SIXTH MEETING OF THE SCO FORUM AT TASHKENT ON 27-28 MAY 2011

PAPER PRESENTED BY LT GEN PK SINGH, PVSM, AVSM (RETD) DIRECTOR, UNITED SERVICE INSTITUTION OF INDIA AT THE THIRD PLENARY SESSION : "PRIORITIES FOR FURTHER DEVELOPMENT OF THE SCO"

It is indeed a great privilege and honour to be invited to participate in the 6th Meeting of the SCO Forum being held at Tashkent. For us in India, Tashkent has a special significance for it was here in 1966 that a peace agreement was signed between India and Pakistan and it was here that India's Prime Minister, H.E. Mr Lal Bahadur Shastri passed away. In the next ten minutes, I shall put across my views on "Priorities for further development of the SCO in the fields of security, economy, social and humanitarian cooperation". The views expressed are my personal views and do not necessarily represent the views of the United Service Institution of India, which I represent here today.

In the ten years since it was established the Shanghai Cooperation Organisation (SCO) has evolved into a powerful regional body. It is a truly Eurasian organisation as can be surmised by the composition of its members, observer states and dialogue partners. The SCO has assumed a new geopolitical role and its increasing influence can be gauged by the memoranda of mutual understanding and contacts that it has established over the years. It has consistently worked towards providing peace, security and stability in the region. In the evolving international paradigm, SCO must aspire to play an even more important role in the political, security, economic and social arenas. India has much to contribute in all these fields and has consistently spelt out its desire to play a meaningful and constructive role in the SCO. India has expressed a desire to become a full member of the SCO. India will not only contribute in a significant manner towards growth and prosperity but also help achieve peace and stability. Here I would like to quote the words of the Indian Prime Minister, Dr Manmohan Singh who said, "Our ambitions and aspirations for growth and prosperity cannot be realised unless there is peace and tranquility that will allow our people to live and work in honour and dignity".

As regards the theme of this Plenary Session I would like to highlight a few priorities for further development of the SCO and am confident that India would support these.

The first issue that I would like to touch upon is that of "Terrorism / Extremism and Drug Trafficking". India has suffered from the scourge of crossborder terrorism and the Indian Prime Minister, Dr Manmohan Singh has very aptly stated that "Terrorism and extremism are alien ideas to our people. They bring only death and destruction in their wake. They have no place in a civilised society". All countries of our Region are affected by terrorism and extremism and have even witnessed suicide bombings. Terrorist / insurgent activity from Afghanistan was already spreading in the Central Asian countries and this is the major destabilising factor and a real threat to collective security. This spread of terrorism from across the borders also allows homegrown extremists to have international links which if not checked can become a major security challenge in future. We have to fight this menace together. Osama Bin Laden was killed in Pakistan and although he is dead, neither terrorism nor Al Qaeda or its affiliates like the Lashkar – e – Taiba or the terrorist network in our region have been exterminated. They have a global reach and we must work together to defeat them. Today, international terrorist organisations are recruiting people from all over the world and we have to fight this challenge together. We need to eliminate terrorist bases and training camps and cut off their financial support. The aspect of State support to terrorist organisations also needs to be addressed. We cannot allow nations to use terrorism as an instrument of State policy. Related to the issue of terrorism is the issue of drug trafficking and small arms proliferation. These are major problems faced by all SCO member States. Given India's experience in dealing with the problem of terrorism and drug trafficking, it has much to contribute to alleviate these problems. India would also be willing to actively cooperate with the Regional Anti-terrorism structure of the SCO. The need is to strengthen anti-terrorism cooperation amongst all our co

In the security sector, India has much to offer by way of capacity building, training, skills development and security sector reforms. Its security forces are highly professional and have expertise in the entire spectrum ranging from internal security duties which include aid to civil authorities and disaster management, border management, counter insurgency and counter-terrorism operations, safeguarding territorial integrity of the country, capabilities for out of area contingencies and as a vital component of the country's comprehensive national power. India is globally recognised for its contribution to United Nations Peacekeeping Operations. The United Service Institution of India (USI) has an excellent Centre for UN Peacekeeping which has trained officers from 75 countries including from Central Asian Republics apart from training Indian contingents. We would be willing to conduct peacekeeping training programmes for our SCO colleagues either at the USI or we can even conduct specific programmes at your institutions. As regards India's defence industry, we have these in the public and private sector and these would be willing to collaborate with your defence industry.

Energy security and Water Security are issues which have been debated regularly at SCO fora. Amongst the SCO partners and observer States, we have countries with energy resources, countries which are consumers and countries through which energy resources have to transit. We need to sit together and formulate an energy strategy which will harmonise and synergise the national and regional policies so as to bring about a "win-win" situation for all of us. India could meaningfully contribute in exploration, building pipelines and refineries, training personnel and also in equity participation. As regards water security it has been forecast as an emerging security challenge and we need to address this problem. India being a riparian state is fully conscious of the implications of water security and its "Indus Water Treaty" for sharing water between India and Pakistan has stood the test of time. India would be willing to participate and share its experiences in resolving water management and energy security issues. In both issues pertaining to Energy and Water security, India could also provide satellite imagery and remote sensing data.

A common framework for trade and transportation within the region can be worked out under the aegis of the SCO. Regional initiatives to connect land locked countries with China, India, Iran and other countries of South and South East Asia through large scale infrastructure project will give a boost to economic growth. President Islam Karimov's message at the June 2010 SCO Summit to start joint projects to build and reconstruct motorways and railroads as also to set up modern means of communications needs to be followed up. The recent Export Partnership Initiative held in Dushanbe on 16 May 2011 to improve exports and trade between Central Asian countries and Afghanistan is a good initiative. Indian companies have expertise in building infrastructure

projects globally and they would be willing to partner local companies to execute infrastructure projects in the road, rail, air and tele and satellite communications sectors. Indian companies would also be willing to invest in equity in these sectors.

As regards the socio-economic sectors India could cooperate in the fields of medical and healthcare sectors, in setting up pharmaceutical industry, in the field of education, in the Information Technology sector, in preservation and revival of cultural heritage and in capacity building and training of personnel. It can also facilitate dialogue between Institutions, Universities and think tanks for finding solutions to our common problems.

In the decade since the formation of the SCO, the regional as well as the global security environment have significantly altered. They provide a challenge as well as an opportunity – the immediate challenge is to overcome the menace of terrorism, extremism, drug trafficking and also evolve a framework for regional cooperation for peace, stability and nation building in Afghanistan and also our region as a whole. Simultaneously we have to work together to improve the quality of life of our people by developing infrastructure, increasing trade and improving education, medical and healthcare facilities. The SCO is a powerful regional body which is destined to play a significant role in the peace, security and stability of our region. Given India's past links with the region, its growing economy, its contribution to building peace and security, it can contribute meaningfully to SCO in fulfilling its geopolitical role.

Director's Page

PAPER PRESENTED BY LT GEN P.K. SINGH, PVSM, AVSM (RETD),

DIRECTOR, UNITED SERVICE INSTITUTION OF INDIA AT THE WORKSHOP ON "CHINA AND INDIA NUCLEAR DOCTRINE AND DYNAMICS" AT THE TSINGHUA UNIVERSITY, BEIJING,

<u>ON 01-02 JUNE 2011</u>

I must thank Paul, Lora, the Department of International Relations of Tsinghua University and the organisers for inviting me to this workshop on "China and India Nuclear Doctrine and Dynamics". It is also a pleasure to be a copanelist with Maj Gen PAN.

I will begin my presentation by a statement made by the Indian Prime Minister Atal Behari Vajpayee in the Parliament on 27 May 1988. He said, "India is a nuclear weapon state......It is not a conferment that we seek; nor is it a status for others to grant..... It is India's due, the right of one sixth of humankind. Our strengthened capability adds to our sense of responsibility; the responsibility and obligation of power".

While considering India and China's nuclear doctrine and dynamics it is imperative that we look at the historical dynamics as also the geopolitical realities that existed from the time our countries became independent, because doctrines are not developed in a void.

India's nuclear ambitions and policies have been consistent since its independence. Right from 1948 when the Atomic Energy Commission was created, our leaders rightly believed that nuclear technology would help alleviate the country's energy needs, sustain its economic development and also, if and when needed, provide a deterrence and enable her to stake a claim to more influence in the global order. I would like to flag a few dates so as to put India's indigenous nuclear programme in its correct perspective :-

- The first light water research reactor in Asia was built in 1956 in India. The Heavy Water reactor was built in 1960. By 1962 we had produced our own Heavy Water and in 1965 separated Plutonium for the first time. We carried out our nuclear test in 1974.

- Now let me cover the strategic environment surrounding India during this period. China's actions in Tibet; the USA – Pakistan Mutual Defence Assistance Pact and Pakistan's dalliance with CENTO and SEATO; the 1962 Sino-Indian War followed by China's nuclear tests of October 1964 convinced the Indian leadership for the need to have our own nuclear deterrent. The Indo-Pak War of 1965 and the perceived possibility of a second front being opened by China only helped accentuate this resolve. The US tilt towards Pakistan in the 1971 Indo-Pak War, the deepening China – Pakistan nexus, the US – China rapproachment and the Pakistani desire since 1972 to have a nuclear weapon and its proliferation activities helped merge the anti and pro nuclear lobbies into somewhat agreeing on the nuclear weapons issue. India's foregoing nuclear weapons would neither have stopped Pakistan acquiring it nor China capping its programme.

At this stage I would also like to remind this distinguished gathering that when China tested its nuclear device in October 1964, the Partial Test Ban Treaty 1963 which banned atmosphere testing war in vogue and despite this China continued such testing till 1980. Further, when China tested in 1964 it was not even a member of the UN what to talk of its being a member of the P-5 ! I would also like to draw attention to the fact that in October 1964 China expected other countries to become nuclear powers because it wanted others to join it and support its stand. Let me just read out a part of the Chinese Government Statement issued on 16 October 1964, the day China exploded its first atomic bomb :-

"(China) proposes to the **governments of the world that a Summit Conference** of all the countries of the world be convened and that as the first step, the Summit conference conclude an agreement to the effect that the nuclear powers and **those countries which may soon become nuclear powers** undertake not to use nuclear weapons either against non-nuclear countries and nuclear free zones or against each other" (Emphasis added).

I would like to highlight the following aspects drawn from the statement issued by the Chinese Government :-

(i) There is no such terms as de jure or de facto nuclear weapon state. I suppose, you explode an atomic bomb and presto you are a nuclear weapon State..... period !

(ii) It proposed a Summit conference of the governments of the World – note, there is no mention of Security Council, P-5 or even the UN.

(iii) It talks of countries which may soon become nuclear powers – so it was not only aware but also sure that others would follow suit. The next one to do so was India – so why does China create all this fuss about India's nuclear weapons specially when the nuclear tests by India did not flout any international conventions as India was not a signatory to the NPT and CTBT.

I will now do a fast forward and come to the present day and flag some issues.

The first one pertains to Disarmament. There is a paradox – all nuclear weapon States while having nuclear weapons also believe in nuclear disarmament. But here too my understanding is that there is a difference in the Indian and Chinese views. While India believes in a global, verifiable and non – discriminatory nuclear disarmament, the Chinese

position linked nuclear disarmament to be carried out in conjunction with conventional disarmament as mentioned in the proposal put forward by the Chinese delegation at the Second Special Session of the UN General Assembly on Disarmament. This proposal is too idealistic and unrealistic – do we really believe that conventional disarmament will go hand in hand with nuclear disarmament? So, since we cannot achieve one, we should forget about the other is what is implied by the Chinese statement.

In the absence of global nuclear disarmament, India's strategic interests require effective, credible nuclear deterrence and adequate retaliatory capability should deterrence fail. India's doctrine of credible minimum nuclear deterrence is not about numbers. It is a dynamic concept – it is not evolving in a void – it will be related to the strategic environment, technological imperatives and the needs of national security. And it will be based on a nuclear triad – ground, air and submarine based nuclear weapons, have no doubts about this.

After touching on nuclear disarmament and credible nuclear deterrence, let me just say a word about "No first Use (NFU)". India's position is absolutely clear but lately there were some articles in the media suggesting a change in China's NFU policy. May be China now would like to have the same policy as the other nuclear weapon States.

A word on nuclear arms race. The simple answer is, NO, India will not get into an arms race. After having acquired nuclear weapons, we have steadfastly pursued our economic reforms and accelerated our globalisation efforts in all fields. Nuclear Weaponisation will not be allowed to mess our economic, political or strategic aims – but the bottom line is that we will have a credible minimum nuclear deterrence. While China also says that it will not get into a nuclear arms race, to my mind, it is clear that the Chinese nuclear arsenal will grow. My distinguished co-panelist, Maj Gen PAN, had written in 2009 "China has no other alternative than to quicken the pace and scope of its modernisation drive, including increasing the number of its war heads and building more mobile inter-continental range ballistic Missiles". So my worry and my question to Gen PAN is, what do you do with the missiles and nuclear weapons which are being replaced by more modern ones ? I have not read of any decommissioning, so do I believe that the shorter range, older nuclear weapons are being redeployed towards the Sino-Indian border possibly in Tibet or who knows in POK ?

Another interesting concept which needs clarification from the Chinese experts is about nuclear stability and nuclear balance because these term are used in an inter-changeable manner possibly because in the Chinese language only one word is used to convey two different strands of thought. May be this aspect could be elaborated by the Chinese discussant.

Linked to the aspect of nuclear stability is to know, how China proposes to maintain nuclear stability and nuclear balance with USA and what will its impact be on nuclear stability / balance between China and India? Actually, the basic question that we need to address is whether there can be nuclear stability or balance without the issue being discussed multi-laterally between USA, Russia, China and India - this is something which we should discuss. Another issue which could be clarified by Gen PAN pertains to his writing that China should continue to maintain a defensive nuclear posture etc and that the US has to make sure that further developments in its nuclear posture do not threaten the capability of Beijing's small nuclear retaliatory force. So you are putting the onus on USA not to threaten / weaken Chinese nuclear retaliation. I don't know what the American response to your proposal was but what will the Chinese response be if I was to put the same question to you with respect to India's nuclear retaliation capacity? Since I am running out of time, I would like China and India to spell out their vision on how to deal with the issue of nuclear red lines if any between our countries; nuclear terrorism; also about nuclear weapons in failing States or in the hands of non-state actors: how to jointly deal with nuclear proliferation and also illegal nuclear commerce of the variety carried out by the AQ Khan network. And how do we address the question of proxy nuclear States? Earlier, we used to talk of "nuclear umbrellas" being provided to non-nuclear States and the world was used to it. But that concept has been overtaken by a perception that Pakistani and North Korean nuclear programmes are there because of the support given by China. What if this model of proxies is then carried forward by other States? What if some States now create a nuclear armed terrorist organisation as its proxy? No, this question is not in the realm of fiction any more and needs to be addressed. And before I conclude I would like to say something about conventional military capabilities - I think in India we will maintain highly effective conventional capabilities which may include precision strikes with conventional missiles, robust BMD etc so as to raise the threshold of outbreak of conflict.

I would like to end by saying that a global, verifiable and non-discriminatory nuclear disarmament is a national security objective for India. India shall continue its efforts to achieve the goal of a nuclear weapon free world at any early date but till then we shall have a credible minimum nuclear deterrence capability.

Director's Page

PAPER PRESENTED BY LT GEN PK SINGH, PVSM, AVSM (RETD),

DIRECTOR, UNITED SERVICE INSTITUTION OF INDIA AT THE 28TH INTERNATIONAL WORKSHOP ON GLOBAL SECURITY, PARIS, 16-18 JUNE 2011, AS MEMBER OF INVITED PANEL ON "DEALING WITH CRISES IN AFGHANISTAN AND PAKISTAN - INTERNATIONAL PERSPECTIVES"

1. We are meeting here today in the aftermath of tectonic shifts that have taken place not just in the Middle East and North African Region (MENA) but also in the AfPak Region. The situation in both these regions is yet unfolding but what is certain is that irreversible changes are taking place and new opportunities and challenges have cropped up with the killing of Osama Bin Laden in Pakistan and the change of regimes in the MENA region.

2. Any discussion on Af-Pak today has to take into account the following points :-

- First and foremost is that the 2014 timeline set by the US Administration is not a mirage. What is more important is that not only USA / ISAF and Afghanistan have endorsed this timeline, even the international community has endorsed it. This deadline which is over 3 years away signals that there will neither be a precipitous withdrawal nor will a vacuum be created which can be filled by the Taliban or other opportunistic players. NATO and USA are having strategic arrangements with Afghanistan and will stay beyond 2014 so we have three years now in which countries in the region like China and India have to think how we can contribute to peace and stability in Afghanistan after 2014.

- Killing of Osama Bin Laden in Abbotabad has exposed Pakistan's double game of being an ally in the anti-terrorist operations while at the same time providing sanctuary and support to the Al Qaeda, Taliban, Lashkar-e-Taiba etc. This duplicity must not be allowed to continue.

- Killing of Osama Bin Laden and other senior functionaries on Pakistani soil would have convinced the Taliban that they can no longer count on Pakistan ISI protection and support to stage a triumphant re – entry into Kabul. I believe that the Taliban are getting into secret talks with USA not because of any change in heart but because they have been weakened military by US/ISAF operations. The military pressure must be kept up on the Al Qaeda, Taliban etc and at the same time effective measures taken to cut the umblical chords that bind Pakistan ISI and the Taliban.

- The solution to the global war on terror cannot be found in Afghanistan alone. Whether we like it or not, we will have to address the problem of global terrorism emanating from the Af-Pak region. Therefore, staying the course in Pakistan is as important as staying the course in Afghanistan. I hope the distinguished panelists will address the issue of terrorism emanating from Pakistan and what we can do to convince Pakistan that terrorist organisations can neither be strategic assets nor be used as instruments of State policy.

3. To an audience such as is present in this room I do not have to spell out the challenges faced in Afghanistan. Afghanistan is a strong society but a weak State. It can either have strong war lords, who at times create localised violence to safeguard their power and position or have a strong Central government, but not both. Reconciling this won't be easy. All of us have been watching events unfold in Afghanistan over the last decade. Contrary to what many believe and write, great accomplishments have been made in Afghanistan. Let us not forget that a great democratic space has been created and this would not have been possible without successful operations being carried out by US/ISAF troops supported by other countries who have contributed to nation building in Afghanistan. The challenge of creating effective organs of State functioning along with an effective Afghan National Army and Police are Herculean tasks.

4. However the truth is that neither will be able to stand on their own feet even by the end of 2014. Training and mentoring of ANA and Police by USA / ISAF or others may not be enough to fill the void created by the drawdown or withdrawal of US/ISAF troops. Will China, India, Saudi Arabia, Turkey etc step in to fill this void? Or will we look for a UN mandated Peacekeeping Force? Of course, UN Peacekeepers will have to be prepared to fight.

5. Another crucial issue is that of international funding for Afghanistan's social, political and security needs. This will have to be a long term commitment – is that possible? More importantly, will this funding not dry up should the Taliban regime come back to power again? So the challenge is to re-integrate the Taliban into the government without letting them take over the Government.

6. As per some Afghan interlocutors, Pakistan supports instability in Afghanistan for two reasons. Firstly, with instability there, the Afghans will not have time to think about Pashtun irredentism. Don't forget that the Afghans do not recognise the Durand Line. The other is a Corrolary; instability in Afghanistan creates refugees etc and gives Pakistan a reason to interfere in the internal affairs of Afghanistan.

7. Now I will turn my attention to Pakistan. As the recent events surrounding the killing of Osama Bin Laden make clear, Pakistan is passing through a grave period of instability. Instability in Pakistan is a self-inflicted wound, where a massive growth in militancy has spilled over from the periphery to the Pakistani heartland. So what is Pakistan doing to contain this Frankenstein? While Pakistan is fighting insurgency, it is still doing so selectively. It has deployed over 120,000 troops but as I had mentioned at the 2010 Berlin Conference, this number is not enough and the fight cannot be won in a short period of time. It will be a long haul and will require at least 250,000 troops. Pakistan has over 600,000 troops and it can find the resources if it so desires. Pakistan is still neither a hopeless case nor in terminal decline. The challenge is to convince Pakistan to throw its full weight in its fight against terrorism and give up its selectivity in this regard. I believe that USA and China can convince Pakistan about the futility of its calculus of treating the Taliban, Lashkar-e-Taiba and the Haqqani network as strategic assets – you have enough levers in your hands but the moot question is "Will you use it"

8. Creation of the Taliban to defeat Soviet forces led to Pakistan acquiring a veto power over US policies in Afghanistan as well as Pakistan. Acquiring nuclear weapons and perceived Chinese strategic support emboldens Pakistan even further. The challenge now is to ensure that Pakistan does not have a veto over US policies at least in Afghanistan, I think the operation to kill Osama Bin Laden was a good beginning and needs to be followed up.

9. I was recently in Tashkent for the 6^{th} SCO Forum Meeting held on 27-28 May 2011. Let me just give you a feel of what I perceive was the message emanating from that meeting :-

- The CAR abhor Islamic extremism / terrorism and would like to see the jihadist surge not only contained but defeated. They do not want the contagion of extremism and terrorism to spread to their country.

- They fear that a fatigue has set in, in the international community and should Islamic extremism and terrorism spread to CAR, nobody in the Western World or for that matter, China or Russia would invest their money or blood to save them – in other words, there will not be another Global War on Terror !

- A regional solution to Afghanistan must include USA and NATO along with Russia, China, India and all neighbours of Afghanistan.

10. In conclusion I would like to say that Bin Laden is dead and gone and will fade away from memory but what will remain will be terrorist groups like the Al Qaeda and the Lashkar-e-Taiba. The threat of nuclear proliferation and the continued fear that some militant or radical organisation will obtain fissile material to make a dirty bomb or the nightmarish scenario of one of them obtaining a nuclear weapon cannot be simply wished away – and if Pakistan cannot be convinced to change course, the likelihood of this scenario unfolding there cannot be ruled out.

11. Finally I would like to salute all countries which have given their blood and money in the fight against terrorism in Afghanistan. As you are aware India too has made a humble contribution, both in blood and money, to bring peace and stability in Afghanistan. During the visit of the Indian Prime Minister, Dr Manmohan Singh to Afghanistan in May 2011, India and Afghanistan decided to establish a "strategic partnership covering all areas of mutual interest" and Prime Minister Manmohan Singh and President Karzai shared their vision of Afghanistan as an "independent, democratic, stable and prosperous country". That is indeed a noble vision, let us all help Afghanistan achieve it.

12. Thank you for your attention.

Director's Page

<u>NNSA - IWG WORKSHOP AND ROUNDTABLE ON</u>

<u>"SCIENCE COLLABORATION AND SECURITY : A NEW GLOBAL</u>

OUTREACH TO KEY ACTORS" AT COMO, ITALY ON 20 JUN 2011

ABSTRACT OF PRESENTATION BY LT GEN P.K. SINGH, PVSM, AVSM (RETD) DIRECTOR, UNITED SERVICE INSTITUTON OF INDIA

Security policies of nation's affect the scientific and technological advancements just as scientific and technological advancements affect national security policies. In today's globalised world, advances in one country affect policies in another country. There will be tensions between the security and scientific objectives both at the national level as well as at the global level. There is thus a need not only for the scientists and security experts to have a dialogue within the country, it is equally important to promote international cooperation between the scientific and security community. These interactions will also help reconcile national interests with the "global good". I am grateful to this forum for providing just such an opportunity to Surgeon Admiral V.K. Singh and to me to participate as also to learn from today's deliberations.

The theme of this session is "Outreach beyond national governments". Obviously all national governments have the primary and important role of collaborating with other governments and internationally recognised organisations. Yet there is a need for outreach beyond national governments. Some of the issues we need to look at are :-

Countering chemical, biological, radiological, nuclear and explosive (CBRNE) terrorism lies at the heart of any counter-terrorism strategy. Wikileak cables talk of global jihadist movements may "soon possess a deployable CBRN attack capacity" - even if this report is exaggerated, can we totally ignore the possibility of a "dirty bomb" getting into the hands of some terrorist / extremist / jihadi outfit ? While governments have undoubtedly understood the dangers related to CBRNE threats and have passed legislations and signed treaties and conventions, rapid technological advances coupled with the revolution in the IT field are beginning to outgrow some of these treaties and conventions. Today we see, not only convergence but technological cross-overs in the biological and chemical production methods. The guestion that needs to be asked is whether these advances lower the threshold for misuse by new entities like the terrorists or non-state actors ? We also need to see whether advances in engineering technologies including IT lower the threshold. Today cyber attacks can have a crippling effect not just nationally but globally and these can be carried by States as well as non-state actors. "Do you know who all have been lacked over the last 2 weeks? IMF, CIA, Sony, Citi Bank, Turkish Government etc. etc. As somebody has said today there are only "two types of companies in the world - those who know they have been hacked and those that don't". Ironically the value of the web is in its connectedness and the threat to it also comes from this very connectedness. So network systems will remain vulnerable - the challenge is to find an answer. Shutting down the internet or having just strong legislation or technical solutions alone may not work. Do we really understand the social, economic and legal aspects involved? Does cyber space have boundaries and effect only one or some nations? If the answer is no, then can a solution really be found in one country or one company or any one organisation?

Do you know that since 9/11 the USAF devotes 3100% more hours to flying for ISR and today with the new "Gorgon Stare" technology you can capture live video of an entire city but you will need 2000 analysts to process the data feed from just one single drone !! How do you protect all this data at various stages of its capture, interpretation and dissemination etc. I would also like to mention a few figures to highlight the magnitude of the problem :-

(a) 2 million malicious sites are created every month.

(b) Four years ago 4 million malicious files were required to be tracked on a daily basis. Today that figure is 60 million malicious files which require tracking.

(c) 25 million applications are available, on-line for downloading. However, one is not sure if all these applications have been tested and are safe for use.

(d) From millions of devices using internet the figure has now jumped to a trillion and keeps growing.

While there has been a discussion about rogue states we also need to look at a "rogue scientific genius" who could wreak havoc by carrying out a cyber attack on a nuclear facility leading to a possible melt-down or use a new biomedical technology to cause a global pandemic.

The other issue that needs looking into is the availability of CBRN material including dual use CBRN material as these are now used for more legitimate purposes and hence more easily procurable through international smuggling and proliferation networks (AQ Khan network easily comes to mind as one such network). Another connected issue pertains to the stockpiles of decommissioned military CBRN material.

I have talked about the convergence of biological and chemical production methods. So with this convergence taking place do we not need to have a re-look at the Biological and Toxin Weapons Convention and the Chemical Weapons Convention ? Are there any shortcoming which were not visualised when these conventions were being

formulated ? Is there a need to bring in convergence between these two conventions and possibly have an integrated Biological and Chemical Weapons Convention ?

Another aspect that merits our attention is the aspect of expert control regulations – should it include broad areas of technologies ? Do these help or undermine international cooperation ?

So what is it that we can do to reach the national governments and beyond. We could look at :-

promoting education and awareness on matters of national security and sensitive CBRNE sectors.

- enhancing coordination between organisations dealing with CBRN and security issues.

- creating a network of research laboratories and institutions which could share their unique expertise, knowledge and best practices.

- creating a global network of monitoring stations to provide early warning of nuclear and biological / chemical events.

- share information / intelligence to prevent proliferation of technologies and sensitive knowledge reaching into the hands of terrorists / criminals.

- encourage free flow of ideas to address emerging / future CBRN proliferation challenges. If this is not done, the treaties and conventions that we work out will always lag behind emerging technologies.

- encourage collaboration in science, technology and research forming an important part of any Strategic Partnerships between countries and / or regional organisations.

- capacity development should include knowledge management, human resources development as well as scientific and technical institutions for applied research and training.

- cooperate in the filed of nuclear forensics.
- support biosecurity educational programmes at the university level.
- cooperate in disaster management / mitigation programme.

Today, all technologies can be used for good or for evil by States as well as non-State actors. The challenge is to ensure that it is used for good. We have to find concrete and innovative ways to bring greater synergy between the security experts and scientists to prevent the misuse of evolving technologies.

Director's Page

USI Gold Medal Essay Competition 2010 - Group A

Terrorism : A View From The Prism Of International Experience* Colonel UM Visal**

Introduction

Nation state has been the basis of the world order in the history of modern world. The cold war and super power rivalry kept the balance of world order for nearly half of the 20th Century. Post Cold War, the USA has emerged as the undisputed superpower who has taken upon itself the role of global policeman. *Hegemony of the developed nations has seen the emergence of organisations and non-state actors who wish to get even using asymmetric means.*

Nations have adopted varied approaches in combating the violent terrorist activities. The military actions initiated by all nations were with the basic aim to bring down level of suffering/injustice/violence so that composite dialogue and reforms could commence to alleviate the concerns of the subject party or the group. The socio-political military compulsions invariably shaped the decisions at different stages in directing the state policy. Hence, it is imperative to study and analyse these aspects in detail and draw relevant lessons for India.

Aim

The aim of this paper is to study the approach adopted by a group of select nations affected by terrorism in combating the menace, lessons and its relevance to the Indian context.

Scope

The Scope of the paper is as follows :-

- (a) Sri Lankan and Israel Experience.
- (b) American and Pakistani Experience.
- (c) Summary of lessons learnt.
- (d) Conclusion.

Sri Lankan and Israel Experience

Sri Lankan Experience. It can be categorised in four timelines:-

- (a) Initial commencement of hostilities in Jul 1983 till IPKF withdrawal in 1990.
- (b) Next phase commenced in July 1990 and culminated in a ceasefire in January 1995.
- (c) Subsequent fighting began in April 1995 and culminated in the February 2002 ceasefire.
- (d) The decisive phase started in July 2006 and ended with defeat of LTTE in May 2009 post killing of Prabhakaran.

Sri Lanka's military strategy evolved over years of confrontation with Tamil militants whose goal was to wage a secessionist civil war to establish an ethnic Tamil state. The initial three phases were mired with intermittent peace and war. The centre piece of previous government strategies was to bring the LTTE to the negotiating table. Ceasefires were accompanied by direct and back-channel negotiations with the LTTE. The proposals of power sharing, federal solutions and a negotiated settlement were never acceptable to LTTE. The assistance by Norwegians for brokering peace also met with little success. LTTE supremo wanted to win Eelam through military means. This period also saw military balance of power shifting between rival parties with LTTE challenging the Sri Lankan Army in the field. The broad military lessons that can be summarised are as follows:-

(a) **Grand Strategy - Defining Role and Scope by Politico-Military Leadership**. The main factors leading to defining the grand strategy were based on two premises:-

(i) LTTE's past record brought out its unwillingness to seek peaceful settlements by talks with the Government of Sri Lanka.

(ii) LTTE's invincibility was *a* myth and the military was tasked *to* eliminate the LTTE, not merely fight or weaken them.

(b) **Diplomatic and Military Isolation of LTTE.** Apart from Tamil diaspora cultivated by the LTTE, no foreign government including that of India supported the Eelam. By securing widespread regional support, Sri Lanka isolated the LTTE politically and diplomatically, crippled its logistics chain by active maritime and air operations, and followed by security crackdown on LTTE cells involved in smuggling and procurement actions. The intervention by the UN and the West at crucial stages of battle was defiantly resisted by Sri Lankan political leadership. The critical intelligence sharing by Sri Lankan government with India and as also follow up actions of Sri Lankan Army, Navy and Air Force militarily isolated the LTTE.

(c) **Revamping of the Armed Forces.** Fonseka overhauled the SLA's battle-fighting techniques, tactics and strategy, which was enabled by a freehand in resources and command. Military equipment was acquired on fast track, frequently involving presidential intervention. The desertion rate, uniformly high at 10 to 15 per cent, was brought down by half. High-performing officers were brought in to the mainstream and were moved up to command important formations as

also to occupy pivotal positions at Army Headquarters.

(d) **Provoke the Enemy to Err.**

(i) **Strategic Level.** Prabhakaran misread Rajapaksa, assuming that like other Sri Lankan leaders, he would try to weaken, not vanquish, the Tigers, to bring them to the negotiating table. He underestimated the new Army, mistaking it for the spent force of the past.

(ii) **Operational Level.** On the battlefield, Prabhakaran repeatedly made the error of fighting a conventional battle instead of employing guerrilla tactics. The LTTE waged fixed defensive battles without any recourse to offensive action. It initiated the 'lose no territory' ditch-cum-bund strategy to their peril as the Army turned the tables by adopting unconventional tactics.

(e) Innovations.

(i) **Direct Command**. A direct chain of command was established, which went down to the grassroots. Importantly, this 'hands on' approach by the Commanders helped in adopting emergent strategies when pre-planned deliberate strategies did not seem prudent, given the unexpected changes in ground situation.

(ii) **Special Infantry Operations Team (SIOT) Concept.** Infantry training doctrine was revamped to emphasise section level infantry operations and the traditional platoon concept was dropped. SIOT operated in teams of eight soldiers. SIOTs were then deployed with offensive formations, with each rifle company being allocated six reconnaissance teams that also acted as field instructors to improve infantry standards and impart SIOT skills.

Israeli Experience. Israel's Arab policy is based on self-survival and defence. Its response to terrorism has been founded on the principles of deterrence, pre-emption, prevention and reprisals.

Aim. Israel's aim during the campaign of 2006 was destruction of Hezbollah and to drive them from southern Lebanon. However, Hezbollah only had to frustrate the Israeli Defence Forces (IDF) and survive.

Strategy. Israeli over reliance on air force and hesitancy to commit ground forces seemed to affect their thinking. Instead, Hezbollah assigned its front-line forces the achievable mission of holding out in towns, villages and small cities that had been turned into virtual fortresses. Hezbollah structured weblike defences that could absorb penetrations to make it forbiddingly expensive for the Army to seize, sanitize and hold urbanized terrain.

Asymmetric Operations.

(a) **Organisation**. Hezbollah's combat cells were a hybrid of guerrillas and regular troops. Modular units and mission-type orders provided Hezbollah more developed, robust chain of command than the Army expected.

(b) **Effective Intelligence.** This was the truly unexpected asymmetry. With a long-standing reputation for effective work, Israel's intelligence services failed terribly. Israeli intelligence proved poor at finding operational command sites; underestimated the amount of weaponry available to Hezbollah; missed some later generation weapons entirely; had no idea how deep, complex and well-constructed Hezbollah's front-line bunker system had become; and failed to predict Hezbollah's tactical tenacity.

(c) **Centre of Gravity**. Lacking high-value assets, the centres of gravity for asymmetric adversaries may become their citizens' political will. Israel's main targets became Hezbollah leadership, fielded forces and weapons hidden among the civilians which were difficult to target.

(d) **Media**. By showcasing the damage in Lebanon and portraying the Israeli attacks against civilians as inhumane, Hezbollah was able to generate sympathy for its actions among the international and Lebanese domestic population. International reactions to the attack caused Israel to suspend airstrikes for 48 hours.

Gaza Offensive Against the Hamas in 2007- 08. Israeli offensive commenced with air-strikes, naval operations and land offensive by army units with the aims to stop rocket attacks and arms imports into the territory. Infantry commanders were given an unprecedented level of access to coordinate with air, naval, artillery, intelligence and combat engineers units. Israel first declared a unilateral ceasefire, followed by Hamas' announcing a one-week ceasefire twelve hours later.

Lessons Learnt - Gaza Offensive.

(a) **Collateral Damage**. Extensive use of leaflets and phone messages were adopted to warn Palestinians, to leave the area or to avoid potential targets.

(b) **Technology Modernisations**. Army used bulldozers to ensure that paths were cleared of IEDs and to destroy tunnels. Viper miniature robots were deployed to disable the IEDs and blocking mobile phone communication. Bull Island camera (akin to a tennis ball) was used which when thrown into a building would transfer 360 degree imagery to the troops outside the structure.

American and Pakistani Experience.

American Experience. As a precursor to 9/11 attacks, embassy bombings and USS Cole episode did not serve as a warning to the USA. The rise of Taliban and Osama bin Laden under the patronage of ISI was emerging as a new threat in being to the world stability. The war against Soviets brought out a lesson that a superpower with infinite resources can be defeated with low level human intensive warfare, technology available off the shelf and support from proxy state or non-state actors. Thus, in pre 9/11 era, the US state conundrum can be described as follows:-

(a) Myopic and short sighted foreign policy when dealing with states affected and states sponsoring terrorism particularly, Pakistan and Afghanistan.

(b) Armed Forces though superior in conventional warfare capabilities need an orientation, perspective and training for fight against terrorists.

(c) Lack of understanding that terrorism revolves around population and not about state or politics.

(d) Past strategic failures and decisions boomerang, haunting the present, to see lessons of history repeating themselves.

(e) Lack of focus, gross ignorance and coherent policy to deal with terrorism harbouring agencies like Taliban, AI Qaeda and Pakistan's (ISI).

(f) Failure to understand that world seeks balances through symmetric and asymmetric means. The religious and ethnic fundamentalism serves as a rallying point for asymmetric warfare.

Post 9/11, America launched its global war on terrorism with its invasion of Afghanistan. With a possible link of weapons of mass destruction and its link to AI Qaeda, the US whipped up world wide hysteria for military invasion of Iraq. It seemed like a preconceived idea to oust Saddam, gain foothold in the oil rich Middle East and expand the American hegemony in the region. The US undermining an international organisation like the UN, unilaterally sought to achieve its political goals using its military might. Bush administration broadly defined its objectives while embarking on the Global War on Terrorism which were as follows:-

- (a) Defeat terrorists such as Osama Bin Laden, Abu Musab al-Zarqawi and destroy their organisations.
- (b) Identify, locate and destroy terrorists along with their organisations.
- (c) Deny all sorts of sponsorship, support and sanctuary to terrorists.
- (d) Defend US citizens and interests at home and abroad.

YEAR AFGHANISTAN

(e) Diminish the underlying conditions that terrorists seek to exploit.

The period from the invasion of Afghanistan and Iraq to the present state can be divided into yearly timelines as under :-

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2001	• Initial attack *	• Iraq disarmament crisis and pre- war intelligence
2002	 Operation Anaconda & Post- Anaconda operations 	
2003	• Renewed Taliban insurgency & Coalition response	• Invasion
2004		 Insurgency expands
2005		• Elections and transitional government, violence not reduced
2006	 NATO in southern Afghanistan, resurgence of Taliban 	• Civil war and permanent Iraqi government, violence simmering
2007	Coalition offensive	• US troop surge
2008	• Reassessment and renewed commitment	• Iraqi Armed Forces active
2009	• U.S. in southern Afghanistan Increase commitment	• Coalition redeployment and decrease in violence
2010	• US offensive and Afghan peace initiatives	• US drawdown

Critical Analysis. Keeping in view the objectives set, conduct and net outcome of operations, a similar pattern emerges, i.e. of quick initial victories, followed by violence/insurgency, troop surge and reduction of violence. The wars in Afghanistan and Iraq have brought about regime changes with establishment of local governments, execution of Saddam Hussein/Zarqawi, AI Qaeda secure bases have been scuttled and Osama Bin Laden has been elusive to Special Forces operations. The innovations which served for initial successes were shock and awe tactics, use of special forces, defections by buying out enemy cadres on dollar power, deployment of fewer ground forces, overwhelming air power and the arming of militias for local battles. *However, critical analysis brings out that overall American performance has been dismal.* The reasons for abysmal performance by the USA and its allies are enumerated below :-

(a) Flawed Strategy. Donald Rumsfeld's theory of military campaigns was defined by discrete, lethal and quick

successes. The prolonged and violent war was a refutation of his theory with the US forces tied down in insurgency, stabilisation operations and civil affairs. The strategy was a short war and exit after a quick victory.

(b) **No Follow-Up Plan for Stabilisation and Reconstruction Missions.** It would be surprising to understand that there was no overall campaign plan to incorporate security, economic recovery, infrastructure, building of bureaucracy and allied aspects which constitute elements of a state. The military hierarchy couldn't ascertain the requirements of troops for such campaigns.

(c) **Leadership**. Bush as the President led the nation, based on instincts and guts rather than on analyses and realities. The advisory team comprising Donald Rumsfeld, Dick Cheney and Paul Wolfowitz was rigid with strong views on the conduct of war.

(d) **Repetition of Mistakes and Failure Appraisal**. The analysis of timelines clearly brings out an established pattern of happening both in Afghanistan and Iraq. It is difficult to fathom the insensitiveness and rigidity of leadership, military, bureaucracy and people of the USA and international community in understanding the lessons and adopt corrective actions in the subsequent campaigns. *The poor predictive capabilities of contemplated operations left vacuum for the military and civil leadership to capitalise on quick victories*. It took formation of Iraq study group, council of colonels and independent studies to understand the failures. The resultant 'surge strategy' in Iraq was implemented from January 2007 after nearly three years of violence. Bush and his team lacked the vision and the courage to admit the failure of their initial strategy and take remedial measures.

(e) **Axing of Military Dissent.** General Eric K Shinseki was vilified and then marginalised by the Bush administration and his team after he called for a greater troop presence early in the war. The dissent was not permitted and the generals took the cue from the event, of acquiescing to the administration. Senior military commanders went alongwith the Bush administration's rhetoric of 'Off Ramping', i.e. scaling down of troops from the war zone, ignoring the ground realities riddled with violence and blood.

(f) **Flawed Diplomacy and Foreign Policy**. The USA unilaterally conducted war without taking the international community on-board for its foreign policy and conduct of war. It should have mended its relations with Iran and Syria; thereby denying the tacit support from those countries and contain the Afghanistan and Iraqi insurgency. The orchestration of global support would have avoided the negative fallout on the international image of the USA.

(g) **Cultural Intelligence.** The importance of seeking cultural knowledge in understanding people, tribes, warlords, political system, customs and traditions in a multi ethnic sectarian society as in Iraq and Afghanistan was not done by the American and coalition forces.

(h) **Abu Gharib and Human Rights Excesses**. The lack of human concern and human rights abuses by the US further aggravated the situation for the ground forces. The US troops kicking the doors, pushing the people and denigrating human sensibilities did not go well with the people.

(j) **Operational / Tactical Flaws.** Bush administration enunciated the policy of *clear*, *hold and build*, which entailed clearing of terrorist enclaves and holding them by joint forces and building of Iraqi institutions to run the organisation. The US military repeatedly failed to understand the issue of security for the population and its relation to violent strikes by insurgents. In counter- insurgency operations isolation of terrorists from local population was not understood at all, which had seen the rise of Taliban and insurgency in Iraq to the peril of American and coalition forces.

(k) **Security**. America after forming governments in respective countries wanted to hand over the responsibility of maintaining law and order to Iraq / Afghan National Army / Police. Despite training the Army and the Police, the sectarian and tribal affinities were far too predominant amongst the local populace for the forces to become an effective agency for restoring order. The USA just couldn't understand the dynamics of situation and devise a correct response. The USA *military didn't have adequate troops on ground to protect the people*. The Provincial Reconstruction Teams (PRTs) in Afghanistan were largely dependent on warlords and militias for security. In Iraq, the US patrols operated from large bases, vehicle based patrols called 'presence patrols' had little value as they only invited IED attacks. Instead, small teams should have established several detachments in neighbourhood, carried out foot patrols, increasing contact with local population, building trust and gaining intelligence. In Afghanistan, the UN and coalition forces just ignored the drug and narco trade as they didn't have adequate forces to deal with the menace.

(I) **WikiLeaks Disclosure**. The overt and covert support by the ISI and Pakistan to Afghan Taliban comes to fore with impunity and brashness of Pakistan polity. The US enlisting Pakistan as frontline state for Global War on Terror (GWOT) was a cardinally flawed decision. Instead, the USA should have initiated a joint front against both Pakistan and Afghanistan which was the hub of global terrorism.

Pakistani Experience. Pakistan is riddled with handling four different types of terror groups: Taliban, AI Qaeda, Kashmiri militants and local religious extremists. Terrorism started affecting the fabric of the society with tensions rooted in the Pakistani Army's search for al-Qaeda members in Pakistan's mountainous Waziristan area in 2004. There were series of ceasefires and three peace accords signed between Pakistan Government and the Taliban, especially after military operations in Wana. These accords broke down after the Lal Masjid episode. Thereafter, military actions in Waziristan and Swat Valley in NWFP ensued. They were later followed by suicide attacks in Rawalpindi against the GHQ, the Mariott hotel bombing, Bajaur offensive and tribesmen attacks on the Taliban. Thereafter, the US drone attacks, counter offensives in Swat Valley, South Waziristan, Orakzai and Kurram were launched to clear the militants.

The major lessons learnt from the Pakistani experience are as follows:-

(a) Making of Frankenstein. Pakistan adopted terrorism as its state policy to offset asymmetry with India. The

ISI, based on the lessons learnt spread the venom of terrorism in Punjab and J & K, Central Asian Republics (CARs), China, Bangladesh and Nepal. The 9/11 terrorist attacks against the USA were the culmination of unhindered terrorist activity in Afghanistan. *Pakistan's counter terrorist strategy saw itself at loggerheads with the terrorist organisations that now had become self-sufficient to take its creators head on and violently.*

(b) **Focus**. The USA focussed more on AI Qaeda cadres and didn't concentrate on other factions promoting terrorism. Hence, Pakistan's counterterrorism actions were selective and self-serving.

(c) **Inaction against Taliban**. Pakistan's inaction against Taliban can be viewed with the prism of contingency. The US initial inhibition to engage troops on ground was misread by Pakistan as short term commitment by the USA. Hence, for a future contingency of having a hold on an organisation Pakistan was reluctant to take action against Taliban to the extent desired by the Coalition Forces. The other contributory factors were: contemplated failure of Karzai regime and possible withdrawal of the Coalition Forces which shaped the Pakistan's counterterrorism strategy.

Summary of Lessons Learnt.

Asymmetric capabilities are developed by a beleaguered state or party to challenge the hegemony of the powerful nations with superior conventional war fighting capability. *The asymmetric capabilities developed mutate faster than the conventional capabilities.* Hence, military is psychologically hemmed with 'last experience syndrome' and is reluctant to devise new methods to combat the new mutant. The major precincts of the military in combating the terrorist organisations is not the deficiency of weapons, organisation or will to fight but the right attitude, focus, self-appraisal and ability to face realities. The 'military limitations' found in the varied experiences can be summarised as follows:-

(a) Lack of synchronisation between grand politico-military strategy and operational / tactical level execution. The higher direction of war / campaign and ground execution need to be harmonised within the realm of the objectives to be achieved.

(b) Deficiency in concurrent reappraisal of circumstances, based on rational analysis, predictive examination and evolution of real time decision support matrix. *The military is slow to respond, inadaptable to change and repetitive in committing same mistakes.*

(c) Conventional approach to sub conventional nature of operations resulting in use of excessive force levels and collateral damage.

(d) Lack of synergy between the military and the civil authorities which is exploited by the terrorists.

(e) Personalisation of conflict, emotiveness of issues and intransigence to repeat the wrong decision which can largely be attributed as human error. There was lack of understanding of human sensitivities and providing of quick fix solutions to seek instant gratification of political or military leaders.

(f) Adoption of incongruous policies by military and professing them as flexible approach only to achieve short term successes which resulted in long term failures. Military aim should be to address the issue of terrorism holistically and not only focus on apprehending/killing of terrorists.

(g) Demonising of the terrorist organisations and lack of empathy to understand the reverse perspective. The human rights abuses committed by the military serves only as a breeding ground for terrorism.

(h) Military mind which to an extent tends to be rigid and not amenable to lateral thinking resorts to falling back repeatedly to safety of structured thinking. Hierarchical organisational structure is not responsive and directive style of command though talked about but is not often practised. Neither, do junior ranks fight for their space, nor for freedom of action with a conviction for accomplishment of the mission or furtherance of the higher commander's intent.

(j) Lack of moral conviction and courage to stake career at all levels for larger benefit or collective good of the organisation in attainment of higher goals.

(k) Prejudiced attitude of the military to blame politicians for all its ills. Insurgency in Malaya was addressed primarily by the military and successfully resolved.

Impact of Socio-Political Considerations.

(a) **Social and Political Pressure**. America post 9/11, was under tremendous pressure to deliver and act against the perpetrators of bombings which forced Bush administration to resort to military action even without taking international community on-board. A similar example was seen when the Indian Army was mobilised, post the attack on Indian Parliament in Dec 2001 as a knee-jerk reaction for social and political survival.

(b) **Elections**. The declarations of several successes and victories in Afghanistan, Pakistan, Sri Lanka and the USA were so timed to gain political mileage out of military actions. Any radical changes or decisions were avoided for any negative fallout or aftermath. The 'Loya Jirgah' held in Afghanistan and elections in Iraq were, however, the US success stories despite boycotting of the same by the Taliban and Sunni communities respectively.

(c) **Human Rights Issues**. The excesses of the US troops as seen at Abu Gharib prison, treatment of Taliban prisoners by Northern Alliance, the state of detention centres and the issue of contractors running private jails are just a few examples to illustrate the human rights abuses by all players of war. The radical laws enacted by the Taliban and fundamentalist clerics against women and schools are denigrating to humanity. Wherever and

whenever human virtues were upheld, the public opinion has swayed favourably to that party or agency.

(d) **Stabilisation and Reconstruction Programmes**. The reluctance of the Bush administration and neoconservatives to shoulder the responsibility of stabilisation and nation building activities cost the USA and the coalition forces an extended insurgency. Neither politicians, nor military top brass could convert military victory to a lasting political settlement, without transiting through the phase of violence and instability. *No Marshall Plan, as executed for Germany and Japan after World War II, were even thought of by the USA for Afghanistan and Iraq.* It shows the short sightedness of the US policy makers.

(e) **Media**. The embedded media subverted the truthfulness of reporting to international community. It was systemic sabotage planned by the Bush administration to further its imperialist goals. An active media would have forced the planners for reconstruction programmes, moulded the opinion of international players, thereby; pressurising the US through mass awareness. Body bags coming home and pressure of soldiers' parents were the main considerations for the US administration for conduct of the campaign. The reporting of Abu Gharib abuses can only be attributed to the media in exposing the ills of the conduct of operations.

(f) **Fear Factor**. The US administration's constant rhetoric developed hype and fear among its masses of another impending terrorist attack. This facilitated the planners to have unprecedented power, circumventing the State and other institutions of the Country.

Lessons for India.

(a) Sri Lankan experience has shown that terrorism can be defeated militarily, provided all the agencies of the state concertedly strive towards a common goal. Indian experience in Punjab also corroborates that terrorism can be defeated with the preconditions of local support, isolation of terrorists from masses and cutting off their logistic bases.

(b) Civil military synergy is also a pre requisite as seen in all the counter terrorist operations. *The higher direction of war, clear focus, tangible objectives and unambiguous mandate for military is of paramount importance in conduct of counter terrorist operations.* Short term policies do not bring lasting peace but the history is bound to repeat itself and ghosts of the previous failures revisit the administration in future.

(c) Military leadership at all levels has to be upright and forthcoming to render correct advice to political masters and not merely acquiesce to the political rhetoric.

(d) Israeli experience of violent and punitive reprisals may not be the correct approach; moderate elements in terrorist groups should also be cajoled and persuaded to shun violence.

(e) Indian media and its military's record of human rights observance stands testimony to the Country's transparency as also the true pillars of democracy. However, with good media interaction negative publicity given to the Armed Forces can be mitigated to a large extent.

(f) Indian Armed Forces conduct of counter-terrorist operations is broadly correct in scope, perspective and manner. However, for gaining moral ascendancy it is imperative for the Army to encourage lateral thinking, unconventional tactics, directive style of command and innovative out of the box thinking to win battles as also the battle for hearts and minds of the people.

(g) Indian counter-terrorist operations in J & K must strongly focus on counter infiltration operations and denial of logistic support to the terrorists from within and from proxy states for at least a two year cycle, thereby; making them inherently weak to sustain their activities. *There is a requirement of raising tri service special forces under Headquarters Integrated Defence Staff.*

(h) The threat from left wing extremism, demand for Gorkha land and maritime terrorism are the new challenges which need to be urgently addressed by politico-military leadership.

(j) The proposed establishment of counterterrorism centre, strengthening of Police / CPO's and building-up of responsive intelligence set-up is the right way to counter the threat of bomb blasts in the cities.

(k) India is not a major producer of drugs and narcotics; however, it is a major transit route for its handlers. The underworld network and links to the terrorist organisations also need to be severed which have been a threat to the Country.

(l) Indian activism in Afghanistan through assistance in reconstruction activities has seen the foreign policy come in full circle, post the isolation during the Soviet invasion of Afghanistan. A friendly government in the neighbourhood will not only give stability to the region but also thwart the endeavours of extremist groups to make it a breeding ground for terrorism. *Thus, Afghanistan has to move ahead together, inclusive of all segments of its society.*

(n) Pakistan is mired in combating terrorism post 2004 in its FATA, NWFP and other regions. It is imperative for India to have a stable neighbour; hence, it must assist Pakistan in getting over the peril of terrorism.

Conclusion

Sri Lanka, Israel, the USA, Afghanistan, Iraq, Pakistan and India all have had unique experiences of terrorism and counter-terrorism activities. Terrorism in all forms mutates to bring out new ways of violence and instability in the society. Religious and ethnic rivalries serve as rallying points for dissension and rise of fissiparous tendencies. New phenomenon of mushrooming of non state actors supported by proxy states has made the issue more complex.

The USA has emerged as an undisputed superpower who is pursuing its unilateral foreign policies to administer the world as a global policeman. The UN has been sidelined and there is no governing body to rein in the US ambitions. This is a dangerous trend and international community should unite to curb the unhindered power exerted by the USA. *The new world order post, Cold War is evolving and Cold War's short sighted policies are still haunting the world.* The sprouting of evil of terrorism in Middle East is a direct outfall of Soviet - US rivalry in Afghanistan.

Sri Lanka has tackled its three decade long terrorism and successfully defeated the LTTE through military might. Israel also has been proponent of punitive actions against Hamas and Hezbollah. It has only been partially successful in its method of fighting. The USA and Pakistan policies are flawed in their basic strategy and approach in combating terrorism. Indian counter-terrorism strategies are apt and yielding results. However, there is a need for more proactive synergetic politico-diplomatic-economic-military approach for eliminating the menace of terrorism.

At operational level, isolation of the terrorist from local population / proxies, and protection of people from terrorist actions is of utmost importance to defeat the terrorist. The troops deployed in a grid fashion and small team concept would be suitable to make their presence felt in the given area of responsibility. In counter-terrorist operations, technology cannot replace the manpower; it can only augment its efficacy. In conduct of operations, human rights, customs and traditions have to be respected. In this form of warfare, cultural intelligence assumes greater significance as compared to conventional warfare. The security forces need to be equipped and trained correctly to adapt to the dynamics of fourth generation warfare.

In order to combat broader issues of terrorism the root causes have to be directly addressed by various agencies of the State. *The military and civil administrations have to function in synchronisation with and preferably under the unified command for optimal results.* The organisational structures and technology applications have to be progressive to respond to the flexible terrorist organisations.

The Indian political masters and military brass have numerous lessons to learn from the experiences of different nations and armies. There is a need to be alive to the happenings within and outside the Country, and to be fiercely responsive to the arising aspirations and sensitivities of the people for nipping the problem in the bud. We as a Nation have all the capability to stand out as an example in the comity of nations in dealing with issues related to terrorism.

*This is a slightly edited version of the Essay which won the First Prize in USI Gold Medal Essay Competition 2010 in Group A.

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Kashmir: Summers of Disruption Dr Sudhir S Bloeria, IAS (Retd)*

Introduction

Jammu and Kashmir has been afflicted by the Pakistani sponsored twin scourge of militant violence and civil disruptions for the last twenty two years. These have taken a very heavy toll of over forty thousand lives, and thousands more maimed and injured. The disturbed conditions also resulted in immeasurable loss to the economy of the state, individual and collective financial sufferings, and substantial destruction of the infrastructure. Apart from the apparent loss of huge proportions, the intangible mental distress, feeling of despair and psychological pressure have been of enormous magnitude. This is a huge loss by any standard and India rightly perceives being engaged in a proxy war unleashed by Pakistan in J&K, and now even beyond.

During the last two decades, at least three times, it appeared that the tormented soul of Kashmir was emerging out of the thick fog of gloom and despair. The end of turmoil, agony and suffering seemed in sight. The first time it happened was in the aftermath of the successfully held assembly elections in 1996, which brought the National Conference to power in the state with not only two third majority in the Assembly, but also as the single largest entity in all the three regions of J&K. It was with out any doubt a massive and clear mandate from a distraught and beleaguered people for restoration of normalcy and return of peace. But the political and administrative hierarchies failed to put their act together to deliver the desired results. Unfortunately, a golden opportunity of favourable circumstances and a ground swell of public support was lost.

The military adventure of Pakistan in Kargil during the summer of 1999 put the clock of recovery in the state back; as to meet the new threat effectively, the successful counter insurgency deployment of the forces in the Valley was considerably diluted. This opportunity was fully exploited by Pakistan and its operators to regroup and replenish the depleting ranks and resources of the terror apparatus. The terrorist violence escalated so steeply that in the year 2001 the number of militants killed and losses of the security forces were highest since the beginning of militancy.

The second round of favourable conditions prevailed after the 2002 Assembly elections, when the inclusive political policies and visible thrust on the development process by the new coalition government was coupled with considerably enhanced capacity of the security forces to counter the trans-border movement, due to remarkably constructed fencing all along the difficult, rugged and mountainous terrain of over 750 kilometers of the Line of Control. The next propitious opportunity arose with the unexpectedly impressive participation of the people of the state, including the Valley, in the 2008 Assembly elections held in the aftermath of the wide spread disturbances in Jammu and Kashmir regions due to land controversy related to Shri Amarnath Shrine Board.

However both times the separatist elements, underground as well as over ground – armed as well as unarmed, and their mentors across the border, proved more than a match for restorers of normalcy, peace and tranquility, and outwitted the policy makers and implementing agencies of the centre and the state. The other side has, it needs to be acknowledged, shepherded and preserved their resources, scouted for exploitable loop holes, waited for the right opportunity to present itself and when the time came, very adroitly and skillfully took advantage of every small opening. The ISI has been constantly changing and evolving its tactics according to the ground situation in the state and to ensure optimum utilisation of the resources available, along with predicable and possible collateral support.

Any objective analysis of the militancy in the state would indicate towards 2003 as a watershed year. The most significant impact on the counter-insurgency operations was the erection of fence along the Line of Control. It was indeed a very commendable achievement of the Army which managed to complete over 750 kilometers of this major wire obstacle through extremely difficult mountainous terrain, in a short period of almost one year. This, coupled with improved surveillance equipment and better border management, brought down the level of infiltration quite substantially. For the first time since 1990 the number of infiltrators became less than attrition in the ranks of militants. This trend has continued every year since then, making the border fencing as an extremely effective measure against the cross - border terrorism. The efforts of the security forces were complimented by a very visible and perceptible increase in the developmental efforts of the state government and enhanced cooperation between civil administration and the forces at all levels - resulting in almost seamless synergy in the anti militancy endeavors.

At the political level the state government reached out to Jammu and Ladakh regions on one hand, on the other the "healing touch" policy adopted by it assuaged the feeling of hurt and distress and helped calm the frayed nerves of the people of Valley. Thus faced with a shrinking local support base and hemmed between unrelenting pressure of the security forces and depletion in the ranks, the militants and their handlers were forced to take stock of the adverse situation and reconsider their options. Instead of the earlier vision of expanding the arc of operations and influence, the emphasis shifted to secure safety of the existing assets while undertaking scattered and high visibility strikes with a view to register their continued presence and garner ample media attention. This was also the time when under pressure from the United States and the peace efforts initiated by Prime Minister Atal Behari Vajpayee, Pakistan President General Parvez Mushrraf had promised to rein in the terror outfits. Efforts of the ISI were also circumscribed by this new stance of their military chief and head of the state. This continued for the next over two years with security forces getting an increasing edge over the terrorist elements. The most visible incident during this period was the militant suicidal strike on the Tourist Reception Centre Srinagar on 6th April 2005, just a day before the Prime Minister flagged off the first bus on the newly opened Srinagar – Muzzafarabad route.

2006 - 2007: The Sex Scandal

Having lost the capacity to pose any serious challenge to the security apparatus and, probably, alarmed by the forthcoming second Round Table Conference on Kashmir, chaired by the Prime Minister himself at Srinagar on 24th and 25th May 2006, the militants struck twice during the month. At two different places in Udhampur and Doda districts of Jammu region, 28 persons of minority community were killed on 1st May. An audacious fidayeen attack was made on a public meeting to be addressed by the Chief Minister in Srinagar on 21st May. Due to some confusion the

militants, who had gained access to the venue dressed as police personnel, opened fire before the arrival of the Chief Minister killing couple of civilians and causing injuries to many. The IGP of Kashmir Range was also seriously injured in this episode. This time the militants had overreached, in targeting the chief executive of the state and almost killing the top ranking police officer of the Kashmir division. Shaken to the core by the magnitude of the security lapse, the state police went after the militants and their infrastructure like never before, particularly focussing on defanging the capacity of the terrorist groups to mount suicidal attacks. Already feeling the loss of depletion in the ranks, the aggressive posture of the police and other security forces severely curtailed the militant outfits' capabilities to inflict serious damage to the state structures through armed actions. A search for softer alternatives had begun.

Literally clutching at the straws, the separatist network exploited to the hilt an ongoing public exposure which had caused embarrassment to some important state functionaries. The infamous sex scandal came to light in the month of April 2006 with the circulation of nude picture of a girl on the mobiles phones in Srinagar. This became tip of an iceberg leading to surfacing of a full fledged flesh trade racket. The rumour mills worked overtime alleging the involvement of former ministers, legislators and senior officers in sexually exploiting women for cash or favours. Anybody mentioned by the kingpin of the racket and her half a dozen accomplices was painted black and denounced as a lecherous offender of the worst kind. Unsurprisingly all the names mentioned in the court or appearing in the public domain, at regular intervals, were of highly placed individuals with known nationalist credentials.

For some obscure reasons, the Jammu and Kashmir High Court took up the case as a Public Interest Litigation on its own accord and made the High Court Bar Association, an overtly and known separatist organisation, as a party. The Bar in collaboration with overground and underground separatist elements had a field day, with the media gleefully joining in for its own reasons, running down, denigrating and reviling the entire state system and machinery. Alleged individual transgressions, which are yet to be proved after judicial intervention, were loudly proclaimed as part of a preplanned and well determined conspiracy of "pro-India elements" to dishonour the Kashmiri womanhood.

Alarmed by the high pitched media hype and the street lung power displayed in the expected localities of Srinagar, the state government handed over the case to CBI. The state High Court regularly monitored status and progress of the CBI enquiry. The CBI arrested and charge sheeted almost two scores of high profile persons. The accused, finding the entire Bar hostile and vocally prejudiced, approached the Supreme Court for transferring the case outside J&K. Their plea was accepted and the case was shifted to a court in Chandigarh, where it is still sub-judice. With this, the CBI closed the case against others for lack of evidence.

The terror masterminds and separatist networks had hit a propaganda goldmine. Having lost the capacity to engineer effective, sustained armed incidents, they had successfully utilised state resources and instruments against some of its own important functionaries, tarnishing their professional standings and personal images beyond repair. Disruption of day to day life, denigrating the state organs and disregarding law and order machinery was to be the future strategy. Also till another and more important issue did not become available, the current matter was to be stretched to the possible extent and what could be more expedient than to level charges against some other important individuals. Help came in the form of another judicial intervention.

Justice Bashir Ahmad Kirmani of the J&K High Court in his order on 8th October 2006 asked the CBI and Chief Judicial Magistrate Srinagar to reopen the closed case and reconsider available material against more than a score of high profile political and official functionaries, including a cabinet minister, Chairman of the J&K Bank and a former Vigilance Commissioner. All those mentioned in the 119 page order appeared to have been virtually condemned unheard. Part of it made a lyrical reading, "....When ministers misbehave, legislators break law, civil servants become uncivil and police officers plunder....". The Honourable Justice probably did not consider the advice tendered by Francis Bacon in his celebrated work "Of Judicature", in the early seventeenth century, which included ".....Judges ought to be more learned than witty, more reverend than plausible, and more advised than confident....Judges must beware of hard constructions, and strained inferences; for there is no worse torture than the torture of laws; especially in case of laws penal, they ought to have care that that which was meant for terror be not turned into rigour...". Or was His Lordship playing to the gallery. In that case who were the applauding audience?

While the separatists and their supporters were probably savouring the new found avenues, the security and law and order establishments had not taken due notice of this development and comprehended its full import and future potential for mischief. The commanders at all levels were smugly citing statistics to emphasise that the level of militancy and violence had come down as compared to the previous year or the tenure of their predecessors. There was no information available, at least in the public domain, to suggest that the government either at the centre or in the state was aware of the newly tested mischief capacity of the overground separatists. Hence, no plans were made or new strategy formulated to neutralise any future efforts to undermine the state structures.

2008: Shrine Board Land Row

The state government provided an ample opportunity to the mischief makers during the summer of 2008, in what came to be known as the Shri Amarnath Shrine Board land allotment issue. It all started on 20th May 2008 when the state cabinet approved diversion of 39.88 hectares of forest land to Shri Amarnath Shrine Board at Baltal and Domel, in Ganderbal district of central Kashmir. This set in motion a series of incidents which, over the next three months, not only gave a serious setback to the progress towards normalcy but almost tore apart the proud secular fabric of the state.

The earliest reactions appeared in the local press voicing concern about the impact of this step on the fragile ecology of the area. The separatists picked up the refrain and launched an agitation against the move giving it emotional, political and communal twist. As if on a cue, several separatist outfits closed their wide differences, which had continued for years, to join hands and a joint Action Committee on Land Transfer was formed to launch a coordinated agitation across the Valley. This movement turned violent towards middle of June. To make matters worse for the coalition government the PDP, whose representatives in the cabinet had not only been a party to the decision but also held the important portfolios of Deputy Chief Minister as well as Forest Minister, publically dissociated itself and demanded revocation of the land allotment. In a bid to cool down tempers and to save the coalition government, the newly joined Governor NN Vohra, who was also Chairman of the Shrine Board, withdrew its request of land to the state government following which the contentious order was withdrawn on 1st July. This had an unprecedented reaction in Jammu where the move was interpreted as an abject surrender to the separatist and communal elements. Jammu erupted like never before, with widespread agitations, at times turning violent, and anti government demonstrations spearheaded by BJP dominated Shri Amarnath Sangharsh Samiti comprising over 30 organisations.

All this resulted in the fall of the coalition government on 7th July followed by imposition of the Governors Rule. The Jammu agitation re-ignited the flare-up in Kashmir, and both provinces witnessed peak disturbances during the month of August. Normalcy started returning only after the state administration was able to resolve the whole issue in negotiations with the Sangharsh Samiti. Without going into the merits or otherwise of the root cause of the issue, it became very clear that the mainstream political leadership was woefully unable to gauge the susceptibilities of the people of the two regions, could not comprehend the designs and capacity of the separatists networks to foment trouble and exhibited opportunism to secure short term gains.

The turmoil which was engineered over an apparently trivial issue had served the desired purpose of the perpetrators; uniting the disparate overground separatist outfits, anti – India slogans were probably loudest in the last 18 years and brought Syed Ali Shah Geelani back into the reckoning as an important focal and rallying point. On the other hand some incidents during the agitation in Jammu dented the secular image of the region – its greatest strength in the post Independence era. And for the first time one could discern fault lines between the Hindu and Muslim majority areas of the division. These developments in the two regions would have gladdened the hearts of the terror groups and their supporters. The state government had scored a self goal; worse, it had shot itself in the foot.

The separatists and their support structure had found a new tool and they effectively used it against the state systems by bringing life to a grinding halt for most of the summer in the nerve centre and the summer capital of the state, Srinagar, and few other towns. With situational modifications the act could be replicated in the coming years. The script of disruption and disturbances was re-enacted during the next two summers also with agitators dislocating the normal life, causing difficulties and misery to the people and huge loss to the state economy. The government, police and para - military forces were most of the time on their back foot and acting in a reactive mode. The price of not reading the developing game plan, absence of anticipatory actions and preventive measures turned out to be heavy, and not merely in financial terms.

2009: Shopian Women's Death

Elections to the state assembly were conducted under the Governor's Rule, in seven phases from 17th November to 24th December 2008. Consequently, a coalition government of National Conference and Congress, headed by Omar Abdullah was formed in the first week of January 2009. The spirited campaign and impressive participation of voters exceeded all forecasts and surprised political analysts. It would be interesting to make a comparison between the three assembly elections held in 1996, 2002 and 2008. The polling percentages in these were 53.92, 43.70 and 61.47 respectively. Similarly the number of contestants per assembly seat was 6.26, 8.09 and 15.56. Such huge involvement of the people in the electoral process was the most authentic proof that the area of influence and the ideological support base of the terror groups and their supporters were indeed very limited.

The new government soon after its move to the summer capital Srinagar in May came to face a situation which snowballed into a crisis. On 29th May night Shakeel Ahangar reported to Shopian police that his wife Nelofer aged 22 years and sister Asiya aged 17 years had not returned home from their orchard across Ranbiara Nallah. A search led to recovery next morning of dead bodies of the two ladies from the Nallah. The burial proceedings were taken over by a separatist leader alleging rape and murder by security forces. A call for "Shopian Chalo" and Kashmir Bandh was given by APHC (Geelani) for 1st June. Facts were twisted and orchestrated through media which led to a public perception that the women had been gang raped by security forces and that Police was shielding them. Separatists from different camps, the Bar Association and even the mainstream opposition found in the incident an opportunity to attack the Government and the security forces/police. Hartal call was extended till 5th June and APHC (G) gave a week long programme beginning from call for "Shopian Chalo" on 8th June. The agitation and clashes with police / CRPF continued for a couple of months.

State Government constituted a judicial enquiry into the incident to address the public outcry. Special investigation was ordered under a DIG, which was later supervised by an IGP on the directions of the High Court. With no break through to link the crime to the security forces, the axe fell on the police officers including the district SP and a Deputy SP who were alleged as perpetrators of the crime or involved in cover up. They were arrested and interrogated and remained in custody for over a month before getting released on bail. They became victims of a design to foment trouble by separatists and other vested interests to keep the pot boiling and not allow return of peace. The investigation of the case was handed over to the CBI on 17th September. The CBI based on forensic evidence concluded that the death of two women was a case of "accidental drowning". The post mortem reports were found to have been manipulated. Swabs were not taken from the bodies of the deceased as was revealed through DNA analysis. The concerned doctor confessed having taken swabs from gloves used to examine other patients. Hymen of Asiya was found intact. The police officers arrested earlier were not found by CBI to be in any way involved in the crime or its alleged cover up. The case is under trial in the court of CJM Srinagar since December 2009. Another summer in Kashmir had been disturbed and thrown into disorder. Compare this with the stunning silence over the murder of two young sisters of Sopore, Arifa and Akhtar, by the militants on 31st January 2011.

2010: The Stone Pelters

The phenomenon of disturbances and disruption was repeated again in 2010, almost immediately after seat of the government moved to Srinagar for the six months of summer in May. The tempo of demonstrations and clashes with police and the CRPF started building- up in the down town localities of Srinagar after a 17 year old boy Tufail Mattoo got killed by a tear gas shell fired by the police to control a rioting crowd. This incident was used to trigger a series of

protests in Srinagar and Baramula, which followed a set pattern. A gathering of young people, mostly in their teens and early twenties, would defy prohibitory or curfew orders, indulge in stone throwing, arson, damaging and burning government property and escalate violence to a level that would leave the police and CRPF no alternative but to resort to lathi charge, lob tear gas shells and in some cases open fire.

For almost five months the cities of Srinagar and Baramula along with Anantnag and Sopore were rocked by stone throwing youth resulting in clashes with police / CRPF and casualties, with further spiralling effect. The two months of July and August were particularly distressing. According to a Frontline story, "In just six days, from July 30 to August 4, the situation took a turn for the worse as a large number of public and private property was destroyed. In the wave of anger that consumed the Valley, nine police stations, police posts and SOG (special operations group) camps, eight government vehicles and one coach of a train, one railway station, two houses of political activists and 13 government offices were destroyed."1 Toll during the summer disturbances, over a hundred deaths, was heavy and unfortunate.

Stone throwing is nothing new in the Valley and Law and Order authorities had effectively dealt with it two years ago during the Amarnath Land agitation. The police, at least in some of the disturbed areas, abdicated authority. Reportedly, a few of the Srinagar SHO's avoided going to the troubled spots. Morale of the State Police, otherwise a very fine force, was dented with steadily mounting casualties in its ranks, lack of effective command, clear directions and inspiring leadership from the top.

Inability to ensure regular attendance in the offices and curb disenchantment among the employees, particularly in the capital city, and virtual breakdown of the functioning of the Executive Magistracy and its synergy with the police further highlighted inefficacy of the state apparatus. There were also reports of lack of coordination and absence of harmony between the top echelons of Civil, Police, CPMF and the Army.

The elements inimical to the interests of the state and the nation could not have asked for more. Although the disruptions were restricted to Srinagar and few other towns of the Valley, the developing situation had all the potential of spreading to other areas of Kashmir. That it did not happen is only because of the fact that a vast majority of the population, outside the pools of influence of the separatists in downtown Srinagar and some urban areas, is in favour of leading a normal and peaceful life. The credit for localising and containing the disturbances belongs fully to the people of the Valley and not to any sagacious political initiative or imaginative and competent administrative handling.

Prognosis

The focal design and modus-operandi of the controlling apparatus of the stone pelters was very aptly and succinctly described by the noted strategic analyst K Subrahmanyam as, "All it requires is some 39 – 40 trained dedicated jihadi terrorists introduced in each town as sleeper cells over the years with enough resources at their disposal. They get embedded in the stone-throwing crowds and direct and manipulate their operations. They are in a position to use the separatists who are in a small minority but in sufficient numbers to provide such jihadis logistic and other backing. Their aim is not to get "azadi" or jobs for young men but to create chaos in the Valley and rebut the Indian claim that constitutional democracy prevails in Kashmir under a government elected in a free and fair poll"2.

This shift from the armed insurrection of the early nineties to the softer options of street protests and demonstrations was almost forced on the ISI due to external and internal developments. This transformation was cunningly conceived and smartly carried out, changing tactics in accordance with the developing situation and, wherever and to the extent possible, using the strength as also means of the adversary to cause damage. Endeavours of the ISI to continue high pitch terrorist activities in J&K received a serious jolt with the erection of border fence along the LOC and upgraded border surveillance in 2003. With this the trans - border movement became so much more difficult and the rate of attrition in the militant ranks higher than the possible replenishment. This inverse ratio, continuing for the last seven years, has caused severe dent in their capacity, and even willingness of the cadres, to pose a challenge to the security forces. Particularly in the affected districts of Jammu division the presence of militants can now be counted on finger tips. In Valley also their number is constantly on the decline.

This setback on the ground was compounded by beginning of the Composite Dialogue between India and Pakistan in January 2004 and consequent scaling down of General Musharraf's support to the terror network and the ISI, which was further circumscribed by considerable and persistent international pressure on Pakistan following the 26/11 terrorist attack in Mumbai. Thus faced with depleting ranks in the field, crunch of resources, increasing pressure of the Indian security forces and reduced support from the highest quarters, the ISI probably had no alternative but to refashion its strategy and depend more on the non – combatant local cadres and their supporters in order to remain meaningful agent of disturbances and disruption in J&K. This is the conceptual framework and parameters with in which the ISI, different terror outfits, the overground separatists and their supporters appear to have been operating in unison, and with considerable success, during the last five years. Large scale protest have been generated leading to clashes with the police and CRPF resulting in loss of life, injuries and damage to property, leading to cyclic repetitions carefully timed to last the summer season with a view to garner optimum media coverage and also to take advantage of the comfortable weather conditions. If these elements have their way, they would like to continue this trend summer after summer till circumstances become favourable, from their point of view, to embark on a more direct and adventurous course. The summer of 2011 is not going to be an exception.

2011: Likely Scenario and Remedial Measures

The scenario of last five years indicates towards inevitability of the mischief makers trying to create trouble during the coming summer months. These elements do not have to stick to any fixed time schedule or play by a given script. They would wait for an opportunity, an opening or a slip by the administration, police or security forces or happening of a triggering event. Anything to spark a few protest demonstrations is good enough to generate clashes with the law enforcing agencies; then escalating these to firing of tear gas shells and bullets, hoping the resultant damage would in turn generate a blow-back effect acquiring a critical mass. As the mode and momentum of the disturbances can not be predicted in advance, therefore, the preparedness of the state government to deal with such eventuality cannot be

based on any single scenario. Whispers are already making rounds in Srinagar saying khoon ka badla june (revenge of blood in june), indicating that if no new issue is on the anvil then last year's casualties would be resurrected for agitation. There is also a talk of attempting Cairo's Tahrir Square type sit-in at Lal Chowk Srinagar. It could be any other matter ranging from the death sentence of Afzal Guru to Ali Shah Geelani's detention or even elopement of a girl. Therefore, the state government has to prepare itself to effectively and speedily respond to any developing situation with a mischief potential, in a calibrated and coordinated manner.

The state administration would do well to embark on a three pronged strategy to achieve the desired results. It must deal with the trouble makers and lumpen elements with decisive determination, take good care of the majoritypeace loving people and also address internal dimensions of the Kashmir issue in conjunction with the central government. In the last few months police has swung into action and apprehended few hundred stone pelters and booked them under various offences. Few have also been detained under Public Safety Act (PSA). But most of those taken into custody have either been released by the police or secured bail from the courts. The past experience in such matters shows that cases of the accused will not be taken to the logical conclusions and hence the culprits may not be deterred from repeating their past actions. Every mischief maker must be made to bear the consequences of legal proceedings involving apprehension, prosecution and conviction. That has not been happening for the last many years. There is hardly any reported case in which a person has been jailed for rioting, damaging government property or assaulting a policeman or an employee, in spite of clinching evidence available against so many people in the form of still and video photographs. The fear of law seems to be absent from the minds of those who break it and that should be restored. There is also an urgent need to revive the practice of taking recourse to the time tested preventive provisions of substantive laws, which seems to have gone into disuse. In this regard, the Executive Magistrates and their police counterparts must aim at achieving seamless coordination in all matters relating to maintenance of peace and good public order. PSA detentions should be resorted to only in exceptional cases. As the Punjab experience has shown, strengthening of Police Stations could be central to any strategy aimed at securing and maintaining peace.

If the law and order apparatus is to ensure peace it is imperative to put curbs on the activities of and deal decisively with separatist leaders and overground workers (OGWs). A widespread feeling has gained ground, and not without reasons, that all the top leaders of various separatist parties and organisations are beyond the reach of civil and criminal laws of the State and the Nation. Main cause for this is the unwillingness or inability of the law enforcing system to make the law breakers face the consequences of transgressing provisions of the substantive laws of the land. The separatist leaders do not consider themselves accountable to the State and the Indian legal system but, at the same time, are mortally afraid of Pakistani Establishment and the ISI.

Similar is the case in respect of the OGWs. This category comprises people from different walks of life, who collectively provide immense sustenance to the militants to keep the problem alive. They furnish material, logistic and, very importantly, media support to the militant organisations. Their activities and financial dealings attract provisions of a number of laws. Virtually none of these have been booked, prosecuted and convicted so far. It would be much more effective and deterrent to launch civil and criminal cases against them and secure convictions than to occasionally resort to detentions under the PSA. As of now this group takes immunity from law as almost granted. The diversity and level of access of these people is truly amazing. If only the Income Tax Department, the Enforcement Directorate and the police effectively enforce the normal laws under their respective jurisdiction, a major source of ground level and logistic support to the militants can be substantially checked.

While the law and order machinery is engaged in diffusing or dealing with a situation which, depending on the past experience, would be confined to a very small part, the state administration must ensure that people in the rest of the Valley are able to lead a normal life without any disturbance or breakdown. For this, role of the district set-up is crucial. Only an effective district administration can provide for the basic needs of the people under its care, create conducive conditions for them to pursue their vocations, aspirations and dreams, as also enable them to lead a reasonably comfortable life. This becomes even more important in a conflict situation and disturbed environment, where lives and interests of the ordinary people are under pressure. The emphasis of the district administration should be on accelerating the developmental activities, quick redressal of public grievances and maintenance of services. Proper selection of the two most important functionaries of the district, the Deputy Commissioner and the Superintendent of Police is of critical importance; merit and suitability should be the only criteria. In the current scenario, situations have to be handled mostly at the cutting edge levels by lower police and executive functionaries, therefore, the synergy and team spirit shown at the district level has a very strong, forceful trickle down effect.

Internal Dimensions

A problem like the Kashmir issue has external as well as internal dimensions. Though the two are inter linked, it is possible to make considerable headway also independently in the two domains. Whereas progress in resolving external aspects would invariably involve Pakistan and in that context endeavours by India alone are not sufficient, serious attention should be given to attend to the internal issues which have remained unsettled and have been generating disharmony and hard feelings in the State as a whole and also within its different constituents. Any objective analyst of the Kashmir situation would surmise that right from the very beginning divergence of interpretations and areas of disagreement have existed between Srinagar and New Delhi. Sharpness of the differing views may have varied at different times during the last six decades, but the grey areas always remained present. These basically relate to two nodal points of non-dilution and continuation of Article 370 of the Constitution of India and quantum of autonomy to the state.

Any attempt in this direction has to be a collaborative and collective effort between not only the State and the Central governments but also between the entire political spectrums of the two entities. A start was made seven years ago and continues in one form or the other. But some political analysts are surprised at the descending order of importance accorded to the initiatives. The attempts to find a common ground were initiated with contacts at the highest level in 2004. Two years later, two Round Table Conferences convened by the Prime Minister constituted six Working Groups; whose deliberations and recommendations have remained ineffective. Currently this task has been assigned to a group of three light-weights and not well known interlocutors appointed by the centre. After handling the

issues for over six decades does the Union Home Ministry need interlocutors recommendations to jog its institutional memory, ask some commentators. But the importance of seriously addressing the internal dimensions of J&K can hardly be over emphasised. The contentious matters are not confined to bilateral resolution between the Centre and the State alone, but also have intra state contours which would require serious consideration for any comprehensive and lasting solution.

Without going into the technicalities of whether the starting point of a resolving formula should be the Instrument of Accession, the 1952 Delhi Agreement or the 1975 Parthasarthy – Beg accord, the fact is that the two matters remain to be settled. This could be the right and proper time to seriously once again address all outstanding political issues between the Centre and the State, and between the State and various stake holders in different regions of the State. Moreover the 2001 Assembly Resolution of the National Conference asking for "autonomy", as also the more recent competing demand of the PDP for "self rule" makes it imperative for the Central Government to seriously and conclusively address the twin issues of Article 370 and autonomy. The parameters of settlement on Article 370 and the contours of the concept of autonomy mean different things to different people and groups. But it may not be beyond the realm of possibility to work out a formulation that would be practical, viable, credible and acceptable across the political spectrum of the Nation as well as the State. However, for this to happen it has to be a composite scheme of special political dispensation at the state, regional as well as district levels.

Conclusion

Last five summers in Kashmir have witnessed disruptions and disturbances of varying magnitude and intensity, throwing the normal life out of gear and causing lot of distress to the people. The steady progress towards restoration of peace and bringing back normalcy, which began a decade ago, has been adversely affected. The tourism sector, business establishments and educational institutions were particularly badly hit. However, the sufferings of the common man are of least concern to those who master minded and carried out the plans to keep trouble going in the Valley through this duration. That these elements would strive strenuously to repeat the act during the coming summer also should not be a matter of doubt in anyone's mind, least of all in the perceptions of the State administration. The most effective way for it to deal with the looming trouble is to anticipate the spectrum of probable courses of action by the mischief makers and their controllers, carry out a thoroughly professional assessment and make adequate preparations to meet the challenge. At stake are not only the credibility of the State Government and the welfare of the people but also more fundamental and basic issues.

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Social Media as a Catalyst in the Egyptian Unrest

Lieutenant Colonel Sushil Pradhan*

'On the Internet people are uploading and downloading ideologies. In a few years, every citizen of the world will be able to comparison shop between his country and his own government and the one next door.'

- Thomas Freidman1

Introduction

The world's attention has turned to Egypt as anti-government protestors have succeeded in ousting Hosni Mubarak's thirty year old iron-fisted rule. Thousands of these protesters took to the streets in Egypt to express their opposition to President Hosni Mubarak's regime and the nation's current economic situation, and the government responded strongly, using military forces to bolster police presence and impose curfew. As such, much of what happened in Egypt has repercussions on the Arab world; since geopolitically, Egypt serves as a bridge between the predominately Muslim areas of North Africa and the Middle East.

Inspired by the 'Jasmine Revolution' that toppled the former president of Tunisia, Zine al-Abidine Ben Ali in January 2011, student and opposition groups had been staging protests across Egypt. Egypt has a large youth population which grew progressively dissatisfied about unemployment, poverty, rising food prices and an autocratic leadership seen as corrupt and calcified. In an unprecedented display of unity among disparate wings of Egyptian society, middle-class students and Internet-savvy young people protested alongside older, hardened activists and those from less privileged backgrounds.

The outbreak of protests in Egypt was marked by a uniquely 21st century phenomenon. Much of the organisation took place over social media platforms like Facebook and Twitter. Citizens no longer depended on mainstream media to spread word of activist campaigns and dissent. Thanks to social media, every protester, every citizen, had the power to be a journalist, to broadcast breaking news to the computer-using, phone-wielding population of the world.

Genesis of the Movement

With a population of over 80 million, Egypt is the most populous Arab nation. Because of its large size, Egypt plays a very influential role in the politics of the region. An estimated 90 per cent of Egyptians are Muslims and 9 per cent are Coptic Christians. Egypt's government functioned as a republic with its legal system borrowed from Islamic law and other systems, such as the Napoleonic code. Presidential elections occurred on a six year cycle, with no term limits, as exemplified by Mubarak's 30-year reign. In 2007, reforms were passed through national referendum to ban any parties based on religion, race or ethnicity. Although the Muslim Brotherhood has been officially banned through the 2007 reforms, it is nevertheless considered the most viable source of political opposition in the country. Another important figure of political opposition is Mohamed El-Baradei, who served as the Director General of the UN's International Atomic Energy Agency from 1997 to 2009. In 2010, El-Baradei announced the formation of a 'National Association for Change'2, a move many believed to be indicative of his political aspirations.

Reports of human rights violations in Egypt were consistently grim throughout Mubarak's presidency3. Human Rights Watch reports that the government took repressive action against minority Coptic Christians, reporters, political dissidents and human rights activists in 2010. In recent years, the government cracked down hard on those who attempted to expose rights violations in the country, making information hard to come by.

An estimated 20 per cent of Egyptians live below the poverty line. Following the global economic crisis, economic growth slowed down from an average seven per cent annual growth of GDP. Two results of the economic downturn have been a sharp decline in foreign exports and revenue brought in from the Suez Canal, both harming Egypt's economic well-being. Living conditions in Egypt leave much to be desired. Legions of dynamic young people who have worked hard to get an education find there's nowhere to use it, with negligible employment prospects.

At the centre of the protest was opposition to President Mubarak. Egyptians grew increasingly frustrated with Mubarak's regime, which was marked by corruption and rights violations. Egypt's economic situation further fuelled the flames of discontent, coupled with widespread unemployment and economic hardship.

Social Media Mobilises the Protestors

Since January 2011, protestors took to the streets in Egypt and soon congregated at Tahrir (Liberation) Square in Cairo. President Mubarak imposed curfews, which many protesters defiantly disregarded. As the protests intensified, the police and military forces began taking retaliatory actions. Many demonstrators were hit with rubber bullets, water cannons and tear gas. There were instances of protesters fighting back against police in violent confrontations. The protests in Egypt were markedly different from other social uprisings because there was no clear leader or political group organsing the actions, raising the doubt whether the movement would fizzle out in the absence of leadership.

However, social media with its strength of social networking, and the sense of inclusion and empowerment that it can bring, served as a key to successful spread of information about the protests in Egypt. The widespread use of twitter, Facebook and other social media outlets enabled protestors to organise themselves and wage a successful media campaign. A Facebook group called 'We are All Khaled Said'4, named after an activist who was killed in Alexandria following an incident of police brutality last year and the April 6 Youth Movement5 (comprising socialists and pro-labour people) were at the forefront of organising the internet movement.

Protestors Inter-Connected. When people needed to communicate to organise demonstrations, they went to Facebook to tell each other where they would be. Egypt hosts an active and politically minded blogging community, and

approximately 79 per cent of the citizenry - over 60 million people - own a mobile phone. As in Tunisia and Iran, many Egyptians learned of anti-government protests via activist pages on Facebook. Even the protests themselves were in part inspired by the death of the blogger-activist, Khaled Said, who was beaten to death by Egyptian police. Without these mass organising tools, it's likely that fewer people would have known about the protests, fewer people might have shown up, and the Egyptian authorities might have more easily dispersed them.

Journalism on the Internet. Social media sites such as Facebook and Twitter enabled journalists to circumvent traditional barriers of communication to share what was happening in blocked off and censored environments. Social media also grabbed the attention of mainstream media outlets around the world, who used video found on YouTube and photos plucked from Flickr in TV news broadcasts and newspaper articles. Professional journalists like CNN's Ben Wedeman were using Twitter to report live from protest areas. Nicholas Kristof, a journalist for *The New York Times*, not only used Twitter for short updates, but also Facebook for observations about the real situation on the ground in Egypt6. The *public commentary*, by virtue of the level of interest, led to worldwide debates, since Kristof's page was meant to be a fan page. Social media was also revolutionary because it made the average citizen a reporter. Armed with just a mobile phone and an Internet connection, protestors uploaded the raw, unedited footage of the latest protests in Cairo to YouTube or Facebook and disseminated them to millions before reporters were even on the scene.

Shaping the Narrative. In situations of chaos, the upper hand often goes to the group that can shape a narrative in its favour. When looting began in Cairo, the narrative could easily have shifted in favour of the government since apparently hooligans were turning the city upside down. But word started getting out via Twitter that hastily arranged neighbourhood watch groups were apprehending looters who, it turned out, had government identity on them. This might or might not have been true, but it certainly shed a different light on the looting. The narrative was reset. Soon thereafter, CNN changed it's on-screen headlines from "Chaos in Egypt" To "Uprising in Egypt." Social media successfully quashed reports deliberately spread by the regime that looters were descending upon the National Museum where a third of the world's priceless treasures are housed. Twitter feeds revealed that in response to these claims, students and activists headed for the museum and formed a human ring around it to prevent looters from entering; although mainstream media reported that it was the Army that had secured the building.

Putting Pressure on Washington. In disturbed regions, Washington has often found it more convenient to spin the narrative in favour of the authority in power, in the interest of maintaining stability and an ally. Egypt being one of the closest allies of the US in the Middle East, there was concern about instability in the region, should Egyptian president Hosni Mubarak fall. However, too much information had been escaping the country, particularly via Twitter and Facebook; and this seemingly endless flood of details firmed up the impression that a genuine uprising was taking place. With that deluge of information, Washington lost any ability to downplay events on the ground and maintain a distanced posture. It had no choice but to subtly and incontrovertibly shift its stance as the unrest continued.

Building-Up Worldwide Opinion. What seemed so striking about the concept of a "social media revolution" wasn't just that protesters in Egypt could communicate with each other, organise, and execute protests. The unique attribute was that people all over the world were able to interact with this information in ways that still-photos and short videos on the nightly news don't permit. It allowed the world to be apprised of the situation in real time. Facebook updates resulted in several hundreds of comments from users, many of them astute observations about, among other things, the political future of Hosni Mubarak, the validity of comparing Cairo's unrest to Tiananmen's, and the role that the media (both within Egypt and outside of it) were playing as the situation escalated.

Convergence of Voice Communications and Social Media. Without doubt the Egyptian government realsed the potency of social media, when it shut down all Internet access in an apparent attempt to curb dissidents and the spread of information. In an innovative move to converge social media on the Internet with voice communications, Twitter teamed up with Google and its recently-acquired SayNow to create a service specifically for the Egyptians called Speak2Tweet7. This service allowed its users to dial any of three international phone numbers using any voice line and leave a message. The message was immediately sent to the Twitter account Speak2Tweet with the hash-tag identity '#Egypt' added to it. Those following the tweets were then able to listen to the voices of the protestors and whatever messages and updates they wanted to relay. Those inside Egypt's borders who wanted to be updated could access all the messages by dialling any of those same three numbers. Global Voices and Stop404.org soon followed suit.

Voices of Dissent. Critics of social media's influence in activism8 are quick to point out that people organised and revolutions occurred long before the Internet existed. Indeed, the role of real people, bravery and sacrifice leading to President Hosni Mubarak's resignation is more important than Facebook or Twitter. While protests continued even after the Egyptian government shut off access to the Internet, the impact of social media can no longer be dismissed. Evgeny Morozov argues9 that it's wrong to assess the political power of the Internet solely based on its contribution to social mobilisation; we should also consider how it empowers the government via surveillance, how it dis-empowers citizens via entertainment, how it transforms the nature of dissent by shifting it into a more virtual realm, how it enables governments to produce better and more effective propaganda. The point is not that social media tools like Twitter and Facebook cause revolutions in any real sense. What they are very good at doing, however, is connecting people in very simple ways, and making those connections in a rapid and widely-distributed manner. This is the power of a networked society and of cheap, real-time communication networks. Social media may not be a cause, but it can be a powerful accelerant.

How Social Media Journalism Accelerated the Uprising?

With the Internet inaccessible for the majority of people in Egypt, much of the international community was relying on journalists and citizens with satellite phones for real-time updates on the violent protests. The information flowing out was a hybrid of the "old school" reliance on reports from journalists on location, and "new school" amplification through the social web. To summarise the multifarious uses of this technology, some *critical enablers* were:-

(a) **Real Time Tweets.** Journalists on location were updating their Twitter accounts with 140-character stories. Sometimes these were quotes from sources being interviewed and at times simply comments on their observations.

Several news organisations like NPR, CNN, The New York Times, Al-Jazeera English and others collated Twitter lists of journalists and citizens tweeting from Egypt.

(b) Facebook Storytelling. Journalists were not only including information about the demonstrations, but also their observations of and personal reactions to the tense situations on the streets of Cairo. They were posting rich and detailed updates to their Facebook pages based on their reporting.

(c) Live Streaming and YouTube Videos. After having their Cairo bureau closed and press credentials revoked by Egyptian authorities, *Al-Jazeera* English and Russia Today utilised YouTube to post updated video reports on the demonstrations.

(d) Live Blogs. Journalists on the ground in Egypt and web producers of news organisations were live-blogging updates to their websites. *The Washington Post's* live blog was updated with all relevant inputs coming from Twitter, Facebook and other platforms since the protests began. Other notable live blogs include *The New York Times, CNN, Reuters, Al-Jazeera, Guardian, BBC* and *The Huffington Post.*

(e) **Tumblr Curation.** Utilising its newly launched collated (or curated, in Internet terminology) 'topic pages' feature, Tumblr created an Egypt page that was being curated and contributed to by journalists and news organisations. Playing to the strengths of Tumblr, the page included an array of short updates, videos and photos from Cairo, while crediting original sources.

(f) **Real-time Audio Updates.** *Al-Jazeera* was continuously posting audio reports from its journalists to a website called Audioboo, which permits one to record shareable audio recordings on-the-go from mobile devices and contextualises that recording with the location, available photos and other information.

Social Media and Egypt: A Portend of the Future of Revolutions?

Are we in the age of Internet revolutions, where Facebook, Twitter and text messages are essential ingredients in democratic change? However, it takes a lot more than the 21st century version of a communication system to persuade people to take to the streets and risk harm, imprisonment, or death. The idea that change in Egypt was brought on by Twitter or a "Facebook Revolution" has been disputed by some, which doesn't mean social media cannot play a role. Social media will simply make it happen faster. Some trends that clearly emerge are:-

(a) **Real Time Information**. The protests would have happened with or without Twitter and Facebook but we might not have heard about it. Would Al Jazeera, without offices on the ground, have been able to report on the unfolding story as it did?

(b) **People as Information Nodes**. Humans are functioning as de-facto news aggregators using the publication tools already available. Interested people took it upon themselves to become individual nodes of information, using the social media tools they had to serve as their own news networks.

(c) Global Reach. More than ever, the Internet remained a crucial vehicle of sustaining and transmitting resistance by allowing Egyptians to 'network the world'. In a matter of hours, "Egypt" and "Jan 25" emerged as the most tagged messages on Twitter, with more than 2,500 tweets per second.

(d) Working Around Media Censorship. Social media didn't cause the protests, but social media services have been a catalyst, helping to spread information about the protests and providing a way to share details about what is happening where. Where the media was censored, social media has filled the void, with citizens themselves reporting on what was happening around them.

(e) Technology to the Aid of Citizens. Innovation kept people on the ground in Egypt connected to the outside world throughout the crisis. The Google-Twitter partnership that set up Speak2Tweet ensured that when mobile networks were down, people could call from landlines and still reach their Internet audience.

(f) Citizen Journalists. Social media can and did, help tip off journalists about developments in places they couldn't access. For example, it was difficult (and risky) for foreign journalists to report from the city of Suez, which saw some of the worst violence. But a steady stream of tweets and blog entries, as well as photos and cell-phone video, provided at least some understanding of the rapidly evolving situation there.

(g) Engaging the People. Governments now have no option than to use social media to get their message across, if they want to engage with their target audiences.

(h) Human Involvement. Every individual has an equal voice on social networks. People are not just hearing a piece of news, but can actually be part of that event in a way that they have never been able to do before. Social networking gives an observer anywhere in the world a voice and something positive to contribute to.

Countering Social Media

Social media have their drawbacks too. Lowering the costs of communication also diminishes operational security. Facebook messages are transparent, and even private messages can be viewed by authorities through search warrants, or pressure on the Internet social media firms. Indeed, social media can quickly turn into a valuable intelligence-collection tool. Reliance on social media can also be exploited by a regime willing to cut the country off from Internet or domestic text messaging networks altogether, as has been the case in Egypt. The capability of governments to monitor and counteract social media developed alongside the capability of their intelligence services10. In order to obtain an operating license in any country, social networking websites have to come to some sort of agreement with the government. In many countries, this involves getting access to user data, locations and network information. Facebook

profiles, for example, can be a boon for government intelligence collectors, who can use updates and photos to pinpoint movement locations and activities, and identify connections among various individuals, some of whom may be suspect for various activities.

Beyond monitoring movement websites, governments can also shut them down. This has been common in Iran and China during times of social unrest. But blocking access to a particular website cannot stop tech-savvy Internet users employing virtual private networks or other technologies to access unbanned IP addresses outside the country in order to access banned sites. In response to this problem, China shut down Internet access to all of Xinjiang Autonomous Region, the location of ethnic Uighur riots in July 2009. More recently, Egypt followed the same tactics for the entire country.

Regimes can also use social media for their own purposes. One counter-protest tactics is to spread disinformation, whether it is to scare away protestors or lure them all to one location where anti-riot police lie in wait. While such a government "ambush" tactics has yet to be used, its use is inevitable in the age of Internet anonymity. Government agents in many countries have become quite proficient at trawling the Internet in search of paedophiles, terrorists and criminals.

The most effective way for the government to use social media is to monitor what protest organisers are telling their adherents either directly over the Internet or by inserting an informant into the group, counteracting the protestors wherever and whenever they assemble. Authorities monitoring protests at World Trade Organisation and G-8 meetings as well as the Republican and Democratic national conventions in the United States used this successfully. One of the biggest challenges for security services is to keep up with the rapidly changing Internet. In Iran, the regime quickly shut down Facebook but not Twitter, not realising the latter's capabilities. If social media are presenting a demonstrable threat to governments, it could become vital for security services to continually refine and update plans for disrupting new Internet technology.

Conclusion

What has happened in Egypt in the last few months has now set a precedent. In spite of digital blackouts and information blockages, while the signal was lost, the voice survived. It found echoes and resonances around the world. Civic hackers in Egypt found supporters around the world, who not only spread their message but also provided them with legal and political infrastructure to make sure that their voice was heard. This revolution was not only about the present but also about what the future will hold. Digital natives who are integrated with the circuits of technology mobilisation and networking have been able to use these platforms to fight for their rights for freedom, dignity and expression. And all this was orchestrated using social media, viral networking technologies and digital communication assemblages.

Social media represents only one tool among many for an opposition group to employ. Their leaders must have charisma and organisational ability. Representing a new medium with dangers as well as benefits, social media do not create protest movements; they only allow members of such movements to communicate more easily. It is part of the overall strategy, but it cannot be the sole strategy. Still, the expansion of Internet connectivity does create new challenges for political leaders who have proved more than capable of controlling older forms of communication. This is not an insurmountable challenge, as China has shown, but even in China's case there is growing anxiety about the ability of Internet users to evade controls and spread forbidden information.

The ways in which Internet connected citizens are able to harvest the technologies of mass communication and social outreach is an indication of how the contours of global governance are going to be shaped. Social networking, citizen journalism, citizen action and civic collaboration are the new weapons of social change and transformation that the world should be able to use effectively. In Egypt, the Internet and social media have once again proven themselves as highly effective tools in the organisation of political protests and are also indicative of what the future holds for political dissent.

Social media networks have become major conduits for news, information and commentary that can unite grassroots movements to change and challenge governments. The unrest that began in Tunisia and Egypt has spread to Libya, Bahrain, Jordan and Yemen too. Even with severely limited internet access in large parts of India, will such form of protest-mobilisation emerge in the near future in the *urban* parts of Kashmir Valley or even in other regions? Food for thought indeed; for those monitoring the internal security situation in the Country.

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India and the Asia Pacific Region: Challenges and Opportunities Lieutenant General Kamaleshwar Davar, PVSM, AVSM (Retd)*

Introduction

The West, mainly Europe and the Atlantic region, largely was the centre of gravity in the momentous 20th century marked by two World Wars, the end of colonialism, a bitter Cold War rivalry between the two superpowers (USA and Soviet Union), gigantic economic and technological growth primarily in the West leaving their Asian rivals far behind in indices of human development, military power and thereby influence in the global arena. Nevertheless, the turn of the century witnessed an astonishing upsurge in the fortunes of Asia which today scripts a clear departure from the geopolitics and economic rise of various powers of the last century and has ushered relatively newer players out to exercise a more than eminent role globally. Most strategic analysts have thus dubbed the 21st century to be predominantly an Asian century.

Strategic Importance: Asia Pacific

Prior to an analysis of the strategic significance of a territorial or oceanic expanse, a theatre or a region, it is prudent to define its geographical boundaries, economic linkages and its myriad social and political inter-dependencies. Surprisingly, unlike the Middle East, Central Asia, West Asia, South Asia or SE Asia, the region being referred as Asia Pacific does not lend itself to a universally accepted geographical or a political definition or entity! Most security analysts surmise that this region got its name to facilitate the US strategic forays into Asia as it gradually increased its footprint in Asia. The vast and strategic expanse between the Gulf of Aden and the Straits of Malacca, that essentially is the Indian Ocean Region(IOR), which carries over 70 per cent of the world's oil and 50 per cent of the container traffic, also gets tagged in a broader sense to the Asia Pacific region (including India, Australia, Japan, South Korea, Taiwan and China) but the US has been excluded from this list! Nevertheless, in current strategic discourse, Asia Pacific generally includes the countries of the Pacific Rim (including the USA and Australia), South Asia, SE Asia, East Asia, NE Asia, collectively a large conglomeration of peninsular countries, archipelagos, island nations and island chains. India which essentially is an Asian, South Asian and an Indian Ocean entity is firmly now categorised as a leading power in the Asia Pacific Rim.

It is pertinent to note that Asia Pacific consists of nearly 4 billion people out of the world's 6 billion and accounts for nearly 60 per cent of the global GDP.1 By 2020, seven of the world's ten leading economies are likely to be in the Asia Pacific region.2 The United Nations, recognising the growing importance of this region set-up the ESCAP, namely, the UN Economic and Social Commission for Asia and the Pacific. Even at the height of the economic crisis the world endured a couple of years back, this region remained the fastest growing region globally, averaging overall 7 per cent growth with China growing at 9.5 and India at 8.3 per cent in 2010 respectively. Almost 50 per cent of the world's maritime trade passes through the confined straits and chokepoints in the archipelagic waters of Southeast Asia and the South China Sea. Thus this region which is of vital economic significance for the entire world lends itself not only to newer forms of regional and global rivalry but also varied forms of traditional and non-traditional security threats like maritime terrorism, sea piracy, poaching, access to territorial waters etc.

This region is also witness to dozens of outstanding and potentially dangerous territorial disputes. For example, those between China and Taiwan, between the two Koreas and nearer home, between India and Pakistan/ China are flashpoints for likely conflicts. Asia Pacific could also become an arena for the new cold war with an emerging and consequently assertive China taking head-on the sole superpower; the USA, now somewhat weary and over-stretched with its global commitments and not so successful interventions in Iraq and Afghanistan. Some analysts feel that the world's maritime future is likely to be determined in large measure in the Asia Pacific, particularly by the developing relationship between the four major maritime powers of the area, China, India, Japan and the USA.

Challenges for the USA in Asia Pacific

Since President Obama took office in 2009, the US administration has been consistently voicing the strategic significance of the Asia Pacific region for global stability and especially to the US interests. Obama's predecessor, George Bush, was largely preoccupied with the Middle East and West Asia with the US operations in Iraq and Afghanistan but President Obama's foreign policy priorities remain in the Asia Pacific region consolidating economic linkages, as also, to manage the growing Chinese naval resurgence in this region. Secretary of State Hillary Clinton's first overseas visit after the Obama administration took charge, was not to Europe (their traditional starting point) but to Asia where she attended the meeting of the Association of Southeast Asian Nations (ASEAN) - the first by a US Secretary of State - and also signed a treaty with the 10 members ASEAN. Interestingly, President Obama consulted many Asian intellectuals and leaders prior to his Asian odysseys and was advised by the respected Singapore veteran Lee Kuan Yew that *"if you do not hold your ground in the Pacific, you cannot be a world leader."4*

The recently expounded US National Military Strategy (NMS) opines that the international order has attained 'a strategic inflection point'.5 It states that as the USA still endeavours for success in Iraq and Afghanistan, the fastest rising region in many ways is Asia with two rapidly rising powers namely; China and India, dangerous states like North Korea and Iran, and various vibrant and emerging economies all set to play a greater role regionally and globally. Not surprisingly, China's rapid growth militarily in the region has been a source of much worry to the US for the last few years. The NMS declares that the US will closely follow the modernisation of the People's Liberation Army especially with regard to the military balance across the Taiwan Straits. In addition China's— "assertiveness in space, cyberspace, in the Yellow Sea, East China Sea and South China Sea"6 will be also monitored. In addition the NMS expresses concern about China's expanding 'anti-access and area-denial capabilities.... to constrain the US and international freedom of action.'7 Without specifically mentioning it, the allusion is clearly to China's development of the Dong Feng 21D anti-ship ballistic missile, anti-satellite weapons, cyber-strike capabilities, emerging long-range precision strike

systems and other military-related technologies. The Pentagon, however reiterates its preparations to 'safeguard the US and partner nations interests.' The US acknowledges a 'responsible leadership role' for China and the NMS, at the regional level and cites the utility of working with China to 'counter WMD proliferation, maritime piracy and instability in the Korean peninsula.' Finally, the US hopes that its defence diplomacy with China will help ease tensions in this region and 'prevent miscalculation.'8

The recently conducted large scale Exercise Key Resolve by the US and South Korean forces primarily to wargame their preparedness against any misadventure by the North Koreans had invited a severe reaction from North Korea. The latter threatened an "all out war" with "unprecedented all-out counteraction"9 that would turn South Korea's capital Seoul into a "sea of flames".10 The US and its allies especially South Korea and Japan will have to factor in North Korea's continuing belligerent behaviour in this region towards them.

China's Military and the Asia Pacific

China's military growth, in real terms, commenced in the early 1990s with military spending rates up by over 10 per cent each year.' Its modernisation was primarily in the protection of its core interests in Taiwan, Tibet and Xingjiang. Its major efforts have been to discourage Taiwan from moving towards independence and also make it operationally problematic for the US to intervene militarily. As it lacked advanced technologies for state-of-the art weapon systems it imported a number of these from Russia. However, concerted efforts by the Chinese over the years have borne fruit and it has vastly improved its abilities to manufacture modern weaponry indigenously. Only recently China unveiled its first indigenously manufactured stealth jet fighter and the Dong Feng 21D anti-ship ballistic missile. Though not yet a true blue water Navy, the Chinese naval force is feverishly working towards it by going in for the manufacture of two to three mid size aircraft carriers, developing a new class of nuclear submarines, better frigates and destroyers. It has now close to 50 modern diesel submarines and China has built new naval bases and has increased its patrolling in the waters not only close to its shores but all across the Indian and Pacific oceans much to the consternation of its maritime neighbours and the USA. Chinese capabilities in ballistic missiles are rapidly improving and it is capable of striking not only across the Taiwan Straits but targets as far off in Japan, India and South Korea. Consequently, China has become more politically and diplomatically assertive along its periphery notably in the East China Sea, South China Sea and the Yellow Sea, and endeavours, off and on, to intimidate other claimants in the region. The shooting down of its communication satellite (the first by any power in the world), naval ships in the Somalian waters, live firing exercises in the South China Sea and expression of strongly worded statements against the US and Japan are all examples of China's not so 'peaceful rise.'

Meanwhile, though the overall number of US forces deployed in the Pacific has gone down, the US has also responded to Chinese naval build-up in the region. It is increasing its capability to operate in Asia by deploying more forces in Guam, coordination with Japan in interoperability, sale of advanced weapon systems to Taiwan, deployment of anti-missile systems and increasing surveillance of Chinese naval deployments. Overall, most Asian countries prefer the US to maintain a strong presence in the Asia Pacific region to ensure a degree of deterrence to Chinese ambitions in the region. Though the US remains the predominant maritime power in the Asia Pacific with its ability of deploying a large number of both naval and air expeditionary forces in the region from Hawaii to the Persian Gulf based on nuclear capable carrier battle groups, the growing Chinese capability will now make it difficult for the US to operate in this expanse with impunity especially in the area around Taiwan Strait.

India and the Look East Policy

Though it was way back and prior to our Independence that an Asian Relations Conference was held in New Delhi in 1946 on Jawaharlal Nehru's initiative, India appeared to have fallen behind in taking any worthwhile Asian community initiatives as it did on the lines of NAM (Non Aligned Nations) movement. Appreciating the dynamics of this vital region, it was only as late as 1991, that India made amends and embarked on a well thought policy initiative dubbed as the Look East Policy (LEP). It underscored a major shift in India's perspective of the world and Asia both strategically and in nurturing closer economic bonds with its Asian neighbours. The geographical proximity and economic potential of India's North East region with the countries of East and South East Asia was an important factor for embarking on the LEP apart from China's growing assertiveness and all encompassing engagement of this region. Initially the thrust of India's LEP was to, primarily, forge closer economic ties with ASEAN member states. Consequently, India became a Sectoral Dialogue Partner in March 1993, a Full Dialogue Partner in 1995, a member of the ASEAN Regional Forum in July 1996 and finally a Summit Level Partner in 2002. Commencing 2003, cooperation in various fields was heralded by states extending now from Australia to East Asia. India subsequently signed the 'Long Term Cooperative Partnership for Peace and Prosperity with ASEAN which is the cornerstone of India's LEP and finally formalised the ASEAN-India Free Trade Agreement (FTA) with ten members of ASEAN in August 2009. In 1997, a sub-regional economic grouping called BIST-EC (Bangladesh, India, Sri Lanka, Thailand Economic Cooperation) was established to reinforce India's LEP. Subsequently with the addition of Myanmar, Bhutan and Nepal this grouping was enlarged as a political and economic forum to bridge Southeast Asia and South Asia at India's initiative in 1997 and is now known as BIMSTEC. India encourages BIMSTEC to forge economic linkages with peninsula member countries of the ASEAN to boost the development of its seven North East states. As another extension of India's LEP, India is also a member of the Mekong-Ganga Cooperation Project which includes Myanmar, Thailand, Laos, Cambodia and Viet Nam.

A significant aspect of India's LEP has been enlarging cooperation on security issues both bilaterally with ASEAN nations as well as through multilateral groupings like the ASEAN Regional Forum (ARF) which also brings in important non-ASEAN countries of Asia. India has taken the lead in the ARF to initiate dialogue and cooperation on various security aspects like border security, maritime security, energy security and counter terrorism aspects. In keeping with its intensive engagement with nations of the Asia Pacific, *India took over as the co-chair, from Australia, of the Asia Pacific Regional Review Group of the Financial Action Task Force which sets international standards to combat money laundering and terrorist financing.* In addition, during the visit of the Japanese Prime Minister to Delhi in Dec 2009, both nations agreed on measures to enhance security cooperation. The ASEAN quest for a suitable regional security architecture has led to the formation of the ASEAN Defence Ministers Meeting Plus Eight forum. The first meeting of

this forum is being organised in Oct 2011 at Hanoi. This body has as its members, nations of the ASEAN and six members of the East Asia Summit namely India, China, Japan, South Korea, Australia, New Zealand and there is a move afoot to include the other major stakeholders, i.e. the USA and Russia too in this forum.

India's LEP, however, can only be successful if its regional cooperation initiatives are backed by adequate military preparedness especially with a formidable three dimensional capable blue water Navy and an Air Force with a transcontinental capability to operate in both the Indian and Pacific oceans simultaneously. The Indian Navy must strive for better interoperability with the other navies in the region with additional 'Milan' type of exercises as it has been doing earlier. India's new initiative, the Indian Ocean Naval Symposium, provides it a new leverage for its soft power for convergent security in the region. *India's naval preparedness will be of much consequence for ensuring the maritime balance of power in Asia Pacific*.

Australia's Initiatives in Asia Pacific

Sensing the growing significance of the Asia Pacific region, Australia has sought a leading role for itself, openly seeking India's support. Though there have been marked differences between the two countries as regards the Australian stand, of not supplying uranium for Indian reactors or earlier its aircraft 'buzzing' Indian naval ships on training cruises in the Pacific as also its racist treatment of Indian students, Australia now wishes India to take the lead *in forging an Asia Pacific community on the lines of the European Union*. During his visit to India last year, Australian Prime Minister Kevin Rudd expressed that India was central to Asia-Pacific community and Australia and India ought to be natural partners in this region where big power rivalries would have to be 'harmonised and reconciled.'11 Australian Deputy Secretary (Strategy), Peter Jennings, recently stated that Australia had shared interests with India contributing to the regional security architecture12. A positive step in this relationship was the signing of the Joint Declaration on Security Cooperation in Nov 2009 between the two countries. However, India has to move with caution vis-à-vis Australia as the latter's dealings on earlier occasions have bordered on a display of arrogance towards India while it has no compunction in supplying uranium to a totalitarian regime like China.

The Necessity of Regional Cooperation

Problems affecting most nations today are multi-faceted terrorism, sea piracy, natural disasters, health pandemics, drug trafficking, money laundering, climate change, environmental degradation among others. These problems are generally beyond the capability of a single nation to resolve and calls for genuine cooperation between nations. Certain problems are best resolved regionally; either bilaterally or multilaterally pooling in expertise, resources, information and intelligence. With problems now taking on a formidable and in certain cases a sinister dimension like nuclear terrorism, the adverse fall-out will affect more than one nation and perhaps the region itself. Thus it is incumbent upon all those who are part of a regional entity to resolve all such issues in a spirit of sincere cooperation beyond narrow partisan interests. India's diverse albeit cooperative initiatives are welcome pointers towards this end. Efforts thus must continue to bring on board, China, to join the Asia Pacific mainstream for regional cooperation. China's gigantic economic leaps will make it more energy hungry and as nearly 80 per cent of its oil imports pass from Middle East/West Asia through the Indian Ocean, it can ill afford to have a confrontation with the other nations of the Indian Ocean.

Conclusion

Asia Pacific with the Indian and Pacific oceans and many healthy and emerging economies on its rim, apart from the new powers, China and India, is slated to play a pivotal role geo-politically and economically globally. India with its genius and a rapidly growing economy has a vital role to contribute to the stability and prosperity of this region in keeping not only with its aspirations but the expectations of the world towards India. Since the last few years, India has made not only a promising start with its Look East Policy but has been proactive with its many initiatives pertaining to the regional economic and security architecture in Asia Pacific. An enlightened policy based on our accelerating economic growth backed by adequate military muscle will enable India to contribute to peace and stability in the region in cooperation with the USA, Japan and Australia.

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Engage the Dragon on High Seas Brigadier Abhay Krishna, SM, VSM*

Strategic Importance of the Indian Ocean Region

The Strait of Malacca situated between Malaysia and the Indonesian island of Sumatra, is one of the most important shipping lanes in the world, linking the Indian and Pacific Oceans. Similarly for the oil-exporting Gulf region the Strait of Hormuz, situated between Iran and the UAE is the only sea-passage to the open ocean. Over 40 per cent of the world's seaborne oil shipments pass through the strait every day, making it the world's most strategically crucial choke point in the energy transportation system1. With a number of narrow straits and confluence of vital sea lanes, the Indian Ocean Region (IOR) is one of great strategic relevance to the world. Ninety per cent by volume of international trade in goods and energy commodities like oil, coal and natural gas is transported by sea2. Much of the world trade is carried through the IOR, either from sources in the region to the economic superpowers or amongst the major or minor economic players within the region including India, China, Japan and South Korea and hence the importance of sea lanes of communication (SLOC). The Strait of Malacca and the Strait of Hormuz together are therefore of vital importance for the economic and energy security of a large part of the world.

In addition the Mandab Strait or Bab el-Mandab, situated between Yemen and Djibouti on the Horn of Africa, provides a strategic link between the Indian Ocean and the Mediterranean Sea, via the Red Sea and the Suez Canal, the Lombok Strait, between the Indonesian Island of Bali and Lombok, the Palk Strait between India and Sri-Lanka are secondary choke points in the IOR.

As the international energy market is dependent upon reliable oil supply, the blockage of the chokepoints in the IOR, even temporarily, can lead to substantial disruption of the global and regional economy. If attacked, Iran is on record of having threatened the blocking of the Strait of Hormuz3. In addition, choke points leave oil tankers and freight shipping vulnerable to piracy, terrorist attacks, political upheavals leading to hostilities and shipping accidents.

Fact File

These factors therefore provide for overlapping and conflicting security interests in the region. The overpowering security concerns of nations have served to enhance the military presence of major world powers in the IOR, as also the forging of cooperative arrangements with several of the littorals, to promote, support and sustain military operations in the region. It is therefore inevitable that in the pursuit of compelling national interests all major powers of the 21st century will endeavour to have significant naval presence from the Strait of Hormuz to the Strait of Malacca .This trend is demonstrated by the manner in which the USA and China threaten to lock horns to wrest control of the blue waters in the IOR, especially during the last few years.

USA. Having maintained a dominant position in the IOR for several decades; the ongoing conflicts in Iraq and Afghanistan, together with new threats emerging in other parts of the region, have only accentuated the compulsions of the only superpower today to reinforce its operational capability in the IOR. The major base in Diego Garcia, together with several other bilateral agreements with a number of countries in the IOR, provides the USA the facility to maintain a credible and sustained military presence in the area of interest.

China. China's rise as a world power has enhanced its strategic, political, security and economic interests in the IOR, the primary focus being on energy security. China is therefore becoming increasingly assertive forging political and military ties with several littoral states in the IOR. As China continues to maintain a naval task force off the Horn of Africa to counter piracy, it is also building-up commercial and diplomatic ties with the aim of securing bases in the area necessary to sustain its maritime forces patrolling these strategic sea-lanes.

Oman. Oman and China have a stable and positive relationship - with China being the largest importer of Omani oil for several years. Oil accounts for over 90 percent of all bi-lateral trade between China and Oman4. At this point Chinese naval ships deployed in the Gulf of Aden for anti piracy operations have utilised Salalah more than any other port making a total of 16 port calls through Jun 20105. Given the stable relationship between Oman and China along with the economic benefits to the host nation, it should not come as a surprise if current arrangements evolve into a formal agreement that guarantees unrestricted access to Salalah Port for Chinese naval ships.

Yemen. Aden represents the first port utilised by Chinese naval ships during their deployment in the Gulf of Aden6. The initial port call was in February 2009 during the first counter piracy rotation when Chinese naval ships accepted diesel fuel, fresh water and food stores in order to replenish the destroyers of their task force.

Pakistan. China's investment in the construction of the Port of Gwadar has for almost a decade fuelled speculation that Beijing's ultimate goal is to turn the port into a Chinese version of Gibraltar. Port of Gwadar offers the facility that Beijing may seek to support its forces. Apart from the regular port calls to Karachi during its 25 years of goodwill cruises and exercises with foreign navies, the Chinese Navy is also a regular participant in the Pakistani sponsored multi-lateral naval exercises.

Sri Lanka. China's relationship with Sri Lanka has received a great deal of attention recently due to Chinese financing of the construction of the Sri Lankan port of Hambantota. While it is unlikely that Hambantota will be developed into a naval base, the Chinese Navy is not a stranger to Sri Lanka. The main naval base at Colombo, Sri Lanka's largest port is fast becoming a popular mid-Indian Ocean refuelling stop for the Chinese Naval warships

Singapore. Given Singapore's close relations with both China and the USA, the island nation is in a delicate position. The littoral states of the Strait of Malacca – Singapore, Malaysia and Indonesia – are also sensitive to foreign military operations in the vital waterways of the Strait. Offers from the USA, Japan, India and most recently China to assist with naval patrols in the area have been rebuffed. Thus, it is unlikely that there will be a formal agreement between Beijing and Singapore along the lines of the USA-Singapore Memorandum of Understanding that guarantees for the former, the

use of Changi Naval Base.7 However, at the same time there is no reason for Singapore to deny increased use of its facilities to Chinese Naval ships that are transiting the area either on their way to the Indian Ocean or while on patrol in the South China Sea or making port calls to Singapore through a combination of goodwill visits, bilateral and multilateral exercises and refuelling stops.

Bangladesh. China has been eyeing Chittagong Port to supplement the availability of port facilities at Gwadar in Pakistan and Hambantota in Sri lanka. It has promised the development and enhancement of the cargo handling capacity of the port at Chittagong to boost trade. There is also a talk of China getting military basing rights in the Chittagong area on lines similar to the induction of troops in Gilgit and Baltistan in the POK in the recent past. With the opening to Chittagong port, China will be in a position to monitor Indian missile tests at Chandipur at Sea and Indian naval activities in the Andaman Nicobar Islands. China reportedly also has access to the Myanmar naval base in Hanggyi Island and has also established monitoring station at Coco Island. These developments open up the door for the Chinese Navy to be available to Pakistan, Sri Lanka or Bangladesh in the role of a countervailing force against India.

Analysis

Not too long ago China used to project itself as a rising economic power but was silent or evasive when queried on their military power – particularly their naval power. However for the past many months China has not been shy of projecting itself as a rising naval power8. China opposed the US – South Korea naval exercises covering the Yellow Sea and warned of the dangers if the USA and South Korea went ahead with their exercises. However the recent display of assertiveness notwithstanding, it appears China is actively involved in the process of developing a network of places9 of influence in the Indian Ocean in order to support forces deployed for non-traditional security missions such as the counter-piracy patrols in the Gulf of Aden. In the first look, Aden presents itself as an ideal place for the support of Chinese naval operations both in the Gulf of Aden and Western Indian Ocean, but, the active presence of Al-Qaeda in the area compels China to look at other options in respect of the locations from which they can support operations by the Chinese Navy.

China's investment in the construction of commercial port facilities in Gwadar, Hambantota and the proposed expansion of Chittagong port clearly indicates that it is seeking to build naval bases in the Indian Ocean. However, conversion of these bases into naval bases capable of supporting sustained operations during war would require billions of dollars worth of equipment and infrastructure. Their exposed vulnerability to an enemy equipped with long-range precision strike capability also makes their wartime utility somewhat uncertain.

In an event of naval conflict between India and China in the Indian Ocean, direct comparison of the size of the force in terms of numbers is of little relevance. India enjoys a geographical advantage and therefore is well placed to exercise theatre dominance. Any naval taskforce venturing into the Bay of Bengal with hostile intentions would have to contend with India's air power both with the Indian Air Force and the Indian Navy operating not only from the Indian Peninsula, but also from the Andaman and Nicobar Islands.10 The operational capabilities of Andaman and Nicobar Islands are being upgraded to support operations by SU 30 MKI, Mirage 2000 and MIG Bison aircraft as also combat aircrafts slated to be inducted in the future.

China's naval presence in the region will be dispersed along the several distant, nodal points that constitute its so called string of pearls. Notwithstanding that these forces together may be superior to the Indian Navy in both size and capability, India will however have the capability to concentrate its forces and gain an upper hand if it decides to launch a strike against an isolated group of Chinese vessels. A massive naval deployment outside one such base will also have the desired effect by compelling the Chinese to de-escalate their land assault.11

Policy Options for India

With increasing presence of Chinese Navy in the Indian Ocean and the Persian Gulf, both Washington and Delhi will come closer to monitor the activities of Chinese naval ships. Both navies have begun to display higher levels of interoperability, in large part thanks to the Malabar bilateral or multilateral exercises held each spring. India and the USA have recently upgraded their intelligence sharing in the field of counter terrorism. In future, both states may well find that the surveillance of China's naval activities in the region is an equally pressing concern.12

India must seek a maritime intelligence sharing agreement, share own radar and sonar data compiled in the Andaman Sea and press for the US satellite imagery in exchange for the same. The US and India however must demonstrate to China that their initiative is part of a larger effort to ensure maritime security in the region from non-traditional threats and their synergy in this regard is not directed against China.13

India has already taken the initiative to establish electronic monitoring systems in Madagascar in 2007 and in the Maldives in August 200914. Apart from gifting own patrol aircraft to Seychelles in reactive response to Beijing's offer of military assistance and launching Indian Ocean Naval Symposium in 2008, India needs to work closely with not only the US but also with Sri Lanka, Oman, Bangladesh, Singapore and all other countries in the IOR through positive engagement and cooperation ensuring economic benefits to the host nations. This would help India extend its presence and ensure that the IOR remains a zone of peace. The underlying message, therefore, is to build capacity and ensure constructive engagement and partnership with all friendly countries in the IOR to maintain the status quo.

What is clear, however, is that there is no compelling evidence yet to suggest that the Chinese Navy has engaged in activities of an overtly military nature. Nevertheless, this does not mean that it has no intention to do so in the future. China is seeking to obtain a permanent base in Gulf of Aden and the deep sea port of Gwadar which is projected to undergo militarisation by the Pakistani Navy. This implies that Chinese surface and sub surface platforms could easily be stationed there. Hambantota or Chittagong can also have dual use. Some observers believe that China's naval modernization is increasingly oriented towards pursuing additional goals like asserting or defending China's claim in maritime territorial disputes, protecting China's SLOCs, displacing US influence in the Pacific15, challenging Indian primacy in the IOR and undermining Indian naval influences in the island countries such as Sri Lanka, Maldives, Seychelles etc.16 All these are designed to assert China's status as a major world power.

First and foremost India, therefore, must embark on building naval capacity to address the deep sense of vulnerability and neutralise all existential military threat to Indian naval dominance. At the same time diplomacy must reach out to effectively engage China in the IOR as an equal partner in sharing each other's maritime strategic interests.

At the outset India must look at maritime intelligence sharing with China as far as anti piracy operations and security of SLOC are concerned. Apart from encouraging regular port calls/ goodwill visits and bilateral/multilateral exercises, India could also offer joint development of command and control systems to combat both piracy and maritime terrorism. India may also actively consider meeting refuelling needs of Chinese Navy through one of her ports. Such a move would not only make India an important client of China in serving their economic and security needs but also greatly marginalise the relevance of ports in ring states. In fact, increasing dependence of China through the secured passage provided by Gwadar and Chittagong ports as an alternate route to meet their energy requirement and other international trade to sustain its economic growth, only makes her more vulnerable to interdiction by Indian Air power. China will thus not like to do anything to destabilise the region while India sits over China's energy jugular. However, to ensure a sustainable peace, stability and security in the IOR, participation and engagement with China while continuing to build own naval matching capability while sharing US concerns on matters of maritime security may perhaps be a step in the right direction to contain the growing Chinese influence in IOR and their march towards becoming a major global player.

This will, however, require astute diplomatic skills on part of India to bring China on board to ensure their engagement and participation. China is a rising naval power in not too distant a future and rightly so it has many core sensitivities mainly with regards to the US dominance in the IOR, Tibet, Taiwan, Islamic fundamentalism as also India' growing power in multi dimensions to name a few. India must therefore tread carefully. Substantive, result oriented engagement supported by pragmatic military hedging from a position of strength is the best strategy to influence and encourage China to participate as a responsible stakeholder in the IOR.

Conclusion

Under the present circumstances China's assertiveness in the IOR is not likely to put India's maritime security in jeopardy in the near future but nonetheless a time will come when India will be compelled to face this challenge in her backyard. India's rise as an economic power is closely linked to her military modernisation, ascendancy in the limited strategic area of influence in the IOR as also close integration with the countries in the region. China has many core sensitivities with regard to the maritime security in the IOR. India needs to understand and accommodate these realities through active participation and engagement with the Dragon on the high seas in the coming decade.

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China's 2011 Dilemma : High Growth Trajectory and Inflationary Spiral Dr Sheo Nandan Pandey and Professor Hem Kusum*

Introduction

China's economic growth accelerated to 9.8 per cent in Q4, beating consensus estimates of 9.6 per cent and up from the previous quarter's 9.4 per cent growth. Over all, the Chinese economy expanded 10.3 per cent in 2010.1 This is against the target of 8 percent. In the run, the gross domestic product (GDP) of the People's Republic of China (PRC) hit 39.8 trillion Yuan (US\$ 6.05 trillion).

The stock markets in China reacted negatively to the better-than-expected growth figures. Shanghai stock market tumbled almost 3 percent to 2677.65 points immediately after the Chinese National Bureau of Statistics (NBS) released the report on 20 Jan 2011. Taking part in a panel discussion on CCTV Xinwen, Ma Jiantang, the Director of NBS, spoke of China facing the real life challenge in taming the inflationary spiral. Earlier, in his New Year address, the Chinese President Hu Jintao had hinted at impending 'track change' in China's monetary and fiscal policy.2 Meanwhile, opinion columns in leading Chinese dailies speak of high economic and political costs of the inflationary spiral.

This is symptomatic of a downbeat in China's national spirit. For an astute China watcher, the intensity of the remorse defies most intellectual descriptions, including David Rosenberg's dub of being 'bearish' and Jim Chanos's diagnosis of 'frenzied bubble' effects. Fear of the economic and political costs of the phenomenon of deepening Engel's Coefficient for the multitudes of poor in small cities and counties in the midst of growing affluence of a few in big cities has perhaps taken out the wind out of sails in China's national mood.3

'Track change' meant tightening of the loose ends of the easy monetary and accommodative fiscal policies brought to bear upon to fight the scourge of global economic down turn. Theoretically, 'goldilocks' scenario, featuring relatively strong growth and modest inflation, can be a bail out proposition. The paper constructively explores the horizon of China's quest to sport this 'goldilocks scenario' in the midst of counter pulls of varied hues and dimensions. The intended correctives involved a policy roll back, be it even mild in the short run. In the bargain, China is expected to put a cap on deficit financing, which ran to staggering RMB 1.05 trillion in 2010. It will force a curb on bank lending that crossed 7.5 trillion target for the year. However, nothing of the kind was possible without adverse impacts on the shape and size of the Chinese economy.

Much of it expressly depended on China's capability to withdraw the 'punchbowl' that once energised and surcharged the Chinese nation with unrivalled 'can-do-spirit'. Zhou Xiaochang, the Governor of the People's Bank of China (PBoC) has since broadly admitted the limitations of the option.4 The euphemism 'proactive fiscal' and 'prudent monetary' policies once ruled the roost when China adhered expansionary monetary and fiscal policies.5 The Chinese President Hu Jintao has given currency to the same euphemism to connote just the opposite. There is thus, premium in taking the words of the Chinese leadership at their face value.

In the run up, the paper addresses research question such as: Whether the Chinese Bust and Bang Margins had thinned to the precipice to call for policy shifts? How best the antidotes to pent-up inflation in vogue could save China's from the impending policy traps to socio-economic down slides; and, could China shed black swan image and make iconic headlines with positive references in 2011? The intent and purpose is to arouse intellectual debate to get to the truth. The paper thus schematically deliberates on: Anatomy of Policy Rethink and Rumination; Bust-Breakthrough Threshold of Policy Instruments of Growth and Inflationary Pressures; and, the Hiccups of Goldilocks Scenario.

Anatomy of Policy Rethink and Rumination

The PBoC announced a 25 basis point hike in the one-year lending and deposit rates just a week before the onset of the New Year. The two now respectively stand at 5.81 percent and 2.75 per cent. It was the second rate hike in 2010 after 2007 and 2008. Giving a break to the past, the long-term lending rate has been spiked more sharply by 26 basis points. Notwithstanding, the PBoC consecutively raised reserve requirement ratio (RRR) by 50 basis points.

All this is discernibly aimed at steering prices and moping liquidity back to normal. Going by the official figures, the consumer price index (CPI) in Dec 2010 eased to 4.6 per cent month-on-month from the 28-month high of 5.1 per cent in Nov, 2010. For the whole year, CPI grew 3.3 per cent in 2010. This was against official target of 3 per cent.6 Higher food and energy prices constituted the main driver of incessant rise in CPI in the past several months.7 As a story in Xinhua dispatch bears out, a basket of 18 staple vegetables had come to cost 62 per cent more during the first ten days of November 2010 than in the same period last year.8 In year-on-year perspective, the food price index for people away and at home rose by 1.3 per cent and 1.7 per cent respectively. Among major grocery store food groups, the index for meats, poultry, fish and eggs posted the largest increase at

5.5 per cent followed by a 3.7 per cent increase in the dairy index. The indexes for nonalcoholic beverages and cereals and bakery products were the only ones to decline. The index for household energy rose 0.8 per cent in 2010. The energy index as a whole increased 7.7 per cent in 2010.

Even while flatly denied by the Chinese National Bureau of Statistics (NBS), there is semblance of truth in the research findings of Zeng Wuyi, a Professor at Xiamen University and Deputy Chairman of the National Statistics Society of China that the official Chinese figure of CPI remains understated by nearly seven per cent over the past five years. Qu Hongbin, co-head of Asian economic research at HSBC in Hong Kong, expected the CPI to cross 6 per cent before long.9 Prof Patrick Chovanec, who teaches at Tsinghua University's School of Economics and Management, is again not wrong in saying that the official Chinese CPI figures do not reflect the staggering 50 per cent expansion of money supply over the past two years. Nonetheless, Marc Faber, dubbed as 'Dr Doom' has gone on record to say that the 'real' Chinese inflation rate is nearer 10 per cent a year. There is a saving grace that the period witnessed down slides in several indices. They included the new vehicles index, which fell 0.2 per cent in 2010 after rising 4.9 per cent in 2009, and the index for apparel, which fell 1.1 percent in 2010 after a 1.9 per cent increase in 2009. I find no reason for the National Development and Reform Commission (NDRC) to bemoan for failing to contain the upswing in CPI to

below 5 per cent.10

The story has been no different in the case of producer price index (PPI) that rose 1.7 per cent in December 2010 from a year earlier. It has been clocking into positive territory of consecutive rise, some times quick and some time slow pace all through 2010. In November, it stood at 6.1 per cent. Prices of production materials rose 6.9 per cent year-on-year. Ma Jiantang, the head of China's National Bureau of Statistics (NBS) attributed driver role to rising prices of mining and quarrying, which jumped 14.6 per cent. Prices of products in the raw material industry then climbed 9.8 per cent and prices of products in processing industry edged up 4.4 per cent year-on-year. The November 2010 PPI had grown 1.4 per cent over October 2010 PPI.

The Chinese socio-economic life is thus, witnessing both the consumer and producer contours of a heating economy.11 Thanks to adverse Gini Coefficient of 0.47, the PBoC will have difficulty in convincing the poor lots that the scenario was little different from a temporary blip.12 Those who subscribe quantitative theory of money of Milton Friedman and his predecessors could expect little different otherwise. China's M2 money supply has since grown more than threefold. It has quite significantly pushed the PRC into throes in more than one perspective.

The impacts are tell tale on last two of the four sets of China- the affluent, the middle income, the lower middle income and the poor. With real wages sliding continuously, a majority of the 176.2 million Chinese industrial workforce, who constituted the third China, is turning far stroppier than ever before.13 As the statistics of the Chinese Supreme People's Court (SPC) bear out, the Chinese mediation and arbitration mechanism grappled with 207400 labour dispute cases in thee first eight months of 2010. The Chinese labour courts have had disposed off 295500 labour disputes in 2008 and 318300 in 2009.14 As most of this working population lives close to the edge, higher wage demands are likely to become more frequent. The implications, as several studies, including the one by this author bear out, could be far and wide.15 It has to have political cost with erosion of the legitimacy of the ruling elite.

As stories in some of the online national dailies and blog posts go to suggest, the 60.5 million strong Chinese rural poor, the constituent of the fourth China, living on per annum income ranging between US\$ 90 and US\$ 125, suffer the pang of double digit food inflation worst.16 In most cases, they are not producers of food stuff. As such, the rise in the prices of food stuff does not add up to their disposable income and hence, neutralise even partly the net impact of food inflation. The phenomenon is again hurting quite severely an estimated 230 million migrant workers as well as those who, in part constitute third and in part fourth China. Erosion of real wages limits their marginal propensity to save, and concomitantly affects their potentials to remit earnings to back home dependant populace. This has led to outcry at both ends of the Chinese migrant workforces.

Average per capita income for rural and urban residents in China in 2010 respectively worked out to be RMB 5919 Yuan (US\$ 898) and RMB 19109 Yuan (US\$ 2900). The Impact of the inflationary spiral on 712 millions strong rural populace is thus, far severe.17 The pang of ever falling real worth of their earnings again do not enjoy neutralisation effects of affirmative actions due to skewed hukou system in favour of urban inhabitants. The Chinese ruling elites are not expected to be oblivious to the fact and hence, the policy rethinks.

Bust-Breakthrough Threshold of Policy Instruments of Growth and Inflationary Pressures

Chinese banks had lent a total of 7.95 trillion Yuan (US\$1.19 trillion) in 2010. It was against the official target of 7.5 trillion Yuan (US\$ 1.12 trillion).18 In addition, the Chinese banks have had estimably released another 2-4 trillion Yuan of off-balance-sheet. In all, the Chinese banks added RMB 10-12 trillion Yuan (US\$ 1.5-1.8 trillion) to over all liquidity in 2010. This is a huge number, especially on the heels of a 9.6 trillion Yuan (US\$ 1.44 trillion) lending spree in 2009. Nonetheless, the Chinese central government spent respectively RMB 8.9 trillion Yuan (US\$1.3 trillion).19 This officially reported spending figure reflects only about three-quarters of total government spending. The total Chinese central government spending was thus, around 11.8 trillion Yuan (US\$ 1.77 trillion) Extra-budgetary spending, social security outlays and central government bond financing of local projects are not part of the official budget. This is besides the gray market liquidity. These measures, inter alia, led China's all time high economic breakthrough with a GDP of RMB 39.8 trillion Yuan (US\$ 6.05 trillion).

The cascading effect of these measures has been equally pronounced. M2, the broad measure of money supply, rose by 19.7 per cent in 2010 over the corresponding period last year. The official estimate was 17 per cent. The PBoC has set its goal to limit growth of M2 in 2011 to 16 per cent. Political mandate to the measure augured in the Central Economic Work Conference, held in Dec 2010. Reining inflation and controlling financial risks were the two express concerns behind the resolutions. The PBoC has since set credit target of RMB 7.5 trillion Yuan (US\$ 1.4 trillion) for 2011. In Jan 2011, the Chinese banks have already released loans of nearly RMB 1 trillion Yuan (US\$ 0.151 trillion). Over the next 11 months, the overshoot of the PBoC target is thus, not at all unlikely for a simple reason.20 In an economy as large and complex as China, the "spigot/mop" approach to monetary policy can seldom be adequate. Nevertheless, the latest PBoC move to rein in banks from their lending frenzy with varying doze of dynamic differentiated reserve requirement ratio (DRRR) to large, medium and small size banks is yet to prove its credentials in the face of complex operating mechanism.21 Besides, the Chinese Central Government will pump in RMB 9.79 trillion Yuan in 2011, RMB 1.3 trillion Yuan more than what it did in 2010. The liquidity problem in China has thus, come to stay without much respite.

The let up in price rise in the case of staple food in the past two months is squarely an outcome of administrative actions.22 The life conditions of most Chinese masses remain gruelling. Shopping list of groceries and fuel in China cost more than the USA. The price of a dozen eggs is over twice as expensive, and a litre of milk is nearly three times as costly, in China as in America.23 The incidence and impacts is tell tale when seen in terms of adverse per capita earning differentials, be it 11 times nominal or 6 times Purchasing Power Parity (PPP).24

While yet above the bust threshold of 50 for the last 23 months in a row, the gnawing dip of the purchasing manager's index (PMI) in the last two months from 55.2 to 52.9 testifies the slow down in the manufacturing sector of the Chinese economy.25 However, this official PMI figure is suspect in its validity. In the face of continuous fall in new

export orders sub-index and rise in input prices sub-index, the prospect of expansion of the Chinese secondary industry to this level is hard to take place. Nonetheless, with an accelerated growth in Q4 of 2010 to 9.8 per cent, it is hard to digest that inflation actually went in the opposite direction.

The urban unemployment rate in the PRC in Jan 2011 stood at 4.1 per cent.26 It was got to when the Chinese PMI stood

2.9 points above the bust threshold of 50 and the GDP had grown 10.3 per cent.27 As the PMI dips following estimated deceleration of the Chinese economy in 2011 to below 8 per cent growth, there shall estimably urban be job loss of at least 31 million workforces. Thanks to Lewis Turning Point effects, the growth story of China awaits a measure of weakening henceforth until equilibrium is achieved by unexpected turn of events.28

Hiccups of Goldilocks Scenario

'Strong growth' as against 'high growth' and 'modest inflation' as against 'stable prices' in a combination constitutes the roadmap of 'goldilocks scenario' of a development paradigm. The cliché has found currency in the Chinese media after the publication of the JP Morgan report, authored by Qing Wang and Earnest Ho, *China Economics: A Goldilocks Scenario in '10*, November 22, 2009. While more reasonable than the cliché 'growth and stability', it suffers clarity on the basic point as to 'how' strong and 'how' modest before one could sit on judgments about its on-ground workability. This terminology had received rather frenzied reference earlier in 1999 before the dot-com bubble bust in 2000. It was again heard in 2005 and 2007 before the 2008 global economic down turn.

As the discussions in the preceding sections bear out, the Chinese Central Government spending of RMB 11.8 trillion (US\$1.77 trillion) and the Chinese bank credit of RMB 10-12 trillion Yuan (US \$ 1.5-1.8 trillion) together made for pumping of RMB 21.8-23.8 trillion Yuan (US \$ 3.28- 3.57 trillion) into the Chinese economy in 2010. It accounted for 54.8-59.8 per cent of the Chinese RMB 39.8 trillion Yuan (US \$.05 trillion) GDP. It excluded the extra-budgetary spending, social security outlays and central government bond financing of local projects. It makes a clear case of over spending beyond all justificatory arguments as Qing Wang and Earnest Ho duo have made out to suggest otherwise. The inflationary spiral, demonstrated both in CPI and PPI rise as such testify the hypothesis conclusively. This is what was inevitable in a policy trap situation for any economy as it happened in the case of Chinese economy.

Given the scenario that China's modest trigger with the monetary and fiscal policies would not bring China anywhere near to 'goldilocks scenario'; given the risk factors of deceleration below the sensitive 8 per cent GDP growth, the PRC has to live with the existing inflationary socio-economic life, with supply side administrative corrections to the volatile public response. However, in our view, the crisis should serve as a catalyst for a more profound rebalancing with a shift in growth drivers from tradable to non-tradable sectors for times to come. Nonetheless, the cyclical conditions of the Chinese economy suggest that the year 2011 shall be more or less a year of reflation and pose significant risks to fixed asset investments.

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India-European Union Strategic Partnership: Time to Move Ahead Dr Dhananjay Tripathi*

Introduction

India – European Union (EU) relationship dates back to 1962 when it established diplomatic ties with European Economic Community (EEC). This relationship was primarily based on a commercial cooperation agreement but with passage of time, developed into a strategic partnership in 2004. The importance of strategic partnership lies in the fact that both India and the EU share a common vision for a democratic, multi-cultural and multi-polar world order. At a time, when new economic and security architecture is evolving in Asia, EU's engagement in the continent is incomplete without partnering India. Similarly, India has to engage with liberal, democratic and globalised Europe for its own benefits.1 Considering commonality of vision, contemporary international scenario and future stakes, the India- EU relationship is of paramount importance to both sides.

Developing Economic Partnership

India is one of the largest growing economies of the world, registering an average growth of more than 6.5 per cent in the last decade. As a matter of fact, India is also amongst those few economies which largely remained insulated from the world economic recession. Similarly, the EU is the world's biggest trading power despite being affected by the financial crisis. The EU as a whole remains world's largest exporter and importer of services with a share of roughly 25 per cent.2 In an era of liberalisation it is obvious that these two important economies of the world will come close to each other. The trade between the two had grown exponentially and has doubled from \notin 28.6 billion in 2003 to over \notin 55 billion in 2007. EU's investments in India have more than tripled since 2003 from \notin 759 million to \notin 2.4 billion in 2006 and trade in commercial services has more than doubled from \notin 5.2 billion in 2002 to \notin 12.2 billion in 2006 (see table 1).

Table 1 : EU - India Trade Profile in 2009 (in Euros)

Trade in Goods

Indicators	Quantity		
EU goods export to India	27.5 billion		
EU goods import from India	25.4 billion		
Trade in Services			
EU services export to India	8.6 billion		
EU services import from India	7.4 billion		
Foreign Direct Investment			
EU outward investment to India	3.2 billion		
Indian inward investment to EU	0.4 billion		

Source: European Commission Trade [Online: web] Accessed on 13 January 2011, URL: http://ec.europa.eu/trade/creating-opportunities/bilateral-relations/countries/india/

As per the figures of 2009; India is the 10th major import partner, 8th major export partner and 9th major trade partner of the EU. For India, EU is the largest import, export and trade partner in 2009.3 Not only this, India and the EU are also in the process of finalising Free Trade Agreement (FTA) which was to be signed in 2010, but date extended by this year. Number of civil society groups of both India and Europe are opposed to some provisions in the FTA. There is a need for reviewing some genuine points of disagreement because issues of livelihood are linked to them. But after the FTA, the trade links between the two would certainly strengthen. In brief, there is a lot to cheer both for India and the EU as far as economic ties between them are concerned.

Apprehensions on Geo-Strategic Issues

However, both in India and Europe, there are scholars who are skeptical about the nature and character of strategic partnership between India and the EU. According to European expert Christian Wagner, "India's new middle class and its foreign policy elite remain much more focussed on the US and Asia rather than on Europe."4 Likewise Indian strategic analyst C Raja Mohan in one of the articles raised several questions on the EU's role in the world politics5

Even if we ignore India – EU relations, there are analysts who are of the view that EU is more a normative power advocating certain values and ethics in international relations and is dependent on the USA for its security and strategic issues. This was clearly visible on several occasions, including during the Balkan crisis where the EU had failed to resolve it internally and had to rely on the US led North Atlantic Treaty Organisation (NATO) forces for succor. Also, during the Iraq war there were differences and lack of consensus between the member states. At present the EU member states as a part of NATO alliance are involved in conflict ridden Iraq and Afghanistan but under the aegis of the USA.

On the other hand, India is also striving hard to acquire a dominant position in the international arena. There are prospects and challenges for India in its mission to establish its independent identity in international relations. These include its growing economy, large market, demography, democratic structure and geostrategic location. On the side of

challenges, India has to safeguard its national interests with regard to a number of issues like international terrorism, climate change, independent foreign policy, energy requirement etc. As of now, when India is readily looking for partnerships and understandings based on its fundamental and founding principles of its foreign policy not much has been offered from the side of the EU. However, there are potential areas where India and the EU can cooperate not only for giving new dimension to their relationship but also in evolving a just, equitable and peaceful international order.

Areas of Cooperation

Both Brussels and New Delhi are committed to the development and stability of Afghanistan and thus, there are ample opportunities for working together. Joint development and reconstruction programme in Afghanistan will be ideal to begin with. In one of the declarations, issued by a head of the state contributing to the UN mandated NATO led International Security Assistance Force (ISAF), it is mentioned that, "we, the nations contributing to ISAF, reaffirm our enduring commitment to Afghanistan's security and stability, which are directly linked with our own security." 6 Stability and elimination of terrorist outfits in Afghanistan is in the interest of India as well. There are ample proofs of that e.g. some anti-India terrorist groups based in Pakistan also get logistic and critical support from warring Afghans factions. Attacks on Indian embassy in Afghanistan were part of a well coordinated plan of these elements. The EU is one of the largest donors to Afghanistan having committed a sum of \in 8 billion7 and India is also the sixth largest bilateral and the largest regional donor with a pledge of \$ 1.2 billion8. This reflects the significance of Afghanistan for both India and the EU where cooperation will only bring positive results. It is disheartening that despite coinciding interests in Afghanistan not much is worked upon jointly by India and the EU, which is not a good sign. Commitment for strategic partnership from Brussels and New Delhi needs to consider joint working plans in Afghanistan.

India and the EU are victims of the international terrorism. There is a necessity for a closer cooperation in antiterrorist activities, which includes intelligence sharing, working on non-proliferation and working together in war wrecked areas of Africa for restoring peace and stability. In this regard, during the recently concluded India- EU summit held at Copenhagen a joint declaration on terrorism has been issued. As per the joint declaration, India and the EU acknowledged that international terrorism is one of the serious threats to international peace and security. It is also reflected in the declaration that both sides will attach great importance to counter-terrorism cooperation in the framework of the United Nations and share a commitment to universal ratification and full implementation of all the UN Counter Terrorism conventions9. This is a relevant document and can prove a milestone in the India- EU relations if given due significance from the duo.

Climate change and sustainable development are other areas where, despite differences over certain matters, India and the EU are committed for green future. India has rightful concerns, where it will not consider any proposal undermining its industrial growth. In this, a mature response is required from the EU side. For time being, it is better that conflicting issues on climate change are kept aside. The two can harness potential in 'research related to climate change' and for developing 'eco-friendly technologies'. In this regard, it is also imperative to implement the bilateral work programme on clean energy development and climate change.

The recent trends of events in West Asia are quite interesting for scholars of international relations. Fall of the Egyptian President Hossain Mubarak can only be the beginning, and similar public protests cannot be ruled out in other countries. West Asia is a crucial source of energy for India, and may be in future for the EU also, because it is world's biggest importer of energy and is second largest consumer. Presently, EU is widely dependent on Russia, Norway and Algeria for its energy needs but it is attempting to diversify its energy supply and here comes the role of West Asia10. Emerging democracies in West Asia is a good sign. It needs moral support from the world's largest democracy as well as from the EU, which is the strongest proponent of democracy. With a rich experience of democracy India and the EU have a lot to offer in West Asia. India and the EU can also play a very vital role in Israel – Palestine conflict and on the Iran issue. Both India and the EU have certain normative commitment in international relations and this might help in resolving some of the complex world problems. If it is unable to do that, then may be it can at least help in easing the situation for some time.

Despite age old relationship with many European countries there is a lack of information about the EU in India. There is a general impression that the EU is a regional organisation. Its main features, functional areas etc. have not been well known to the people of India. Similarly, India in last two decades has undergone massive changes and it offers multiple opportunities to the citizens of the EU. Both India and the EU should invest in improving the people-topeople contact, which would act as a binding force for this relationship in future.

Post Lisbon Treaty Scenario

In 2009, Lisbon Treaty was adopted by the EU. This will change its future projection and role in international relations. There are two very important provisions in the Lisbon Treaty, which are perceived to be relevant for the EU's international dealings. Firstly, Lisbon Treaty will create a High Representative of the Union for the Foreign and Security Policy. The High Representative is based in the European Commission and chairs the Council of Foreign Ministers of the Union. The second important provision is the creation of a permanent Council President to chair the EU summits for two-and-a-half years and it has a renewable term instead of a six months rotation. This will give stability to the EU's decision making and would help in more active intervention at the global level. Lisbon Treaty also extends the EU's role to include disarmament operations, military advice and helping to restore stability after conflict. In the new emerging world order Lisbon Treaty provides relevant guidelines for a surge in the EU's international activism. There are sufficient areas for cooperation, and with Lisbon Treaty one can hope for better strategic cooperation between India and the EU.

Conclusion

In 2005, five basic components of the India - EU strategic partnership were notified in the joint statement. These are: strengthening dialogue and consultation mechanism; deepening political dialogue and cooperation; bringing together

people and culture; enhancing economic policy dialogue and cooperation in developing trade and investment. In 2008, both sides came up with a revised joint action plan inducting new issues to meet the future challenges. These new issues are: promoting peace and comprehensive security, promoting sustainable development, promoting research and technology and promoting people to people and cultural exchanges. On a careful examination of these components of the India - EU strategic partnership one can find that nothing is left out of the course. What is a prerequisite is that, both sides should pay more attention in building a better relationship to overcome the hurdles. In short, economic partnership will develop further in the future; and similar determination is the need of the hour for enhancing the geostrategic partnership also.

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Energy Security - A Strategic Imperative for India Colonel GG Pamidi*

Introduction

The 9-point magnitude earthquake that struck the northeastern Sendai region of Japan on 11 March 2011 and the subsequent tsunami that it triggered have caused incalculable devastation. Apart from the widespread loss of life and property, the natural disaster also damaged six reactors of the Daichi Nuclear plant at Fukushima. By March 16, the earthquake and tsunami-stricken Fukushima Daichi nuclear station had been the site of two fires, three explosions and significant radiation releases. Japan's nuclear disaster that heightened fears of a possible nuclear meltdown has stirred the Indian nuclear debate again. Japan's worst nuclear accident in at least 33 years has compelled both China and India to review plans for atomic energy. A review of all nuclear reactors in the country has been ordered by the Prime Minister, Manmohan Singh in a bid to check the levels to which these are equipped to deal with natural disasters. At the timing of writing, while it is too early to fully comprehend the extent of the damage as well as the radiation dangers that may happen, there are already calls in India to rethink about the approach to nuclear power. This article attempts to seek answers to some of these questions and explore the possibility of using nuclear power to augment other sources of electricity in the country, without forsaking the valid concerns of safety, economic viability and environmental degradation.

Energy Needs of the Asian Giants

The 21st century has been termed as the Asian century and both China and India are the two rising giants of Asia. While it is indisputable that both these countries are galloping ahead, it is also a reality that (among other reasons) future economic growth will depend on the long-term availability of energy, particularly electricity. Growth in economy is made possible by several inputs, the two most important being energy and human resource. Studies by several academics and consultants forecast continued high growth rate for the next several decades.1 If energy does not meet demand, these optimistic growth projections will receive a rude jolt and plummet. Both the rising giants of Asia, India as well as China have been scouting for energy resources across the world with missionary zeal.2 For a country of India's size, population and economy which is targeting ambitious growth rates of eight to ten per cent over the next two decades, safeguarding energy is a strategic priority.3 Both these countries are eyeing nuclear energy as a viable option.

As is well known, India is a severely energy deficient nation. Not only are the rural areas in our country still resigned to darkness after sunset but several urban areas and even metros are subjected to long hours of power cuts. Both, the industry as well as agriculture, suffer and this affects the overall national development. The nation owes each citizen a good quality of life, and regular uninterrupted power is one important facet of this. To ensure this, the country needs to tap the entire range of available fuel sources after a careful examination of issues related to sustainability, security of supplies, self sufficiency, and security of energy infrastructure as well as their effect on local, regional and global environments. While the environmental burden needs to be factored in, in the words of Dr Anil Kakodkar, it needs to be reiterated that *"poverty is the biggest polluter"* and is the source of several conflicts. Currently, the per capita consumption of electricity in India is only about 566Wh per year. In comparison, the USA has 13,647 kWh per year and China 2,453 kWh per year4.

India's energy situation demands that all energy resources, including nuclear, be developed to meet the long-term energy needs in a sustainable manner. However, there is no dearth of sceptics and cynics of nuclear power. The doubts and misperceptions of nuclear energy range from safety aspects to availability of skilled manpower to radioactive waste management to the economics and viability of nuclear power generation itself. The recent Japanese tragedy has further heightened theses fears and hence the need for a dispassionate analysis.

Current Energy Generation and Source Position

Currently, India draws the bulk of its electricity from thermal sources, especially coal. In terms of percentages, almost 70 per cent of power generation is from coal. India's requirements for coking coal are almost entirely met by imports. Even the non-coking coal is increasingly imported to blend it with Indian high-ash coal for power generation at some coastal locations. Increasing dependence on imports has caused serious concerns about the country's vulnerability to the international market. "For a large country like India, long term energy security, mainly based on indigenous resources, is an important and inevitable need, from economic as well as strategic considerations," according to the Indian Department of Atomic Energy. The quality of coal available in India is poor, with ash content in the range of 35 to 50 per cent. As a result of exploration carried out up to the depth of 1200m, a cumulative total of 267.21 billion tonnes of Geological Resources of Coal have so far been estimated in the country as on 1st April 2009.5 Despite its poor guality, with this much estimated reserves, coal is likely to continue to be the mainstay of power generation in India for a long time. Hydropower comes a distant second and produces approximately 15 per cent of the output. However, India has a large hydro potential and this needs to be exploited fully. This traditionally involves construction of large dams and, with it, arises the major problem of displacement of people. Hence, while hydropower is clean, it is not always green because large dams can destroy our natural habitat as well as displace people. Renewable sources provide the next share and several areas have good potential. Unfortunately, at the present level of technology, renewables cannot be used for central power stations and remain very expensive due to high capital costs and low availability factor. They also have the additional challenges of seasonal variations. Nuclear reactors supply about three per cent of electricity. India's energy requirements are so huge that it cannot afford the luxury of banking only on a few energy sources or neglecting any source.

The importance of nuclear power will grow significantly in the coming years as the concern of resource extinction prevails in the world. While the premise that all available energy sources need to be fully tapped is well understood, this article focuses on nuclear energy per se.

Nuclear Energy: Past and Present

The vision of harnessing energy from the atom is not new. It dates back to the independence days. India's first Prime Minister, Pandit Jawaharlal Nehru recognised early that nuclear technology offered a tremendous potential for economic development, especially for a developing country aspiring to leapfrog technology gaps brought about by long years of colonial exploitation**6**. However, the process of development of nuclear energy has been far from smooth. Under the "Atoms for Peace" programme which was aimed at facilitating the civil use of nuclear technology, India acquired a Cirus 40MW heavy-water-moderated research reactor from Canada and the USA provided the heavy water. The peaceful nuclear explosion of 1974 changed the way the western world looked at the Indian nuclear programme and sanctions were imposed on India. Being a non-signatory to the Nuclear Non-Proliferation Treaty (NPT), India was subjected to a de-facto embargo from members of the Nuclear Suppliers Group (NSG). This has prevented India from obtaining commercial fuel, nuclear power plants and services from the international market. The positive outcome has been that India has been compelled to develop its own fuel, components and services for nuclear power generation. This has resulted in innovations in the areas of Fast Breeder Reactors, Thermal Breeder Reactors, the Thorium fuel cycle, nuclear fuel reprocessing and Tritium extraction and production.

India's domestic uranium reserves are relatively small and the country is dependent on imports to fuel the nuclear industry. Russia has been a major supplier of nuclear fuel to India since the early 1990s. Due to lack of uranium, the electricity generation had gone down. However, the India-US Civil Nuclear Agreement led to the end of India's nuclear isolation. A waiver from the Nuclear Suppliers Group was given in September 2008 which allows India to commence international nuclear trade. As a result, India will now be able to import Light Water Reactor (LWR) technology as well as high grade uranium to enhance nuclear power production. 7 As of 2010, India has 19 Nuclear Power Plants in operation, while four others are under construction. India has a vision of becoming a world leader in nuclear technology having made good progress in technology for fast reactors and Thorium fuel cycle.

India now has a largely indigenous nuclear power programme and expects to have 20,000 MW nuclear capacity by 2020 and 63,000 MW by 2032.

Nuclear Cooperation with Foreign Countries

India has designated two sites for nuclear power plants to be established in cooperation with the USA. However, there still appear to be certain niggling doubts over the Civil Liability for Nuclear Damages Bill, a domestic legislation of India. This has been followed by the signing of Convention on Supplementary Compensation (CSC) for Nuclear Damage at the International Atomic Energy Agency headquarters in Vienna, Austria on 27 October 2010. To date, four nations – Argentina, Morocco, Romania and the USA have ratified the CSC pact. With India's action, 14 countries have signed the convention, according to an IAEA release. In order to enter into force, the pact must be ratified by a minimum of five nations with at least 400,000 units of "installed nuclear capacity," the release states.**8**

India and France have been working closely in the field of nuclear power plants. During the recent visit of the French President Nicholas Sarkozy to India, the two countries signed a general framework agreement and four other pacts for deepening bilateral cooperation in the nuclear energy sector. The location has also been identified and it is proposed at Jaitapur in Maharashtra. A general framework agreement has also been signed between the Nuclear Power Corporation of India Limited (NPCIL) and the French company, Areva.

Russia and India have a long relationship in the nuclear field. In December 2009, India and Russia signed a bilateral agreement on cooperation in civil nuclear energy. This was followed by an important agreement signed during the visit of the Russian Prime Minister Vladimir Putin during March 2010. Russia has agreed to build 16 nuclear reactors in India and six of these are to be built by 2017.

Australia has declined to supply uranium to India. Though the previous government of John Howard had given in principle support to the sale of uranium, the present government under Julia Gillard has so far not reversed the previous government's decision not to sell Uranium to India.

NPCIL has signed an agreement with Kazakhstan in 2009 for supply of uranium. India has also signed Uranium supply agreements with Namibia and Mongolia. The future of nuclear cooperation for India with various countries appears fairly optimistic.

Major Critiques of Nuclear Energy: Safety

One of the biggest opposition to nuclear energy is on the issue of safety. While nuclear energy reduces the extent of carbon emissions, it poses serious threats to the environment and human beings in case of an accident. The horrific accident of Chernobyl is a grim reminder of the danger. The former UN General Secretary Kofi Annan had said, "...... the exact number of victims may never be known, but three million children require treatment and.... many will die prematurely...not until 2016, at the earliest, will be known the full number of those likely to develop serious medical conditions...because of delayed reactions to radiation exposure...".9

Let us examine the recent Japanese disaster at the Daichi Nuclear Plant. The Japanese media have reported that underlying the meltdown of reactors which forced the government to declare a "nuclear emergency situation" was the failure of diesel generators to supply power to an Emergency Core Cooling System of the nuclear reactor10. The generators stopped functioning after they were flooded by the tsunami. Commenting on the situation, a *Japan Times* editorial blamed the government for not implementing necessary safeguards and asked "why were the back-up diesel generators at 1F placed in a location where they would be vulnerable in the event of a tsunami, and why wasn't a policy of double-redundancy enforced in which a reliable back-up power-generation system existed for the back-up diesel generators?" The daily has urged the government to review its nuclear power generation policy and "ensure multiple redundancies in safety systems" in all the 54 power reactors in Japan11. Another editorial in the *Yomiuri Daily* opined: "Nuclear power generation has become the fundamental source of energy in this country. However, the shock wave of the explosion may shake that position to its foundation." It went on to suggest that the Japanese government "must reinforce its system for preventing accidents at nuclear power plants. If the government makes mistakes in handling such accidents, the utilisation of nuclear power stations at home and abroad will be jeopardised."12

Public safety is an emotive issue in India since the ill-effects of Bhopal gas tragedy are still being felt by lakhs of victims. Even the Bhopal gas tragedy would pale into insignificance if a nuclear accident, akin to the Japanese incident happens in India. Its repercussions would have to be endured. This brings us to the moot question: Does this mean that we must not pursue nuclear energy at all? There is absolutely no doubt that the best practices in the world need to be observed in the nuclear plant construction as well as maintenance. All the safety norms must be adhered to diligently and people responsible for safety and maintenance must be held accountable. Let us analyse the recent Japanese experience. Amazingly, a 40-year-old power plant built to withstand a 7.9 magnitude earthquake on the Richter scale shut down automatically as designed when the earth began shaking. In fact, it stood up to an earthquake that released more than 40 times the amount of energy the plant was designed to survive.13 The tsunami wave that hit the plant is said to have measured at least seven metres in height, compared to the maximum 6.5 metres high wave the plant was designed to cope with.14 The twin effects of the earthquake as well as the tsunami seem to be responsible for the plants cooling generators to collapse. It is also a matter of surprise that the Japanese who have a well developed robotics technology do not seem to have incorporated robots in their reactor operations for just such an eventuality. The correct lesson to imbibe is not the simplistic and fatalistic one of abandoning nuclear energy but to build reactors capable of withstanding such pressures and to have redundancies built-in.

In this regard, the path set by Spain is revealing. The Spanish government has recently ratified a law removing a statutory 40 year limit on nuclear power plant operating life. Specifically, the nuclear energy amendment states that the government will determine nuclear energy's share in Spanish generation and also the lifetimes of existing nuclear plants based on a variety of considerations including regulatory requirements for nuclear safety and radiological protection as advised by the Spanish nuclear regulator, plus trends in demand, the development of new technologies, security of supply, costs of electricity production and greenhouse gas emissions.15 This serves to show that with technology the legitimate safety concerns can and have been addressed adequately in other parts of the world. There is no reason that India cannot use the same safe practices and technology, and if possible, even surpass those.

Economic Viability of Nuclear Energy

Another widely propagated idea is that nuclear energy in India would be more expensive than fossil fuel based electricity. **16** Although nuclear energy is not as cheap to harness as coal or oil, importing uranium will certainly make nuclear energy a viable long-term option since importing fuel from abroad would help in reducing costs. Both the opponents and proponents of nuclear power generally agree that nuclear power plants have a decisive advantage over coal-fired plants in the area of fuel costs, and this advantage should continue as long as uranium supplies remain abundant.17 Another important factor determining the economic viability of nuclear power, apart from capital costs, is the actual number of hours a nuclear power plant operates. With an assured supply of nuclear fuel, the plant utilisation will definitely go up and this will help in reducing overall costs. The excellent commercial performance of Nuclear Power Corporation, a triple A-rated company is testimony to the economic viability of nuclear energy.

Availability of Skilled Manpower

The positive aspect of decades of nuclear apartheid that India had to face since the time sanctions were imposed on India was that India was compelled to develop technology on her own. This in turn has resulted in a huge pool of trained manpower in India who are competent. In this connection the testimony of Seigfried S Hecker, former director of Los Alamos National Laboratory to the US Senate Committee on appropriations, Subcommittee on energy and water development on 28 April 2008 is noteworthy. He said, "I found that whereas sanctions slowed progress in nuclear energy, they made India self-sufficient and world leaders in fast reactor technology.......".18

Radioactive Waste Management in India

Radioactive wastes from the nuclear reactors and reprocessing plants are treated and stored at each site. Waste immobilisation plants are in operation at Tarapur and Trombay and another is being constructed at Kalpakkam. Notwithstanding this, research on the final disposal of high-level and long-lived wastes in a geological repository is in progress at BARC. Disposal as a final step in the management of radioactive waste involves confinement or isolation of these wastes from biosphere in the repositories. Based on the longevity and concentration of the radionuclide present in the waste, the repository could be either near-surface or in deep geological formation. India has extensive and varied experience in the operation of near surface disposal facilities (NSDFs) in widely different geo-hydrological and climatological conditions. Over the years, considerable expertise has gone in refining and improving the design and construction of these NSDFs. A system of multiple barriers employed in these NSDFs ensures isolation and release of radio nuclides below permissible limits to the environment. This is ensured by regular monitoring and periodic performance assessment of NSDFs.19 Overall, the system is efficient and has stood the test of time and there is every reason to believe that India will continue to do so.

Conclusion

India needs to sustain its current high growth rate for several years to realise her long cherished dream of banishing hunger and poverty and finally becoming a 'developed' nation. In order to convert this dream into reality, affordable and uninterrupted energy is critical. Access to traditional global energy sources such as oil and gas will become increasingly difficult and expensive as time progresses. India has to adopt a holistic approach in energy generation and tap all sources, including nuclear, to bridge the huge gap between demand and supply. One hopeful possibility is that the Japanese crisis will spark the development and deployment of new and even safer nuclear power plants. India too has to quickly learn its lessons from Japan's failures and lay more emphasis on making its nuclear plants with such inbuilt mechanisms that can withstand even mega quakes and attendant fallouts.

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Defence Budget Based on GDP Ratio - Lowest in the World Colonel PK Vasudeva (Retd)*

The Finance Minister, Mr Pranab Mukherjee has allocated defence outlay Rs 1,64,415 crore (about \$36 billion) for 2011-12 - 11.59 per cent over this year's Rs 1,47,344 crore (merely 3.9 per cent over the previous year 2009-10) on defence - 13 per cent of the entire country's budgetary outlay for the next financial year starting from April 1, 2011. A sum of Rs 69,199 crore, an increase of Rs 9,199 crore over the last years Rs 60,000 crore an increase of 15 per cent over the previous year has been earmarked as capital outlay for new acquisitions of weapons, planes, ships, equipment, naval dockyards and special classified projects. Neither the projection of growth of Defence expenditure - only at 8.3 per cent by the Thirteenth Finance Commission - nor his strenuous efforts in the pursuit of fiscal consolidation seems to have deterred him from being a pragmatist as far as Defence is concerned.

However, the most remarkable feature of this year's (2010-11) defence budget was that not only was the actual expenditure on purchase of equipment, or the capital outlay, exhausted, the three Services also spent more than they had been allotted.

On a more positive note, the budget will focus on vital aircrafts for the IAF and also helicopters for the Army. Out of the Rs 69,199 crore for new acquisitions, it appears that the budgeting exercise this time around is not merely a running account of the arithmetic of carrying forward the committed liabilities but a more realistic assessment of the needs, bearing in mind the major acquisitions in the pipeline [such as 126 Medium Multi-role Combat Aircraft (Rs 45,000 crore), C-17 Globemasters and Reconnaissance Surveillance Helicopters].

From the figures provided under the Revenue head, the performance of India's premier Defence equipment manufacturer — Ordnance Factories Board (OFB) — appears noteworthy. Unlike last year, when a budgetary support of Rs 246 crore was provided to the OFB, this year the allocation to OFB is Rs 1,176 crore. But an increase of merely 7.5 per cent for the Defence Research and Development Organisation (DRDO) at Rs 5,624 crore does not match the rhetoric of indigenous development in Defence Production Policy that was announced in January 2011. The increased allocation at Rs 64,251 crore for the Army and Rs 10,584 crore for the Navy (from Rs 57,326 crore and Rs 9,329 crore respectively in the previous year) appear generous compared to the Rs 15,927 crore granted to the Air Force (Rs 15,210 crore last year).

The other focus area is the Naval fleet. A sum of Rs 7,020 crore is set aside to pump in money for under construction ships like the sea-borne aircraft carrier, the stealth frigates and submarines. A sum of Rs 720 crore is allocated for naval dockyards, which, as per the stated policy of the ministry, are set to modernise and compete with global players in shipbuilding.

Despite the three Services spending the whole capital outlay for this financial year, for 2011-12, they have got only Rs 8,366 crore more than 2010-11 revised estimates. Earlier, several thousand crore rupees used to be returned to the central kitty every year because they could not be spent within time. This showed poor defence fund management.

China's defence spending is almost double that of India at \$ 78 billion. It is expected to announce a defence budget for 2011 later this week. Various experts have assessed China's defence spending at 7.5 per cent of its GDP.

China has already constructed airstrips, railways and broad roads in the difficult mountainous terrain up to the borders with India so that its forces remain within the striking distance to Indian strategic locations. China is also helping Pakistan defence forces in acquisition of the modern defence equipment and jet fighters for attaining air and marine superiority over India.

The defence expenditure of some of the important countries based on their GDP is given in the Table below.

Table

Allocation of Defence Outlay of some Important Countries as per Percentage of their GDP

Country	% GDP		
Oman	11.40		
Saudi Arabia	10.00		
Iraq	8.60		
China	7.50		
Israel	7.30		
Syria	5.90		
Pakistan	5.10		
United States	4.50		
Russia	3.90		
India	1.84		

Interestingly, the share of India's defence spending out of its gross domestic product (GDP) has gone down. It now stands at 1.84 per cent of the GDP, down from 2.3 per cent this year which is of grave concern to the defence forces who are guarding the Country's frontiers under very difficult and hazardous environment.

Reckoned as a percentage of total Government expenditure, the Defence expenditure appears to be falling from 13.88 per cent in 2009-10 to 13.11 per cent but as a percentage of GDP it is mildly recovering from the drop at 2.12 per cent in 2010-11 to 2.18 per cent, despite the economy growing at close to nine per cent. Lowering of the share of the defence spending in GDP terms stems from the report of 13th Finance Commission. In its report in February last year the commission suggested "as a percentage of GDP, defence spending is to be progressively decreased to 1.76 per cent by 2014-15" which does not seem to be a sound recommendation considering the global security environment and India's security concerns. Budgeting generously for the Defence is not the flavour of the year across the world, so it seems. The UK is imposing a cut of 8 per cent, the USA is cutting \$78 billion over five years and even Russia, although suffering from an obsolete fighting machinery, has chalked out a slow-paced long haul plan extending till 2020 for rejuvenation of its conventional arms.

It is important to note from the above Table that both our adversaries are spending much more on their defence than India, which should be taken as a warning and to remain watchful of their future intent. We have to guard our frontiers with an extremely vigilant eye, lest we are caught unprepared like it happened in 1962.

Successive standing parliamentary committees on defence have recommended allocation to be raised to at least 3-3.5 per cent of the GDP if the Indian Armed Forces are to be rapidly modernised. In the past Prime Minister, Dr Manmohan Singh and Defence Minister AK Antony, on separate occasions, have pitched for a 3 per cent share of the GDP for defence. The GDP for the next fiscal has been projected at Rs 89,80,860 crore by the Finance Minister, Pranab Mukherjee.

India must therefore increase its defence outlay to 3 per cent of its GDP so that the Armed Forces remain well equipped with the latest modern equipment. However, we can make use of our industry to help overcome our immediate needs indigenously as it is capable of producing war equipment at a comparatively lower cost. Efforts should therefore be made to allocate more funds for the Defence Research and Development Organisation to produce defence equipment indigenously rather than depending heavily on imports.

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The Smart Indian Soldier Lieutenant Colonel Sunil Jain, MD*

Introduction

With the launch of "Universal ID Authority of India" Project, the idea of unique identification number has caught the fancy of Indians. The Indian Armed Forces have had this system in place for many years. This is being done in a well organised manner. However, advances need to be brought in information technology to the Armed Forces in a scientific manner, to facilitate foolproof identification, and maintenance of service / health records.

The smart cards have been introduced in the Armed Forces for availing CSD facilities. It is said that army marches on its stomach. But in modern adage it will be said it advances on 'spices'. Change is the spice of life, and change for scientific advances incorporation is the need of the hour. The smart cards should be introduced for health purposes first, and the healthy troops will thus march to victory.

The Need

The two important needs of the Armed Forces are 'identification' and 'dynamic record keeping'. A Smart Card can fulfill both these needs with one card. It would replace a variety of other documents used for maintaining personal data and records. It would also be amenable to upgradation periodically with advances in technology.

Smart Card ID - Introduction

A Smart Card includes an embedded computer chip which can be either a microprocessor with internal memory or a memory chip alone. The card connects to a reader with direct physical contact or with a remote contactless electromagnetic interface.

With an embedded microcontroller, Smart cards have the unique ability to store large amounts of data, carry out their own on-card functions (e.g. encryption and mutual authentication) and interact intelligently with a Smart card reader. A Smart card ID can combine with several ID technologies, including the embedded chip, visual security markings, a magnetic strip, a barcode, and/or an optical stripe.

Smart cards are used worldwide: in financial, telecommunications, mass rapid transport, for secure identification to control access to buildings and offices, as administrative tools for students in campuses, in healthcare and other applications.

Secure Identification

One of the main purpose of Identity cards in the Defence Forces is to verify the identity of individuals seeking access to specific locations. The futuristic needs would call for a wide range of applications – from enabling access to facilities or secure networks, to proving an individual's rights to services, virtual record keeping and for conducting online transactions.

Integrated Biometric and Smart Card technologies will provide almost foolproof security. Biometric technologies are defined as automated methods of identifying or authenticating the identity of a living person based on unique physiological or behavioural characteristics. Smart cards have the unique ability to store large amounts of biometric and other data, carry out their own on-card functions, and interact intelligently with a smart card reader. Secure ID systems that require the highest degree of security and privacy are increasingly implementing both Smart Card and Biometric technology.

There are numerous government ID systems implemented worldwide that are using Smart Card and Biometric technology. These include :-

(a) US Department of Defence Common Access Card - with photo, biometrics (fingerprint) and a smart card chip. This is one of the most advanced ID smart card programmes. The Common Access Card (CAC) serves as the DoD (Department of Defence) standard identification for active duty military personnel, selected reserve personnel, civilian employees, and eligible contractor personnel. The CAC is the principal card used for logical access to DoD computer networks and systems, and will be the principal card used to enable physical access, as systems are installed for authentication and access at DoD facilities. As of May 2008, DoD had issued over 12 million Smart Cards. As with all Federal agencies, DoD is now migrating to a FIPS 201-compliant Common Access Card.1

(b) Netherlands' 'Privium' automated border crossing system - with photo, biometrics (iris) and a smart card chip.

(c) Malaysia's National ID (Government Multi-Purpose Card) - with photo, biometrics (fingerprint) and a smart card chip.

Selecting a Biometric Technology

Biometrics can provide very secure and convenient authentication for an individual since they cannot be stolen or forgotten and are very difficult to forge. The two types are:

(a) **Physiological characteristic** – These are relatively stable physical characteristics, such as an individual's fingerprint, hand geometry, iris pattern, retinal pattern etc. This type is usually unchanging and unalterable without significant duress to the individual.

(b) **Behavioural characteristic** – This is more a reflection of an individual's psychological make-up. A signature is the most common behavioural biometric used for identification. As most of the behavioural characteristics vary over

time, an identification system using these must allow updates, to enrolled biometrics references.2

Table 1 shows a comparison of different biometric technologies with their performance rated against several metrics.3

Characteristics	Ease of use	Error incidence	Accuracy a	User acceptance	Long term stability
Fingerprints	High	Dryness, dirt, age	High	Medium	High
Hand Geometry	High	Hand injury, age	High	Medium	Medium
Retina	Low	Glasses	Very high	Medium	High
Iris	Medium	Lighting	Very high	Medium	High
Face	Medium	Lighting, age, glasses, hair	High	Medium	Medium
Signature	High	Changing signatures	High	High	Medium
Voice	High	Noise, colds	High	High	Medium

Table 1 : Comparison of Biometric Technologies

Memory Use

Biometric systems store either the full biometric image or a biometric template. Biometric templates are small, ranging from nine bytes for hand geometry to 300-1200 bytes for fingerprint scan to 512 bytes for iris recognition to 1500 bytes for voice verification. Smart cards have sufficient on card memory to store one or more biometric templates.

The Impact

These technologies will have a tremendous impact for security purposes. Only genuine persons will be able to enter the sensitive areas. This will obviate the need of sentries in many areas and the need for oral passwords. Thus, there will be a saving on manpower and money.

Electronic Medical Records - Evolution and Miniaturisation

Lack of medical data can lead to inefficient or inappropriate practice.4 Also it can lead to essential care being delayed or withheld. An intervention that addresses even a fraction of this problem will have many financial and clinical benefits.5 The electronic medical record was introduced in an attempt to solve this issue. The medical records should be available on all hospital terminals,6 and in our set-up at all Field aid posts, Field hospitals and other hospitals.

Medical record keeping has used new technologies, developed by using globally accepted standard platforms such as HTTP, HTML and the internet. The scope of use was ambitious. Further these systems are compliant with security requirements for the confidentiality of electronic health data published by the US National Library of Medicine.7 However, concern about breaches in internet security is a threat and it may violate patient confidentiality. Importantly in health care, security of data and confidentiality are generally recognised as being pillars of ethical practice. Smart cards offer a ready made solution to some key problems of security and confidentiality.8

It is imperative that the medical records should be carried by the patient and given to doctors whom they desire and wherever they desire. This again has led to smart cards being considered as a possible solution. The low cost of the cards, their increasing storage capacity, and the fact that patients carry their card to the point of care make the smart card an attractive option. This will serve both the purposes i.e. as identification token and as a data container.

For privacy and security reasons the contents of the smart card will be accessible only by a doctor's PIN coded key card.9

Past History / Medical Records - Importance Revisited

It is highly important in any medical consultation and especially in emergency situations that past medical history is readily available. This should contain blood group, allergies, personal medical history, ailments, medications, immunisation details, family medical history, and health schedules.

A lot of morbidity and mortality due to drug interactions, allergic reactions or misdiagnoses can be prevented if medical professionals and care givers have access to proper medical records. Many times the information is inaccessible, inaccurate, lacking in detail or out dated. Accessing certain vital medical information makes the difference between life and death in an emergency situation.10

Further, a smart card can store all medical reports including laboratory diagnostic data, radiography, ECG, ultrasound imaging, CT scans, MRI and morphologic slides.

In lighter vein

With the widespread worldwide use of electronic health records the chapter on "past history taking" in the renowned Hutchison's Clinical Methods will either become history or will be shortened. It might be replaced by how to record and read electronic health records!

Smart Cards & Combat Zone

Medical data available in emergencies can be life-saving. Small and portable technology of Smart Cards allows them to be carried to the forward most location.

For fighting fit troops in the combat zone, medical records including physiological characteristics, are important and imperative. Knowledge of the physiologic parameters, which provide a more objective measure, may decrease mortality in combat casualties.11

In emergency management of combat injuries, blood group is one of the most important of all medical records. The leading cause of death on the battlefield is uncontrolled hemorrhage.12 Policies allow the use of identification cards and tags for transfusion purposes during contingency operations.13 Blood transfusion hazards persist and include human errors resulting in the inadvertent transfusion of incompatible blood.14 Blood group tags on combat uniforms can have various errors. Typographical errors in blood group lists maintained in units/contingents and individual paper cards can be disastrous. These factors make error reduction a priority and medical records on smart cards emerge the best option.

The role of Army Medical Corps has a long road. This can be simplified with supportive technology. Smart cards are useful both in life and death. For the second eventuality, use of Smart Cards with biometric technology can be useful and decisive.

In future the biometric technology should also include dental characteristics. For ensic dentistry is important to the armed forces. 15

Medical Boards: "From opinion to disposal" - the Smart / Electronic way

The specialist will punch in his opinion in a preformatted Performa, will encrypt it on the Smart Card and simultaneously forward it to all concerned, including the Records office, via the intranet.

As regards to privacy and confidentiality, electronic data can be better secured than paper records, because authentication, authorisation, auditing, and accountability can be facilitated.16

The use of an Electronic Medical Record (EMR) system may overawe most users at the beginning, but once a comfort level is established, EMR is likely to outscore conventional paper recording systems.17

The Impact

Introduction of Smart Cards will impact and facilitate following aspects :-

(a) Were smart cards adopted for the storage of medical histories it would change the form of medical information recorded, not merely convert paper files to electronic ones.18 It will become more systematic.

(b) Collating of data will become easy and trends visualised instantly for immediate policy action.

(c) Electronic data can be better secured than paper records, because authentication, authorisation, auditing, and accountability can be facilitated.

(d) Continuum of care: It has been aptly said "Once a soldier always a soldier". The information stored on Smart Cards can be of continued use even after retirement. The Smart Cards will allow easy extraction and prevent duplication of efforts for pertinent information.

(e) This will result in tremendous cost cutting and cutting of trees for paper. The Army Postal Service (APS) would become more efficient and may have additional responsibilities.

Personal Data and Records

There is sufficient memory for recording these in the Smart Cards.

The Current Scenario

Internationally, a few examples of countries using Smart cards are as under :-

France - SESAM Vitale: One of the biggest e-Health schemes in the world and also one of the most successful. Up and running since 1998, the SESAM-Vitale system links healthcare professionals with the compulsory health insurance administration. Version 2 of SESAM-Vitale, which is currently being deployed, offers the current standards in terms of security and will enable stronger identification of social security beneficiaries.

The Carte Vitale 2 will not just allow for a simplification of administrative procedures, increase transaction security and speed up reimbursements, but will also contain considerable additional information like details of attending physicians, people to contact in case of emergency, authorisations for organ donation and top-up insurance policy details. Furthermore, the Carte Vitale 2 will include a photograph of the insured person that conforms to the latest Identification, Authentication and Signature (IAS) specifications19.

German Health Care Card: One of the largest IT projects in the world. Total of 71 million people now carry the card.

Supports cryptographic capabilities for digitally signing medical documents and prescriptions.

The Taiwan's Bureau of National Health Insurance: To help control (contain) costs, facilitate electronic claims and improve healthcare quality, Smart cards have been deployed nationwide. So far, 23 million patient health cards and 345,000 healthcare professionals (providers) cards have been issued.

In India, *Rashtriya Swasthya Bima Yojana*, launched on October 1, 2007, is using Smart cards for cashless transactions for health care. It covers all workers in the unorganised sector who come in the category of Below Poverty Line (BPL) and their families. The advantage is – if users migrate they can use the smart card wherever they go.

Conclusion

A number of private players are vying for the use of Smart cards in Healthcare. They also want the UID number to be linked to a UHID (unique healthcare identification number). In India this should be first done in a well organised manner in a well managed group i.e. the Armed Forces. Subsequently, the same can be done for all the Indian nationals. The experience of the Armed Forces in the form of systematic and secure functioning will be of great utility. The Armed Forces, already entrusted with the Nation's security can secure data the best - in healthcare and other selected areas as well.

*Lieutenant Colonel Sunil Jain, MD is a classified specialist (Paediatrics), MH Saugar.

Army Day Lieutenant General SK Sinha, PVSM (Retd)*

The Indian Army celebrates 15 January as the Army Day. This is a landmark date in its history. It was raised as a colonial army nearly three centuries ago and became a national army on 15 August 1947. Yet till 14 January 1949, the top leadership of the Army was British and only on 15 January 1949, that for the first time an Indian became its Chief. This was the fulfillment of a demand for inducting Indians as officers in the Army, made by Ram Mohan Roy before a Select Committee of the House of Commons in 1833. The Uprising in 1857 had ruled out the acceptance of that demand. Starting with the second session of the Indian National Congress in 1886, this demand was revived repeatedly in the party's subsequent resolutions. The imperialists vehemently opposed this. Two well known Commanders-in-Chief of the Indian Army had strong views in the matter. Lord Roberts wrote, "Native officers cannot take the place of British officers. Eastern races, however brave and accustomed to war, do not posses the qualities that go to make good leaders of men." Lord Kitchener wrote about deep seated racial repugnance in the Army, "chiefly it is due to an honest belief - which is not altogether unfounded – that any substitution of Indians for British officers must be detrimental to the Indian soldier, recognised the world over, that the British Government allowed a very small trickle of Indian officers in the Army. General, later Field Marshal, KM Cariappa was among the first batch of some half a dozen Indians, commissioned in 1919.

I was a student in Patna when I first heard of Cariappa. There was a news item with his picture in the national newspapers in 1942 saying that he was the first Indian to be promoted to the rank of Lieutenant Colonel. Not long after, I joined the Army. In 1944, when I was a subaltern, I learnt that he was the first Indian to be promoted to the rank of Brigadier. Little could I then imagine that I will have the great good fortune of working closely under him.

I first met Cariappa on 14 August 1947 at a farewell party given by Indian officers to departing British and Pakistan officers. Cariappa was the chief host and among the guests were Lord Mountbatten and Field Marshal Auchinleck. In his speech, he gave fulsome praise to British officers for building our wonderful Army. He was sentimental about officers going to Pakistan saying, "We have shared a common destiny for so long that our history is inseparable. We have been brothers. We shall always remain brothers." A silver trophy depicting a Indian and Pakistani soldier holding their rifles pointing towards a common foe, was presented to Brigadier Raza, the senior officer going to Pakistan. What an irony that in less than three months, Indian and Pakistan soldiers were shooting at each other on the battlefields in Kashmir.

On 15 August 1947, Cariappa was promoted to the rank of Major General and became the first Indian General Officer. On 20 January 1948 he took over as Western Army Commander in the rank of Lieutenant General, again the first Indian officer to hold that high rank. I was a Major at that headquarters as General Staff Officer (Operations). We were conducting operations in Kashmir. I had to brief him in the Operations Room about the operational situation in Jammu and Kashmir. He complimented me on my briefing and enquired about the most threatened place in the State. I replied that there were reports of heavy enemy build-up against Naushera and a major attack appeared imminent. He said that he would like to go there tomorrow. I accompanied him to Naushera. He went round the defences and then told Brigadier Usman that Kot feature overlooked our defences and must be secured. Two days later Usman mounted a successful attack against that feature. He named it Operation Kipper, the nick name of the General. A week later over 10,000 enemy attacked Naushera. With Kot held by us, our troops inflicted a crushing defeat on the enemy, who retreated leaving 963 dead. This was the biggest battle of the Kashmir war. Usman became a national hero.

On the lighter side, I may mention two amusing incidents arising out of his translating English sentences, too literally into Hindustani. Soon after the successful battle of Naushera on 6 February 1948, Cariappa decided to visit Naushera to congratulate the troops. Usman briefed the General about the battle and said that the troops were keen to advance to Jhangar from where we had to withdraw in late December 1947. Cariappa said that we would have to wait for a while for reinforcements and logistic build-up. Addressing the troops he spoke, *"50 Para Brigade ke officeran, Sardaran, Jawanan. Is waqt mulk muft, ap muft, hum muft hain. Apka Brigade Commander Saheb bola kih ap age jana mangta. Hum apko tasveer ke andar dalna mangta. Aap is waqt age jana sakta nahin, kionkih hamara bandobast ka dum bahut piche hai. Ap is waqt dushman ko ankh maro." After his lecture, Cariappa asked me to find out the reaction of the troops to his speech. I asked a Gorkha Subedar, <i>"Saheb apko General Saheb ka speech pasand aya?"* The Subedar replied, *"Sahib General Sahib ka speech bahut achcha tha magar General Saheb angrezi mein bola, ham kuch samjha nahin."* On another occasion while addressing the families of soldiers at the Family Welfare Centre, he wanted to emphasise the need for family planning and having not more than two children. He spoke, *"Mataon aur Behnon, ham chahta kih ap do bachcha paida karo, ek apne lie aur ek mere lie."* He meant one child for the family and the other for the Army.

Cariappa would spend some ten days every month on tour in Kashmir and I invariably accompanied him as his staff officer. I recall two instances of his personal courage. We were travelling in a jeep to Uri. The Brigade Commander suggested to him that the flag and star plate on the car be removed, as the area near Hemen Buniyar was under enemy observation and prone to sniping. Cariappa said that he wanted to see how accurate the enemy firing was. On another occasion, Cariappa stood on a hill top near Tithwal to survey enemy positions. The local commander told him that the enemy could observe us and we should view the area from inside a bunker. He ignored his advice. We all stood in the open for a few minutes. As we started coming down the hill, an enemy shell landed where we had been standing. Cariappa was a few years older than my father in age. I marvelled at his stamina and energy. I found it not easy to keep pace with him.

He was a staff officer's nightmare. No detail, no matter how small, escaped his eyes. I had to keep jotting down numerous points and prepare copious tour notes. I remember on one occasion, I had driven in a convoy of the tactical Headquarters to Amritsar while the General had flown in an aircraft to Amritsar. We were staying at the Circuit House. Our convoy arrived late at night. We were received by the Brigade Major at Amritsar who told us that the General had gone to sleep but had given instructions that hot food should be kept for us, no matter how late we fetched up. We were touched by his concern for his staff officers. The following morning, the General was to travel in the staff car of the local GOC to Pathankot and thence in a jeep from Pathankot to Jammu. In those days the road condition between Pathankot and Jammu was too bad to permit travelling in a car and only jeeps and trucks were used from Pathankot to Jammu. There were no bridges on the Ravi, Basantar or Ujh. Vehicles had to be ferried across the Ravi and ford through Ujh and Basantar. As luck would have it, after Cariappa and the GOC got into the staff car, the car would not start. Cariappa came out of the car in a foul temper. He told the GOC that vehicle maintenance in his Division was poor. He asked me to get his jeep. The jeep had arrived at midnight with the convoy and had not been cleaned properly. I had asked the driver to top up petrol and be ready to move in the convoy to Pathankot in the morning. Cariappa saw dust on the mudguard, drew a line with his finger and told me, "Do you expect an Army Commander to travel in such a filthy vehicle? I expect better from my staff officer." I felt mortified at the rebuke which I no doubt deserved. It was a good lesson for me in the future. During tours in Kashmir at the end of the day, hot water would be laid for my bath in the evening. I would insist that the Army Commander's jeep be given a hot bath first!

One day as we returned from tour, we saw his two children coming out of his other staff car in his house. They had missed the school bus. The ADC had sent the staff car to fetch them. Cariappa was furious at the misuse of Government transport. He directed me to initiate disciplinary action against his ADC. Next morning he sent for me and enquired what action I had taken. I told him that I had issued a warning to him and he had assured me that he would not make that mistake again. He enquired, "What about the loss of petrol to the Government." I replied that we were depositing Rs 40 in the Treasury, at the prescribed normal non-amenity rate for the 8 miles, for which the staff car had been used. He directed that the amount be debited to his personal account.

Cariappa followed a strict dress code. He was always impeccably dressed whether in uniform or in civilian clothes. I remember seeing him in Regal Cinema at Connaught Place in Delhi in the Dress Circle, wearing a dinner jacket for a late night English movie. During one of his tours he visited a workshop company. He found everything spick and span. He even bent down to check that there was no overgrown grass under some of the vehicles which had been off road for some time. He complimented the Major commanding that company. A month later that Major was selected for a foreign course. He thought that he had been nominated for the course at the instance of the Army Commander. He sought an appointment with him to thank him. He went to meet Cariappa in his house one evening wearing a multi coloured bush shirt. He ticked him for his dress saying that an officer calling on a General should be wearing uniform or a lounge suit and not a horrible maternity jacket. The officer was taken off the foreign course for which he had been nominated.

General Sir Roy Bucher was the Commander-in-Chief while Cariappa was the Army Commander conducting operations in Kashmir. Bucher appeared to have his own agenda and would put brakes on Cariappa's plans. We often received letters signed by Bucher in red ink, addressed to Cariappa on minor issues. We on the staff would say that our Command was fighting on two fronts, against Pakistan in Kashmir and against Army Headquarters in Delhi! Cariappa wanted to break through Zojila and link-up with Leh. Unfortunatley our first attack against the enemy's Zojila defences had failed. Cariappa was keen on another attempt for which we made elaborate plans, bringing tanks from Jammu to Srinagar and thence to Baltal across rickety wooden bridges. The move of these tanks was kept a well guarded secret. The success of the plan depended on achieving complete surprise. Winter was fast approaching and time was at a premium. We had not only to break through Zojila but also complete winter stocking before the pass got closed due to snow. Bucher wanted the operation to be undertaken after the winter but Cariappa was insisting that it should be done before the winter. Bucher reluctantly agreed. I was told to be at Baltal, the base from which the attack was launched to keep the Army Commander informed of the progress. We successfully broke through Zojila, using tanks at that altitude for the first time in military history. It was an epic victory. Our further advance was held up at Matayan by the enemy holding a formidable mountain feature called Batkundi. Guns and ammunition had to be brought up to engage the Batkundi feature. The Sappers were feverishly constructing a road to Matayan. We were getting messages to speed up road construction and the attack on Batkundi. I was summoned to Delhi. I walked from Matayan to Baltal and drove through the night to Srinagar to catch the first flight to Delhi. Immediately after I arrived at Delhi, I briefed Cariappa of the latest situation. He asked me to accompany him to a high level meeting. I had no idea about where we were going till I found myself in front of a room in South Block with a name plate, Jawaharlal Nehru. The word Pandit was missing and so also his appointment. I was overawed and also quite nervous. I had never before attended such a high level meeting. The Prime Minsiter was sitting at his desk smoking a cigarette from a cigarette holder. I found him totally bald. I had seen Nehru on several occasions from a distance always wearing a Gandhi cap and of course never smoking. Cariappa briefed him and during the briefing said that the distance from Baltal to Matayan was 22 miles and road construction was taking time. Nehru interjected and said that the distance was only 12 miles. Cariappa said that my staff officer was here and he had walked that distance only yesterday. They turned towards me. I said that the distance along the foot track was a little over 12 miles but the road coming up was winding and was about 22 miles long. Both Nehru and Cariappa were satisfied with what I said. Later I learnt that in 1913, Nehru had spent his honeymoon at the Matayan rest house.

In January 1949, it was announced that Cariappa would be taking over as the Commander-in-Chief on 15 January 1949. He sent for me and asked me whether I would like to serve as his Military Assistant in his new assignment. I was delighted and enthusiastically accepted the offer. I told him that it would be a great honour for me to continue serving on his staff. A couple of days later, General Banerjee, the Military Secretary sent for me and told me that the Chief designate had expressed his regret that he could not have me as his Military Assistant, which was a Lt Col's appointment. He had told Cariappa that the rules required that an officer must have a minimum of six and a half years service to officiate as a Lt Col and I had only five years service. He had told him that he could waive the rules in my case, if he so desired. Cariappa said that he did not wish to set a bad precedent. This was typical of him. During the 1965 war his son Flight Lieutenant Nanda Cariappa (later Air Marshal) was shot down while on a fighter sortie over Lahore and taken a prisoner. Field Marshal Ayub Khan was the President of Pakistan. He was many years Cariappa's junior in the pre 1947 Indian Army and had served under him. He sent a personal message to Cariappa saying that his son was safe and he could be returned to India as a special case. Cariappa replied that he had several sons who were held prisoners in Pakistan. Nanda should be returned along with the others.

I had no occasion to meet Cariappa when he was the Chief. I remember that when as Vice Chief, I resigned from

the Army on my supersession, I received a telephone call from him to say that he was proud of me. I felt overwhelmed. I recall visiting him after his retirement at his house, Roshnara, in Mercara (now Medikeri) in Coorg. I had gone there from the Staff College at Wellington, to request him to write a foreword to my book, Operation Rescue, regarding the 1947-48 war in Kashmir. He readily agreed to do so and wrote a very generous foreword, which greatly added to the value of the book. I found him as always very correctly dressed and his old self, commanding great respect. He had a silver statuette of an Indian soldier on the mantle piece in his sitting room. He told me that every morning, he paid his homage to the Indian solder because he owed so much in life to him. Years later, I called on him in Bangalore where he was staying, for proper medical attention. He was now approaching 90. He could not walk properly. He shuffled but he was immaculately dressed. He insisted on pouring a drink for me with his shaking hand. I realised that that was to be our last meeting. A little later he passed away.

When he was the Commander-in-Chief (this appointment was changed to Chief of Army Staff after his retirement), he was particular about upholding the dignity of the Army. After Independence, the civilian bureaucrats had got together to downgrade the status of the Service Chiefs below Defence Secretary. The then three Service Chiefs, who were all British, took up the matter with Lord Mountbatten. At the latter's intervention the protocol status of the Chiefs was kept higher than the Defence Secretary. On taking over as Chief, he maintained that he would deal directly with the Defence Minister and not through the Defence Secretary. His staff officers would deal with the Defence Secretary, who was a staff officer of the Minister. In this regard he was only following the practice in the Army when a commander dealt directly with his higher commander and not through the latter's staff officer. In 1949 an Indian delegation had to go to Karachi for a conference convened by the UN to delineate the Cease Fire Line. At the instance of Cariappa, Lieutenant General SM Shrinagesh the then GOC-in-C Western Command, was nominated the leader of the delegation with Shri HM Patel, Defence Secretary, Shri Vishnu Sahay Kashmir Affairs Secretary, Major General KS Thimayya and Brigadier SHFJ Manekshaw as members of the delegation. I was the Secretary of this delegation. Things have changed so much since then. There have been instances when a Defence Secretary has been the leader of the delegation with Service Chief as a member. However, the normal practice has now become that Vice Chiefs of the three Services are members of delegations led by the Defence Secretary. After 1962, the appointment of Cabinet Secretary was introduced and he was given a higher status than the Service Chiefs. The civil servants at last managed to have their way. In 1947 Sir Girja Shankar Bajpai had not been accorded a higher status than the Service Chiefs.

Apart from highest standard of personal integrity, Cariappa was a strict disciplinarian. He summarily sacked three serving Major Generals, one for being drunk at a function in Raj Bhavan at Mumbai, the second for being unduly friendly with a junior officer's wife and the third for misuse of regimental funds. He gave them the option to resign or face a court martial. He advised them to put in their papers so that the image of the Army did not get sullied. They resigned and their resignation was promptly accepted. 2010 has been a year of scams galore, in which the image of the Army has also got badly besmirched along with the judiciary, the bureaucracy, the media and of course the political leadership. The Army needs to recall the high standards set by Cariappa and endeavour to live up to them. This will be its best tribute on Army Day to the memory of Cariappa, who is rightly hailed as the Father of the modern Indian Army.

*Lieutenant General SK Sinha, PVSM (Retd) was commissioned into JAT Regiment in 1944. During World War II, he saw combat in Burma and Indonesia. After Independence he was transferred to 5 Gorkha Rifles (FF) and was associated with the Kashmir War from Day One i.e. 27 Oct 1947. He retired as Vice Chief of the Army Staff in 1983. After retirement, he was appointed India's Ambassador to Nepal in 1990, Governor of Assam in 1997 and was the Governor of Jammu and Kashmir from Jun 2003 to Jun 2008. Presently, he is an Elected Member of United Service Institution of India, New Delhi.