A Case Study on Strategic and Geopolitical Impact of PLA-Pak Military Strategic Partnership and Security Implications for India*

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Introduction

Diplomatic relations between Pakistan and China were established in 1950, shortly after the defeat of the Republic of China (present day Taiwan) in 1949.1 While initially ambivalent towards the idea of a Communist country on its borders, Pakistan hoped that China would serve as a counterweight to Indian influence. The Indian Prime Minister, Pandit Nehru also hoped for closer relations with the Chinese. However, with escalating border tensions leading to the 1962 Sino-Indian war, China and Pakistan aligned with each other to confront India jointly. One year after China's border war with India, Pakistan ceded the Trans-Karakoram Tract (measuring 5180 sq km) to China to end border disputes and improve diplomatic relations.

Bilateral relations between Pakistan and China have evolved from an initial Chinese policy of neutrality to a partnership that links a smaller but militarily powerful Pakistan. Pakistan is dependent on China for its economic and military strength, with China attempting to balance competing interests in the region. Diplomatic relations were established in 1950, military assistance began in 1966, a strategic alliance was formed in 1972 after Pakistan facilitated American rapprochement with China (shuttle diplomacy of Henry Kissinger)2 and economic cooperation began in 1979. Since then, China has become Pakistan's largest supplier of arms and its third-largest trading partner. It would not be incorrect to conclude that Pakistan is a 'client state' of China.3

The fulcrum of Pakistan's foreign policy rests on the premise of very warm relations with China. In 2010, Chinese Premier Wen Jiabao called Sino-Pakistani ties "firm as a rock," and his Pakistani counterpart echoed the sentiment. "To test a friend whether true or not, it needs time and means under crisis," Pakistani Prime Minister Yousuf Raza Gilani told China's state-run media in May 2011.4 To bolster this argument, it is relevant to note that historically, China supported Pakistan's opposition to the Soviet Union's intervention in Afghanistan and is perceived by Pakistan as a regional counterweight to India and the United States.5 The 'Treaty of Friendship, Cooperation and Good Neighbourly Relations between the People's Republic of China and the Islamic Republic of Pakistan'6 signed in April 2005 is of historical significance.

China - Pakistan Military Nexus

Deep Military Bond. China's role as a major arms supplier for Pakistan began in the 1960s and included assistance in building a number of arms factories in Pakistan and supplying complete weapons systems. "Until about 1990," wrote South Asia experts Elizabeth GM Parker and Teresita C Schaffer in July 2008 CSIS newsletter, "Beijing clearly sought to build up Pakistan to keep India off balance."7

Missiles and Tanks. Pakistan Army's majority arsenal, both short and medium range ballistic missiles, such as the Shaheen series are modifications of Chinese imports. Shaheen I (M 11) is a single stage solid fuelled missile with a range of 290 km while Shaheen II (M 9) range has a range of 2000 km.8 Though technically M11 did not violate the Missile Technology Control Regime (MTCR) (while M9 clearly does) it has the capability of being able to deliver a 500 kg payload over 300 km. The Main Battle Tank Al Khalid (T 90 II) tank, which was a fructification of a deal was signed in 19909, would constitute approximately forty five per cent of MBTs being produced in the world10 along with type T 98 of China and T 90 of Russian Federation.

Aircraft. The current fleet of the Pakistan Air Force (PAF) includes Chinese interceptor and advanced trainer aircraft, as well as an Airborne Early Warning and Control radar systems. Pakistan is producing the JF-17 Thunder11 multi-role combat aircraft jointly with China. The aircraft, fitted with Beyond Visual Range missiles, PL 12/SD 10 with a reported effective range of more than 100 km12 will definitely bolster the capability of PAF. According to latest reports, Pakistan is seeking to buy thirty six J-10 aircraft,13 which would make Pakistan the first recipient of one of the most advanced weapon systems in China's arsenal. The addition of these aircraft would enable PAF to raise two fighter squadrons and further sharpen its combativeness. It has also been reported that Pakistan is likely to procure drones14 from China. It can be reasonably presumed that Pakistan will vie for a capability of these drones to operate over sea ostensibly in the garb of anti-piracy operations to monitor the Indian Navy's presence in the North Arabian Sea.

Ships and Submarines. In its quest to counter the Indian Navy, Pakistan Navy received the last of its F-22P Frigates from China in Jan 2011. The first and second F-22P ships named as Zulfiquar and Shamsheer have already been commissioned in Pakistan Navy (PN). The new warship, christened Saif, has been built by the Hudong Zhonghua Shipyard Shanghai. Pakistan Navy (PN) has already decided to go ahead with its plans to get the fourth ship constructed at the Karachi Shipyard. The \$750 million contract also includes latest anti-submarine warfare (ASW) helicopters.15 The most significant development is Pakistan's decision to acquire six Yuan (Song) Class Submarines from China. These submarines will reportedly be equipped with crucial air-independent propulsion (AIP)16 systems. With plans to acquire AIP technology, PN would be in race with IN, which plans to arm its French Scorpene submarines with AIP only by 2013. It can be reasonably summarised that China is actively assisting Pakistan Navy to shift its philosophy from 'sea denial' to that of 'sea control'17 with an aggressive intent to control the sea lanes leading to the Arabian Gulf.

Nuclear Programme. In 1983, China took an extraordinary decision to help Pakistan become a nuclear power18. This was done with a single-minded determination and tenacity, knowing that the consequences of making Pakistan a nuclear power would last three or four decades. It was a known fact that Chinese security agencies knew about Pakistani transfers of nuclear technology to Iran, North Korea, and Libya,19 which was dubbed as a 'Nuclear Wal-Mart' by expert Michael Krepon. In return, Pakistan was rewarded by North Korea by transfer of Nodong (Ghauri) missile. China is accused of having long-standing ties with Abdul Qadeer Khan, father of the Pakistani nuclear programme.20 A

subsidiary of the China National Nuclear Corporation contributed in Pakistan's efforts to expand its uranium enrichment capabilities by providing 5,000 custom made ring magnets,21 a key component of the bearings that facilitate the high-speed rotation of centrifuges. China's assistance may have even enabled Pakistan to achieve parity or even edge past India with an estimated count of 70-90 warheads22 as of 2010 with increasing stockpiles.

Strategic and Geopolitical Impact

Strategic Impact

Energy Security. The 'String of Pearls' strategy of China, which is a win-win proposition23 for both Pakistan and China was first proposed in 2006 in an internal United States Department of Defence report titled 'Energy Futures in Asia'.24

China has funded more than 80 per cent of Gwadar Deep Sea Port (GDSP), which is strategically located at the mouth of the Strait of Hormuz. It is viewed warily by both America and India as a possible launch pad for Chinese naval operations in the Indian Ocean. Gwadar is also visualised as becoming a regional hub, serving commercial traffic to and from the Mid East, the Persian Gulf, and China's Xinjiang province, Iran, Sri Lanka and Bangladesh.25 Its location at the mouth of the Persian Gulf and at the opposite end of the choke points of Strait of Hormuz and the Gulf of Oman enhances its strategic importance. Its development would definitely influence the geo-strategic environment of the region. The port is also being connected with 1100 km Makran coastal highway connecting major cities of Pakistan. Senior Chinese leaders have highlighted energy security as a critical issue for China's future. The Chinese energy debate focuses both on supply security and on the need to keep energy prices as low as possible.26 By 2030, China will depend on imported oil for approximately 75 per cent of its total demand, with supplies coming mainly from the Persian Gulf. Increasing dependence on imported energy and resources, apart from the need to transport large quantities of export goods to trade partners, makes China heavily dependent on reliable maritime transportation, which in turn makes Sea Lines of Communication (SLOCs) through the Strait of Hormuz particularly important. China possibly estimates that that India has the potential to interdict China's energy and trade routes as they literally pass through our doorstep. Presently, the PLA Navy has only limited power projection capability and lacks the ships and overseas bases necessary to sustain a naval presence along, let alone control the SLOCs that are vital to Chinese economic prosperity27. The most visible articulation of this thinking has been President Hu Jintao's formulation of 'Malacca Dilemma', meaning that China has the potential to be greatly and adversely affected by blockages of key Asia-Pacific maritime trade routes, especially the Malacca Strait.28

Geopolitical Manoeuvring

Economic Surge. The emergence of China and India has definitely upset the world's current geopolitical balance. The two rapidly growing countries face enormous challenges.29 As India expands her horizons, the two giants are beginning to rub shoulders in different parts of Asia, Africa, and Latin America. New economic prosperity and military strength is reawakening nationalistic pride in India, which could bring about a clash with Chinese nationalism. In the power competition game, China has surged ahead by acquiring economic and military capabilities underpinned by a clear policy to achieve a broader strategic objective. Any attempt by India to challenge or undermine China's power and influence or to achieve strategic parity is strongly resisted through a combination of military, economic, and diplomatic means30. Interestingly, the bilateral trade has zoomed in recent times – in 2008, China became India's largest trading partner. However, the growth in bilateral trade has been asymmetric. The trade balance has gradually shifted in favour of China. The trade is likely to cross \$ 120 billion by 2015.31 This is no guarantee that the two nations will not go to war. In 1914, when the World War I was imminent, Germany and France were the two largest trading partners.32

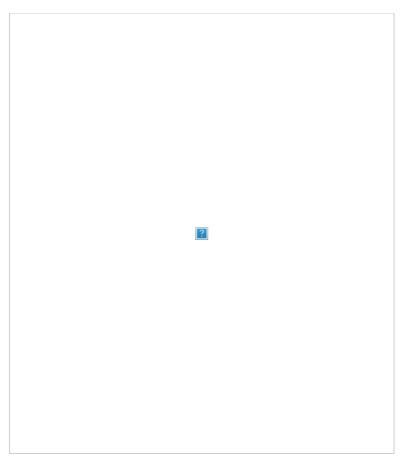


Figure 1 : India-China Bilateral Trade Balance33

Border Dispute. The most contentious issue in the normalisation of China-India relation is resolution of the land boundary. Several rounds of talks held over more than a quarter of a century (since 1981) have failed to resolve the disputed claims. China's claim over the entire Indian state of Arunachal Pradesh and aggressive patrolling of the border region signify that China is not interested in maintaining the status quo. Although the border issue could be settled with fairly straightforward compromise e.g. India foregoing claims to territories lost to China and China abandoning claims on Indian territory – China does not seem to be interested in a settlement based on the status quo. China's position, furthermore is unlikely to change over the next decade.34 An unsettled border provides China the strategic leverage to keep India guessing about its intentions and nervous about its capabilities, while exposing India's vulnerabilities and weaknesses and ensuring New Delhi's 'good behaviour' on issues of vital concern to China.35 Should a conflict break out, the PLA's contingency plans emphasise a 'short and swift localised' conflict (confined to Tawang region, along the lines of 1999 Kargil conflict) with the following objectives in mind: capture the Tawang tract, give India's military a bloody nose, and deliver a knockout blow that punctures India's ambitions to be China's equal or peer competitor once and for all.36

Chinese Military Doctrine

Over the last three decades, the Chinese military thinking seems to have undergone incremental changes, resulting in evolution of three different doctrinal templates. The first of these was the framework of 'People's War under Modern Conditions' which recognised that protracted wars of attrition were no longer suited to China's evolving interests and geostrategic environment. By the early 1990s, with the first Gulf War serving as a powerful driver, this doctrine evolved into a second one, which is commonly labelled as 'Local Limited War under High-tech Conditions' (akin to Air Land Operations). The third template focuses on the correct mix of informationalised and mechanised forces and concepts to conduct short duration, high-intensity combat in the information era. The Chinese Defence White Papers of 2006, 2008 and 2010 also put forth their views about forward deployment, use of PLA Navy as a strategic force, trans-regional mobility and changes from a defensive mindset to usher in expeditionary capabilities.37

Summary

A summary of PLA-Pak military nexus and its geopolitical and strategic impact reveals that India is definitely hedged in by two very belligerent neighbours, whose intent and aim are very clear. The outline of the policy options for India holistically with a predominant thrust towards China, is given in succeeding paragraphs.

Engaging Strategy with Pakistan and China-Policy Options

Short to Medium Term (2012-2022)

In this time frame, strategic prudence is essential in bilateral relations with China. Core focus should be on political and economic engagement coupled with development and preservation of military deterrence. Pakistan is grappling with the insurgency in FATA and Taliban problem which would keep its army engaged. However, it is to be understood clearly that Pakistan will continue to vigorously pursue its nuclear programme to blunt the conventional edge that India possesses.

Pakistan. Pakistan will continue to be leveraged by China as a suitable counter to keep India engaged. The chances of

Pakistan turning into a 'failed state' are unlikely. This is because the USA, China and Saudi Arabia have strong national interests, not necessarily complementary to each other, but with a common objective of ensuring the survival of Pakistan. It must be appreciated and factored that peace with Pakistan can never be realised as the very existence of the Pakistani state (read Pakistan Army) hinges on its anti-India posturing. A weak and divided Pakistan is therefore in India's interest and we must take all actions necessary to neutralise the Chinese sphere of influence. The recommended courses of action against Pakistan are as follows:-

(a) Identify fault lines in the US, Chinese and Saudi national interests in Pakistan and exploit them.

- (b) Give active support to Baluchi, Sindhi, NWFP factions to keep Pakistan Army and the ISI busy.
- (c) Destabilise Pakistani economy to do that we need to identify areas that can be targeted overtly and covertly.
- (d) Use media and world opinion to enhance Pakistan's negative image which is prevalent already.
- (e) Militarily, we need to force Pakistan into an arms race so that it takes a toll on its economy.

(f) The Indian armed forces need to posture and remain deployed in such a manner that the Pakistan armed forces are forced to maintain a vigil to their east.

(g) Indian embassies worldwide would have to lobby proactively behind the scenes to negate both Pakistani and Chinese influence.

China-Cooperative and Engagement Strategy. Given the present disparity with China, there is a need to engage in cooperative strategies. This will ensure that we are able to consolidate our position and challenge the Chinese threats on equal footing. There will be a need to engage China in all sectors since we would be competing for the same resources and strategic space in the global arena. As a part of engagement strategy, water sharing negotiation should be an essential part of diplomatic initiative.

(a) **Geopolitical Issues**. There are areas of significant convergence between India and China on geopolitical issues, which include greater democratisation of international institutions, WTO and issues related to climate change.38 The possibility of strategic partnerships with countries in the Indian Ocean Region (IOR) rim and those with similar strategic compulsions should have matured. This should include the possibility of basing rights in the IOR39, South China Sea, and the Philippine Sea.

(b) **Trade**. Growth of bilateral trade has been beyond expectation in recent years, with China surpassing the USA as India's largest trading partner in 2008. However, existing policy to exclude Chinese investment in strategic sectors and measures against anti-dumping should continue. The recent controversy of Huawei Telecom is a pointer to the security concerns.40

(c) Military Cooperation.

(i) **Cooperation on Piracy in IOR**. The PLA Navy and IN are presently operating independently in the IOR to counter threats of piracy off the coast off the East Coast of Africa. There could be a possibility of synergising these operations and India could take on a lead role.

(ii) **Bilateral Exercise and Port Calls**. Existing bilateral exercises of Navy and Army should be continued. There is a need to increase the frequency of port visits, exercises and invitations to the PLA Navy. This would neutralise to an extent, the rich harvest that Pakistan has made in 'AMAN' series of exercises.41 Likewise, interaction of the Indian Army and IAF with the PLA and PLAAF, could also be continued keeping the overall aim of 'engaging' but revealing very little.

(iii) **Protection of Chinese SLOCs**. The IN could offer to protect Chinese SLOCs within the IOR. This would also serve the dual purpose of allowing the Chinese to know that the IN can easily cause disruptions.

(iv) **Humanitarian and Disaster Relief (HADR) and Anti-Terrorism Exercises**. Bilateral anti-terrorism exercises should continue. Such exercises should include HADR scenarios also. These exercises involve all the three services and hence a 'joint' plan would need to be evolved.

(v) **Exchange Visits**. The number of officers and courses subscribed by the armed forces as well as those offered to the PLA could be increased. However, this must follow norms of reciprocity.

(vi) **Joint Working Group (JWG) Meeting on Border Dispute**. JWG meetings on resolution of the boundary issue needs to continue exploring various options. Rhetorical peaceful gestures, through bilateral meetings, must continue to protect India's territorial claims. Here, we need to tread very cautiously; reason being that India presently is in no position either geopolitically or militarily, and also in terms of Comprehensive National Power (CNP)42 parity, to resolve the boundary dispute on terms favourable to Indian interests.

Hedging Strategies

Shaping Geopolitical Environment. India's geopolitical environment consists of immediate neighbourhood, intermediate and outer periphery. The strategy is enumerated as follows : –

(a) **Untangling Sino-Pak Nexus**. The current radical movement43 in the Xinjiang Uyghur province, along with Pakistan being identified as the epicentre of Islamic terrorism, provides India with a window of opportunity to play up this fault line to untangle the Sino-Pak nexus. Based on the premise that Karakoram pass could become not only a one way conduit for arms and ammunition from China to the South; but also a means to export fundamentalism from the

South to the North. The Xinjiang Uygur province is a resource hub of China; and potential destabilisation in the province has a larger economic implication for China than Tibet which is just a buffer state. There may be some linkages between Pakistan based Islamic organisation and the Uyghurs which need to be 'invested or played' up.

(b) **Tibet Card**. Presently, the very mention of the 'Tibet Card' rests uncomfortably amongst India's diplomatic circles. There is a need to exploit this issue. If nothing else, at least 'silence and ambiguity' should be maintained by India on this issue.

(c) **Boundary Dispute**. It needs to be understood that even with the resolution of the boundary dispute, it is unlikely that India-China relations will be totally peaceful. However, one of the Chinese excuses for aggressive military behaviour towards India will be removed. Hence, settlement of boundary dispute will certainly be in India's interest. Our maximalist and minimalist positions must be understood with clarity.

(d) **Military Balance**. Military capability development is essential to deter aggressive adventurism originating from China. Critical gaps in military capability must be bridged by fast tracking procurement processes. Certain military capabilities which will aid the deterrence strategy at the operational and strategic levels are as follows:-

(i) **Army**. Road and logistics build-up right up to the LAC is the first prime requisite if the Indian Army is to be considered 'combat worthy' by the PLA. There can be no doubt that 'boots on ground' are the ultimate guarantor of national sovereignty and deterrence. The strength of the Indian Army opposite the Chinese formations across LAC needs further enhancement over and above the two Divisions already sanctioned. It must be realistically understood that India will never be in a position to shift any significant ground forces out of Kashmir valley if the stability of the current counterinsurgency grid is to be maintained.

(ii) **Navy**. The IN is best placed to provide strategic level deterrence which the Chinese Navy very clearly understands. The IN presently has an operational edge over the PLA Navy, solely on account of India's geostrategic location astride Chinese SLOCs in the IOR, PLA Navy's present weakness and inability to break out of the South China Sea. However, to make this threat credible, the IN requires augmentation of its force levels. China's energy vulnerability needs to be exploited and the Indian Navy's ability to interdict Chinese SLOCs need to be strengthened by induction of more fleet tankers which provide 'long legs'. The operationalisation of nuclear submarine Arihant and likely induction of aircraft carrier Vikramaditya in the foreseeable future will establish IN as the predominant Navy in the IOR.

(iii) **Air Force**. No operation of war can hope to succeed without credible Air Power. The Chinese understand this dictum quite well. If the IAF is able to maintain its sanctioned force levels of 45 squadrons, it would prove to be a sufficient deterrence against any Chinese adventurism. The procurement of Medium Multi Role Combat aircraft needs to be expedited as the competitors have been shortlisted.

(iv) **Nuclear Deterrence**. India's 'minimum credible' nuclear deterrence can only become a reality the day Indian nuclear weapons can hit Beijing with land, air and sub surface missiles. China has the entire Indian subcontinent covered by missiles like Dong Feng which have been operationalised and deployed. Presently, our nuclear deterrence is neither 'minimum' nor 'credible'. Pakistan is on par with India (or even slightly ahead). As far as India is concerned, Agni III and IV need to be operationalised in adequate numbers to signal a retaliatory or second strike capability that can reach into all provinces of China. As brought out earlier, operationalising the second strike capability will ensure deterrence.

(v) **Cyber Warfare**. It is a well known fact that China is actively pursuing this 'fifth dimension' of warfare.44 A cyber war doctrine with a road map for the next two decades delineating clear cut responsibilities between various national agencies and adequate funding needs to be formulated and implemented at the earliest. This may be a classified study involving the highest security agencies viz. RAW, IB, NSCS etc.

(vi) **Surveillance**. There is a need to vastly enhance surveillance and intelligence networks. Indian surveillance capability of Chinese bases in Yunan, Lanzhou and Chengdu Military region, along with air bases and Naval facilities at Hainan Island/other ports needs to be vastly improved, so that the country is not caught unawares. Surveillance cover over the Andaman & Nicobar Islands and force levels located there need to be enhanced to prevent raids by Chinese forces in the future.

Conclusion

India has learnt bitter lessons from its past. The present pace of economic liberalisation must not take us away from the reality of our neighbours encircling us in the long term.45 The Indo-US Nuclear Deal has enhanced the status of the country by enabling nuclear commerce and also furthering India's aim of being recognised as a world power. The policy options outlined above need to be deliberated upon at the highest levels of the Services headquarters and the Government. Only a 'steel fist in a velvet glove' is respected in a world full of realpolitik. The strategy and doctrine must flow from the highest levels.

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* This article won the First prize in USI Gold Medal Essay Competition 2011: Group 'A' – Open to All Officers.

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Fifteenth Colonel Pyara Lal Memorial Lecture - 2011

Rising Power and Enduring Paradox: India's China Challenge*

Dr C Raja Mohan*

Introduction

It is a great privilege and special honour to deliver the 15th lecture in memory of Colonel Pyara Lal, whose contribution to the flowering of the United Services Institution is legendary. I cannot claim to have known Colonel Pyara Lal well. I had the opportunity to meet him occasionally during the 1980s, when he used to visit the Institute of Defence Studies and Analyses, where I was a young researcher. He always showed interest in the kind of work I was doing and had strong words of encouragement. If Colonel Pyara Lal was a great institution builder, India will need more like him in the coming years. To cope with the sweeping challenges arising from China's rise—the single most important geopolitical fact of our time—India will need to build new institutions and reform many of the existing ones. Above all, it needs a comprehensive re-imagining many of its national policies.

My lecture today begins with a brief overview on the growing international weight of China and India. I will then move on to explain the paradox of Sino-Indian relations, where every attempt to build a stronger relationship in the past saw the sharpening of the rivalry between the two Asian giants. The third part of the lecture will look at the prospects for the mitigation of Sino-Indian rivalry; the fourth will look at the opportunity to build greater cooperation between China and India. The concluding section offers a few thoughts on the policy changes that India must consider in effectively dealing with China's rise.

Rising Power

The world is witnessing the simultaneous rise of its two largest nations—China and India. I do not want to dazzle you with all the figures that are widely available. During the last three decades and more, the average annual real growth of the Chinese economy has exceeded 9 per cent and has occasionally touched 13 per cent and 14 per cent. This economic miracle has made China the second largest economy in the world in real terms. China is expected to overtake the United States in the size of GDP within the next couple of decades. Although the emergence of India is not as spectacular as that of China, it has been significant enough. India's economy has ended its historical underperformance to become the tenth largest economy in real terms in 2010. It is expected to become the fifth largest by 2020.

It is widely acknowledged that the rise of China and India will affect the geopolitics of the various sub-regions of Asia, influence the great power relations and contribute to systemic change in international relations. It has been recognised for a while that the rise of China and India was inevitable and that together they might change the world in many ways. But the perception of the scale, pace and consequences of the emergence of China and India as great powers has become more acute since the financial crisis that rocked the world at the turn of this decade. The slowdown of the Western economies, especially those of Europe and Japan, and the continuing relative decline of Russia has meant China and India will catch up and overtake most developed economies much earlier than anticipated. The improved economic standing of China and India, in turn, will allow the two countries to devote significant resources to military modernisation, and beef up their hard power capabilities. Both countries will also steadily improve their soft power resources and bring greater weight to their diplomacy and cultural influence. Meanwhile, the sheer size of their billion plus populations and expanding economic weight would produce massive systemic impact on a range of issues—from energy, environment, and resource security to regional institutions and global governance. The world must also accept that China and India—given the sense of their own exceptionalism and a strong belief in their 'manifest destiny'—have more than the necessary political will to become great powers and shape world politics in this century.

How exactly China and India may change the world will depend on two important factors. One is the kind of purpose that China and India might attach to their increasing power capabilities. Will their policies be similar to those of France and Britain in the 19th century? Or would they look like America and the Soviet Union in the 20th? Or may China and India be very different type of great powers? The other factor is the nature of the relationship between the two Asian giants. This short essay is a reflection on whether China and India would be partners or rivals. This question animates not just the strategic communities in Beijing and Delhi but the whole world, for the dynamic between the two giants could become the defining dynamic of the international system in the 21st century.

Enduring Paradox

Even before they constituted themselves as modern states in India (1947) and China (1949), the national movements in the two countries and their intellectual leaders reached out to each other to find enduring bases for cooperation. As two great civilizational states emerging out of colonialism, the Chinese and Indian nationalists believed, they were destined to reshape Asia and the world. That was the essence of the understanding that Jawaharlal Nehru arrived at when he met the Chinese delegations anti colonial congress in Brussels in 1927. After that the Indian national movement signaled its solidarity with the Chinese people as they resisted the Japanese occupation. Yet, as the Second World War engulfed them, the Chinese and Indian national liberation movements found it impossible to cooperate. The structure of great power conflict in Asia and the fact that India and China faced different imperial powers prevented political cooperation between the two national movements. As Japan advanced closer to the Subcontinent in the 1940s, Britain got Chiang Kai Shek to travel to India and urge the Indian nationalists to ease their confrontation against London and focus on the war effort against Tokyo. The Indian leaders, including Gandhi refused. At the intellectual level too, the big ideas that moved China and India did not always match, and despite their common struggle to cope with the new domination of the West, they did not see eye to eye on critical political and philosophical assumptions.

In the early years after claiming their independent nationhood, India and China once again embarked on a new effort to build political cooperation. Their romanticism was marked by the slogan of '*Hindi-Chini Bhai-Bhai*' in the 1950s. Yet by the late 1950s, the turbulence in Tibet and their unresolved boundary dispute began to sour the

relationship which culminated in a brief military conflict at the end of 1962. This was followed by a prolonged chill until an effort to normalise the bilateral relations in the 1980s. Through the final years of the Cold War, India and China were ranged on the opposite sides of the divide. While Chinese communists drew closer to the United States after their split from the Soviet Comrades, the democratic India found itself embracing the Russian Communists. While the boundary dispute dominated the relationship, China and India found that their world views were radically different, and their interests clashed in Southeast Asia and South Asia, and their differences on the future of the security order in Asia and the Indian Ocean were strong. No wonder that Sino-Indian relations in the 20th century were characterised as 'protracted contest' and an unending rivalry.

At the turn of the 21st century, Sino-Indian relations seemed to enter one of their best ever phases. The normalisation efforts in the final years of the 20th century seemed to bear fruit as two-way trade between the two countries galloped from barely 2 billion US dollars in 1998 to nearly 70 billion in 2011. Sustained high level exchanges and broadening people to people contacts were supplemented by important efforts at military confidence building and a political effort at resolving the all important boundary dispute. Yet, the notion of an all-encompassing rivalry began to take hold of their bilateral relationship. Despite expanding trade and a stronger economic basis for a sustainable relationship, a whole range of issues began to trouble the relationship again since 2008. These include Tibet, the Dalai Lama's presence in India, Chinese opposition to international financial assistance to developmental projects in Arunachal Pradesh, the issue of stapled visas to Indian citizens from Jammu and Kashmir, China's attempt to undermine the India-US civil nuclear initiative at the Nuclear Suppliers Group in 2008, extending similar nuclear cooperation to Pakistan, Beijing's reluctance to support India's permanent membership of the United Nations Security Council, and its unwillingness to condemn Pakistan's support of cross border terrorism against India. Some Indian analysts have argued that these moves form a consistent pattern of Beijing's aggressive claims in the boundary dispute, its balancing of India by shoring up Pakistan, and determined opposition to India's larger global aspirations. They see it as a part of a rivalry rooted in the relentless logic of geography and extending beyond bilateral issues and Pakistan. Since they share the same space in Asia and both nations seek to expand their influence on the nations across their borders, a contestation for influence in Central Asia, South Asia, and Southeast Asia became inevitable. The competition was not limited to land spaces but also extended to the Indian Ocean and the Western Pacific Oceans, as China and India with their new focus on trade sought to protect their now vital sea lanes of communication. Nor was the rivalry limited to their immediate environs. It expressed itself in far flung places from Siberia in the Russian Far East to Columbia in Latin America and from Africa to the South Pacific, as Beijing and Delhi chased each other's tail in search of vital natural resources-both energy and mineral—far from their shores.

Mitigating the Rivalry

In their enhanced bilateral engagement at the turn of the 21st century, both China and India have sought to downplay the prospects for mutual rivalry. They continually declared that they were not a threat to each other. They also insisted that there was enough space in the world for the peaceful rise of both China and India, and that cooperation between themselves would be critical for the emergence of the Asian century. For all formal statement of these propositions and deepening mutual economic links, China and India constantly sought to limit the influence of the other. Despite the tall talk of building "Chindia", what has emerged in the last few years is an unmitigated rivalry. Delhi's traditional fears of China encircling it in the Subcontinent through special relationships with India's neighbours has increased rather than decreased in the 21st century. In the past India's focus was China's strategic partnership with Pakistan; it now extends to Beijing's relationships with Nepal, Bhutan, Bangladesh, Burma and Sri Lanka. Similarly China used to be concerned about India's influence in Indo-China that Beijing has historically seen as its backyard. Today Beijing is looking warily at India's expanding naval and military profile in the South China Sea and Delhi's maritime partnerships with Japan, Vietnam, Indonesia and Singapore.

In their attempt to hedge against each other's rise, Beijing and New Delhi found that their bilateral relationship was increasingly sensitive to their relationships with other major powers. Both have used their relationships with the United States, Japan, and Russia to gain advantage over the other. As a consequence the fear of hostile strategic alignments by the other has gained ground in both capitals and laid the basis for what international relations theorists call the "security dilemma". What one nation sees as a necessary step in protecting its own interests is seen by the other as an aggressive move to undercut its positions. The security dilemma then sets off the two mutually suspicious nations on an ever escalating competition resulting in reduced security for both.

The notion of a Sino-Indian rivalry is not new. What makes different and consequential today are a number of factors. Rising China and emerging India are more powerful nations today on the cusp of great power status, have interests that are wide-ranging, are driven by a strong nationalist impulse, have staked their domestic political legitimacy on their ability to sustain high rates of growth which in turn depends on their ability to achieve external objectives in an increasingly interconnected world. They have repeatedly found themselves at odds in reshaping regional and international institutions. India has been wary of China's increasing influence in the South Asian Association of Regional Cooperation. Beijing in turn has sought to limit India's role in East Asian institutions. Delhi and Beijing have also clashed over the reform of the global nuclear and the United Nations Security Council. The world is watching very closely the unfolding rivalry between the rising Asian giants. If the rivalry ends up in war or conflict, it is bound to diminish both China and India. While the talk of a grand eastern alliance between Beijing and Delhi was always far-fetched, the big question is whether the two can manage their competition by keeping it limited and peaceful. Without the wisdom to do so China and India will find it difficult to realise their larger global aspirations.

Re-making the World

Six decades ago when China and India reconnected with the world as modern and free republics, they had a huge problem coming to terms with the existing international order that was dominated by the Western powers. As two great civilizational states, China and India had a sense of their self-importance despite the extreme underdevelopment that marked their societies. It was not easy, therefore, for Beijing and Delhi to reconcile their claim for a special place in the world and their inability to secure it. China and India, after all, had endured an extended period of relative decline amidst the rise of Europe and the West in the previous centuries. In the middle of Twentieth century, the Chinese and

Indian economies were burdened by widespread poverty and their large populations were under-equipped to participate in the world economy. As a result China and India chafed under the international rules that they did not make and constantly found themselves either having to obey the diktat of other powers or defy them at considerable cost. After much trial and error, China and India found a way to grow their economies rapidly. Three decades of high growth rates since the late 1970s have made China, the world's second largest economy. India which followed a similar path a decade later is on track to become the second fastest growing economy after China.

As their relative economic gains make China and India great powers, Beijing and Delhi now have the power and responsibility to reshape the world. No future set of international rules will be sustainable without the explicit support of Beijing and Delhi. That is quite visible in the current international negotiations on global warming. It will be even more evident in the coming decades as the China and India position themselves at the top of the global power hierarchy. Peaceful coexistence and deeper bilateral cooperation between China and India, then, are the main preconditions for a stable and sustainable global order in the 21st century.

Policy Challenges

India's tasks in managing its complex relationship with China, minimising the conflict with Beijing and expanding the envelope of cooperation are widely understood by the policy makers in Delhi. But these tasks are likely to become quite challenging for a number of reasons. For one, the strategic gap between China and India continues to grow. At the turn of the 1990s, China and India were roughly equal in terms of aggregate economic size and per capita income. By the turn of second decade of the Twenty First century, China looms nearly four times larger. This huge gap is unlikely to close any time soon. Even if India produces its best historic economic performance of nine per cent annual growth rate —seen for a few years in the mid 2000s—it will stay behind China for a long time. During 2010 and 2011, the Indian economy has visibly slowed down to seven per cent and below, and Delhi is perilously close to a macro-economic crisis amidst the widening trade deficit, falling rupee, high inflation and mounting burden of wide-ranging subsidies. The conditions for reducing gap in the forseeable future—a significant slow down of the Chinese economy and a rapid acceleration of India's growth rates—may not present themselves easily.

This single factor alone complicates India's ability to manage the consequences of China's rise. States in a position similar to India have two basic options. One is to adjust itself to the power differential, eschew rivalry, and tailor its policies towards greater accommodation. Such a course is largely unthinkable for India. Given its own self-image as a natural leader of the developing world, Delhi will find it hard to settle for a secondary place in a China-centred Asian order and an international system where Beijing begins to play a larger role in setting and enforcing rules. The alternative for India is to persist in balancing Chinese power. Balancing a larger power is usually done in two ways—internal and external. Internal balancing involves the full mobilisation of domestic economic and military resources to maintain a measure of strategic equity if not full parity. The other is external balancing of the strong power through alliances and partnerships. A third option is to adopt an asymmetric strategy towards the stronger power.

On all the three counts, India is facing difficulties. Internal balancing requires an extraordinary political will and executive capability in rapidly building comprehensive national power. Delhi, however, has not demonstrated this over the last decade. Despite the visible expansion of Chinese strategic capabilities across the spectrum—from transforming the border infrastructure to cyberwarfare capabilities—Delhi has found it hard to move forward. Whether it is the construction of border roads or modernising the Indian military, whether it is upgrading its human resource potential or investing in advanced research and development, Delhi has not shown the purposefulness of Beijing. On the question of external balancing, India has made some interesting moves in laying the foundations for strategic partnerships with the United States, Japan, Vietnam and others who are all alarmed to different degrees by the rise of China. Yet, India finds it hesitant to follow through the logic of external balancing. Fears about losing strategic autonomy, apprehensions about being a junior partner and domestic political concerns have significantly limited Delhi's capacity for strategic cooperation with powers bigger than itself. If the ghosts of non-alignment impede India's partnerships with the US and Japan, an ingrained reluctance to offend China has constrained what India can offer smaller powers like Vietnam seeking to balance China.

Finally, the idea of an asymmetric strategy towards China has been barely debated in India. Delhi has experienced the Pakistan army implement the asymmetric strategy of cross-border terrorism during the last two and a half decades as a way to neutralise India's superior capabilities. Delhi has also seen China adopt a similar approach to weaken the United States in the Asia and the Pacific. Despite the demonstrated virtues of an asymmetric strategy, there has been little strategic imagination in Delhi to move along similar lines in coping with China's rise. Internal balancing, alliances, asymmetric approaches are as old as statecraft. They are not inventions of the modern strategic thought from Europe, but date back to the era of Kautilya's *Arthashastra* and Vishnu Sharma's *Panchatantra*. Unless Delhi is willing to grapple with the basics of statecraft and reconnect to its own traditions of strategy, India will find increasingly hard to deal with the unprecedented challenges arising from the rise of China.

*Text of the lecture delivered at USI on 07 Sep 2011 with Lieutenant General Vinay Shankar, PVSM, AVSM, VSM (Retd), former Director General Artillery in Chair.

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Sino-Indian Border Talks and the Shifting Chinese Stance?

Dr Sheo Nandan Pandey & Professor Hem Kusum*

Introduction

4th Annual Defence Dialogue (ADD) concluded after two day long parlays in Delhi on December 09, 2011. General Ma Xiaotian, Deputy Chief of the General Staff of the People's Liberation Army (PLA) and the Indian Defence Secretary Shashikant Sharma led their respective six member delegations. The agenda included discussions on issues related to 'regional security, military exchanges and confidence-building measures (CBMs)'.1 The event assumed importance as it took place after a freeze of nearly two years and immediately after the postponement of the 15th Round of Special Representative (SR) level talks.2 In the course of three hour long in-depth talks, the two sides, as the official release says, agreed to adhere strictly to the provisions of 2005 Protocol for implementation of Confidence Building Measures (CBMs) on the Line of Actual Control (LAC) i.e. to maintain peace and tranquility in the border areas; exchange military delegations - the Chinese side to send its delegation first in December 2011 end to be followed up by the Indian delegation's visit in January 2012; and, the two sides to work earnestly towards increasing mutual trust and confidence as this was to benefit both the countries.3 General MÎ Xiaotiân and team later called on the Chairman, Chiefs of Staff Committee and Navy Chief Admiral Nirmal Verma.

This paper delves into the dynamics of the Chinese flip flop, short of culpability of the PRC for rather 'stagnant embrace' on the issue. The study, in its perspective assumes: 'Territorial nature of state' normally stands a fixer and could more often than not lend situations amounting to 'fierce competition' between States. no player including India and China can be expected to give up genuine stakes in lieu of positive reward of any denomination; coercive strategies such as the one practised by PRC held the potential to impact the momentum of reconciliation, howsoever adversely; and, the present as well as the subsequent 6th Generation Chinese leadership would come to terms to rational approach and resolve the issue in the interest of common people (*laobaixing*) in not too distant a future.

This paper is organised to explore: Veracity of the Claims and Counter Claims; Broadsides and Commitments; Conundrum and the Future Landscape; and, Options and the Way Out. In applied perspective, the analytics, brought to bear upon included Anthony Giddens's *Theory of Structuration* besides state centric theories of 'Dependency' and 'Strategic Coalition' to gauge the ebb and flow of dispute resolutions by the Chinese and Indian stakeholders. It takes objective realities of the position of the two sides of the dispute and explores how best the two can settle the issue on the negotiation table in foreseeable future.

Veracity of the Claims and Counter Claims

The Chinese have two major claims on the Indian territory; One, in the Western sector, over the 'Aksai Chin' lying in the Northeastern section of Ladakh District of Jammu and Kashmir; and the other, in the Eastern sector, the Arunachal Pradesh. The PRC is presently holding altogether 43,180 sq km of Indian territory in the Western sector, 38,000 sq km that it occupied in the course of its 1962 aggression and 5180 km that was wrongfully ceded to it in 1963 by Pakistan. The PRC has again claimed over 2000 sq km of Indian territory in the Middle sector. Neither of these areas have a border with China proper. They run in part along Indian positions with East Turkestan, known as Xinjiang Uyghur Autonomous Region (XUAR) and Tibet, called Tibet Autonomous Region (TAR) since 1955 and 1965 respectively, under the dispensation of Communist China. China's right to negotiate and demarcate the boundary with sovereign neighbouring powers including India is thus, limited to its suzerainty over the two entities as such. It can not be absolute until the representatives of the two entities are part of the process. The unsettled position of China will practically continue as long as the issue of sovereignty over the geographic region in question is not finally settled.

None other than the PRC is objectively responsible for the imbroglio. Had it accepted and gone by the commitments of the erstwhile legal representatives of the two entities to the treaties and border demarcation, it could have enjoyed acceptability even while just holding suzerainty. Transfer of sovereignty in due course could have put final seal over the issue. In the recorded history, in the Western sector, the boundaries at the two extremities, the Pangong Lake (in Tibetan *Pangong Tso*), lying broadly south of the Johnson-Ardagh Line and Karakoram pass stand well settled.4 China's cognisance of its 1842 treaty does resolve the issue of Aksai Chin. It is well settled even when seen from the natural elements angle. Beyond the legality of *McMahon* line, running along features such as Thag La, Longju, and Khinzemane, located at 27°48'N, Indian claims remain strong from all angles including historical and prehistorical facts of life that China can not claim for a variety of reasons including the then non-existing suzerainty over peripheral China. The Middle sector relates to the pockets of boundary in the Indian States of Himachal Pradesh and Uttarakhand with Tibet. As in the Western and Eastern sector, the legitimacy of the PRC to enter into negotiated demarcation of boundary is limited to its suzerainty. The issue is otherwise settled as neither the populace of Tibet nor East Turkistan and their institutions

have any grievance and opposition to India's position on the issue.

Broadsides and Commitments

The forthcoming ADD shall take place in the backdrop of exchanges of military delegations in a couple of months. The Indian multi-command military delegation visited China during June 19-23, 2011 while their side was in India during November 4-9, 2011. The visit of the eight member Indian military delegation led by the General Officer Commanding of the Delta Force of the Northern Command Major General Gurmeet Singh had taken place after the freeze in military exchanges in the context of China refusing Visa to Lieutenant General BS Jaswal a year ago. The decision to revive the military exchanges was taken during the Summit meeting of the visiting Indian Prime Minister Dr Manmohan Singh. The return visit of the Chinese military delegation was led by the Political Commissar of the Tibet Military Command under Chengdu Military Region, Lieutenant General Lang Youliang. These two delegations have at least set the dialogue moving in right direction. The scheduled 4th ADD was expected to finalise plans for further exchanges in 2012 besides taking stock of the achievements of the past. While nothing spectacular could come about, the engagements

have supposedly resulted in reducing the level of perceptional animosity and hostility. Nonetheless, it could give fillip to shared vision for future positive engagements.

There are yet, a multitude of caveats in the roadmap of positive developments for resolving the disputes. Taking the sum and substance of various theoretical approaches in the field of territorial dispute settlements including the Anthony Giddens's *Theory of Structuration*, the imperatives left to both primary as well as secondary actors of the territorial disputes can be little different from rising above the normative considerations.5 Adherence to State centric 'Dependency' and 'Strategic Coalition' theories, do as well suggest relative restraint against whipping subjective conception of justice.

Chinese academics having allegiance to the PLA institutions have of late come out with a slew of papers on a wide range of subjects related to force projection capabilities of the Indian Armed Forces in general and Sino-Indian border disputes in particular. They often make pejorative references and tend to remind the Indian side of the October 1962 fiasco to its "Forward Policy". Quite a few write ups have projected Indian Armed Forces as 'inferior lots' in combat, logistics and war-fighting capabilities and suggest 'short and swift victory' of the PLA as an antidote to plausible Indian 'adventures'. Scores of stories with pejorative observations about the Indian defence capabilities and intentions, besides the socio-cultural life and political stability of the Indian State, in various Chinese and English language national news papers, in particular on-line editions of PLA Daily (*Jiefàngjûn Bào*), People's Daily (*Rénmín Rìbào*) and China Daily in November 2011 bear out the mindset and psyche of the Chinese nation.

Most specific to the Sino-Indian border disputes were the six part 'position paper' on the Chinese website *www.hprc.org.cn* in January 2011, which, inter alia called for 'a fair, reasonable and mutually acceptable solution' but stuck to often repeated Chinese refrains that the Sino-Indian borders were never demarcated, and the Indian hard sell of McMahon Line and the sovereignty over Arunachal Pradesh did not go well with China. The papers talked of political status of Tawang, and insularly provide prescription. All this while it knows the truth that the *Tawang Galden Namgey Lhatse* Monastery is located on Indian soil, and allegiance and subscription to it by the Tibetan monks can not make difference to the territorial right of the rightful claimants. This goes to underline the commitments of the Chinese side.

Conundrum and the Future Landscape

Improvements in the bilateral relations since late 1980s notwithstanding, there have been numerous jitters to full and final settlement of the border disputes. China's arguments on the issue could be misplaced but not without substance. The geographic settings of China and India did not historically leave grounds for either land or maritime border. China proper did not extend to India's territorial region at any point of time in the historical past. Of the Han Chinese dynasties, the second-last imperial Ming Dynasty governed 15 administrative entities, which included 13 provinces (*Bùzhèngshi Sî*) and two directly governed areas. Even under the 18 provinces (*Yîshíbâ Xíngsheng*) system of the Qing dynasty, the territorial expanse of China proper did not extend to Indian territorial expanse. There was little change in the shape, size and extent of China proper when the Qing dynasty was succeeded by the Republic of China (ROC) in 1912. Indian territorial expanse bordered only with Tibet and part of East Turkestan or say XUAR as the Chinese call.6 In the light of this ground reality, where did an occasion come up for the Indian as much as Chinese establishments of the historic past to go into delimitation and demarcation of land and maritime borders with China at all?

The Sino-Indian border dispute is thus, borne of China's territorial expansions far beyond 'China proper'. This is the case with China's border disputes with 14 countries by land (12 of these stand resolved) and seven countries by maritime boundaries, involving as many as 23 skirmishes short of a theatre war of different denominations.7 It included some of the warlike skirmishes such as those with India (1962), erstwhile Soviet Union (1969) and Vietnam (1979) but has strategically sought to call them 'conflict' (*zhongtu*) and not 'war' (*zhanzheng*). In handling the territorial disputes with one or the other country over the times, China's approach approximates to what John Mearsheimer and his ilk call 'offensive realism' with a difference, characterised by pacifist looks and stern contents, meticulously camouflaged with policy cloaks such as 'harmonious world' (*hexie shijie*) and 'good neighbour' precepts.

A long drag to final settlement is not some thing peculiar to India. This has been the case with all the countries in territorial disputes with China. Where it has gone for demarcation, it has never been full and final in one go. Chinese way is characterised to go for half boils which reaps imponderable gains. It does concede to the other side but only when the long term gains and/ or losses are clearly in sight. The latest in the row are the cases of Russia and Vietnam. There are then big power-small power considerations while giving concessions to the other side. A case in point is border demarcation with the Russian Federation along the Heilongjiang River, where China gave out half of the *Heixiazi* Island while it could have held the full in terms of agreed *thalweg* principle.8 In contrast, China entered into a settlement to demarcate 1350 km long land border with Vietnam only after the latter conceded China's right to use and operate railways on 300 meter stretch on its soil at the junction of at Guangxi Zhuang Autonomous Region (GZAR) of China and Lang Son province of Vietnam, occupied by China in 1979 war. Concessionary approach, applied in the case of Myanmar (October 01, 1961), Nepal (October 05, 1961), Mongolia (December 26, 1962) and Pakistan (March 2, 1963) carried enormous hidden cost to their detriment.

The Sino-Indian border disputes involved eight rounds of inconclusive negotiations between 1981 and 1987. The process yet, yielded positive grounds, which saw extreme hostilities softening into moderate détente. Following December 1988 Beijing Summit, the setting up of joint working group (JWG) in 1989 got to put in place an array of confidence and security building measures (CSBMs) with a net effect of limiting, if not thwarting the plausibility of untoward happenings. Through the 1993, 1996, and 2005 bilateral agreements, both nations have agreed to "maintain peace and tranquility" in the border areas. The two sides have then put in place the mechanism of Special Representative (SR) level talks in 2005 and Annual Defence Dialogue (ADD) in 2007 to break the ice over the vexed border disputes.9

Until this 15th Round of scheduled SR level talks was put off, the SR level talks, represented by the Indian National Security Advisor, earlier MK Narayanan and now Shiv Shankar Menon and the Chinese State Councilor

(*Guówù Weiyuán*) Dai Bingguo have crawled a few steps and are hitherto stuck hard in the second stage of the three stage process. Declaration of the Guiding Principles and Political Parameters constituted the first stage. Identifying the 'framework' for the resolution of the dispute is hanging fire. The third stage involving on ground efforts to demarcate the boundary in the three disputed sectors thus, looks a far cry. The contributions of the four rounds of ADD mechanism are thus far, just few and far between. It has at best succeeded in facilitating exchange of military delegations. The joint military exercise code named 'Hand-in-Hand 2007' held in Kunming, Yunnan Military District under Chengdu Military Region and the follow-up in 2008 on the Indian soil in Belgaum, Karnataka can be said to be the solitary tangible fruits of the 14 rounds of SR level talks and 4 rounds of ADDs.10

Options and the Way Out

Halting progress and limited success of SR level talks and ADD on border dispute must not surprise any one. It stems partly from a structural problem in the historic geopolitical stance of the Chinese state in the region. As elsewhere, the PRC got first, suzerainty over Tibet. This is true again with East Turkestan. Even while sovereignty eludes, it has brazenly repudiated their international obligations and commitments in contravention to both the 'naturalistic' and 'positivistic' laws of international conduct and thus, compromised its own legitimacy.11 Worse, as and where it had an opportunity, it got to squander them in its vanity. This is writ large in China's retraction to various conventions, treaties and agreements of yesteryears including McMahon Line and Simla Accord (1914), formalised by the then sovereign entities of what is now Xinjiang and Tibet with the Indian sides in one way or the other. For a breakthrough, it is but essential that the Chinese political elite rise to the occasion and accept the hard truth. For appreciating Indian position in all the three sectors of dispute, the Western, Middle and Eastern, they could better look up and draw on a wide range of Chinese and Tibetan literature, beginning with the epoch of Emperor Ming of Han Dynasty (58-75 AD).12

On the negotiation table, in their strategies, the Chinese sides first, hammered home 'package' deal as against India's 'sector-by-sector' approach. The PRC was yet agreeable to accept the watershed principle in the Eastern sector. It did not go down well with the Indian side. The Chinese approach smacked the tenets of *quid pro quo* at the altar of natural justice. In fact, PRC stood a net gainer in either way. It served its strategic design. Nonetheless, it did not have a real stake. The disputed area did not form part of China proper. China ultimately gave in to the approach of the sector-by-sector review within the framework of comprehensive settlement in 1984. As historical-legalistic arguments could not find a meeting ground, the two sides have little leeway except trying for political solution. The line of actual control (LAC) device is a way forward to bide time.13 With occasional jitters, the two sides have held two level exchanges including scores of summit meetings. While political parameters and guiding principles on the settlement of the China-India border dispute have been set, the settlement eludes due to gingering effects of the Chinese side.

Common interests of the PRC and the Indian state in the new millennia outweigh the points of differences in the border dispute. The stake holders have to work out meeting of minds in respect of grey areas. In the Western sector, the main area of concern relates Aksai Chin and the Trans-Karakoram Tract. While there is little merit in China's territorial claims, it has assiduously built a stake in National Highway 219 that connects XUAR and TAR. The negotiations have thus, to focus on some sort of arrangements that gives China user rights while India retained its territorial rights. China can very well replicate its experiments with Vietnam to settle the issue. Namka Chu, Thag La, Sumdurong Chu, Tulung La, Asaphi La, Longju, and Chen ju along McMahon Line in the Eastern sector continue to be contentious.

Conclusion

China's efforts to garner its interest through biltilateral mechanism such as ADD have proved disastrous in fruitions of healthy relations. Increased convergence of multifaceted interests of the two in this new millennium should go as a touchstone in the settlement of the dispute on rational grounds. The jitters in the relationship of the two emerging powers of Asia with the stake of welfare as much as potential of 36.6 per cent of world population must weigh over emotional factors such as those surfacing out of journalistic adventurism on the part of intellectual communities of the two sides. This includes South China Sea disputes as these too have become flash points.

Endnotes

1. Hu Yinan, "China, India Resume Military Dialogue", China Daily, Dec.8, 2008 http://english.peopledaily.com.cn/90883/766939.html

2. The mechanism of Special Representative (SR) was put in place in 2003. The 15th Round of the (SR) level meeting, scheduled to be represented respectively by the Indian National Security Advisor (NSA) Shiv Shankar Menon and the Chinese State Councilor Dai Bingguo, was aimed at firming up the proposed "Working Mechanism for Consultation and Coordination on India-China Border Affairs," an additional arrangement involving senior diplomats of both countries to urgently deal with any evolving situation along the Line of Actual Control.

3. Press Information Bureau, Government of India, Dec 09, 2011 http://pib.nic.in/newsite/erealease.aspx?relid78388

4. Burkitt, Laurie; Scobell, Andrew; Wortzel, Larry M. (July 2003). *The Lessons Of History: The Chinese People's Liberation Army At* 75. Strategic Studies Institute. pp. 340-341 http://www.strategicstudies institute.army.mil/pdffiles/PUB52.pdf

5. Giddens, Anthony. *The Constitution of Society: Outline of the Theory of Structuration*. Berkeley, University of California Press, 1984.

6. Xinjiang means new frontier. Until the Qing dynasty, the region was known as *Xiyu* having geographic reference point of being Western Region right from the time of Han dynasty who drove out Xiongnu empire. During the yesteryears of historical past, all or part of the region has been ruled or influenced at various times by the Tocharians, Yuezhi, Xiongnu Empire, Kushan Empire, Han Empire, Former Liang, Former Qin, Later Liang, Western Liáng, Tang

Dynasty, Uyghur Khaganate, Kara-Khanid Khanate, Mongol Empire (Yuan Dynasty), Dzungar Khanate, Qing Dynasty, Republic of China. It has been carved as an autonomous region under the communist rule since 1949 and called Xinjiang Uyghur Autonomous Region.

7. M. Taylor Fravel, Strong Borders, *Secure Nation: Cooperation and Conflict in China's Territorial Disputes*, Princeton University Press, 2008.

8. The *thalweg principle* is the principle in which the boundary between two political states separated by a watercourse is denoted as the thalweg of that watercourse, if those two states have agreed to use the thalweg definition. Various states have also *defined their watercourse international boundaries by a median line, left bank, right bank, etc.*

9. The mechanism of Annual Defence Dialogue (ADD) between India and China has been set up vice the provisions of the MoU "Exchanges and Cooperation in the Field of Defence" that was signed in 2006. In the MoU, the two sides had agreed to abide by the provisions of 2005 protocol for implementation of CBMs on the Line of Actual Control (LAC) and maintain tranquility of the border.

10. 130 Chinese troops including 40 officers were part of the Chinese contingent in the joint exercise in Belgaum. They were drawn from an Infantry Battalion under Chengdu Military Command. Equal number of Indian troops from the Eighth Maratha Light Infantry Battalion took part in the eight days long exercise.

11. Going by both Westphalian and non-Westphalian constructs of sovereignty, largely represented in the works of Thomas Hobbes, Jean Bodin and Emer de Vattel, sovereignty has a 'domestic' and 'external dimension, where the key lies in people's mandate to represent. China's coercive as well as positive actions have failed to garner support of the masses either in Tibet or East Turkestan.

12. In Chinese literature of antiquity such as Book of Later Han, the Indian state is referred as Heavenly India (Tianzhu) and the regions thereof are referred as Upper India (Shang Tianzhu), Middle India (Zhong Tianzhu) and Lower India (Xia Tianzhu). There are then a large number of references of the Kingdom of Tianzhu in the south of the Himalaya (Zai Ximalaya Shan Nan) in a large number of works of Chinese scholars.

13. As per the agreed principle, the two sides were to hold on without prejudice to their respective positions on the issue. The force level was to be kept at minimum compatible to otherwise good neighbourly relations. Simultaneously, the two were to work out effective confidence building measures (CBM).

Editor's Update

Since this article was received for publication, the Fifteenth round of boundary negotiations was held between the Special Representatives during January 2012 in Delhi. It was agreed to establish a Joint Border Management Mechanism to help prevent misunderstanding between the two countries arising from the un-demarcated Line of Actual Control (LAC). The first meeting of this 'mechanism' was held in Beijing from 05-06 March 2012. They agreed to hold the next meeting in India.

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The Weapons Trail in India's Northeast

Shri EN Rammohan, IPS (Retd)*

India's first insurgency broke out in India's Northeast in the Naga Hills district of Assam in the mid fifties of the last century. The Nagas a Mongoloid group of thirty odd tribes lived in the Naga Hills district of Assam and in four hill districts of Manipur. They told the British before they left India that they did not wish to be governed by the 'plains people' of Assam when India would be given Independence. The British had orders issued to treat the Naga Hills and other tribal areas as excluded areas. This did not satisfy the Nagas who had formed a Naga National Council. The first manifestation of their division from India came on 14 August 1947, a day before the Independence of India, when Angami Zapu Phizo, the head of the Naga National Council assembled his followers and the people of Kohima and declared the Independence of Nagaland. On the next day, 15 August 1947, when the Indian Independence Day was to be celebrated, the Naga people boycotted the function where the Indian flag was hoisted.

First Weapons from Pakistan Army

Angami Zapu Phizo, the Naga leader first began to organise his army by collecting weapons that the British Army had left behind in several dumps in the Naga Hills – after the Japanese were defeated at the Battle of Kohima. He had raised a unit that he labelled the Naga Home Guard. The weapons they recovered from the caches left by the British Army were however not of much use. They were mostly weapons of Second World War vintage. The Naga Underground that had been formed got a big lift when Angami Zapu Phizo managed to slip into East Pakistan and met the Pakistan Army. The Pakistan Army agreed to help the Naga rebels and gave them weapons and trained them. The Naga Underground Army infiltrated back into India and re-entered the Naga Hills in 1955-56. The weapons were self loading rifles, light machine guns and mortars, all imported by the Pakistan Army from European countries. By the 1960's, the Pakistan Army began training the leading Naga underground personnel in the use of plastic explosives. The Northeast Frontier Railway had a single metre gauge railway line going from Lumding to Dibrugarh on which the Assam Mail, the only Mail train from New Delhi to Dibrugarh, used to run. This single line ran parallel to the Naga Hills border from Furkating to Amguri. Of this stretch, the Assam Naga Hills border was thickly wooded. Self styled General Kaito Sema and his band of guerillas who had gone to East Pakistan for training was taught to use plastic explosives on the railway track. From 1965-66, SS Kaito Sema and his guerilla band set off a series of explosions on the railway track between Titabarh and Mariani stations of the Northeast Frontier Railway line, derailing the Assam Mail several times.

First Weapons from China

As the Naga insurgency progressed, Angami Zapu Phizo reached London from East Pakistan. Making London his base, Phizo developed a relationship with the Baptist Church of the United States. He got their sympathy, but could not manage to get any weapons for his underground army. His Kilonsers (ministers) back in the Naga Hills decided to send a group from the underground army to China. The first group crossed the eastern borders of the Naga Hills, traversed northern Burma with the help of the Burmese Nagas and crossed over into China from the Kachin area of Burma. The Chinese after some discussion agreed to help and the group, after a good spell of training, marched back with a collection of Chinese weapons from their ordnance factories. The Indian Army had, by then, been inducted in the Naga Hills. The China returned group of Naga hostiles gave the Indian Army a tough fight in several encounters. Meanwhile the Indian Intelligence agencies got a measure of success by splitting a faction from the Naga underground army by playing on inter-tribal rivalries. This finally led to the signing of a peace agreement. The Naga underground was split and one faction signed the peace agreement. The leaders of the second faction were away on the long trek to China through Burma. The two leaders who took the second group of the Naga underground army to China were Thuingaleng Muivah, a Thangkhul Naga, and Isaac Swu a Sema Naga. They were just crossing over from Burma into the Naga Hills when they heard about the peace agreement with the Naga underground. They strongly objected. Their attempt at reconciliation did not work out. After trying for some time Muivah and Swu formed the Nationalist Socialist Council of Nagaland (NSCN) in league with SS Kaphlang a Hemi Naga from Burma, who had helped Muivah and Isaac Swu on their trek to China and back.

It was shortly after this that the United Liberation Front of Assam (ULFA), an insurgent group, was formed in 1979. But it was activated in 1983, after the horrendous election that was forced on the Assamese people. This group went to Dimapur and met Thenguilang Muivah and Isaac Swu, the leaders of the NSCN, and asked for help. The two leaders warmly welcomed the ULFA leaders and guided them to have a civil and an army wing. They took the ULFA leaders to the Kachin Independent Organisation (KIO) in eastern Burma, who were having problems with the Burmese government and asked the KIO to help the ULFA by selling them weapons and training them in guerilla warfare. The KIO agreed and a stream of ULFA boys began their long trek from Kanubari tea estate near Sonari in upper Assam, to Longwa on the trijunction of Arunachal Pradesh, Nagaland and Burma and then through northern Burma to Kachin country. The training was hard and brutal and the relatively soft Assamese boys came back hard, tough and battle hardened. The weapons given by the KIO were however not very good. They were mostly weapons of the Burmese Army seized by the Kachin fighters. It was at this stage that Paresh Barua the ULFA Commander went to China and asked the Chinese for help. At that time the Chinese refused to sell arms to the ULFA. The ULFA and NSCN leaders then decided to approach Bangladesh and the Pakistan embassy in Dacca to plead for supply of arms. This was based on the case of arms that the Pakistan Army had supplied to the old Naga underground army in 1955.

Acquisition of Arms Financed by Pakistan, Purchased from Chinese Arms Companies

A team of ten ULFA boys led by Munin Nabis was sent to Bangladesh, sometime in 1991 to first contact the Bangladesh Director General & Field Intelligence (DGFI) and then the Pakistan embassy and the ISI. This move led to a bonanza for the NSCN and the ULFA. Shortly after the first batch was trained in the camp of Gulbuddin Hekmatyar in Khost the team returned to Bangladesh. Here they had a quarrel with Paresh Barua, the commander of ULFA and they fled to Assam and surrendered to the Assam Police. They informed them of a meeting that was held in Sayeman hotel in Cox's bazaar in Bangladesh in which the NSCN and ULFA leaders took part with the Pakistan ISI and the DGFI of Bangladesh. Pakistan promised to supply arms worth one million dollars for the NSCN IM (Isaac Muivah) and the ULFA. These weapons were to be purchased through arms dealers in Bangkok and Manila who would arrange to buy them from the Chinese Government's ordnance companies. They would also arrange to send the weapons by ships from North Korea to the sea off Cox's Bazaar where they would be loaded on local hired trawlers and brought to Cox's Bazaar. Here the consignments would be off loaded and carried by groups of NSCN, ULFA men overland via Alikadam, south of the Mizoram border to the Tiddim road and then into Churachandpur, then north via Kupum to the NSCN Camp in Benin, Tamenglong and then to Hebron near Dimapur a large camp of the NSCN IM. Shortly thereafter, the National Democratic Front of Bodoland, and the Peoples Liberation Army were also given money by the Pakistan ISI to purchase weapons through the same channels and route.

Some months after reports of the ULFA team's return to India from Pakistan and Bangladesh, and information about the meeting in Cox's Bazaar between the ULFA and NSCN IM leaders was received, the DIG of Mizoram confirmed that about 250 armed Naga young men were trekking south just across the eastern border of Mizoram. They would sometime move into Mizoram, and enter a border village; to purchase a pig, prepare and have their lunch and then resume their march. The column was sighted by the BSF post at Parva, the tri-junction between Mizoram, Burma and Bangladesh heading towards Bandarban, a small bazaar in the Chittagong Hill Tracts of Bangladesh. A few days later, ten Naga boys surrendered at the BSF camp at Parva. They narrated that they were among 250 NSCN IM men who were going to Cox's Bazaar to get weapons that had been landed there! They were airlifted to Massimpur. The information obtained from the ten ULFA boys, who had gone to Bangladesh, Pakistan and returned to India and surrendered to the Assam Police, was now confirmed. Weapons had been purchased and brought by ship and coastal steamer, and unloaded at Cox's Bazaar. From there the NSCN boys, who were seen marching by the Mizoram Police, had collected them and were now marching back. A few days later, the DIG Mizoram reported that the long line of Nagas seen going West were now marching back, but now each boy was carrying two weapons!

Regrettably, the Central Government took no action, though they had the information of the NSCN group heading for the Chittagong Hill Tracts of Bangladesh. It was only in 1995, that the Central Government managed to contact the Burmese Government and staged an ambush across the border in Burma south of Mizoram by a combined group of the Indian Army and the Burmese Army. Shortly after the ambush was sprung, the combined group of the ULFA, the NSCN IM and the PLA was taken by surprise. Fifty eight of the combined cadres were killed and as many weapons recovered. The rest of the group scattered into the jungles. Unfortunately at about this time, the Indian Government announced an award for Aung San Su Kyi, the Burmese Democratic Party leader who was under house arrest. The Burmese Military Government then asked the Burmese Army contingent to withdraw. As a result the Indian Army contingent could not pursue the cadres of the insurgent groups who had scattered in the jungles and had to withdraw to India. Most probably, some more consignments were brought by this route in 1992, 1993 and 1994. This could not be confirmed.

Purchase of Arms from Chinese Arms Companies by ULFA through Bhutan

Meanwhile, the ULFA and the National Democratic Front of Bodoland (NDFB) had shifted its military and civil HQs to Bhutan. Relations between the local government officials of Bhutan, the ULFA and the NDFB were very good. The ULFA and the NDFB were helping the local officials to keep the Nepalese who had been pushed out of Bhutan from infiltrating back to Bhutan. Also, they were buying everything for their cadres through the local officials. Obviously there was very good economic benefit to the Bhutan officials. By this time Paresh Barua the commander of the ULFA had managed to establish contact with arms dealers in Bangkok and Manila. He managed to persuade some officials of the Defence Ministry of Bhutan to sign indents for AK rifles and RPD 7.62 Light Machine Guns and ammunition as if the weapons were being procured for the Bhutan Government. It is established from interrogation of ULFA cadres that at least two consignment of weapons indented through the Bhutan Government defence officials were collected at the Bhutan border by the ULFA. On one occasion Paresh Barua had himself gone to the Bhutan-China border to collect the consignment.1

All Further Purchases by Insurgent Groups of Northeast through Arms Dealers from Chinese Arms Companies

After the ambush by the Indian Army and the Burmese Army south of Mizoram, there was a lull. The NSCN IM now shifted the route. They first established an office in Aizawl. The next consignment that the NSCN IM brought was again purchased through arms dealers in Bangkok or Manila. It is not known which defence official of an unknown country was made to sign the indent form? It is known from reliable sources now that the Indian currency was converted to US dollars in Bangladesh and then paid to the NSCN IM dealer in Bangkok or Manila. The weapons were to be brought by a North Korean ship that would trans-ship the weapons to a coastal steamer, which would then land at Cox's Bazaar. The coastal steamer also dropped anchor a little away from the shore at Cox's Bazaar and the weapons were brought by boat. After landing they were taken by boat to the shore and then collected by the NSCN IM boys and taken overland to Bandarban, a transit camp established by them. From here instead of going east via Parva, they turned North and after reaching Kagrachari, they slipped into the Longai valley of Mizoram between two border out posts of the BSF at Amchurimukh and Tuipuibari. Going a little further, they hit the junction of the road coming from the Tripura National Highway to Kanthlang BOP via Vangmun. From Kanthlang this road crosses into the Longai valley of Mizoram and proceeds to join the Aizawal-Silchar highway. When the NSCN IM foot patrol carrying the weapons delivered at Cox's Bazaar reached the point where the road from Kanthlang descends into the Longai valley, NSCN IM vehicles from their camp in Aizawl, were waiting. The weapons were loaded into these vehicles and taken via Silchar, Jiribam, Khonsang, and Tamenglong to Benin, the big NSCN IM camp North of Tamenglong.

I was Adviser to the Governor of Manipur in 2001-2002 and managed to cultivate a source who told me that the NSCN IM had opened a camp in Aizawl. I asked the Intelligence Bureau about this and they flatly denied that the NSCN IM had opened a camp at Aizawl. Then in end 2001 a group of NSCN IM boys were seen marching to Bandarban. They

were sighted by the BSF post at Parva. A few days after the sighting, five NSCN IM cadres came running from Bandarban side and sought shelter in the BSF post at Parva. They were quickly interrogated and airlifted to Massimpur by helicopter. On interrogation all the five revealed that they were tired by the privations of the long march from Benin south to the Manipur border and thence through Burma to the Chittagong Hill Tracts (CHT) and decided to run away from the NSCN IM camp at Bandarban back to Nagaland. They were chased and so took refuge with the BSF at Parva. They also said that after the ambush East of Parva in 1995, the NSCN IM had changed their route to the new axis via Kanthlang. Since then they had established the camp in Aizawl and had always carried the weapons brought North from Kagrachari to near Kanthlang, loaded it in vehicles of the NSCN IM based in Aizawl and taken them by road via Silchar, Jiribam, Khonsang, Tamenglong to Benin.

What is inexplicable in this is: Why the Intelligence Bureau was denying the establishment of the NSCN IM camp in Aizawl? My good friend Subhir Bhowmik, the BBC correspondent at Kolkata told me that he had been taken to their camp at Aizawl well before 2001. Obviously the IB then also knew about the transit of arms by this route! The most interesting factor about the smuggling in of arms in the winter of 2000, and of 2001, is that the NSCN IM had signed a truce with the Government of India (GOI) in 1997 and talks were being held regularly between an interlocutor appointed by the Indian Government and the leadership of the NSCN IM. This bringing in of arms was clearly a violation of the ground rules of the ceasefire agreement signed by the GOI and the leadership of the NSCN IM.

That the NSCN IM changed the route of bringing weapons is confirmed by another incident. I was the Director General BSF in 1999, when I received a signal stating that Assam Rifles had ambushed an NSCN IM party in the Longai valley; eight NSCN

IM cadres were killed and one seriously injured was in the hospital at Agartala. I was curious to know what the NSCN IM was doing in the Longai valley, therefore, I went immediately to Agartala to get a copy of the interrogation report of the injured NSCN IM cadre. I met Brigadier Panwar who was commanding the Assam Rifles brigade in Agartala and found that a company of Assam Rifles was deployed in the Longai valley to protect the Brus who were being attacked by the Mizos in Mizoram and were trying to flee to Tripura. I found out that a villager came to the place where a company of Assam Rifles was billeted in the Longai valley and informed them that a group of armed tribals were camping South of their location in the Longai valley. A patrol of the Assam Rifles was sent to investigate and they stumbled on the camp of the group who were resting. There was an exchange of fire and eight of the group were killed and one was seriously injured. Nine weapons were captured. The rest of the group managed to escape. Brigadier Panwar then told me that a couple of days later a group of NSCN IM men from Dimapur came to their HQs and protested that there was a ceasefire on between the Government and the NSCN IM; hence, the weapons ought to be returned to them!

Obviously this group were NSCN IM cadres who had gone via Parva to Cox's Bazaar to collect weapons and were returning from Bandarban via Khagracahri, and had slipped into the Longai valley by crossing between Amchurimukh and Tuipuibari BOPs of the BSF and were marching towards the pick-up point near Kanthlang. They were taking rest when the Assam Rifles patrol surprised them.

By 2004-5, it was learnt from reliable contacts from among the insurgents that several insurgent groups from the Northeast, particularly from Manipur, the Peoples Liberation Army (PLA) and the United National Liberation Front (UNLF), the NSCN IM and the NDFB had been using Bangladesh to convert the cash collected from extortion into dollars. This was then taken to two Southeast Asian capitals and made deals with arms dealers in Bangkok and Manila. They had established contacts with a couple of arms manufacturers of China based in Yunnan. Obviously these illegal arms dealers must have had contacts with some countries to get the arms indents prepared.2 In all the cases that we were able to collect information from; sources among the insurgent groups in the Northeast (the NSCN IM, PLA, UNLF, NDFB or ULFA), the arms dealers in Bangkok and Manila had arranged the Indent to be signed by a defence ministry official and then placed the indent with the Chinese arms factory in Yunnan, a ship was engaged that flew the North Korean flag to get the arms loaded and transported to the high seas off Cox's Bazaar. It is not difficult to presume that the country that signed the Indent for the weapons was also North Korea. The North Korean Ship would anchor on the high seas off Cox's Bazaar and the arms would be transferred to a coastal steamer which would then ferry the weapons to the shore. From the shore, the cadres of the insurgent groups would carry the weapons through the transit camps of the NSCN IM set-up enroute into India.

The UNLF probably took their weapons via the Chittagong Hill Tract directly through Burma to Churachandpur via Phaisanjang to their hideouts South of Sajik Tampak in South Chandel district. It was only on one occasion that Paresh Barua got the ship to unload the weapons in Chittagong port. This was in April 2004. While he was present and seeing to the unloading of the weapons in Chittagong port, the local police was tipped off and all the weapons were seized.

The list of weapons seized was impressive and included the following : -

- (a) T-56-1 Sub Machine Guns 690
- (b) 7.62 mm T-56-2 SMGs 600
- (c) 40 mm T69 Rocket Launchers
- (d) 40 mm Rockets 840
- (e) 9mm Semi Automatic Rifles 400
- (f) Launching Grenades 2000
- (g) Hand Grenades 25,000
- (h) SMG Magazines 6392

- (j) SMG Cartridges 7,00,000
- (k) 7.62 Rifle Ammunition 7, 39,680
- (l) Cartridges of other assorted weapons 4, 00,000.

The immediate inference is that this purchase could only have been made from an arms factory and obviously the indent must have been signed by some country. Could this not be North Korea? Since it was Paresh Barua, the self styled commander of the ULFA who was personally seeing to the unloading on the docks of Chittagong harbour, the weapons must have been meant for the ULFA in Assam. Also, Paresh Barua must have had patrons in the then Bangladesh Government at a very high level. It was the Indian Intelligence who tipped off someone in a high position and also not in league with the then party in power!

Conclusion

Presently, Paresh Barua and a group of his cadres are in the Kachin Area of Burma. They have access to the arms dealers in Manila and Bangkok. The channel of purchasing arms from the Chinese arms factories in Yunnan is still open. The Assam insurgent group is alive in the eastern region of Assam, but is lying low. In Manipur, the PLA and the UNLF are intact and quite active with a good following. The NSCN IM and the NSCN K have morphed into three groups, thus weakening the NSCN IM. With the arrest of Angelous Shimray of the NSCN IM and Rajkumar Meghen of the UNLF weapon procurement by these two groups is probably on hold. As far as the PLA of Manipur is concerned, they are quite active. Their cadres are known to be training the Maoist cadres in Jharkand. Their line with the Maoists in Nepal is also active. Though the Government of Bangladesh is against any kind of relationship with the Northeast militant groups, their financial market is open to purchase of dollars.

It is for the GOI to seize this chance and see that development money is grounded in the rural areas of Nagaland and Manipur. I have seen the ground conditions in these two states and written about it in several papers on the Northeast. What is urgently required is to construct good roads to connect all villages to the towns, develop drinking water supply system, improve horticulture in all rural areas, and allow educational institutions to set up schools in the interior areas. As the village economy improves, and good schooling reaches the interior villages, there will be a transformation in the outlook of the youth. As economic opportunities open up with better education, joining insurgent groups will become a lesser option.

Endnotes

- 1. Interrogation report of ULFA cadre.
- 2. Information collected from sources from the Northeast.

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Asia's Water Crisis and the New Security Risks*

Dr Brahma Chellaney**

Water, the most vital of all resources, has emerged as a key issue that would determine if Asia is headed toward cooperation or competition. After all, the driest continent in the world is not Africa but Asia, where availability of freshwater is not even half the global annual average of 6,380 cubic metres per inhabitant.

When the estimated reserves of rivers, lakes, and aquifers are added up, Asia has less than one-tenth of the waters of South America, Australia and New Zealand, not even one-fourth of North America, almost one-third of Europe, and moderately less than Africa per inhabitant. Yet the world's fastest-growing demand for water for food and industrial production and for municipal supply is in Asia, which now serves as the locomotive of the world economy.

Today, in 2011, the fastest-growing Asian economies are all at or near water-stressed conditions, including China, India, South Korea, Vietnam, and Indonesia. But just three or four decades ago, these economies were relatively free of water stress. Now if we look three or four decades ahead, it is clear that the water situation will only exacerbate, carrying major implications for rapid economic growth and inter-riparian relations.

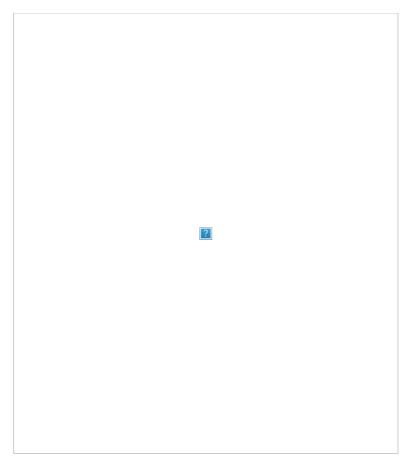
Yet Asia continues to draw on tomorrow's water to meet today's needs. Worse still, Asia has one of the lowest levels of water efficiency and productivity in the world. Against this background, it is no exaggeration to say that the water crisis threatens Asia's economic and political rise and its environmental sustainability. For investors, it carries risks that potentially are as damaging as non-performing loans, real estate bubbles, and political corruption. Water has also emerged as a source of increasing competition and discord within and between nations, spurring new tensions over shared basin resources and local resistance to governmental or corporate decisions to set up water-intensive industries.

These developments raise the question whether the risks of water conflict are higher in Asia than elsewhere in the world. With Asia becoming the scene of increasingly fierce intrastate and interstate water competition, the answer clearly is yes. Water is a new arena in the Asian Great Game.

In fact, water wars—in a political, diplomatic, or economic sense—are already being waged between riparian neighbours in several Asian regions, fuelling a cycle of bitter recrimination and fostering mistrust that impedes broader regional cooperation and integration. Without any shots being fired, rising costs continue to be exacted. The resources of transnational rivers, aquifers, and lakes have become the target of rival appropriation plans.

Please refer to the **map** showing 'Rivers of Tibet'. With a river or groundwater basin often becoming tied with a nation's identity, ownership and control over its resources is considered crucial to national interests. That has helped give rise to grand but environmentally questionable ideas—from China's Great Western Route to divert river waters from the Tibetan Plateau to its parched north and South Korea's politically divisive four-rivers project, to India's now-stalled proposal to link up its important rivers and Jordan's plan to save the dying Dead Sea by bringing water from the Red Sea through a 178-kilometre-long canal, which is also to serve as a source for desalinated drinking water.

Several factors have contributed to the Asian water crisis, which is leading to river and aquifer degradation. One key factor responsible for the water crisis is that Asia is not only the largest and most-populous continent but also the fastest-developing continent. How the swift economic rise of Asia has brought water resources under increasing pressure can be seen from the fact that most Asian economies now are water-stressed. The exceptions are few: Bhutan, Burma, Papua New Guinea, Laos, Cambodia, Brunei, and Malaysia.



Unlike fossils fuels, mineral ores, and timber that they import even from distant lands, the Asian economies must make do with their own water resources, a significant share of which is in transnational watercourses. This fact only serves as a strong incentive for some nations to try and commandeer internationally shared waters before they leave their national borders. Given the critical role of water in economic modernisation, this continent has emerged at the centre of the global water challenges.

Another factor is consumption growth, as a consequence of rising prosperity. The plain fact is that the average Asian is consuming more resources, including water, food, oil, and energy. The consumption growth is best illustrated by the changing diets, especially the greater intake of meat, whose production is notoriously water-intensive.

A third factor is the role of irrigation in accentuating the Asian water stress. Asia more than doubled its total irrigated cropland just between 1960 and 2000. Once a continent of serious food shortages and recurrent famines, Asia opened the path to its dramatic economic rise by emerging as a net food exporter on the back of this unparalleled irrigation expansion.

Asia now boasts the leonine proportion of the world's surface land under irrigation. About 70 per cent of the world's 301 million hectares of land equipped for irrigation is in Asia alone, making it the global irrigation hub. Just three sub-regions of Asia—South Asia, China, and Southeast Asia—by themselves account for about 50 per cent of the world's total irrigated land.

It is thus hardly a surprise that Asia leads the world in the total volume of freshwater withdrawn for agriculture. Indeed, almost 74 per cent of the total global freshwater withdrawals for agriculture by volume are made in Asia alone.

Water literally is food in Asia. Yet the growth of rice and wheat output in Asia, after the dramatic increases of the previous quarter century, has actually slowed since the late 1990s, raising concerns that Asian countries will become major food importers, roiling the international market. The international food market is not large enough to meet major import demands from Asia.

A fourth factor is that the fastest increase in water demand in Asia is now coming not from agriculture but from the industrial sector and urban households, in keeping with the fact that this continent has become the seat of the world's fastest industrialisation and urbanisation.

A final factor linked to Asia's water stress is the large-scale impoundment of water resources through dams, barrages, reservoirs, and other human-made structures without factoring in long-term environmental considerations. Dams, to be sure, bring important benefits. But upstream dams on rivers shared by two or more nations or provinces in an era of growing water stress often carry broader political and social implications, especially because they can affect water quality and quantity downstream. Dams can also alter fluvial ecosystems, damage biodiversity, and promote coastal erosion and saltwater intrusion.

Asia is not just the global irrigation hub; it is also the world's most dam-dotted continent. China, the world's biggest dam builder, alone has slightly more than half of the approximately 50,000 large dams on the planet. Most of the best dam sites in Asia already have been taken. Yet the numerous new dam projects in Asia show that the damming of rivers is still an important priority for policymakers. Such a focus on dam building has only intensified intrastate and interstate water disputes and tensions in Asia, with implications for regional security and stability.

The countries likely to bear the brunt of upstream diversion of waters are those located farthest downstream on rivers like the Brahmaputra, Mekong, and Tigris-Euphrates: Bangladesh, whose very future is threatened by climate and environmental change; Vietnam, a rice bowl of Asia; and Iraq, still internally torn. Cross-border water appropriations from the Illy River threaten to turn Kazakhstan's Lake Balkhash into another Aral Sea, which is dying.

So, the big question is: How can Asian nations prevent the sharpening struggle for water resources from becoming a tipping point for overt conflict? To contain the security risks, Asian states must invest more in institutionalised cooperation on transboundary basin resources in order to underpin strategic stability, protect continued economic growth, and promote environmental sustainability.

The harsh truth is that only four of the 57 transnational river basins in Asia have a treaty covering water sharing or other institutionalised cooperation. These are the Mekong, Ganges, Indus and Jordan river basins. The absence of a cooperative arrangement in most Asian transnational basins is making inter-country water competition a major security risk, increasing the likelihood of geopolitical tensions and instabilities.

India is downriver to China but upriver to Pakistan and Bangladesh. By entering into water-sharing treaties with both Pakistan and Bangladesh, India has set an example. In fact, its water treaty with Pakistan is the most-generous international agreement ever signed between any countries in modern world history. It is the most generous in terms of both the quantum of waters reserved for the downstream country as well as the sharing formula, which lopsidedly leaves for upstream India less than 20 per cent of the waters of the six-river Indus system. Despite the Indian water magnanimity, Pakistan has almost continuously waged overt or covert aggression against India since the Indus Waters Treaty was signed in 1960. And India has never made any effort to leverage its water-supplier role to dissuade Pakistan from waging aggression in any form.

China, by contrast, has no intention to emulate India's example in any manner. By expanding its borders, China has become the source of transboundary-river flows to the largest number of countries in the world — from Russia to India, and from Kazakhstan to the Indochina Peninsula. This status is because of its forcible absorption of sprawling ethnic-minority homelands, which make up 60 per cent of its landmass and are the origin of all the important international rivers flowing out of Chinese-held territory.

Getting this pre-eminent riparian power to accept water-sharing arrangements or other cooperative institutional mechanisms has proven unsuccessful in any basin. In fact, as epitomised by its planned or actual construction of a separate cascade of upstream dams on several major international rivers, including the Mekong, Salween, Brahmaputra, Arun, Irtysh-Illy, and Amur, China is increasingly headed in the opposite direction — toward unilateralist actions impervious to the concerns of downstream nations.

China is unlikely to take into account the water interests of India or any other downstream country. The plain fact is that when it comes to assertive pursuit of national interest, China has cared little about the potential impact on its image in other states. Its policies are designed to advance perceived national interests, not to seek approbation or appreciation from other states. As one influential Chinese academic put it to this writer, the choice Chinese policymakers have on diversion of Tibetan river waters is between slaking the thirst in China's parched north and "not offending" India and other downstream states — and "this choice is a pretty easy choice for Chinese decision-makers." China has already built a number of dams on rivers flowing to India, including the Brahmaputra, the Sutlej and the main Indus stream. These dams are not large. But the new large dams planned on the Brahmaputra and the Arun are likely to materially alter cross-border flows into India and Nepal.

It is important to note that no country in history has been a greater dam builder than China, which boasts not only the world's biggest dam (Three Gorges) but also more total number of dams than the rest of the world combined. Yet far from slowing its dam-building spree, China has stepped up its re-engineering of river flows in two ways: by portentously shifting its focus from internal rivers to international rivers, and by concentrating on mega-dams.

For example, its newest dams on the Mekong are the 4,200-megawatt Xiaowan — taller than Paris's Eiffel Tower and producing more electricity than the installed hydropower-generating capacity of all of the lower Mekong countries together — and the 5,850-megawatt Nuozhadu, which when complete will be even bigger in storage volume but not in height.

Last summer, China's state-run hydropower industry published a map of major new dams approved for construction, including one on the Brahmaputra at Metog (or "Motuo" in Chinese) that will be larger than even the 18,300-megawatt Three Gorges. India's largest dam — the 2,000-megawatt Tehri — pales in comparison with China's dams. The Metog Dam will have a devastating environmental impact on India's Assam plains and the eastern half of Bangladesh.

In the next one decade, according to international projections, the number of dams in the developed countries is likely to remain about the same, while much of the dam building in the developing world, in terms of aggregate storagecapacity buildup, will be concentrated in just one country — China. The consequences of such frenetic construction are already visible. First, China is now involved in water disputes with almost all its riparian neighbours, ranging from big Russia and India to weak clients like North Korea and Myanmar.

Second, its new focus on water mega-projects in the traditional homelands of ethnic minorities has triggered fresh tensions along ethnic fault lines over displacement and submergence issues at a time when the Tibetan plateau, Xinjiang and Inner Mongolia have all been racked by revolts or protests against Chinese rule. And third, Chinese projects threaten to extend the serious degradation of internal rivers to international rivers.

Yet, as if to underpin its rise as the world's unrivalled hydro-hegemon, China is also the largest dam builder overseas. From Pakistan-occupied Kashmir to Myanmar's troubled Kachin and Shan states, China has widened its dam building to disputed or insurgency-torn areas, even in the face of local backlash. Even as PLA units are engaged in dam and other strategic projects in restive Gilgit-Baltistan, China's dam building inside Myanmar has contributed to renewed bloody fighting recently, ending a 17-year ceasefire between the Kachin Independence Army and the government.

For downriver countries, a key concern is China's opacity on its hydro-engineering projects. It usually begins work quietly, almost furtively, and then presents a project as holding transboundary flood-control benefits and as an unalterable fait accompli.

Worse still, China rejects the very notion of a water-sharing arrangement or treaty with any riparian neighbour. The terms "water sharing," "shared water resources," "treaty" and "common norms and rules" are an anathema to it. It is one of only three countries that voted against the 1997 UN Convention, which lays down rules on shared basin resources.

It is thus no accident that there are treaties among co-riparian states in South and Southeast Asia, but not between China and any of its neighbours. That the country with a throttlehold over the headwaters of major Asian rivers is also a rising superpower, whose muscular confidence is increasingly on open display, only compounds the regional security challenges.

In this light, China poses the single biggest obstacle to the building of institutionalised cooperation in Asia to harness internationally shared rivers for mutual and sustainable benefit.

With its multitude of inter-country basins, Asia cannot continue to prosper without building political and technological partnerships to help stabilise inter-riparian relations, encourage greater water efficiency, promote environmental sustainability, take on practicable conservation strategies, and invest in clean-water technologies. If Asian states are to address their water challenges, they will need to embrace good practices on the strategic planning and management of water resources.

* A slightly edited version of the talk delivered at USI on 28 Dec 2011 with Vice Admiral Pradeep Kaushiva, UYSM, VSM (Retd) in the Chair.

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Nuclear Weapons Free Zone in the Middle East: A Significant Step Towards an Eventual Nuclear Weapons Free World*

Colonel GG Pamidi**

Introduction

The Middle East has been described as one of the most volatile and violent political systems since the end of the Second World War1. In a conflict-ridden area with a history of mistrust and animosity, where chemical weapons were used in the past, the prospect of renewed use of Weapons of Mass Destruction (WMD) is possible.2 For these reasons, a WMD-free zone in the Middle East is not only an aspirational goal, but a matter of urgency.

The end of the Cold War brought in tectonic changes and this has affected the international landscape. However, during the last twenty odd years, the world appears to have forgotten about thinking and working toward a non-nuclear and non-violent world. Perhaps this was understandable since the prospects of a catastrophic nuclear exchange suddenly appeared remote. The pursuit of nuclear disarmament across the world seemed less important.

Events during the last couple of decades have changed the world dramatically. Tragically, one aspect that has not altered is the persistent threat to survival of mankind due to nuclear weapons.

Desirability of a Nuclear Weapons Free World : A Safer and Saner World or More Turbulence?

The threat of an all-out nuclear war does not appear to be on the near horizon, but as more countries have the desire for and the capabilities to create nuclear weapons, it is ever more important for states to determine a way to create Nuclear-Weapon-Free Zones (NWFZs) in pursuit of a nuclear-weapon-free world3. The critics of the NWFW base their arguments on the premise that a world without nuclear weapons will encourage sub-conventional and conventional wars and this in turn will lead to an increasingly turbulent world. In other words, they maintain that nuclear weapons have deterred sub-conventional and conventional conflicts and that without nuclear weapons, the region and indeed the world will become more turbulent or its logical corollary, namely, nuclear weapons create a less turbulent environment. This merits detailed examination on both counts.

Nuclear Weapons Deter Sub-Conventional and Conventional Conflicts. Studies of the past conflicts reveal the fallacy of the argument. Nuclear weapons have not succeeded in desisting a Nuclear Weapon State (NWS) in engaging in conflict with a Non-Nuclear Weapon States (NNWS) using conventional means only. For example, Vietnam or Korea. Neither has it succeeded in stopping conflicts between the NWS, for example the Ussuri conflict in 1969, which took place between China and the erstwhile USSR. At the height of the Cold War, there have been about 100 armed conflicts.4 There are ample documents to substantiate that several US Presidents seriously considered using nuclear weapons.5 Therefore, attainment of a NWFW is definitely desirable for the survival of the human race.

Nuclear Weapons Create less Turbulent Environments. This logic too appears to be flawed; since the Middle East has been plagued with violence and is, paradoxically, home to an opaque nuclear power as well as home to a threshold nuclear power state. There is a strong school of thought that advocates possession of nuclear weapons as the only method of preventing conflicts. This school quotes George Washington who surmised long ago, *"To be prepared for war is one of the most effectual means of preserving peace."* They argue, not without reason, that it is a historical fact that in every age provocative nations, barbarians, and now terrorists (whether state sponsored or otherwise) have sought to gain a greater advantage over the civilized world. In the age of nuclear weapons, one bad actor could hold rest of the world hostage – literally if not figuratively. All of which points out to the difficulties in formulating a defence policy. Any successful defence must plan, not only for the obvious threats, but also for that one terrible exception.

On the face of it, this appears to be a strong and persuasive argument but the danger in it is that it is a sharply escalatory curve. Taking the argument to its logical conclusion, if nuclear weapons are indeed the ultimate guarantee of a nation's security, more and more nations will become nuclear. If this is the reality, is it desirable? Conflict in the post-Cold War era has acquired new characteristics: these are not classical inter-state conflicts; they are fuelled by identity based factors and issues of economic and social justice: and there is drastic increase in the role of non-state actors. Weapons of mass destruction fashioned for inter-state conflict and their associated strategic deterrence doctrines, premised on state behaviour, have little relevance for the new reality6.

The heart of the matter is that nuclear weapons are unusable as weapons of war. Though the nuclear bomb initially seemed to have the potential for war fighting, compellence and deterrence; its special characteristics soon effectively reduced the three options to only one – deterrence. They are useful to deter use of nuclear weapons by other nations. If that is the only limited role of nuclear weapons, the world will be infinitesimally better off without them and a NWFW will be a far less turbulent place. More serious critics focus on these problems-the growth and potential breakout of latent NWS, the future of extended deterrence, the enforcement of disarmament, and the potential instability of small numbers- that concern *mutual* nuclear disarmament. These legitimate concerns must be addressed in a credible manner, if significant progress is to be made toward the goal of a NWFW. To address these problems adequately, the current nuclear disarmament effort must be transformed from a debate among leaders in the NWS to a coordinated global effort of shared responsibilities between NWS and NNWS7.

Establishment of a NWFZ in the Middle East : Prospects and Challenges

The idea of a Nuclear Weapon Free Zone in the Middle East is not a new one and it was introduced in the UN General Assembly(UNGA) in 1974 by Egypt and Iran. After the 1974 resolution, the UNGA had been adopting the resolutions. From 1979, following the Iranian revolution, Egypt started sponsoring the resolution alone. In fact from 1980 onwards, most of the resolutions on this question were adopted by consensus, which included all the Arab states, Iran and Israel.

Israel, which was in favour of a NWFZ, tabled its own resolution in 1980, which stated that it was imperative for the member nations of the region to have direct talks with each other and called upon each and every nation to participate in such talks. However, Israel dropped its own draft after a lack of support for the same.

In 1990, the concept of a Middle East NWFZ was expanded to include all weapons of mass destruction in a proposal mooted by Egypt. The status quo situation continued till 1995 when the issue once again gained centre stage attention at the NPT Review and Extension Conference. One of the important reasons that made possible the indefinite extension of the treaty was adoption of the Resolution on the Middle East, co-sponsored by Russia, the United Kingdom, and the United States8. The Middle East remains the region with the greatest concentration of states that are not party to one or more of the international treaties dealing with WMD: the Biological Weapons Convention (BWC), the Chemical Weapons Convention (CWC), and the Nuclear Non-Proliferation Treaty (NPT), as well as the Comprehensive Nuclear Test Ban Treaty (CTBT).9 Moreover and more ominously, WMD (specifically chemical weapons) have been used in the Middle East.10 The overwhelming majority of countries in the region have some form of WMD-related research, development or weaponisation programme.11

Prospects. This reality is an enormous challenge but is also the very reason that the Middle East is the region that receives the most international attention as a potential WMD free zone. Elsewhere in the world, NWFZs have been successfully negotiated and adopted, and additional such zones are being systemically pursued. But in the Middle East the goal of a NWFZ has been linked to a WMD Free Zone in all the relevant official circles. This is because of the strategic link that states in the region have made among the various WMD,12 with biological and chemical weapons perceived as the "poor man's nukes", despite the significant difference in scale of mass destruction between nuclear weapons on the one hand and biological and chemical weapons on the other hand.

Nevertheless, the most recent developments in this sphere shed light on the implementation of the 1995 Resolution on the Middle East. The 2010 NPT Review Conference agreed to convene a Middle East conference to make practical progress toward establishing a Middle East Zone Free of weapons of mass destruction in 2012. Irrespective of the role, international community may play in the Middle East, the importance of peace process initiated by Middle East countries for the denuclearisation of the region can not be ignored. The possibility for a peace agreement to materialise overnight is unlikely and nor should there be an attempt to rush the process.

Challenges. The creation of NWFZ in the Middle East has been stalled due to the non-compliance by a couple of states. While it is fairly well known that Israel has a small but effective nuclear arsenal, Iran is also widely suspected to being covertly nuclear.

There are also following differences between the Egyptian and the Israeli drafts :-

(a) The Egyptian draft resolution does not elaborate a mechanism for a discussion on the establishment of a NWFZ or even suggest that a formal agreement to create such an NWFZ should be negotiated and signed by the regional states. Rather, it implied that the Middle East should simply comply with the stipulations of the announced zone. The Egyptian proposal also did not define the obligations that these states would be taking towards each other: instead it referred to their commitment towards the zone.

(b) The Israeli proposal, in contrast, emphasised the need to negotiate the terms of such a zone through direct talks between the state parties. Israel's focus on the negotiation mechanism may have resulted from the conviction that it should not surrender deterrent effect of its nuclear potential unless there is an Arab acceptance of Israel's existence in the region.

Israel's justification for its nuclear policy and programme stems from its geographical location and its relations with its neighbours. Being surrounded by Arab states on all sides, Israel sought the nuclear option as a deterrent to possible Arab attacks and in the interest of national security. However, over the years, relations with the Arab countries have improved. Yet, Israel continues to maintain its ambiguous stand on the existence of its nuclear weapons. This policy of opaque nuclear proliferation eliminates the possibility of establishing a transparent verification mechanism in the region, which is an important prerequisite for the establishment of an NWFZ13.

Israel has always maintained that it will not be the first to introduce nuclear weapons in the region, reports of their threat to do so in 1973 and during the Gulf War not withstanding. Moreover, it has been in favour of establishing an NWFZ in the region, arms control and general disarmament evident from the fact that it has already signed all international treaties barring the NPT. However, it believes that if a lasting peace is not established in the region which is brought about by direct talks between the countries, any arms control treaty or NWFZ would be impractical and futile.

Attainability of a NWFW

The elimination of nuclear weapons is called for in Article 6 of the NPT, so it is not a new goal. The way forward is to negotiate a treaty that would commit the nations of the world to nuclear disarmament by a certain date. This approach was championed by the Indian Prime Minister Rajiv Gandhi 20 years ago, and it has long had many adherents in the UN Conference on Disarmament. The problem lies in convincing countries to act in a way that makes a nuclear-weapons-free world possible.

Starting with the 2007 *Wall Street Journal* article by four former US statesmen-George Shultz, Henry Kissinger, William Perry, and Sam Nunn-and followed by endorsements from similar sets of former leaders from the United Kingdom, Germany, Poland, Australia, and Italy, the support for global nuclear disarmament has spread14.

In his 2009 Prague speech, President Obama maintained that "the basic bargain is sound. Countries with nuclear weapons will move towards disarmament, countries without nuclear weapons will not acquire them, and all countries can access peaceful nuclear energy." It is recognised that, unlike earlier NGO movements and advocacy, which were

vulnerable to allegations of naiveté, it is now the political class itself, led by the US President himself, which is advocating "global zero", providing much more gravitas to the idea15.

India and a NWFW. As is well known to all, India is now a NWS. Further, it has affirmed its intention to maintain a credible minimum nuclear deterrent. In his statement to Parliament on 29 July 2005, the Prime Minister, Dr Manmohan Singh, said:

"Our commitment to work for universal nuclear disarmament, so passionately espoused by Prime Minister Rajiv Gandhi, in the long run will remain our core concern."16

Subsequently, replying to a debate in the Rajya Sabha (Upper House) on 17 August 2006, the Prime Minister said:

The present juncture of a world without acute rivalries among the NWSs is the right juncture to initiate an earnest dialogue under the aegis of the United Nations at the Conference on Disarmament.

Conclusion

There is no gainsaying the fact that WMD pose a threat to the very existence of mankind. The jury still seems to be out on the fact whether nuclear weapons bring about a safer world or whether they bring about more turbulence. However the reality is that all nations are unanimous in their opinion that nuclear weapons need to be eventually abolished. Towards this end, efforts are underway to declare various regions as NWFZs.

The Middle East remains a highly volatile region and it has been home to violent political systems since the end of the Second World War. The intention to have a NWFZ in the Middle East has been a cherished dream of the nations of the region since almost last four decades. International efforts towards a NWFZ in the Middle East can be fruitful only when backed by a solid and sustainable consensus of all states.

As is evident from past history, India is committed to global, non-discriminatory disarmament. It has always maintained an unwavering position with respect to the establishment of a NWFW. The forums are there and many of the pathways, notably that of delegitimisation are well known to all. Towards this end, the move towards a NWFZ in the Middle East is a welcome step.

Endnotes

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Integrated Road Network: A Catalyst for Nation Building

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Introduction

Availability of physical infrastructure for distributing resources and essential services to the public is one of the key factors for society's success and progress. In fact, nation's economic strength is reflected in its infrastructure assets.1 An elaborate and effective road network assumes a distinct place and contributes significantly to the growth of the country by bringing in direct benefits from its role in the development of sectors, such as minerals, agriculture, industry and commerce.

Roads as part of country's infrastructural assets not only shape the economic activity of the country but also play an important role in day to day activities of the people. Easy accessibility, flexibility of operations, footstep service and reliability have earned road transport an increasingly higher distinction and has been acknowledged as pivotal engine in fostering trade, economic growth, production and social development. Inclusive economic development brings in prosperity, enhances living standards, that in turn integrates society and provides security. This article attempts to explore the role of road network for nation building in terms of national integration and achieving country's security objectives and future dynamics.

Integrating Nation through Network of Roads

Comprehensive integration of a nation encompasses multiple factors and involves continuous breakdown of all barriers viz political, cultural, social, religious, economical etc. within a defined boundary.2 Service delivery in the infrastructure sector and a national grid of road network contributes immensely towards attainment of regional integration. However, this is not possible unless every nook and corner of the country is connected systematically. For equitable advancement, the main requirement is to have solidarity and support from relatively more prosperous areas to the less privileged areas within a region. The far flung border regions which are poorly connected with the rest of the country are unable to benefit from the enormous resources available in such places. Physical connectivity and integration with mainstream India is crucial for alleviating regional disparities.3

Development of country's infrastructure is one of most important factor for accelerated economic growth. All great civilisations attained greatness only through advancement of adequate infrastructure.4Through its backward and forward integration with other sectors it creates employment, promotes specialisation, extends markets and enables exploitation of opportunities, especially in rapidly developing countries such as India. Greater integration of road network is achieved by developing and reinforcing its own capabilities and meshing the model with other transportation systems viz the railways, waterways and airways to efficiently function in the increasingly competitive and fast-changing environment through inter-connection and inter-operability of national networks or as 'an instrument of social integration'.5 Economic integration has many advantages such as employment generation, conflict resolution, boosting of trading activities, effective administration, resource management for prioritising development and last but not the least, opening up avenues for 'spreading peace and prosperity'. The idea behind the focussed development of remote and far off regions with mainland India is to achieve total integration of the country and to lay a solid foundation for the future of upcoming generations as obtained in the developed nations. Thus, in the contemporary era, infrastructural building including development of a national grid of road network would prove to be a valuable tool for achieving effective national integration. Thus provision of infrastructure including development of comprehensive road network is a vital tool for achieving national cohesion through integrated social and economic growth of the region.

Road Network and National Security Dynamics

From the time, when roads were constructed only for movement and administrative purposes, they have emerged as an essential entity for achieving larger goals. Besides bridging resources differential and meeting socio-economic needs of people they are being designed to achieve territorial integration and to ensure security. Strategic infrastructure close to borders properly connected by road network can act as a force multiplier during war, as they can facilitate faster troops and equipment mobilisation and deployment. During war, road infrastructure could well be used to militarily counter the adversary effectively. Better roads reduce haulage time for operational stores and facilitate sustained logistics support to the Armed Forces deployed in border areas.

The existing roads in the border and remote areas of India are primitive and underdeveloped. They are marred by frequent landslides and fall well short of the desired standard. This state of affairs not only cuts off these areas from the rest of the Country but also hinders the Indian security apparatus operating along the border, especially opposite China. Given the presence of the Chinese military and infrastructural development on the other side of Indian borders,6 it is strategically prudent to keep the road infrastructure towards own side strong and robust. India as a sovereign nation has to guard its borders and to do this effectively, building-up matching road capacity is of utmost importance.

Border areas have been rendered geographically isolated and economically backward due to poor road infrastructure in those regions. In addition to poor infrastructure, cultural and ethnic diversities in the Country have led to a perceived sense of alienation and neglect on several fronts, particularly in the economic field. Persistent economic discontent and dissatisfaction, have often manifested in the form of violent insurgencies. Inadequate social and economic disparities, brought about by lack of proper communication infrastructure may have contributed largely to the misunderstandings and mistrust which caused political turmoil and catapulted into unrest and illegitimate demands. In sum, vibrant trade and economic activities would solve most of the irritants, uplift the standard of living and enhance a feeling of 'mutual security' amongst the people of the region.

Challenges

In India, since the population centres are dispersed all over, and are also separated by deserts, valleys, mountains and

snow bond areas, a reliable road network for sustainable economic growth of peripheral Indian states becomes imperative. Appropriately designed and integrated road network not only reduces the cost of transportation, both in terms of money and time, but also removes regional imbalances. Some of the emerging challenges for development of an effective road network are described in the succeeding paragraphs.

Maintaining Ageing and Over-Stressed Networks. The road infrastructures in India are grossly inadequate and those existing are old, overstressed and increasingly unable to meet emerging requirements of industries and the people. Nevertheless, either as a result of insufficient routine maintenance or because of technical deficiencies in their original construction, or both, roads are rapidly wearing out, necessitating surface strengthening much sooner than anticipated. The need of the hour is conservation of these roads and to ensure that all fortification measures are carried out professionally and to high technical standards. Besides, the road network needs to be expanded and upgraded to cater for ever increasing vehicular traffic to bring in stability and proficiency in service sector. After evaluating the existing road conditions in India, it is emphasised that a major programme for upgradation of road network needs to be undertaken on priority.

Generation of Funds. Expansion of surface communication is a prerequisite for every developmental initiative. However, development and maintenance of extensive road network for a country like India, requires substantial resources and funds. Secondly, considering the speed of economic growth, expansion of desired road network system needs to be put on 'Fast Track' to keep pace with current development. Hence, rapid generation of large amount of funds for development, upgradation and maintenance of extensive road network is a challenge, and the same would have to be organised by galvanising all available mechanisms for funding infrastructure projects.

Capacity Building. Economic development brings in increased traffic, leading to overcrowding and congestion, requiring wider/multi-lane roads to build higher capacity for seamless transport management. This brings in challenges of land acquisition and environment safeguard issues. Besides, the remote and border areas being mostly mountainous regions with difficult terrain and uncongenial climatic conditions, transport infrastructure has to be essentially road based. The initiatives of the Government to promote various development activities to alleviate the poverty of people are thus, largely dependent on building capability of the road network to carry passengers and goods, efficiently and economically. An appropriately designed and well maintained road network is therefore essential for cost effective movement of people and materials, without which trade and industry cannot maintain a competitive edge.

Technological Upgradation. The poor quality of roads is one of the most important causes of high level wear and tear on the vehicles as also large number of vehicular accidents in India. With the industry having suffered from very little technological and managerial improvements in the design and construction of roads, there is a need to effect these changes immediately. Technological knowhow and utilisation of the same in order to build superior roads and also to undertake roads construction in difficult areas is a must. This needs to be looked into with a futuristic vision.

Environmental Challenges. Road projects normally commence on receipt of environmental clearance as construction/ upgradation of roads has a large potential negative impact on the environment. Inadequate road construction techniques cause significant damage to forests, land and water sources and reduce the very quality and life span of the road. Consequently, a harmonised approach needs to be embraced to prevent and mitigate the negative impacts of roads including protecting flora and fauna, cultural and heritage sites etc. All environmental guidelines need to be stringently followed, including implementation of environmentally sound construction techniques in order to minimise the adverse impact on the society and environment. Hence, the challenge is to adopt environment friendly practices to deliver a safe and efficient network of national roads within the framework of sustainable development and environmental norms.

The Way Forward

In the last few years, Indian economy has seen unprecedented growth. However, due to the lack of infrastructure, the industrial sector has grown at much slower pace than required. The market integration impact due to ineffective roads network is not as strong as it should be. Many experts believe that Indian economy can easily grow at ten per cent if adequate infrastructure, including road network, is put in place. Some of the measures for development of effective road network are discussed in succeeding paragraphs.

Private Funding. Development and maintenance of extensive road network in India is an expensive business. Government allocation and funding always falls short and hence other sources of funding need to be explored. Private funding, including Public Private Partnership (PPP), is the order of the day. Injection of private finance in order to accelerate generation of funds is one of the remedy for Country's infrastructural deficits. Highway project executed through the systems of "Private Finance Initiative" as DBFO (Design, Build, Finance, and, Operate) and BOOT (Build, Own, Operate and Transfer) model have been found to be extremely successful in the Western countries.7 Besides, the work undertaken as Private or PPP projects are completed much faster as it has less bureaucratic hurdles and procedural delays.

Development of Integrated Road System. A model of National Road Grid, structured to achieve a fully networked and integrated road system needs to be conceptualised. Key to the success of economic development initiatives in any country or region is the establishment, maintenance, and continued refinement of an appropriate road network. Such networks, which link the core of a region or country to the rings of development leading to the periphery, are essential elements for enhancing communication linkages between distant locations. Significantly, in the case of developing nations experiencing significant growth in population and creation of new centres of commerce and human activity, creating a national strategy8 for sequential development of a comprehensive road network capable of meeting present and future needs is a must.

Lucrative Land Compensation Package. Upgradation and widening of roads require vast tracts of land. However, acquisition of land in India is a difficult and long drawn out process. At times, some stretches of roads have to be cut across constricted, dangerous or circuitous routes which endanger vehicular movement simply because the specified

land was not made available by the land holder. This can be avoided if the people in possession of this land are offered lucrative compensation and jobs in lieu. It must be ensured that no compromise is made in the process of land acquisition based on short term considerations because that would hamper long term development.

Linking Beyond Borders. Well-developed roads in border regions would further India's vision of greater economic engagement with surrounding states and also increase its influence in the neighbourhood. In fact, in the era of globalisation, building strategic roads linking its borderlands with neighbouring countries could be a right step towards regional economic integration. The growing ties with neighbouring countries, including China, in various spheres can be exploited to bring a sense of 'trust' and institutionalised arrangement for higher economic and strategic interaction between them. A positive engagement will increase confidence-building measures to resolve complex issues which could benefit the Asian region as a whole.

Greater Role of the Armed Forces. The Armed Forces, especially the Army, can be incorporated to fulfil the strategic aims of national integration and security through infrastructure development. Although, the Army is involved in construction work to some extent, however greater role needs to be assigned to it. The Indian Army, in particular the Corps of Engineers, including Border Roads Organisation are most suitable, as they are equipped and organised to undertake asset creation work in most difficult terrain and inhospitable weather conditions with a high degree of professionalism.

Conclusion

Road network is a valuable national asset and lifeline of the society. An effective road network is of paramount importance for continued economic prosperity of the Country. Demand for infrastructure facilities and services have traditionally outpaced supply in India – even causing concerns about sustaining India's future economic growth. Just like most of the infrastructure sector industries in India, road infrastructure is also grossly underprovided for, especially in the remote and border areas. Special efforts have to be made to integrate these areas holistically with mainland India for achieving comprehensive economic development. Terrain in such areas being difficult, mostly mountainous, the population has to rely solely on roads as a means of communication, hence the importance.

Greater physical connectivity, including communication networks, is essential if economic partnerships such as the South Asian Free Trade Area (SAFTA) and those on the anvil with Southeast Asia and China have to take off and, more importantly, be sustained.9 Physical connectivity would facilitate easier, cheaper and quicker movement of people and goods between India and her neighbours. Additionally, such physical connectivity with the economies of Southeast Asia holds the best promise for the economic development of India's insurgency-affected and resource-rich Northeastern states. Further, increased trade and improved economic conditions in countries like Bangladesh, Nepal and Bhutan would help in generating more employment and better economic returns to the people. This would significantly check economic migration and demographic shift. Above all, better connectivity and transit facilities go a long way in developing mutual trust and confidence between neighbours.

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Communications To and From Unmanned Aerial Vehicles

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Introduction

Radio Controlled aircraft models which were first made in 1930 in USA are the forerunners of UAVs (Unmanned Aerial Vehicles). UAVs/drones/RPVs (Remotely Piloted Vehicles) are becoming an extremely important part of modern warfare. These are mostly being used for ISR (Intelligence, Surveillance and Reconnaissance) and ELINT (Electronic Intelligence) tasks. RPVs enable troops on the ground to see across a street/beyond the hill, in close vicinity or wider areas of interest comprising hundreds of km. RPVs can be also gainfully used in anti terrorist operations and help in ensuring port and border security as also for policing and internal security applications.

Some UAVs are also armed and have proved to be a very effective weapon platform to track and attack pinpoint stationery and moving targets in Iraq and Afghanistan. In fact larger UAVs can carry out most of the tasks that a small aircraft can, without danger of losing or capture of air crew and at the same time stay aloft for weeks. As a result of the loss of U2 spy plane over USSR in 1960 and capture of Gary Powers the Pilot, research on UAVs was speeded up in USA. Accordingly, the downing of US drone in Iran in early Dec 2011 created much less international row than downing of U2 and capture of Gary Powers!!

With the advent of solid state electronics and super miniaturisation technology the designers could pack much more electronic based payloads in UAVs. This opened many vistas for designing and exploiting use of these birds. During the past few years of combat in Iraq and Afghanistan, UAVs have become integral and critical part of military operations. Ground stations, each supporting a number of UAVs, increased from 16 in 2002 to 1000 in 2008, with nearly 6,000 birds in use.1

Categories of UAVs

UAVs can be categorised under three types-

(a) **Type I or Micro UAV**s are portable and hand launched. They are used to find out what is happening in the close vicinity. The payload is about three to four pounds and endurance is nearly an hour. They normally carry a single camera.

(b) **Type II UAVs** can be carried by two men and have payload of five to 30 pounds. Different types of sensors including EO (Electro Optical), IR (Infrared) or SAR (Synthetic Aperture Radar) can be fitted in them. Such UAVs support formations; brigades, divisions and corps and can have endurance of about 12 hrs. They are capable of operating to the line-of-sight horizon; distance being limited by ground to air communication link.

(c) **Type III UAVs** have size and payload close to nearly a 'two passenger' capacity aircraft. They can carry a wide range of sensors, including if required, sophisticated on-board image and sensor data processing systems. Such UAVs like Predator can also be armed with weapons so that they can be used in a hunter/killer role.2

Competing Considerations for Payloads in UAVs

UAVs, particularly Types I and II, have serious limitations of size, engine power, duration of flight and resultant weight carrying capacity. There are competing requirements e.g. fuel, range, communications equipment, cameras, radar and take off power, demanding a share. Which requirement will get how much space and weight in a UAV depends on the role for which the UAV is designed. In order to reduce peak take off power, various kinds of assisted take off methods are made use of.

Communication Links for Operation of UAVs

The planners for induction and operations of UAV systems in our Defence Forces need to realise and appreciate that sophisticated, secure and reliable communications are required to control the flight of a UAV and downloading information being collected by the on board instruments. This information may be in the form of data, imagery and or video. Band width required for down load links is therefore much more than needed **for** up link communications.

Type I and II UAVs invariably do not use satellite links because they cannot carry high-gain tracking antennas. Also they change attitude too rapidly for a tracking antenna to stay locked on any satellite. Therefore, line-of-sight, air to ground communications are used for such UAVs. In case a UAV has to fly low or range of its communication link is affected due to distance or intervening terrain, another UAV can be used as a relay station or a relay station can be located on higher ground.

Satellite links are normally used for Type III UAVs, which are much larger. These links can handle long distance high band width data/videos containing information gathered by various sensors fitted on the UAV. In addition line-of-sight communication equipment can also be installed for command and control, and dissemination of data. Iranians have claimed that the American drone that landed in their territory in Dec 2011, was as a result of their capturing the control link of the drone!! Technical features to minimize susceptibility to jamming and interception are most essential. Initially, communication links with UAVs were mainly analog FM. However, these are being changed to digital links to meet the requirement of security, improved range and efficient use of spectrum. Some peculiarities concerning fitting communication systems in UAVs are mentioned below : –

(a) Placement of antennae on UAVs poses some technical problems due to limited space. In case a UAV has to circle, the antenna can experience a shadow effect from the fuselage, affecting the commerciability of the link.

(b) There are a number of electronic gadgets fitted in a UAV. It is essential that there is electromagnetic compatibility amongst them and any mutual interference is avoided. Particular care has to be taken to ensure that the down link RF power does not jam other electronic instruments (self jamming).

(c) To reduce the weight and space requirements as also self jamming, the RF power of the transmitter in UAVs is reduced and compensated by high gain antenna on the ground. Also, techniques such as downlink antenna space diversity can be used to overcome such problems.

Spectrum and Frequency Management is Essential

The three Defence Services are going in for of UAVs for different applications. The number is going to increase as time passes. In recent years UAVs have been used in asymmetrical wars in Iraq and Afghanistan. But in case of a full fledged or limited war that India might get involved in, the adversary will also be using UAVs in considerable numbers. Large frequency bandwidths are required for high definition video, laser designators, SAR, ground moving target indicators and multi-spectral imagers, and have to be catered. It is essential that measures are taken for efficient use of spectrum and frequency management, at inter service level.

Analog FM links used on UAVs typically require 20-25 MHz of bandwidth. This puts a constraint on number of UAVs that can be aloft in a given area at any one time; about three is the maximum number. One obvious solution is to have digital links for communications with UAVs and retrofit those using analog links. Also spread spectrum techniques can be of use. It is also essential to examine in depth the frequency bands to be used for UAV communications. Use of Ku band restricts range but has some advantages over commercial bands. Different solutions shall have to be found for varied missions and types of UAVs.

Free-space optical communication (FSO) is an optical communication technology that uses light propagation in free space to transmit data for telecommunications or computer networking. Its implementation will reduce burden on the spectrum used for existing radio transmission techniques. However, many technical details such as ability to keep sustained locking would have to be perfected.3

Use of UAVs as Communication Relays and Nodes

Modern communications are using higher and higher frequency bands. Communications in such bands provide much higher band widths and through put. However, such frequencies are highly susceptible to intervening terrain and in cases even objects. Line of sight is, therefore, essential for uninterrupted and high quality communications. Nodes/relays on mountain tops and carried in tethered balloons are some of the means by which line of sight and communication ranges can be increased.

UAVs which have been primarily used for ISR applications as also for hunter killer operations in Iraq and Afghanistan are emerging as new platforms for elevated relays and communication nodes. These can be of particularly use in operations in mountainous/jungle terrain and mobile warfare, to get over line of sight problems, obtain extended ranges and achieve greater reliability. This would enable Signals commander of a Force to have control over such UAV mounted resources and not depend on out side help. Such elevated small nodes/relay stations can be launched and employed for days and weeks depending on operational and technical requirements. A moving node/relay station in a restricted space on a UAV will pose some technical challenges like self jamming and placement of antenna, solutions for which are possible. The US Army is using its Shadow UAV as a relay. The US Air Force has developed a Battlefield Airborne Communications Node for use on high-altitude UAVs such as Global Hawk.4

Conclusion

Operation of UAVs requires secure and reliable ground to air communications for their control and downloading information collected by various ISR systems mounted in them in the form of video and data. While it is possible to mount satellite tracking antennae in larger UAVs, smaller UAVs can only have radio communications due to constraints of space. Also due to limited space, difficulty of fixing various antennae and mutual electronic interference amongst different ISR systems and communication equipment present some technical challenges. Another important aspect is that particularly down links in UAVs require considerable band width as they carry video and large intelligence data.

UAVs are being used primarily for ISR functions and some larger ones which are armed, in hunter/killer role. A new role for using UAVs as aerial relays and communication nodes has also emerged. Difficulties in providing reliable communications in the mountainous terrain in Afghanistan for NATO Forces, has given this a boost. India has even higher mountains and more rugged terrain along its Northern and Eastern borders. Using UAVs for communication relays and as elevated nodes in such areas and for mobile operations elsewhere by the Indian Corps of Signals can be of immense use in ensuring reliable and high quality communications.

There is a need for inter service initiative and staff for coordinating communication requirement for UAVs and using UAVs as relays and communication nodes. In addition, coordination for efficient use of spectrum and frequency management for UAVs in a battle area is also essential at inter service level.

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Missile Defence in Turkey

Ms Debalina Chatterjee*

The Phase Adaptive Approach

According to the Article 5 of the Washington Treaty, one of the fundamental jobs of the NATO was to 'deter and defeat' any threat of aggression against a NATO member state's periphery. The Bush administration had proposed a missile defence to protect European countries and the United States from long range missiles especially from Iran. In 2009, the Obama administration decided to deploy a ship based missile interceptor in the Mediterranean Sea, and cancelled plans of deploying the missile defences in Poland and Czech Republic as was planned earlier. Fielding Standard Missile 3 Interceptors in the Eastern European nations is a 'phased adaptive approach' of the Washington. The Standard Missile 3 Interceptors, an upper tier ballistic missile defence weapon, is a derivative of the RIM-156 Standard SM-2 ER Block IV Missile and is the missile component of the US Navy's forthcoming theatre wide ballistic missile defence system called NTW- TBMD (Navy Theatre Wide- Theatre Ballistic Missile Defence).1 The SM-3 is less expensive than ground based interceptors and its mobility with similar sea based systems is very effective against Medium Range Ballistic Missiles. Obama had made it clear that the missile defence in the Mediterranean Sea is to provide "optimal protection against ballistic missile threats from the Middle East, from Iran in particular".2

Turkey's Concerns

Turkey is threatened from weapons of mass destruction and air and missile attacks in the south eastern borders. Some important regions in Turkey including Ankara, Adana, Iskenderun and other important sites like airbases, power stations, military headquarters are within the reach of ballistic missiles from Syria, Iran and Iraq. During the Gulf War in 1991, Turkey had been apprehensive about a possible Scud missile attack from Iraq for supporting the West against Iraq. The USA had proposed to deploy the radar in a military base in Kurecik which is 435 miles away from Iran. This radar along with the deployment of the USS *Monterey* armed with Standard Missile-3 IA missile interceptors to the Mediterranean Sea would "complete the first phase of the administration's missile defense plans".3 Washington wants a missile interceptor radar system to be deployed in the forward area near Iran for "early warning and cueing information".4 The information would then be transferred to large X-band radar or the European Midcourse Radar to enable US defences to discriminate, track and identify an incoming missile.

In December 2009, the Prime Minister of Turkey, Recep Erdogan had "ruled out the prospect that Ankara would host missile defence systems to intercept an Iranian attack".5 This move of the Prime Minister was backed by the Turkish military. Turkey feared that any kind of missile defence against Iran would make Turkey susceptible to a possible missile attack from Iran and also Syria, Iran's ally. In 2011, Iran has developed cruise missile called Qadr which can fly "undetected by the most advanced radar systems and one of a destructive power enough to sink any battleship" 6 and is a prowess of the Iranian Navy.

Progress in Turkey

In 2011, Turkey agreed to host long range radar system and this deal was "the most significant cooperation"7 between Turkey and the USA. Both Turkey and the US had agreed to deploy the X-Band or AN-TPY2 radar. It is a "high power, transportable X-Band radar designed to detect, track and discriminate ballistic missile threats" and it could provide a ballistic missile defence as per the phase adaptive approach. The AN- TPY2 and some parts of Terminal High Altitude Area Defence system are the main components on the Phase Adaptive Approach.8 It is a "phased array, capable of search, threat detection, classification, discrimination and precision tracking at extremely long ranges."9 It was claimed to be the "biggest strategic decision between the US and Turkey in the past 15 or 20 years" 10 especially after 2003 when Turkey refused to allow an armoured division of the US to cross Turkey to invade Iraq. According to the US plans, Turkey would host mobile radar detection system AN-TPY2 and by 2015, there would be new sea based and land based modifications of the SM-3.11

Playing the Political Cards

Though Turkey has developed warm relations with Iran, and has even clarified that the missile defence shield does not target any particular country, yet it is apprehensive of Iran's growing missile threats and the threats from Syria. Iran had warned that if the US or Israel attacked Iran, it would target NATO's missile defence installations in Turkey. Iran felt that deploying missile interceptors in Turkey was aimed to "protect Israel against Iranian missile attacks"12 in case of a war between Iran and Israel. Turkey is not only apprehensive of Iran's ballistic missiles but also its cruise missile like the 18 Kh-55. But at present Turkey has no plans to counter cruise missile threats, though there are option like the F-35 Joint Strike Fighter which have Active Electronically Scanned Array which could track low flying cruise missiles. Iran had criticised Turkey for allowing NATO to station an early warning radar in the southeast which will also be a part of NATO's missile defence systems and this could jeopardise Turkey's nascent economic relations with Iran. However, a senior military officer of Iran had also clarified that missile defence shield in Turkey would "pose a threat to Russia".13 Syria had also been a bone of contention for the two countries. The decision to host advanced radar systems could jeopardise relations between Ankara and Tehran especially at a time when Turkey is trying to improve its relations with Iraq, Iran, Russia and Greece. Turkey had decided to remove these countries from its 'Red Book' which includes names of countries that pose a threat to Turkey.

Turkey is trying to follow a policy of 'zero problem with neighbours' and the missile interceptors in Turkey could not only jeopardise its relations with Iran, but also with Russia who has time and again been doubtful about the missile interceptors being placed in East European countries, even though the US keeps assuring them that they are meant to counter missile threats from Iran. Turkey had also assured that the new radar system would not be against any country but "will allow the country to contribute to the development of a new security system of the NATO".14 However, Russia still feels that the US and NATO continue to follow the policy of encirclement of Russia through their 'Anaconda Loop'.

Technical Challenges of Placing Missile Interceptor in Turkey

If Iran is the real threat to the USA, then Turkey would not be the best option for the deployment of missile interceptors. This is because placing missile interceptors in Turkey would give it short warning times. This means that the use would seek to intercept the ballistic missile from Iran at the boost phase itself, but this is not possible as boost phase interceptors have not yet been developed. Even radars could face serious technical limitations.

The Other Options

The US Republican Party Senators like Jon Kyl, James Risch, Mark Kirk and James Inhofe felt that Georgia should be hosting the missile interceptor radars rather than Turkey hosting them. Other Senators like John McCain, Joe Lieberman, and Richard Lugar had also supported the option. This was in reaction to Turkey's demand of not sharing radar information with non NATO states like Israel in particular. Turkey had also claimed for command and control over the radar and does not want the West to tag it as a response to threats from Iran. However, the concerns regarding placing the interceptor radars in Georgia is that Georgia is not a NATO country and hence, it could have serious complications in the relations between the US and Russia and also between the NATO and Russia. Georgia and Russia had been entangled in a conflict regarding the independence of Abkhazia and South Ossetia. South Ossetia wanted to be independent from Georgia but, Georgia attacked the capital of South Ossetia, Tshkinvali. The next day Russian military engaged Georgia in South Ossetia. After five days of engaging each other in conflict, Russia gained dominance over Georgian cities, Poti and Gori. Later on, cease fire agreement was reached and buffer zones were formed by Russia against Georgia around Abkhazia and South Ossetia. Both South Ossetia and Abkhazia were independent and were recognised by Russia, but this intensified the rift between them and Georgia.

The NATO and the US had also thought of Bulgaria as an option in case Turkey refused to place missile interceptor radars in its territory. This could be due to the fact that Turkey is not interested to place missile interceptor radar against Tehran. However, Bulgaria could be a good option for the US and NATO. However, it could further make the Russians wary of the interceptor radars.

Back to the Cuban Missile Crisis?

The present situation does remind readers of the Cuban Missile Crisis in 1962 when a similar incident happened. The US had deployed their Jupiter missiles in Turkey which could strike almost any place in the erstwhile Soviet Union; to which, President Krushchev responded by demanding removal of the missile from Turkey. He feared that the US could be tempted to launch a first strike as the Americans were far behind the Soviets in nuclear capabilities. Soviets also placed surface to air missiles in Cuba which had been a cause of worry for President Kennedy too. Both the super powers were almost on the verge of a nuclear brinkmanship. It leaves a fear in mind if the world would see another incident similar to Cuban Missile Crisis. Russia feels that the US still considers them to be a strategic threat.

Russia's Concerns

Russia has felt that the USA and NATO are trying to "neutralise" Russia's nuclear weapons in order to push them out of the "major areas of the world's oceans".15 Russia had not been supportive of European Midcourse Radar but instead had proposed for a Theatre High Altitude Area Defence and Aegis initially. This is because the SM-3s have a longer reach than the current THAAD system. Though ground based interceptors, sea based Aegis and radar placed in countries like Turkey and Bulgaria close to Iran are a threat to Iran and not to Russia; however, the interceptors placed in Poland could be a threat to Russian ICBMs. Russia had always opposed the deployment of missile interceptors in Eastern European countries as this would have a "negative impact upon the Russian nuclear deterrent".16 Russia also faces threats from the US Submarine Launch Ballistic Missiles and the US Minuteman Man III Intercontinental Ballistic Missiles. Russia tried to convert the ICBM arsenals into single warhead, but the missile defence could upset the plan. At present the radars are technically not feasible. For 120 sq m of antenna face, there could be 30,000 transmit/receive modules while the US called for just 20,000. For this modernisation, there has to be an alternative and the antennas need to be reconstructed. Once the 'effective area' of the antenna is proportional to the transmit/ receive modules, the number of targets that could be engaged by the radar would also increase. With modernisation programmes, the X-band could target more missiles which could be a concern for the Russians. The operating frequency of the X band radars would be higher than the early warning radars of Russia. Long back, President Vladmir Putin had raised concerns that with the missile defences being deployed, the "(nuclear) balance will be upset".17 The ground based interceptors resemble the Intercontinental Ballistic Missiles and they are large, two stage ballistic missiles, which weighed heavily and could carry a kill vehicle moving faster than the ICBMs trajectory from Russia to the USA. Russia had also claimed that deployment of no anti missile near its border could prevent a retaliatory strike from Russian missiles which are capable of evading an Anti Ballistic Missile. Russia had warned that it could target the 'Third sites' with nuclear missiles and also withdraw any time from the Intermediate Range Nuclear Forces Treaty.18 Russia has developed operational tactical missile systems, Iskander-M which is a response to the "deployment of the US missile defence system in Europe" and is taking part in tactical exercises, and is expected to replace the outdated Tochka tactical missile. 19 It could hit ground targets like "command centres, large groups of troops, fire attack means, air and missile defence facilities, aircraft and helicopter on ground" and could be equipped with either conventional or nuclear warhead.20

Russia had also developed an Intercontinental ballistic missile named Topol RS-12M which could avoid being detected by a missile defence.21 Russian Deputy Foreign Minister, Sergey Ryabkov that Moscow would want a formal agreement with NATO that neither side would "target the other's offensive missiles with missile defense interceptors".22

USA's Steps

The USA had decided to provide information on the Standard Missile-3 interceptors to Russia. This would be "a bid to address Moscow's concerns that the technology is a threat to its long range nuclear forces".23 It would give Russia

information on the 'missile burn out velocity' or the VBO. However, Washington has not been able to guarantee Russia that the missile interceptors would not be aimed at Russian nuclear forces. SM-3 interceptors have been the right decision for the US politically as Ground Based Interceptors deployed with nuclear warhead could act as an MRBM which could "upset" Moscow and could lead to conflict over the Strategic Defence Initiative.24

Turkey's New Friends

China and Russia had been bidding for Turkey's new air defence missile project. China's Precision Machinery Import and Export Corporation planned to sell the FD-2000 anti aircraft missiles capable of 'cold launch'. Turkey had also showed interest in the Russian S-400 surface to air missiles. NATO had objected to Turkey's interest in Chinese and Russian missile defence systems and has refused to share any intelligence information on incoming ballistic missiles. The growing ties between China and Turkey and improved relations between Iran and Turkey are becoming a cause of concern for the US and Israel. China has also developed surface to surface rocket launching system together with Turkey.

The Future

It would be a matter of time to see how Turkey manages to keep good relations with both NATO and its non-NATO allies. 'Collective defence' is a basic right recognised by Article 51 of the UN Charter and Turkey is now looking for new allies for this. Many analysts are confused with the fact that the US defences could be easily defeated by simple decoys that could look like Mylar balloons and other forms of counter measures. Hence, the missile defence system might not be a viable option. Turkey had also shown keen interest in acquiring indigenous nuclear weapons which the West had not been supportive of as they feel it would be "critical to international security".25 Even if Turkey decided to go for the Chinese missile defences, it is less likely that the US could take much serious action as the US needs Turkey as a geostrategic ally to counter any threat from Tehran. Tactical nuclear weapons are less likely to be removed from Turkey by the US. The US would need Turkey also to counter any ballistic or cruise missile threats from Russia too.

The Sino Turkey Honeymoon

However, relations between Turkey and China and Turkey and Iran have started improving, which would be the new twist in international security. In the present context, friendship with Iran would benefit Turkey as Turkey needs more natural gas from Iran. In 2010, Turkey had voted against US sanctions on Iran which was a "slap in the face"26 of the Americans. Chinese aircraft had refuelled in Iran during their flight to Turkey for a military exercise in Anatolia. Turkey's new defence relations with Pakistan would also have serious impact on its relations with the West. But with new allies in Turkey's basket, the dependency on the West would reduce and Turkey being a sovereign country could have the sovereign right to choose its own allies than being dictated by the US. With Turkey developing its first air launched cruise missiles, it is making it clear; that while NATO is an ally, but it would now not want to be completely dependant on them. The West however, waits with palpitated hearts to see if the Sino-Turkey deal on missile defence takes place as that could lead to exposure of crucial information of NATO's missile defence technologies, thereby, making it easier for the Chinese to develop counter measures. Is the growing Sino-Turkey defence relation another aspect of China's Assassin's Mace Weapons Strategy whereby China is befriending US's allies to defeat the US?

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United Nations Interim Security Force in Abyei (UNISFA) : A New Mission in the Hot Spot of Sudan

Lieutenant Colonel Ajay Jaswal*

Background

Sudan underwent a long period of civil war for decades between Sudan Armed Forces and Sudan People's Liberation Army. On 09 July 2005, both parties signed the *"Comprehensive Peace Agreement"* (CPA) to solve their problems. On 09 July 2011, history was written when a key aspect of CPA, the referendum in Sudan resulted in the country being split into Republic of Sudan (RoS) and Republic of South Sudan (RoSS). With separation both countries inherited their disputes; the conflict in Nuba Mountains and Kordofan, the Abyei dispute, Blue Nile conflict and disputes all along the 2200 km border; Abyei, being central to all these problems.1

Abyei is considered as the bridge between RoS and RoSS, a historical link between the two states and its people. Strategically located on the border and in the middle of Sudan and South Sudan, it is the most contentious aspect in the implementation of the CPA. It is inhabited, in majority by Ngok Dinkas of South Sudan, and also witnesses its secondary population of Arab Misseriya pastoralists who migrate annually through it and spend a considerable time of the year in the grasslands of Abyei.

A simultaneous referendum on the future of Abyei provided for, by the CPA's Abyei Protocol was stalled as a result of dispute on the criteria for eligibility of voters and the border dispute. An agreement on the withdrawal of forces was overshadowed by escalating tensions, build up of armed forces from both sides, which finally resulted into in a major SAF invasion in May 2011. This invasion led to widespread looting, damage to property and a large scale civilian displacement (IDP) into South Sudan. Abyei is currently heavily armed and its stabilization has become an urgent priority for the international community. Presently, command and control in both armies is tenuous at best and the potential for a local commander to initiate hostilities, which could quickly degenerate into general war, is still dangerously high.2

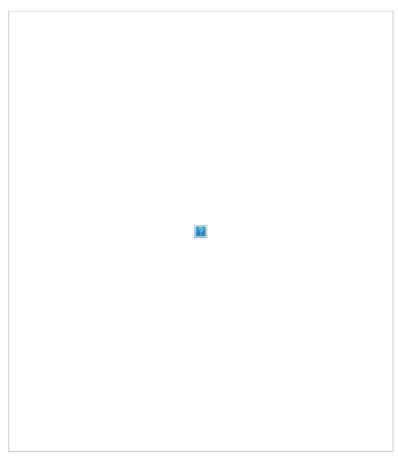
On 20 June 2011, with the assistance of the African Union High level Implementation Panel (AUHIP)3, the RoS and the SPLM signed an "Agreement on Temporary Arrangements for the Administration and Security of the Abyei Area".4 The Agreement provided for the establishment of an Abyei Area Administration which was to be jointly administered by an SPLM nominated Chief Administrator and a GoS nominated Deputy. The administration was to exercise the powers contained in the Abyei Protocol of the CPA, with the exception of the power to supervise and promote security and stability in Abyei, transferred to a newly established Abyei Joint Oversight Committee (AJOC). The Agreement provides for the total withdrawal of armed forces from Abyei and the full demilitarisation of the area. It requires the establishment of a Joint Military Observer Committee (JMOC), composed of observers from both parties who will report to the AJOC. The Agreement also stipulated the establishment of an Abyei Police Service to address issues related to nomadic migration in Abyei.

In support of these arrangements, and to provide security in the Abyei Area, the Agreement had requested for deployment of a United Nations Interim Security Force for Abyei (UNISFA) comprising of 4,200 Ethiopian troops, to be deployed immediately following Security Council authorisation – consequent to the same, UNISFA was established to implement the mandate.5

Historical Perspective of the Abyei Problem

Refer to **Map 1**. Historically, Abyei was known for a peaceful coexistence between the Ngok Dinkas, the agrarian settlers and the nomadic pastoralists, the Arabic Misseriya's, who migrate through Abyei in November-December, when summer dries up their land in Mughlad, Sudan (North of Abyei Area). Abyei town is the centre of gravity of Abyei Administrative Area (AAA) and is located on the North of River Kiir (referred by Arabs as Bahr el Arab). The lifeline of Abyei River Kiir, runs all along the adjoining provinces of Bahr El Ghazal, Darfur, Upper Nile and Kordofan states, all having a history of conflicts between states and the inter-tribal conflicts. South of river Kiir lies the world's largest swamp *"The Suds"* where the soil is clayey (fertile) and is characterised by thick tropical forests, bushes and vegetation.

Map Showing Abyei and Adjoining States



Map 1

After Independence of Sudan on 01 Jan 1956, which is unfortunately, also the name of its controversial boundary 1-1-56, civil war erupted in 1965. Both Misseriyas and Dinkas took up arms against each other and took sides of North and South Sudan. The civil war ended in 1972 after the Addis Ababa agreement, wherein it was decided that a referendum would be conducted to decide whether the population wanted to remain with the North or would like to be part of the autonomous Southern Areas. However, power struggle, control of oil and natural resources led to the second civil war in 1983.6 The Abyei Area is said to be at the geographical centre of this civil war, which is now the longest running conflict in Africa and has caused some two million deaths, significant economic destruction and untold suffering, particularly for the people of Southern Sudan.7

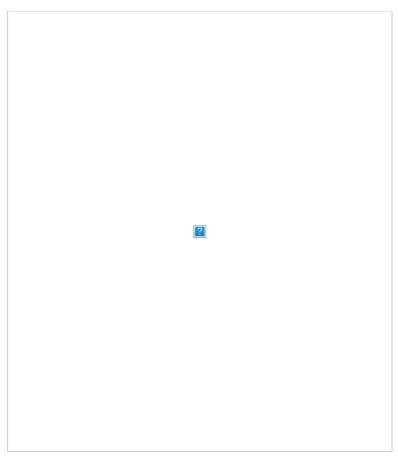
Protocols and Agreements

On 20 July 2002, the parties signed the 'Machakos Protocol' to end the civil war. Subsequently in 2004 'Abyei Protocol' was signed on agreed principles of administering Abyei. The area was referred as the area of nine Ngok Dinka chiefdoms transferred to Kordofan in 1905.8 The area was to be administered by Abyei council to be selected by the residents of Abyei. The residents were dual citizens of Bahr el Ghazal of South Sudan and Western Kordofan state of Sudan. They were but predominantly, Ngok Dinkas and the Sudanese residing in Abyei.9 An "Abyei Boundary Commission" (ABC) was formed to define and demarcate the boundary,10 it comprised of members from RoS, RoSS, Misseriya and Dinkas, who were assisted by experts from the USA, the UK and IGAD (Inter Government Authority for Development).

On 09 Jan 2005, 'Comprehensive Peace Agreement' was signed by both parties11 and they agreed to all previous agreements including the "Machakos" and the "Abyei Protocol". In July 2005, the ABC experts tabled their report saying that no historical evidence or maps were available to prove the existence of nine Ngok Dinka Chiefdoms in Abyei in 1905.12

Refer to **Map 2**. However, a binding decision was given by the ABC experts, identifying a legitimate area of Dinkas from Kordofan – Northern Bahr El Ghazal boundary north up to Latitude 10°10''. However, based on old records the Misseriya had a secondary right as well.13

Map Showing the ABC Experts Decision Plan



Map 2

The line 1-1-56 formed the boundary to the South, SE and SW (Details are given on Map 2). In June 2008, a road map of Abyei for the return of IDPs and implementation of Abyei protocol was signed for implementation. The so called *"Abyei Road Map"* further led to arbitration leading into the road map. However, subsequent to declaration by the ABC experts which was broadly objected by two parties specially RoS, which declared that the experts' opinions were broadly based on insignificant proofs of the past and were beyond the mandate that was given to the experts.14

In the lead up to the referendum on the self-determination of Southern Sudan, tensions increased in Abyei at the end of 2010 leading to a series of violent incidents in the area in early January and a build-up of regular and irregular forces from the North and the South in response. In the absence of a final agreement on the status of the Abyei area, temporary security arrangements were agreed upon by the CPA parties, in the 13 and 17 January 2011 Kadugli Agreements, and the 4 March 11 Abyei Agreement.

Deterioration of Security Situation and the UN Response

The security situation in Abyei deteriorated further, when on 19 May 2011, an UNMIS convoy transporting a Sudan Armed Forces (SAF) Joint Integrated Unit (JIU) was attacked in Dokura, an area controlled by Southern Police unilaterally deployed to Abyei in August 2010. In response, the SAF immediately deployed an infantry brigade to the Abyei area and bombed SPLA positions in several locations, taking control of Abyei town and the entire area North of the Kiir/Bahr Al Arab river. The SPLA remained in control of the area south of the river. On 21 May, following the takeover of Abyei town, the Government of Sudan unilaterally dissolved the Abyei Administration.

The security situation in Abyei resulted in the cancellation of then scheduled UN Security Council visit to Abyei. The Dinka Ngok traditional leadership met the Security Council in South Sudan. The Security Council strongly condemned the RoS for its unilateral action in Abyei. The Council called on the RoS to immediately halt looting, burning and illegal resettlement. The Council expressed grave concern about the deteriorating humanitarian situation in Abyei, including food, health care, shelter and water, to those affected by the conflict. The Security Council also condemned the fact that two of the three main supply routes from the North to the South had been blocked, and that the critical Banton Bridge in southern Abyei was destroyed by the SAF which impeded trade and safe return of the IDPs. It reiterated that the continued military operations of the Government of Sudan and militia activities in Abyei constituted a serious violation of the Comprehensive Peace Agreement and the Kadugli agreements. The Council demanded that the Government of Sudan immediately withdraws all military elements from Abyei.15

In consequence to no change in RoS stance in Abyei, United Nations Security Council on 27 June 11 adopted resolution 1990 (2011) on Abyei leading to establishment of UNISFA with an aim to monitor, maintain and enforce peace in Abyei16 under the Chapter VII of the Charter of United Nations.

UNISFA: The Mission Begins

The UNISFA is a single troop contributing country (TCC) mission, Ethiopian, whose troops started arriving in Abyei on 16 July 2011. It is headed by the Head of Mission (HoM) and Force Commander (also the ASG) Lieutenant General Tadesse Werede Tesfay, a reputed General from Ethiopian Defence Forces.17 As of 01 November 2011, roughly three thousand troops were on ground. The Ethiopians brought heavy combat military equipment consistent with chapter VII requirements. UNISFA started deploying in Abyei, Diffra and Agok Company

Operating Bases (COBs) and commenced its patrols in its area of responsibility (AOR) on 24 July 2011.

However, on 02 August 2011, reality struck UNISFA first and hard, four Ethiopian soldiers lost their lives while seven others were critically injured, when one of the vehicles of Joint Military Team (JMT) Patrol was hit by a landmine in Mabok on their way from adjoining village Rumamier.18 All patrols were immediately ceased and these later recommenced on 23 August 2011, on identified safe and demined road stretches. UNISFA immediately asked for mobilisation of UN Mine Action Office (UNMAO) teams in Abyei to support UNISFA's mine clearance activities. They also simultaneously commenced demining key lines of communications. However, till date no representative from UNMAO had reached Abyei because of the challenges Abyei posed and the restrictions the RoS imposed on all foreign aid agencies into Abyei. Till November end, UNISFA de-miners had already cleared the road to Rumamier and had unearthed and disposed a significant number of anti-tank mines and unidentified explosives (UXOs).

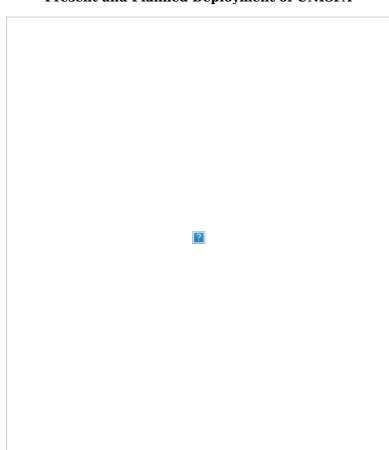
The civilians (IDPs) had also started crossing river Kirr in anticipation of UNISFA being there. However, UNISFA warned them of the grave risk of being hit by landmines/UXOs and also SAF action who were still in Abyei. There is high likelihood that both RoS and RoSS might not provide sufficient funding as envisaged in the Addis Agreement. It will, therefore, be important for the international community while advocating for RoS/RoSS budgetary support to do their best to support stabilization, humanitarian and recovery programmes for Abyei.

The UNISFA force composition is of a mechanised brigade comprising of three motorised infantry battalions, two tanks companies and two artillery companies as its force projection (strike) elements and other in supporting role like construction, demining, transport and logistics companies. In the initial phase their high level of professionalism was visible from their smooth convoy movements, fast deployment, rapid demining and quick construction of Bantom Bailey Bridge.

The Ethiopian contingent comes to Abyei with a reputation of being unbiased and neutral to both RoS and RoSS. Their soldiers are battle hardened, honest and professional. Though, initially operational momentum was lost due to mine accident, but it was soon overcome and with complete deployment by December end, UNISFA is looking for extended reach and domination of AOR to execute its mandate.

UNISFA Operations and Deployment

Initial deployment of UNISFA was seriously restricted by heavy rains and severed road communication. UNISFA had commenced its daily short duration patrols (SDP) from its positions in Abyei town, Diffra and Agok to the vicinity of these locations. Presently, adequate air effort is not available for air reconnaissance. The deployment in seven additional positions, Umm Khaer, Bantom, Rumamier, Todach (COB locations) and Noong and Tajalei (TOB locations) is planned in the coming months. Furthermore, UNISFA has deployed 42 military observers to Abyei. Preparations were already underway to form a two sector AOR, NORTHBATT and SOUTHBATT. The NORTHBATT will be based at Diffra with a company each at Diffra, Todach, Um Khaer and Umm Khariet. The SOUTHBATT will have a headquarters at Abyei with a company each at Abyei, Rumamier, Bantom and Agok. As the third battalion of UNISFA is likely to be absorbed in the border mission after the release of its mandate by the UN, it is likely that UNISFA will continue to have a two battalion deployment in Abyei in future. The present and planned deployment of UNISFA is shown on **Map 3**.



Present and Planned Deployment of UNISFA

Map 3

In Abyei, international military observers have been permanently deployed in Agok, Diffra and Abyei team sites and military officers will shortly be deployed to Khartoum and Juba to liaise with both Governments on operational and administrative issues along with UN substantive staff. UNISFA has also been reconfigured to take over the security at the UN base at Kadugli to be further used as a logistic base, but is awaiting confirmation from the Government of Sudan that this asset will be transferred from erstwhile UNMIS.

UNISFA Mandate

Security Council Resolution 1990 of 27 June 2011,19 established UNISFA for an initial period of six months, and comprises a maximum of 4,200 military personnel (military units, military observers and staff officers), 50 police and appropriate civilian support. The resolution gives UNISFA a mandate to:-

(a) Monitor and verify the redeployment of any SAF or SPLA forces from the Abyei Area as defined by the Permanent Court of Arbitration.

- (b) Participate in relevant Abyei Area bodies as stipulated in the Agreement.
- (c) Provide de-mining assistance and technical advice.

(d) Facilitate the delivery of humanitarian aid and free movement of humanitarian personnel in coordination with relevant Abyei Area bodies.

(e) Strengthen the capacity of the Abyei Police Service by providing support, including the training of personnel, and coordinate with the Abyei Police Service on matters of law and order.

(f) When necessary and in cooperation with the Abyei Police Service, provide security for oil infrastructure in the Abyei Area.

The Council also gave UNISFA Chapter VII authorisation 20 to undertake the following:-

(a) Protect UN personnel, facilities, installations and equipment.

(b) Ensure the security and freedom of the UN and humanitarian personnel and members of the Joint Military Observers Committee and Joint Military Observer Teams established by the 20 June Agreement.

- (c) Protect civilians under imminent threat of physical violence.
- (d) Protect the Area from incursions by unauthorised elements and ensure security.

Areas of Concern

Some of the major concerns for UNISFA in its set up phase are as follows:-

(a) **Non-Cooperation by Sudan Government**. The initial deployment of UNISFA was initially marred by the closure of the El Obeid logistics base (in Sudan), Government denials of flight clearances and movement of civilian transport led to shortages of fuel and food, which was further aggravated by heavy rains. A discussion on the draft status of forces agreement (SOFA) is still an ongoing problem with both Governments. To manage such issues a consultative quadripartite mechanism has been put in place comprising of the United Nations, Governments of Ethiopia, Sudan and South Sudan.

(b) **Demilitarisation of Abyei**. The absolute demilitarisation of Abyei Area is mandatory as per the agreement and is essential to coordinate the return of IDPs, management of migration and movement of humanitarian agencies into Abyei.

(c) **Establishment of Governing Bodies**. The RoS has prefaced the withdrawal of the SAF on the establishment of the Abyei Area Administration (AAA) and of the Abyei Joint Oversight Committee (AJOC) mandated by the 20 June agreement. Early establishment of these bodies is essential and is challenge to UNISFA.

(d) **Non-availability of Land**. Though the AJOC has formally agreed to allow UNISFA to establish its camps in land of own choosing, but, until a formal agreement is agreed to, it may become a bone of contention in future.

(e) **Mission Support and Planning**. There is no significant civilian mission support established even after five months of the military component arriving in the mission area.

(f) **Weather Constraints**. Incessant rains continue in the mission area from June to November every year, cutting Abyei completely from both Sudan's and the area remains flooded. UNISFA has to plan, live and survive with this reality in future as well. It needs to stock itself and for that create enough facilities to avoid the problems it faced in the last rainy season.

(g) **Non-Availability of Air Assets**. UNISFA has presently no air effort of its own, it's two UH and two AH are still in Ethiopia. UNMISS has only provided one UH (MI-8) to UNISFA and is the only life line for any emergencies. All movement of aircrafts are borrowed or latched on to existing UNMISS resources and in case of emergency the availability of air assets is a serious problem.

(h) **Presence of Armed Groups**. Presence of SAF/SPLA/ Police in Abyei will continue to remain and even if some of these elements withdraw they are most likely to inject militias or their proxies to continue domination of their

areas and interests. Hence, demilitarisation in Abyei will be a serious challenge for UNISFA.

(j) **Building Trust Amongst Locals**. UNISFA needs to continuously undertake key leadership engagement (KLE) with Dinkas, Misseriya, RoS and RoSS with the intent to reduce the trust deficit and continue the peace process. They already have the most dangerous scenario to manage in coming months i.e. the armed Misseriya migration has commenced, UNISFA is not fully deployed, SAF is still in Abyei and IDPs are fast losing their patience to return to their homes.

(k) **Shortage of International Staff**. UNISFA military and civilian staffing is not complete after six months of the mission, all previous ex-UNMIS staff were withdrawn due to pressure of RoS. This has resulted in a staff vacuum in UNISFA, affecting its operational capability. To further worsen the woes, RoS has conveyed that there will be no western military staff / UNMO in the mission area.

(l) **Very Limited and Erratic Connectivity with South Sudan.** RoS has refused the entry and exit via Khartoum for the UN personnel and the flights to Juba (capital of South Sudan) are erratic because of SAF reluctance to allow flight clearance for any flights to South Sudan from Abyei (Disputed Area) because of illegal cross border movements. The issue being more of a political nature is not likely to be resolved in the near future.

Way Ahead

Military Approach. Militarily, UNISFA needs to undertake following actions on priority to pace up its operations in Abyei:-

(a) UNISFA need to modify its concept of operations and make it more mobile and manoeuvre based, which it can achieve by conducting long duration patrols (LDPs) and establishment of more temporary operating bases near population centre for protection of civilians and area domination.

(b) UNISFA must immediately occupy all planned company operating bases on a green field deployment and enhance its footprints all over the Abyei box.

(c) UNISFA must establish company grids fast rather than just battalion grids to enhance accountability and increase area domination.

(d) UNISFA is presently undertaking KLE at macro level, micromanagement of local population also needs to be undertaken at company level. This will not only facilitate the information gathering process but also will enhance UNISFA capability to deter or avoid an adverse situation and be more proactive.

(e) UNISFA needs to have in place a *"Winning Hearts and Mind Strategy"* in its military concept of operations, to enhance confidence building amongst locals.

(f) A speedy and deliberate demining effort will extend UNISFA's reach in the entire Abyei box.

(g) The UNISFA logistic chain is susceptible to the vagaries of weather and dependent on whims of the RoS and RoSS. This uncertainty severely hampers planning of military operations, UNISFA must plan redundancy in its logistic operations and solve government issues by finalising SOFA.

Humanitarian Approach. It is hoped that the Addis Agreement will hold ground to facilitate humanitarian, stabilisation and recovery programmes. This will also depend on cooperation of all state and non-state actors. The humanitarian approach must be driven by the Abyei Administration and the locals with the international community in support role. UN agencies and other NGOs must return to Abyei once UNISFA is completely deployed in Abyei. Abyei being a contested area, UN and NGO assistance for Abyei must commence from North as well as South.21

Political Engagement and Negotiating Deals. As per the Addis Ababa agreement both parties have nominated candidates for the Abyei Area Administration but agreement is outstanding on the candidacy of the Chairperson. The parties have, however, accepted each other's nominations to the Abyei Joint Oversight Committee (AJOC).22 After the engagement of basic body meeting of 1st AJOC, subsequent AJOC meeting continue to be marred by an unsupportive attitude of both parties. Based on the AJOC meeting, the decision on formation of Abyei Council, Administration and other Police services to ensure security of the Abyei still remains a big question.

UNISFA needs to undertake key leadership engagements with the Ngok Dinkas community in Agok, Misseriya in Mughlad, RoS and RoSS. These meetings must continue to focus on return of IDPs and community confidence building measures to manage the Misseriya movement.

At the macro level, a much greater effort and initiative is desired from AUHIP, IGAD, US and UK to impress upon a common understanding with regards to the Abyei issue. The Abyei Area Administration must be formed and set up in Abyei to manage the administration and reconstruction of Abyei.

Demilitarisation of Abyei. In the last five months, since the first UNISFA troops entered Abyei, Abyei town and areas North of River Kiir continue to be occupied by a SAF with increased presence of Sudan Police and Oil Police. On the South of river Kiir, where SPLA holds ground, troops have just redeployed south of the 1-1-56 line and leaving their proxies South Sudan Police Services behind. Engagement of both parties to completely remove all these authorised and unauthorised armed elements from Abyei is essential and must remain the primary agenda of all future negotiations and engagements.

Conclusion

UNISFA is a new mission and has perceivably being established as a consequence of unexpected exit of UNMIS from

Sudan in July 2011. Though UNMIS to UNMISS (South Sudan) transition was smooth, the international community did not want an unresolved Abyei to be left behind. In order to fill the resulting security vacuum, UN Security Council resolution 1990 authorised UN Interim Security Force for Abyei (UNISFA) on 27 Jun 2011.

Presently, there is very little change in the conflict drivers of Abyei. The issues like contestation of the Abyei and related border demarcation remains, the Abyei referendum is outstanding, migration issues and associated ethnic/tribal conflicts remain at the centre stage. Frustration levels for both the Misseriyas as well as the Dinka Ngoks remain high and the level of trust and readiness to cooperate is at its lowest ebb. It is hoped that SAF and SPLA will withdraw from the Abyei area completely as this would then facilitate the return of 1, 30,000 IDPs. The Abyei Administration and its bodies have not yet been put in place and it establishment will accelerate the return to some form of normalcy.

The developments in Abyei, including the fighting and destruction in 2008 and then in May 2011 might make it difficult for the international community to retain a neutral and sober perspective. On a long term, it can be predicted that because of issues like boundary demarcation, rights of local communities and oil wealth of Abyei, the area is likely to remain disputed and likely hotspot that can quickly degenerate into war. However, it must be realised that the Abyei problem requires a *"sustainable political solution"* which can be facilitated by key players in the region AUHIP, the USA, the UK and China. It is hoped that humanitarian, stabilisation and recovery support programmes along with UNISFA will build an environment to facilitate such a solution. UNISFA will however need to assert itself right from the start as neutral, impartial and rise to the challenges of Abyei.

UNISFA needs to keep its focus clear and for now must follow a three pronged approach. Firstly, make itself administratively self contained to cater for probable disruptions of weather and war, to maintain high operational momentum and deter all armed elements playing spoilers. Secondly, continue engaging all parties to maintain peace and lastly and least desired, tactfully use their chapter VII mandate to react to unauthorised armed groups which can be peace spoilers.

Endnotes

- 1. Abyei: Sudan's Next Test by Colin Thomas-Jensen and Maggie Fick
- 2. Sudan's Slide toward Civil War by Andrew S. Natsios

3. The African Union is a union consisting of 54 African states. Established on 9 July 2012, the AU was formed as a successor to the Organization of African Unity (OAU). The most important decisions of the AU are made by the Assembly of the African Union. The AU's secretariat, the African Union Commission, is based in Addis Ababa, Ethiopia.

- 4. The agreement was signed in Addis Ababa and brokered by AU and UN.
- 5. Security Council resolution 1990 (2011) of 27 June 2011.
- 6. SPLM/A Memorial, paras.
- 7. CPA, Preamble, Page 11, Para 2.
- 8. Notably, Section 1.1.2 of the Abyei Protocol
- 9. Abyei Protocol, section 6.1(a)
- 10. Abyei Protocol, section 5.1
- 11. CPA, Chapeau, p. xii. Para 1.
- 12. ABC Experts' Report, Part 1.
- 13. ABC Experts' Report, Part 1.
- 14. RoS Memorial.

15. June 20 Agreement on Temporary Arrangements for the Administration and Security of the Abyei Area (S/2011/384) and the September 8 decision of the Abyei Area Joint Oversight Committee (S/2011/593).

- 16. SC/Resolution/1990(2011) dated 27 June 2011.
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- 19. SC/Resolution/1990(2011) dated 27 June 2011.
- 20. SC/Resolution/1990(2011) dated 27 June 2011.
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Components of National Security and Synergising Them for Envisaged Security Threats in 2025

Rear Admiral K Raja Menon (Retd)*

Introduction

The planning of National Security based solely on threat perceptions is deeply rooted in the psyche of the Indian security establishment. Independence in 1947 was precious and something to be protected and nurtured. That experience produced an inward feeling full of claustrophobia and devoid of an outward looking psychology of tying up one's security with those of others. The partition did not help in easing the claustrophobia feeling, engendering as it did, a pathology based on 'loss' of territory. The unfinished business of partition as Pakistani leaders have put it brought immediate pressures on Junagadh, Hyderabad and even Travancore. The insecurity over these states was accentuated by the tribal invasion of Kashmir. All these territorial fights and disputes, involving as they did the use of armed forces in Hyderabad, firmly fixed in the National Security consciousness that the use of force by the state could only be for preserving territorial integrity.1 By territorial, is meant to include only the plains of India and peninsula India. The possible loss of Lakshadweep Islands, it has been brought out in the partition records, were attempted by the departing British Armed Forces, for Imperial defence. The proposal was received without any demur from the Congress High Command.2 Since then the idea that territory might be 'lost' has been the central theme of National Security Planning. The threat to the state was envisaged to arise solely from loss of territory. The war over Kashmir and the war with China reinforced the idea that 'threats' could only mean loss of territory. The war over Kashmir and the war with China reinforced the idea that 'threats' could only mean loss of territory. The result was a huge infantry heavy army suited to holding ground and a stunted navy and air force.

Mature countries do not plan national security on fearing a loss of national territory. International borders of mature states have been fixed over time and have acquired a sense of permanence – National Security has to look 'beyond' frontiers. To come to an assessment of what and where to look for national security threats one needs a national team to look at energy, traditional enmities, terrorism, climate changes, demographics, space futures and regional geopolitics. It is not enough that a defence minister makes a political statement that our armed forces are employed in some kind of chowkidari, to keep out trespassers – and that amounts to National Security Planning. To bring in some forward planning the forecasting of scenarios to a period of 10-15 years ahead is vital in defence planning. The threats are uncertain and may originate from unknown direction and regions. For these reasons some techniques have been developed that makes it easier to go through this process. The classic method, of course is the Net Assessment, where the external scenario is articulated and combined with internal scenarios to make a holistic Net Assessment. In this paper rather than go through all the areas that should be looked at, some critical subjects are examined as part of the external environment and these include regional geopolitics as well as international issues.

The Threat from Pakistan

Many analysts would say that Pakistan is a threat to itself, because it is a dysfunctional state, but that is of no comfort to India, to which Pakistan by its very nature poses a threat to stability on India's western border. The permanence of that threat arises essentially from that country's lack of economic progress and its burgeoning population, which by 2050, may touch 3473 million and could well see that state as the third most populous in the world, with a third world standard of living and possessing nuclear weapons. In this portion of the paper we examine not the existential threat from a poverty stricken Pakistan but the threat that emanates from the centrality of the army and from terrorism. To take the latter first, Pakistan's ISI has close links with the Lashkar-e-Taiba (LeT), a largely India oriented organisation that is permitted to flourish, because of the Pakistan Army's permanent strategy of preparing for a threat from India. The LeT made its debut on the international stage when it attacked Mumbai for four days in November 2008 and laid siege to two hotels, a railway station and a Jewish rest house. The LeT was founded in 1989 in Afghanistan by the ISI and began operating against Kashmir in 1990. Until 2008 there is a belief that the US global war on terrorism did not include the LeT as a target, for it was seen as an India specific organisation. The loss of US lives in Mumbai, the subsequent case in a New York court and the role of Headley have converted the LeT from being India specific to a world terrorist oganisation.

Headquartered in Muridke, it was started by Hafiz Sayed and Zafar Iqbal with the assistance of the ISI as the Markaz-ud-Dawa-wal-Irshad or MDI. The MDI was until 1983, concentrated mostly on Afghanistan but then it split into the LeT/MDI and shifted its objectives to Kashmir. The LeT was designated a terrorist organisation in the UN but was forewarned by the ISI and was able to withdraw its funds and change its accounts in time.4 The LeT has created a vast organisation in Pakistan for two purposes. One is to train militants and the other is to convert the people to the Ahle Hadith Islamic theology. It has an office in every major city in Pakistan. It maintains 'secret' training bases throughout Pakistan which in many cases cannot be interfered with by the local police for they are under ISI protection. Most recruits come from the Gujranwala area and are ethnic Punjabis. The New Delhi based South Asia Terrorism portal calculated 750 LeT operatives in J&K, although operations are mounted by upto a dozen fighters. The close link between the ISI and the LeT is because the latter has not so far attacked Pakistani state institutions and is committed to the 'unity' of Pakistan. It declares enemies such as Christians, Jews, Hindus and Kafirs (Unbelievers) outside Pakistan. Their recruiting bases are not the Madrassas, but a more educated lot, often from school leavers. It also does not concentrate recruiting from the Ahl-e-Hadith theology because many Ahl-e-Hadith Ulemas have rejected violence in society and therefore the LeT is partially separated from its roots.5

There are other anti-Kashmir groups operating in Pakistan, like the Hizbul Mujahideen (HM) and the Hazkat-ul-Jihadi-Islami (HUJI). Of these, only the HM have ethnic Kashmiris. The others have ambitions beyond Kashmir. The sectarian groups attack mostly Pakistani Muslims of the other Sect, like the Sipahi-e-Saba-Pakistani (SSP) which target Shias and Ahmadiyyas. In addition, there are strong clashes between the Deobandis and the Barelvi traditions of theology. The attack on the Indian parliament was executed by the JM, and the Kalu Chak attack by the LeT. In 2007 the Jaish-e-Mohammed (JM) split into two, one faction remained loyal to the state while the other targeted State institutions including Musharraf and the Karachi Corps Commander.6

On the other hand the Deobandi groups have carried out many high profile attacks in Pakistan, including the attack on Benazir Bhutto. The LeT manifesto '*Hum Kyon Jihad Kar Rahen Hain*' explains that the LeT does not wage Jihad inside Pakistan but only in other countries, such as Kashmir, where Muslims are oppressed7. LeT is non-sectarian, and although it acknowledges that Pakistan has made mistakes, Pakistanis are all Muslim brothers. So they do not attack Barelvis, Sufi or Shiites. LeT urges all Muslims to turn upon external enemies to prevent internecine warfare. So LeT is the only organisation that opposes Deobandi orthodoxy and explains Jihad in a way that all Pakistanis can understand. In the meanwhile, the LeT has also been active in social causes like the Kashmiri earthquake and the monsoon floods of 2010. But much of the LeT's success in humanitarian activities is really the work of the ISI which simultaneously funds public relations activity for the LeT.

Because of these reasons it is unreasonable to assume that the ISI and the Government will abandon the LeT due to the pressure from India or the USA. The LeT contributes not only to Pakistan's external insecurities but also to domestic cohesion and hence the survival of the state. But the ISI is also aware that the LeT has developed alliances with a number of other militant outfits and the relationship with the LeT is strong enough to preserve the outlying outfits from the Government suppression. This is because the ISI sees the LeT as generously committed to the territorial integrity of Pakistan. For this reason Pakistan has taken only cosmetic actions against the LeT and refused to ban the organisation. So LeT continues to hold high profile meetings in all Pakistan cities, and has even protested the killing of Osama. It has shown support for the killer of Punjab Governor Salman Taseer and the LeT's anti-American stance is seen as a lever to exploit by the ISI.

The Threat from the Pakistani Army as an Institution

The Pakistan Army has ruled the country outright during three periods, and has been in control when not directly ruling the country. Its importance comes from the fact that it is the only state institution that works as it is meant to. This however often leads the generals to believe that the rest of the country can be run like the army, which is a colossal myth, because the army has no other worthwhile institutions to depend on to rule the country. The army, it is conceded has a modern ideology – based on nationalism and, therefore, it is not so easily riven by the kinship alliances that split Pakistan society. The generals are quite aware that the army has to be protected from Pakistani civil society and when civil domination is seen to threaten army interests, the generals react and take over the Government. The Pakistani soldier owes his discipline and sense of military unity to the fact that, as he would have to in civil life, he is not required to show kinship loyalties and bow to the patronage that cripples Pakistani society.8

The military does function as a huge meritocracy and is internally quite free of corruption as compared to civil society. A symbol of the meritocracy is that the present army chief General Ashfaq Kayani is the son of an NCO and is at the same time a remarkably well read general. This is unusual as most in the Pakistani Government are heads of class of hereditary landowners or industrialists, with the exception of the Muttahida Qaumi Movement (MQM) and Jamaat-e-Islami. So kinship is the central weakness of the Pakistani State and the average Pakistani suffers other weaknesses – including the loyalty to ethnicity. The latter pull can at times be bad enough to pull towards secession, as demands have been made by Balochis and Sindhis. There is also a pull towards worship and when this pull is combined with those of kinship and ethnicity, it can be quite overwhelming. The present rebellions by various ethno-religious groups are a reflection of the pulls of this kind. It is often argued that corruption outside the army in Pakistan is endemic, but this kind of corruption is actually due to pulls created by kinship, class loyalty and ethnicity whose demands cannot be ignored without the institutional support that the army gives to soldiers within the ranks, whereas the kinship pulls are the strongest outside the army.

Politically this is visible in the sense that the Pakistan Peoples Party (PPP) is actually that of the Bhutto family, while the Pakistan Muslim League (N) is controlled tightly by the family of Nawaz Sharif and the Awami National Party by the family of Wali Khan. Most people outside the army in Pakistan obtain their power and position from hereditary beneficence. The pulls of kinship actually weaken the State because the power of the elite and control of local sources of wealth encourage them not to pay central taxes, thereby preventing Central Government expenditure on infrastructure.

The concentration of kinship in the Pakistan Army can be understood by seeing the recruiting base of the army. In 1920s the Punjab, the NWFP and Gurkhas contributed 84 per cent of the soldiers in the fighting arms. After partition almost 80 per cent of the army is drawn from the Potobar region around Rawalpindi and is actually only 15 per cent of the population.9 This makes the army heavily Punjab oriented and eases the problems of putting down rebellion in Sindh, Balochistan and even some Pashtun areas. The army also ensures that of all the services in the government, the army officer is given a handsome pension and land to build upon so that it is looked upon as an elite service.

Of course, the larger budget of the armed forces makes the army unpopular among other government departments. The feelings of antagonism however come from giving huge government land grants to Services organisations to build private housing on easy terms so that the army is the biggest landlord in Pakistan. The army justifies this grant by pointing out to the soldier's frugal service life and harsh postings while in service, and the benefits he gets are treated as his due. So, there is a vast Service organisation that supports the serviceman or *fauji* through the *fauji* group, which in 2009 was worth \$1.48 billion and the *fauji* foundation was worth \$510 million. The *fauji* group paid a tax of \$380000. These organisations provide health care and education for the dependents of servicemen and widows, and look after disabled soldiers. The army welfare trust has assets worth \$ 590 million and owns 16000 acres of farmland, sugar mills and cement plants.10

The army distributes its largesse honestly and without corruption and this helps to build institutional loyalty. Outside the military, nationalism is hopelessly qualified by class and kinship loyalties. For this reason the army is careful to see that soldiers do not pick up any 'extra' loyalties while in service. During General Zia's time the Tablighi Jamaat was allowed to preach within the service but, thereafter, this influence has been rolled back as a compromise on

national identity.

Both military rulers, Ayub Khan and Musharraf, idolised Kemal Ataturk, as the symbol of the kind of head of state that they would like to be - secular and believing in modern nationalism. So they would have liked to have been remembered, but the fact is that Ataturk led his country to victory after victory against the British and the French and others who wished ill for Turkey. There are many reasons why Pakistani generals cannot follow the Ataturk model. Firstly, they have chosen a giant democracy as a possible enemy. India is six times the population of Pakistan and has 10 times the GDP. Secondly, there is no sense of nationalism among the Sindhis and Baloch to compare with their feelings of ethnicity and, thirdly, they have no institutions to work within Pakistan, like the army itself, to strengthen Pakistan. But of all the reasons, the defeat after defeat that the generals have led the army into has been self defeating. However, the generals themselves cannot be seen to be losing hope that they can eventually win over India, which is an impossible task.

The Rise of China - Best Case

The story of China is the story of its economic growth. But for its amazing growth China would not be the serious subject of a study of this kind. There are many projections of how much that growth could be, but the most famous of the early predictions came from Goldman Sachs whose depiction of the GDP towers of the top three economies in 2050 took the world ideas by storm. Since then, there have been many counter-arguments that the pre-eminence of the USA is its own to lose – not China's to claim. That the US will correct its course and remain pre-eminent for some more decades than shown by the GDP towers of Goldman Sachs. Such optimistic calls underestimate the likelihood of China's dominance in 20 years from 2010. The argument is whether the outcome will be decided by the actions of the US, in reinventing itself or by those of China, which will surpass the US, no matter what the latter does. There is a view that economic dominance is the sum of the overall resources a country can muster plus the amount of credit it has with the world.

A study by Arvind Subramaniam11 recognises that China's population will age during this period, that the Chinese economy is distorted in many areas, that it is over- dependent on exports, that its exchange rate is undervalued, and that the land is increasingly polluted. Despite all these drawbacks, Subramaniam posits that the Chinese economy will grow at 7 per cent on its way to dominance, overtaking that of the US which will be growing at 2.5 per cent, as it has for about 30 years, higher than the 2.2 per cent projected by the congressional budgetary office.

If these projections are true, the world will not be a multipolar world in 2030, but a unipolar world with China being the only pole. At that point China's per capita GDP will be \$ 33000, roughly half of the US, and therefore poor individually. But the major difference will be that the US will be a net debtor to the world while China will be a net creditor. When the Chinese economy reaches that stage the Yuan will be the equivalent of the Dollar as a reserve currency. If these projections are sound, then the gap between China and the US in 2030 will be the same as between the US and the second competitor in 1970. At PPP rates the per capita income of China will be more than half that of the US. There are four reasons why China while being relatively poor may not be able to exert power. These are :-

(a) Any poor country will be engaged heavily internally on the guns vs butter controversy and domestic compulsions determine foreign policy. Hence, a poor country cannot invest heavily in power projection without disturbing the internal equilibrium.

(b) Secondly, the taxes a poor country can levy will be less than in a rich country. So although the total GDP may be large, the tax to GDP ratio may not be as large, thereby limiting the options of the government.

(c) Thirdly, a poor country can only have limited influence abroad as its soft power is bound to be low. Other people can only be inspired to follow the example of a country that has no destitute and disadvantaged people. But even admitting to these inadequacies of China in 2020, the actual wealth that it can muster will influence governments. China, with its present GDP has already coerced African governments into closing down Taiwanese consulates and China has already practically saved Greek, Irish, Portuguese and Spanish economies by buying their debt, as it has done with Iceland.

(d) Lastly, many manufacturing countries have seen their goods priced out of the market by Chinese goods riding on the back of an undervalued Yuan as China announces huge trade surpluses. None of the countries have had the courage to protest against the undervalued Yuan except for the US which has waged a lone battle against the Yuan.

It is true that the strength of the US lies in its ease of doing business, its 'can-do' attitude, its centres of innovation and the link between easy money, the universities and centres of excellence. But all this was good in the 1990s when government debt was 42 per cent of the GDP. Today it is near 100 per cent and whereas once foreigners owned only 19 per cent of the US debt, today it is close to 50 per cent and the greatest part of it is held by China.12 In other words, the US cannot escape the logic of demographics. China is four times more populous than the US, so even if the per capita income of the Chinese is a quarter of the Americans, its GDP can match that of the US. What is more, at a conservative 7.5 per cent growth the Chinese GDP will inexorably overtake that of the US by 2030.

Subramaniam has created a scenario based on that of the Suez crisis of 1956 when the US threatened to sell Sterling in the International market to weaken the English Pound so that Britain was forced to withdraw from its misadventure in Suez. Subramaniam suggests that by 2030, China could exert the same kind of financial pressure on the US to withdraw from the western Pacific, bending to China's pressure, on the threat of dumping US treasury bills and collapsing the Dollar. The Chinese, by that time may be willing to accept a re-evaluation of the Yuan as a result of the Dollar sales. The issue is that such a scenario is plausible.

China's Search for Resources and its Consequences

This part of the paper takes off from the previous portion which has stated that China is headed for a phenomenal economic rise. This portion takes the view that rise cannot take place on China's internal democratic resource base.

China will pursue its resources where and when it can get them. But as an Indian analyst what we are interested in is, which part of the world would China attempt to gather its resources from as a result of which, a clash with Indian interests could take place? The short answer is Africa, for three reasons, which are as under :-

(a) The route to all resource bases will take Chinese shipping away from the Indian ocean, other than if the resource base was Africa.

(b) A pursuit of a resource base in Africa has to take Chinese trade past the southern tip of India under all circumstances.

(c) A military policy to support China's resource base in Africa or its SLOCs from Africa will bring Chinese military assets into close proximity to India's military with unpredictable consequences.

China's pursuit of national resources is so vast that its strategy to obtain them will eventually become its grand strategy.13 To obtain resources, China will embark upon a massive programme of investment that will change the geopolitics of the affected region. The ravenous appetite for global resources will result in a controversy in Beijing, on whether the resources should be gathered as part of the international system or the search should be supported by military power. If it chooses the latter, as this author believes, it will result in entanglements not seen before. At present the search has taken them into Africa and South America where their capability to project military power is weak. They are, therefore, vulnerable and at the mercy of those powers that can project power in those areas. As its military power grows it will have to live with this period of vulnerability hoping for the best. The manner in which China approaches the need to protect its resource base will indicate much of how China views the world and its attitude to its own phenomenal growth.

It is possible that in the deepest recesses of the politbureau, China has a grand strategy – a plan of how it will actually become the world's number one power. It is just as conceivable that it has no such plan and it is, like so many other countries fire fighting its day to day problems. The truth probably lies somewhere in between. But whatever grand strategy it may evolve, the likelihood is that its first prerogative is 'to avoid conflict' with the USA. Does this avoidance apply to other powers around the periphery? Most likely not, as it does not apply to powers it considers below its status.

So, we have two established facts. One, China's search for resources will, as far as Africa is concerned bring it into proximity with India. Secondly, its grand strategy of avoiding conflict only applies to powers considerably stronger than itself- like the USA and does not apply to countries like India. China believes that the US would like to remain the sole hegemon and will block its rise as a competitor. So, whatever China may do, Beijing believes that the US, will in a time of crisis act against its vulnerabilities, which consists mainly of its resources bases abroad and its SLOCs. Partly this belief stems from watching the result of the competition between the US and USSR and the manner of its ending.14

China needs above all - time to build its Comprehensive National Power (CNP). It is convinced that for the present while the US is involved in the war on terror, Iraq and Afghanistan, it has no need to worry about the US looking in its direction. But China does not believe that it has an indefinite amount of time. In the meanwhile, its best strategy is to try and disassociate the US from whichever ally it might gather to its own side and such allies include Japan, India, Korea and Australia. We in India must, therefore, see where we are placed in the Chinese estimate of its grand strategy. While it will play with caution against the main competitor it will be resolute and fierce against any of the smaller ally's attempts to gang upto with the US. The SLOCs from Africa it uses, could be the most likely source of united trouble from the US and India. It is the most vulnerable of all strategic weaknesses and is also the most geographically convenient area for a coalition of the US and India to act against its interests. For these reasons it will sooner, rather than later, seek a base in the Indian ocean from which it has a better chance to stop the two countries – India and the US from acting together.

China's Military Rise

The scope of China's military modernisation has increased recently, enabling that country to use military options to gain diplomatic advantages or resolve disputes in its favour. During the decade, the particular growth of the PLA not only enables it to pursue anti-access strategies as before, but additionally to sustain military power at a distance. China is developing advanced medium range cruise missiles, new attack submarines, increasingly capable air defence systems, electronic warfare equipment, advanced fighter aircraft and counter space systems.

The PLA has the world's most active programme for developing ballistic and cruise missiles and is currently testing new variants of offensive ballistic missiles. It is also developing new methods of ballistic missile defence using active measures like kinetic kill missiles. It has outfitted its new destroyer the Luyang II C class with the YJ 62 anti-ship cruise missile apart from fielding a generation of land based domestically produced long range land attack cruise missiles – the DH 10. It is believed to have retro-engineered the SSN 2 missiles that it received along with the Sovremenny class destroyers as well as retro engineered the supersonic Sizzler SSN 27 B which came with the Kilo class submarines.

It has now upgraded the number of missiles opposite Taiwan from 1050 to 1150 and it is increasing the lethality of these weapons by, for instance introducing terminal homing on the DF-15 missiles. China is developing an anti-ship ballistic missile by modifying one series of the DF-21 which now has a range in excess of 1500 kms and when integrated with the Yao Gan surveillance satellites will give the PLA an anti-carrier capability in the western Pacific. In the meanwhile, more DF-31A increased range missile have entered service with a range of 11,200 kms and it may be developing a road module ICBM with MIRV.15

What the world is most interested in is, not in what China can do internally or in its near vicinity, but its growing capacity for power projection, for which we need to study the developments in the PLA Navy (PLAN) and strategic capabilities of the PLA Air Force (PLAAF). The PLAN has now the largest navy in Asia. Its navy includes some 75

principal combatants, more than 60 submarines, 55 amphibious vessels and 85 missile craft. A new PLAN base has been constructed on Hainan Island to accommodate ballistic missile submarines and advanced surface combatants, right next to the international shipping lane. Its first aircraft carrier has commenced trials and an indigenous carrier building programme has commenced. It has trained 50 pilots in carrier operations.

In anti-carrier operations, it has improved its Over the Horizon (OTH) capability using both sky wave and surface wave OTH radars. These are part of a system with surveillance satellites in locating carrier battle groups at long ranges for interdiction by anti-ship ballistic missiles. The Jin class 094 SSBN is continuing in production and has fielded one new SSBN. There are plans for five Ballistic Missile Submarines (SSBNs). It has manufactured two Shang class Nuclear Attack Submarines (SSNs) and has plans for a new 095 class of SSNs. Its 13 SONG class Conventional attack Submarines (SSKs) carry YJ 82 Anti-Ship Cruise Missiles (ASCMs). The follow-ons to the Songs are the Yuans of which four are in service. The new SONG may have air-independent propulsion (AIP) system and be capable of launching the new SS-NX-13 ASCM once it completes testing.

Its domestically produced warships of note include the Luyang 11 class with the indigenously produced HHQ-9 long range Surface to Air Missiles (SAMs), two Luzhou class with the SA-N-20 Russian SAMs and the Jiangkai class with the HHQ 16 vertically launch SAMs. As can be seen there is an emphasis on AA destroyers and frigates and these are thought to be the ships that will escort their new carrier. The PLAN has deployed about 60 of its wave piercing catamaran hull Houbei class equipped with the YJ-83 ASCMs.

The PLAAF has 490 combat aircraft within un-refuelled range of Taiwan and many more if air-to-air refuelling is accepted. The PLAAF is transferring from an air force into an air and space force. It is upgrading its B-6 bomber force with a new aircraft with an air-to-surface cruise missile. The PLAAF has probably the largest SAM force in the world, leading which are a number of PM42 battalions of the latest Russian SAMs. The PLAAF is also developing an Airborne Early Warning (AEW) aircraft based on the surveillance aircraft version of the IL-76.

Changes in Doctrine

In 2008, PLA published the revised Outline of Military Training and Evolution (OMTE) which emphasised more realistic conditions for training in complex electromagnetic environments. The PLA is making serious efforts to practice joint operations, which is emphasised in the OMTE. What they seem to follow is to task a number of elements of the three services into a 'task force' (although they do not call it such) and appoint a joint command headquarters. Early attempts were limited to phased and sequencing operations loosely coordinated. Although the Integrated Joint Operations doctrine was published as early as 1999, what was actually practised was a predetermined sequencing of operations. After 2009, it has been recognised that most officers have no training or experience in joint staff work which inhibits their work in integrated headquarters.16

Space, Counter-Space and Cyber Capabilities

China is expanding its ability to collect Space intelligence as well as develop Space communications and navigation facilities. It has launched its first navigation satellite and will have a complete network of navigation satellites by 2015. It launched the 6th of the Yaogan satellites in 2009. It continues to test the long march V for lifting heavy loads into Space, supported by a new launch facility in Wenchang on Hainan. In 2008 it was reported that Canadian researchers had uncovered a Chinese attempt to infiltrate major Indian sites in government offices. PLA strategists say that Space assets are central to informationalised warfare. They are aware that it is in Space that communications make it possible to win future wars. So on the one hand, China is improving its Space capabilities and on the other, it is developing capacities to attack the enemy's Space assets, following the US into militarising of Space. PLA writings speak of 'blinding' and 'deafening' the enemy's Space assets and of destroying or capturing satellites and other sensors. PLA writings also emphasise the importance of dominating the electromagnetic spectrum in the early stages and of embarking on kinetic strikes to disrupt the enemy's warfighting and power projection capabilities.17

The Military Aspects of China's Resource Collection

Energy independence is no more of an option for China. It has ensured that apart from import of energy it has gone far afield to procure as many oil producing assets as possible. It is estimated that four fifths of its oil will be imported by 2030 despite the fact that 70 per cent of its energy needs are met through coal. A part of its strategy is to avoid sensitive SLOCs by developing land based pipelines. Plans are there to import 800000 b/d by way of the Kazakhistan pipeline. A spur line from the Siberian field worth 300000 b/d is under construction and the Myanmar oil pipeline will eventually supply 400 000 b/d bypassing the straits of Malacca.18

Beijing has, however, evaluated that its major oil suppliers will remain the Persian Gulf, Africa, North America, which are the sources from which SLOCs will provide the main supply. So even if all pipelines are constructed, China's reliance on SLOCs will continue. A gas pipeline from Turkmenistan passing across Kazakhistan and Uzbekistan is being constructed that will supply 40 bcm of gas per year. Gas pipelines are also being built from Russia and Myanmar that will deliver 68 and 12 bcm respectively. The presence of major oil companies around the world cannot be discounted as foreign policy leverages in the future, as part of Chinese foreign policy.

The economic miracle of China in the last two decades has created the phenomena of Beijing's Ex-IM bank19, with a war chest of \$200 billion and the promised patronage of political leaders from the President downwards, to expand China into Africa. But unlike the colonial expansion into Africa, the motives for the Chinese march into the continent are as yet obscure. Among the overarching observations about those motives are:-

(a) The paranoic fortress mentality of the senior party theoreticians who drive China's foreign and commercial policies overseas. These people have made the partial leap from mercantilism to free trade, but are reluctant to make the same leap into relying on the markets for resources and raw materials. China seeks to own the resources that produce both.

(b) China's energy needs will quadruple in two decades. Beijing has rejected the reliance on the market to drive oil exploration and maintain prices. They have decided to acquire African oil assets, and in that process, have discovered cheaper minerals and agricultural products.

(c) China has studied the pitfalls of the colonial decline and would like to create a different 'model'. The success of the model is, as yet in doubt as the geo-political support to protect resources in another continent begins to look suspiciously like colonialism and gun boat diplomacy.

There is considerable dispute in open literature whether China's drive into Africa is commercial expansion or state sponsored outreach or a mixture, and if so, dominated by commerce or policy. To make a more educated answer for this question, it would be necessary to look more closely at what exactly China is doing in Africa and where. Wrong conclusions could be drawn, unless the sheer size of Chin-Africa is understood. A broad survey of Chinese involvement in Africa is covered in the succeeding paras.

Sudan.20 For many years Sudan was China's flagship scheme for owning and extracting oil from Africa. At the time Beijing could not have chosen a worse regime to depend on. Unfazed by the virtual genocide committed on the southerners by the ethnic Arab northerners, China's political support to Khartoum granted virtual immunity to the Sudanese regime from international action. There are an estimated 30000 Chinese in Sudan working on the drilling sites and there are allegations that many of them are PLA soldiers in plain clothes. Most of the oil is located towards the South and the only port through which the oil is currently exported is Port Sudan in the North. This necessitates long internal pipelines. Almost three quarters of Sudanese oil goes to China. China owns 40 per cent of equity in Sudan's largest oil company, the Greater Nile Petroleum Company.

Ethiopia. This country's hydro-power resources, as yet untapped have been harnessed in the last few years, as the Chinese have built seven hydro-power stations. In the latest venture they have earmarked \$ 1.9 billion for a 2000 MW scheme that will supply neighbouring Sudan and the Chinese power requirements for oil extraction.

Kenya. Has no oil, but there are an estimated 25000 Chinese settlers in the country. The Chinese floated the idea of building the port of Lamu in Kenya to export Sudanese oil, as the pipeline run would be shorter southwards but the unsettled relations between the two states and the possible religio-ethnic differences have stalled the project. Kenya has offered huge agricultural tracts on lease and Qatar has taken one section. The other is being considered by China.

Tanzania. This is a country where Chinese agro-companies have leased thousands of hectares of farmland producing much of the country's agricultural surplus, now being sold in neighbouring countries. An unknown number of Chinese settlers live here.

Mozambique. It had the old Portuguese coffee and tea estates, which are now run down. Here again the Chinese have set-up an agricultural research centre and allocated \$ 700 million from state funds to expand agriculture.

Namibia. With a population of only two million, the number of Chinese in the country have already attracted unfavourable comments. The number of Chinese actually present are alleged to be many thousands more than those who entered the country legally (2310). Chinese companies have signed mining rights for Uranium, Cobalt and Zinc.

Zimbabwe. In the eyes of the world the Chinese entry into Mugabe's Zimbabwe is on parallel with its activity in vetoeing strong sanctions against the Cambodian Pol-Pot regime for genocide and against the Khartoum regime for genocide in Darfur. The Chinese explanation is that their presence in Zimbabwe, to invest in mining, transportation, communication and power generation will prevent the total collapse of this country, even if it means Mugabe's continuance.

Angola. This state may become the crown jewel of China's oil resources, having displaced Nigeria and Sudan as their biggest suppliers of crude oil. The Chinese investment in Angola has come to be known as the *Angola Model*. China invests in infrastructure projects in return for which its oil companies get oil rights. The actual balance between the two has not been worked out, but Chinese investment into infrastructure has actually doubled the Angolan budget. Taking both infrastructure investments and oil extraction together, whether the Angolans have a good deal or have been cheated is not clear, without the details of the contract. However, there is immense criticism that inspite of the figures published by China the life of the Angolans seems as poverty stricken as before, while tankers take away their oil.

Gabon. For the size and population Gabon has a heavy Chinese presence. 30 companies have invested in Gabon in oil, mining, timber and infrastructure.

Guinea. Is ruled by another dictator, with whom China has signed a massive \$ 7 billion mining deal. In a country where nothing gets done without pay-off for the dictator there is much speculation on the nature of the contract the Chinese have obtained.

Ghana. This country has recently discovered oil and the largest field - the Jubilee is partly owned by China.

Ivory Coast. Chinese investment in BHP Billiton, the mining multinational will double the manganese output of the company.

Congo. The state of this country, its decline into a failed State, combined with its explosive population growth, and its competing genocides, all constitute a narrative of their own. Propped up by the UN forces for almost a decade, China has entered the Congo in its decrepit condition in a massive way that may well be the model for its investments in Africa. There is a good risk of suffering the consequences arising from investing in countries arbitrarily chosen, irrespective of its political condition. Some of the other implications are:-

(a) In a repetition of the Angola model, China has declared its plan to spend \$9 billion on infrastructure. This

investment has spurred international confidence to enter the State in order to conclude more mining deals. All countries are unanimous that the DPR of Congo has an undiscovered treasure of mineral wealth. The biggest mining company, the Gecamines was recapitalised. Chinese infrastructure projects have a couple of flagship schemes, namely the 3200 km railway line from Katanga to Matadi (the farthest upstream port on the Congo river), a total of 4000 kms of road, two hydro-electric dams, a few airports, schools and hospitals. In return, the Chinese have rights to 10.6 million tons of Copper and 626,619 tons of Cobalt.

(b) But in a State where political morality is non-existent, the opposition have been the sole watchdog against many scams. The deals have apparently been negotiated by middlemen, which is the normal method of siphoning off funds by both buyer and seller. Other criticisms includes the absence of any labour regulations, employment of child labour, environmental disregard and accusation of Chinese figureheads over companies financed by illegal Congolese money given to them by the Chinese. The opposition accused the Government of willfully or incompetently managing the negotiation of what they felt was \$ 80 billion worth Congolese mineral assets that would be taken out in the next decade for which the return to the State would be meagre.

The Long Route to Take Energy Home

For a non-maritime state to firstly, depend on energy routes passing by strategically unfriendly states (India) and secondly, to persevere with acquiring assets instead of the commodity, is again a strategy that is looked askance in the Western countries and India, which have all relied on the international market to spur the search for new oil as well as to obtain it at reasonable cost. The Chinese oil routes are shown on **Map 1**. It is interesting to see that the greater part of African oil now comes from West Africa (Angola, Congo, Guinea, Gabon and Nigeria). If the Malacca dilemma is real, as made out by Chinese scholars, alternate routes could be Gwadar-Xinjiang and Sittwe-Yunnan (Myanmar). But calculations show that these pipelines could only take the load of about 20 per cent of the oil transiting the Indian ocean. Gwadar moreover is a non-starter until Pakistan re-establishes order in Balochistan. The density of oil traffic is set to triple or quadruple between 2010 and 2030 as China's imports also quadruple. Interestingly, Beijing does not have the same vulnerabilities in gas, as almost 90 per cent of the China's gas imports already come overland through pipelines.21

The Strategy to back Resource Gathering

A series of fine papers have already begun to emerge from western thinkers that the strategic challenge from China to the US might well resemble the rise of Imperial Germany between the wars when the Kaiser attempted to build naval power to challenge Britain. In an article entitled 'Will Asia's Rise Resemble Europe's Past' the Authors bring out the writings of Admiral Wegener whose idea of a Maritime Strategy, although discarded by the Kaiser, eventually led to Hitler following precisely what Wegener had recommended. In the first move of WW II the Germans occupied Norway and changed geo-strategy for the rest of the war, by giving Germany a coastline it never possessed. The speculation is that China would need to do something similar to convert its poor geography to a better maritime position. This giant leap whose contours are as yet indeterminate will be discussed in the paper later. The criticism was the same as what it is now-that both Germany and China would probably have been better off adjusting to the prevailing international system, than running a parallel system while still being a challenger.

Filling the Strategic Gap between China and Africa or Linking China to Africa

Owning assets in Africa and the need to transfer resources to another continent creates two separate problems which will both eventually require mutually supporting solutions. The two separate problems are :-

- (a) Protecting Assets in Africa
- (b) Protecting SLOCs

The Search for Bases. The Chinese Navy is not yet prepared to enter the Indian Ocean competitively either against the US Navy or the Indian Navy. There is much speculative literature that the Chinese are building bases in the Indian Ocean. Actually these are ports with some infrastructure which even the Chinese Navy could legitimately use during times of tension is another matter. Most of these countries, especially Seychelles, Mauritius and Madagascar are too small to antagonise the major powers, be it China, India or the USA. *For one of the small countries to transit to becoming a belligerent is a huge leap, and unlikely to be taken. All the same, it would be better to make the laws of war plain to many countries that may not be aware of international law.* President Hu Jintao's visits to Seychelles, Mauritius and Madagascar were not innocent diplomacy by any means. At present there is a huge gap between the capability that the Chinese need to protect their African trade and what is achievable

No Maritime Support. Whatever the grand strategy of China may be in Africa, eventually the Chinese will have to establish a safe and massive link to Africa, both for the transfer of resources and to defend the route in a world where they attempt to displace the USA as the hegemon. The maritime link is clearly the obvious one where all Africa's resources required by China transit through the Indonesian straits to China apart from what can be sent through Afro-Asian pipelines. The insecurity of their SLOCs in the Indian Ocean is not a mirage in the Chinese mind. All Chinese scholars speak of it consistently without being provoked. Added to what they say is the observation in the US and India that Chinese maritime power is still diffident about blue water operations in the Indian Ocean. The naval hardware to compete with the US or India in the Indian Ocean will be available only 50 or 15 years down the road respectively.

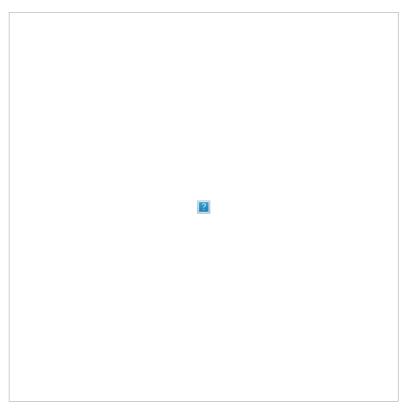
This is a conundrum, and the Chinese solution is still uncertain. But it would appear that if the Central Military Commission (CMC) is still a PLA dominated body with only one naval representative (since 1986 only), the prevailing (but temporary) view in the CMC is likely to be continentalist or Mackinder-ish rather than Mahanian or Maritime. This may explain the many transnational links that they have built towards the Indian Ocean with the latest one connecting their Karakoram Highway to the old Soviet road to Bagram and then through Afghanistan and Iran to Chah-Bahar. So, could the Chinese view of linking China to Africa be a two stage process, consisting of:-

(a) Dominating the Afro-Asian littoral from the Persian gulf and Suez around the Cape in the first stage.

(b) Venturing out to sea in the Indian Ocean after the littoral domination is achieved - say in 2025 or 2030?

(c) There is one scenario where the Chinese become adventurous and jump the gun and establish a base in the Arabian Sea as envisaged by Admiral Yin Zhou in charge of Information Technology (IT) in early Jan 2010 on the Chinese Defence Ministry website.22

A pictorial representation is depicted on **Map 1**: While they have succeeded in advancing to the Asian littoral in Vietnam, Cambodia, Thailand, Myanmar, Pakistan and Iran, the continental strategy still has a gap in making the leap to Africa.

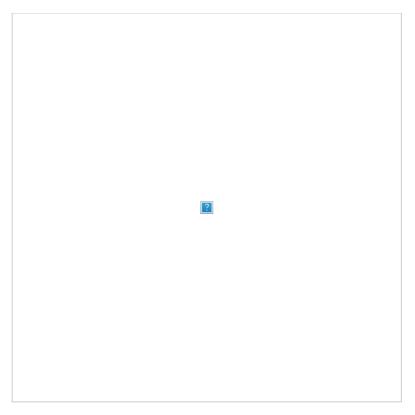


Chinese Oil Routes



Protecting Their Presence in Africa. There are few instances of nations that came to trade that did not get enmeshed in politics. In what might be called *The East India Company model*, the Chinese will need political support to preserve their investments, particularly as it begins to become huge. With governments being displaced in coups and revolutions it is only a matter of time before a political faction in a country requests the Chinese for support in an internal fight, and that will be the beginning of China becoming an African power. This might have been avoided had they been selective about their African presence. On the contrary they have spread their footprint everywhere and this must lead them into military activity – initially as trainers and suppliers of hardware and eventually more intrusively. They will make a beginning somewhere – probably Tanzania where they have been the longest. Angola is another possibility far away from observation and any Anglophone influence. The conversion of their continental strategy into a maritime one, perhaps when they feel more confident after 2025, is shown pictorially in **Map 2**.

Chinese Maritime Strategy Phase II



Map 2

Wild Cards

(a) The Chinese take up a serious military training mission in two adjacent countries, thereby legitimising the presence of combat vehicles and a large number of Chinese citizens/troops in Africa.

(b) The Chinese take up a combat flying training mission giving them the toe-hold necessary to introduce tactical aviation onto the Indian Ocean littoral. This might short cut the long gestation Carrier Battle Group (CVBG) building programme.

(c) The Chinese take on an airborne logistics support mission to an African country thereby, introducing long-range reconnaissance capability operating from Africa.

(d) They build a new port (probably Lamu in Kenya) which will give them access in all conditions other than hostilities.

(e) The port, aviation assets and land combat training missions will be close to each other, most likely on the East coast of Africa as mentioned above.

Myanmar and its Uncertain Future

Myanmar or Burma, as it was then known, was one of the Theatres in which Indian armed forces fought during the Second World War. Although, the Indian General Staff prepared to fight a war on the western front in 1939, eventually they fought the Japanese to a standstill, followed by the reconquest of Burma, which was a land-ward advance, with a major amphibious right hook to Rangoon. The amphibious spearhead found the capital abandoned, when they landed. The psychological effect of the Burma campaign has not gone away. The fear remains that India could be engaged not only on the familiar northern and western fronts, but on a new eastern front by an overlapping Chinese thrust through Myanmar. For this reason, the long term political stability of Myanmar is of political consequence to Indian strategists. The fact that China has penetrated quite far South, in Myanmar and that signs in Chinese have appeared as far South as Mandalay is of concern as to where the Chinese engagement with Myanmar is headed.

Myanmar is a totalitarian state whose future is as uncertain as are all totalitarian states. It is difficult as yet to conjure up a vision of Myanmar as a stable state of some kind, except that the power of the State Law and Order Restoration Council (SLORC) cannot last over a decade or so. Yet the country is stitched together by the Army with which the minorities have signed agreements on some kind of federalism. What the state has going for it is a high human development index where women's literacy is not much different from that of the males. Life expectancy is higher than in India and the birth rate is as low as the best states in India. Hence, the capacity of the Country's area to support the population of 26.5 million is undoubted from any view point of agriculture or ecology. In fact, from any point of view Myanmar is a strange country where the Country works but the Government does not. Its GDP growth rate is not too low at 6.3 per cent and per capita income is \$1200 per year at PPP rates.

The danger to India from Myanmar comes from its non-functional Government and the extent to which it has allowed the country to become China – dependent during the years that it was a pariah. The huge contradiction of instability comes from the limited longevity of the Junta and the fate of the federal structure after the collapse of the Junta. Which of the minorities will work with the centre and which would not? Which of the minorities will made a break for it and how much will the resultant tumult resemble a civil war? During the civil war like situation the big doubt is, what will the Chinese do, considering their level of investment as far south as Yangon. The Myanmarese leaders are confident they can play both ends against the middle – allow the Chinese every concession, become financially dependent, permit special privileges and yet when the chips are down, they feel they can retain political independence. In other words, the SLORC feel that there is no price to pay for all the Chinese investment aid and visa free access to Northern Myanmar.23

In this they are making a huge blunder, as the regime itself is likely to be short lived and lead to some kind of civil war. In that conflict the Chinese will have to take sides to protect their investments and the choice will be made on the basis of real-politik and not on sentiment. China's investments will become its paramount interest and in underestimating that interest the SLORC is making a grievous error. So the final result of what happens in Myanmar will be a result of, which way the Chinese jump in the post SLORC scene. This may or may not be to India's advantage in the new alignment of power. In that new alignment the strongest single player will be the Army and India's interests require that we keep our contacts with the Army. The problem will be if the Army finds a ready supporter in China during the post SLORC phase, in which case the Indian position in Myanmar becomes weak and the Chinese appear on our eastern flank. The seriousness of the Chinese appearing on our eastern flank has to motivate our policy towards Myanmar and explains why Myanmar is studied in detail among the limited number of issues in this paper.

The Effect of Afghanistan on Pakistan and Indian Policy

The Americans and the International Security Assistance Force (ISAF) are due to start thinning out in 2012 and their withdrawal is due to be completed in some form by 2014, leaving behind their offensive ground and air capability. The Pakistanis have a hope that the Afghan government at that time will include a section of Pashtuns from the current group called the Taliban. As a result of Pakistani intercession, they hope they will have leverage on the eventual Afghan government. Therefore, their interests will be protected by the future government to the extent that India will not be permitted a large presence in Afghanistan, which the Pakistanis may have to worry about as being a 'second' front in their West. The result of Pakistani meddling may well turn out to be entirely different from what was intended. Control or influence of Afghan governments have been tried by various countries with indifferent success, because, as everyone states, the Afghans are independent minded. So it is not clear why the eventual Afghan government should exclusively favour the Pakistan government when all Pakistan has to offer is access to the sea – a facility they would not like to deny anyway.24

The scenario that will eventually unfold in Afghanistan and hence in Pakistan may well be different. This is because the problem with the Pakistan Taliban – a fundamentalist group – has not been settled by the Pakistani state. Large numbers of their group are also Pashtuns, interspersed by Punjabis from the South Punjab Madrassas, who demand an Islamic state devoid of 'lawmaking legislatures'. These groups are difficult to pin down because they shelter across the border, over the porous Durand Line in Afghanistan with their ethnic cousins. The settlement of the Afghan government in 2014, does nothing to appease the Pakistan Taliban who are fighting the Pakistani state for ideological reasons. This movement is spreading and targeting the government, Shias, Ahmadiyyas, schools and non-fundamentalist organisations. This group will continue their activity unchecked no matter what happens in 2012 or 2014.

In the worst case, lack of success by the Kabul government in holding down the turbulent South and East could see a coalescing of ethnic Pashtun interests growing into a cross border Pashtun nationalistic entity that wipes out the Durand Line. If, as expected the leadership of the Pashtun nation is again captured by fundamentalists, India could see the opening up of terrorist training camps across the border all over again.25 How much the Pakistani state will compromise with their fundamentalist entity is difficult to forecast, but they will definitely try and not get engaged on two fronts - the West and the East. It might make sense for the Pakistanis to make peace on the eastern front but sensible choices have not been made by the Pakistanis in the past. So post 2014, India needs to have an Af-Pak policy as this problem is not going away when the Americans leave. The traditional method of allocating a 'front' to a command, as we have hitherto done, as for example, creating a western front, with a Western Command, and an Army Commander, to deal with the front, no longer is good enough when India has to deal with a semi-permanent transborder problem in the border between Pakistan and Afghanistan. At present the method followed is that when the Command is overwhelmed by the complexity of a problem that is not a straightforward border transgression, the problem is kicked upstairs to New Delhi which has virtually run Afghan policy as an activity that is well beyond the scope of an Army Commander. In this way, all Commands are suited to deal with border transgressions and just that with any geo-political complication being passed upwards to New Delhi, including the Ayni airbase in Tajikistan, the training of the Afghan Army, security of Indian construction companies in Afghanistan and any other Afghan activity. This manner of dealing with a local problem is hugely different when the Army Commander's role is converted to that of a Theatre Commander.26

Maritime Competition in the Indian Ocean

Chinese maritime power in the South China Sea and in the Indian Ocean are taken together – as one integral whole. The level of maritime security as seen by China in the western Pacific has to be of an assured level, before the CMC's strategists will permit the PLAN to think of deploying 'out of area'. Operating in the Indian Ocean, will initially be an 'out of area' operation that can only be justified when the PLAN has met the strategic fulfillment of operating adequately up to the Second Island chain. All navies seek funding for their warships. The PLAN is no different. Funding is provided against strategic objectives set-out in the argument. Currently, it is unlikely that the PLAN has given to the CMC, any argument for immediate budgetary allocation for an Indian Ocean force. Such an argument undoubtedly exists in the long term perspective planning of the PLAN. Such is the author's speculation, not supported by any first hand information. Adequacy of force to operate up to the Second Island chain is itself likely to produce a formidable list. To contend with, there is the entire Japanese Navy in the Northern theatre, then there is the major portion of the US 7th fleet, and the entire South Korean Navy and the growing Vietnamese Navy to balance. It is only when the PLAN planners feel that forces are 'adequate' against such a combination that they can turn their attention looking beyond the Pacific into the Indian Ocean.27

Logistics is another difficulty for sustained operations in the Indian Ocean. With campaigns under their institutional memory, the long term planners of the CMC will never agree to the PLAN making more than a temporary foray into the Indian Ocean unless logistics basis are set-up and the diplomatic effort has gone into supporting a

Chinese presence in a new area. Politico-military-diplomatic coordination is an activity that the Chinese are good at and have some practice in. Their operations in the Indian Ocean as part of the Sumatra patrol from which ships were diverted to the Libyan crisis is a pointer to the fact that the Chinese are learning. They managed a 100 day patrol by getting their ships re-supplied by Chinese companies operating in Africa and showed great flexibility in conducting an extended stay for their ships. This is a one-off operation, but the lessons have probably been learnt that a continued presence of Chinese ships in the Indian Ocean will involve a diplomatic and logistic effort of some magnitude.

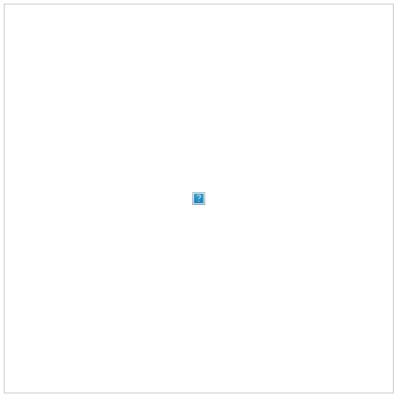
At the same time there must be a bureaucratic push or a desire to operate in the Indian Ocean from all the government departments that are involved in seeking resources from all over the world to push the economy along. It is most unlikely that the presence of the Chinese in every littoral country of Africa, combined with the need for some security of resources and SLOCs will cause the Chinese to rely on the international system for their continued protection. If they did, then there is no push to build a bigger Chinese Navy, which we know there is, and the question of whether flag follows trade is settled once and for all. The Chinese have gone to great pains to describe their foray into Africa as different from colonialism, and the basic motivations are different – but will the effects be different? Can huge state enterprises, their assets, goods and people be left unprotected, dependent totally on the international system for their constrained as they were by their Constitution. So just as there is caution and reluctance to come into the Indian Ocean until the circumstances are right, there is an enormous push on the PLAN to go and do what navies are meant to do.

For India, the timing of the Chinese push into the ocean overcoming their reluctance not to go is important as the Indian Ocean is not the only front on which India is engaged with China. There is the long Himalayan boundary on the Indo-Tibet border which saw a resurgence of incidents in 2009 before they decreased. There is no explanation for the increase in incidents, pushed as they were by suddenly more aggressive Chinese patrolling. Since then there have been a number of incidents that indicate that the Indian Ocean is not the only place where the two countries are engaged. There were the incidents in the South China Sea followed by the confusion over the Sino-Indian talks clashing with the world Buddhist conference about which the Chinese were upset.28

At the background of Indian assessments about Chinese intention is the realisation that the state of Chinese logistics in Tibet has vastly improved over the years and it is the resulting confidence that makes the Chinese more aggressive? The Indian estimates of what forces the Chinese can bring to bear in Tibet are chilling, after the building of the feeder and parallel roads and the Ghormo-Lhasa all weather rail link. The correlation of forces have changed drastically in Tibet and there is a constant Indian fear that all Sino-Indian equations will now react on the new force realities in Tibet. This fear needs to be specifically articulated and should not be left as a mere threat to our territory. After all, we have to be clear that the threat to our territory today is not materially different from the threat in 1962. In that war, the Chinese did capture territory but *returned most of it*. It is, therefore, wrong to assume that a continued threat to Indian territory by conquest still remains. Even today, we do not have a consensus that what the Chinese did to us in 1962 was 'to teach us a lesson', successfully or otherwise, as Mao Zedong had ordered the PLA. So territory will not be recovered by China through conquest, but the possibilities of another 'lesson' are indeed real. This time the lesson will come from a highly mechanized, airborne and air mobile land force capable of hitting hard at diverse points in quick succession through Revolution in Military Affairs (RMA). The old infantry ground holding operations days are over. This is the reason why we must have an offensive Indian Ocean strategy, to retaliate with when taken by surprise in the Himalayas.

Areas of Strategic Geo-Political Concern for India

The areas of geo-political concern for India are shown in Map 3 below:-



(Source: Author)

Map 3

In terms of priority we have the two areas that are closely interlinked – Tibet and the Indian Ocean. In one area geography acts against India's military interests in having to push troops up a formidable 9000 ft and higher mountains to man their posts on the Tibetan border; in the Indian Ocean on the contrary the Chinese have to transit 2400 nautical miles to even step into the eastern limits of the Bay of Bengal. These two geographical advantages and disadvantages to an extent strategically nullify each other in terms of operational leverage.

The area of Myanmar is an offshoot of the Indo-Tibetan border problem in that the southward movement of the Chinese into Myanmar could threaten to turn the eastern flank of India's Tibetan front. The farther the Chinese advance into Myanmar the more the flank remains turned. At the same time the Myanmarees are clear that they are not going to give the Chinese a clear run through their country. They are keen to invite the Indians to participate in the development of their country and exploit the natural resources by building roads, pipelines and oil transit routes. So this area involves more of a cat and mouse game with Indian constraints being mainly one of financial limits to what it can do.

The third area of geo-political tension is the handling of the fundamentalist threat from Pakistan which will spill over into the war against the Indian forces in Kashmir as recently announced by the Jamaat ul-Furqan (JUF) – to convert the whole of Pakistan into a Taliban nation and wage war on the US and India. While the claim may have been fanciful the possibilities are grim, if Afghanistan becomes uncontrollable after 2014 and the Pashtun problem spills over into Pakistan to create a cross border Emirate once again.

Another area of concern is the Middle East for a large number of reasons which normally are associated with the Middle East - the Palestine problem, Hizbollah, Hamas and Fatah, the Iran - Israel rivalry, nuclear weapons and non-proliferation and the ever present attraction of cheap oil in the area. Of immediate concern is the action of Iran in attempting to become a nuclear power and creating a sectarian schism that will split the Middle East. The difficulty for India is that each side will demand an alliance from India and urge the other countries to choose between being enemies and friends. Since the greater part of India's hydrocarbons come from this region, it has to be careful how it plays its cards.

Other Regions. The regions mentioned in the paper so far are those with a higher probability of turbulence and will require state organisation to deal with these problems on a semi-permanent basis. Other regions are those that India has lived with for four decades and, although they may have fluctuating levels of stability, can be dealt with by normal state institutions. These include Southeast Asia, Africa, Sri Lanka and the islands of the Indian Ocean.

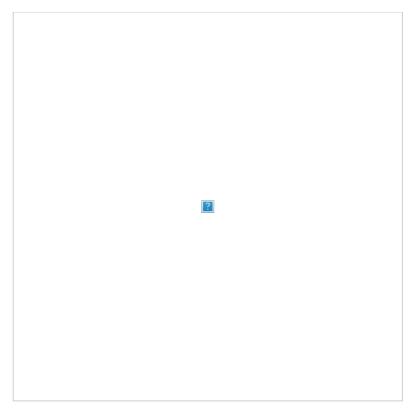
Other Issues

Space. The UN resolution on outer space is clear that it is meant for the use of all mankind and for peaceful purposes, as are celestial bodies.29 Subsequent resolutions talk of preventing an arms race in outer space (2001). Contradicting these sentiments from the international body are statements from commanders of space commands of the USA who have stated that "one day" the US will hit land based platforms from outer space, for that is the eventual high ground. The commanders did not comment on the explicit provision of the outer space treaty which came into effect in 1967. The fact is that with the use of a huge number of communications, surveillance and observation satellites Space has already been militarized. What remains is the carriage of weapons into Space. On this issue it is well known that the debate is deadlocked in the Committee on Disarmament at Geneva. In 2006, the UN voted almost unanimously (except for Israel and the US) to prevent an arms race in outer Space. However the Bush Administration made it clear that the US was going to militarise Space. The quadrennial Defence Review of 2001 states explicitly "A key objective ... is not only to ensure US ability to exploit space for military purposes, but when, as required to deny an adversary's ability to do so". The Times has reported that, 'the US has already spent trillions in developing Space programmes... with plans to deploy weapons. It continues ... Air force doctrine defines Space superiority as 'freedom to attack as well as freedom from attack', in Space. The Office of Science and Technology (OST) policy statement issued from the Office of the President on 6 October 2006 states that the US will oppose regimes that seek to prohibit US access to the use of Space. Proposed arms control agreements must not impair the rights of the US to conduct research, development, testing and operations or other activities in Space for US national interests.

So it is a matter of speculation whether China's anti-satellite test was an announcement of starting an arms race or joining the arms race started by the US. One of the powers that falls in between is India, which has started Space cooperation with the US and there is a joint mission planned for 2016. So the issue for India is clear. In an escalatory scenario with China, if India's Space assets come under threat- what deterrent power does India possess to ensure the safety of all its Space assets on which it has become hugely dependent?

The Present Organisation's Historical Background

The historical areas of responsibility of commands are shown in Map 4 below30:-



Military Commands Pre-World War II

(Source: Imperial Gazetteer Atlas of India, Oxford.....Clarendon Press) 1931 Map 4

It may be seen that this map is the last one that existed before the Country went into the Second World War and then into Partition resulting in the Commands being subdivided between India and Pakistan. This is the last historic map the British intended for the defence of India, and is taken from the Gazette of India 1931. As can be seen, these areas of responsibility address the issue of ruling India. It does not address the geopolitical issues around India for which the British had other forces not under the C-in-C India. The main component of force not under the C-in-C India was the C-in-C Far East Fleet at Singapore with battleships and aircraft carriers. British military existed otherwise in Mauritius, Colombo, Aden, the Gulf, Diego Garcia, Malaya and Singapore. The map of the defence of India should be compared with **Map 3** which shows areas of concern for India in the next 15 years and it will be seen readily that the two have no bearing on each other. This is the issue to be addressed in this paper.

The current organisation of the Defence of India is a modification of what the British used to rule India – i.e. to keep India from revolting internally with a few cantonments set up at the North West Frontier to deal with the Pathans and Afghanistan.31 The organisation cannot deal with external threats that do not appear at the borders of India. After 65 years of Independence the threat to the borders of India have disappeared and the old system, no matter how much it renews itself, is withering from disuse and non-functionality. The region around India is one strategic entity. The British recognised this and used the entire land forces in India as one command – India Command, with one C-in-C, i.e. C-in-C India. The rest of the bits and pieces were put together by troops in the Gulf, Africa, Indian Ocean, Malaya and Singapore. As India becomes a regional power it has to use its imagination to realise that it wants to be more than a power merely defending its own territory – as C-in-C India did formerly. These suggestions are contained in the remaining portion of this paper.

Reorganisation of Theatre Commands32

In today's scenarios and that of the next decade theatre commands must look at a geo-political problem as a whole and not have the entire problem divided into little portions without one responsible theatre commander dealing with the entire whole. Countries in similar situations normally leave it to a theatre commander of sufficient stature and the wherewithal to deal with it holistically. Assuming that this proposal is agreed to, the theatre and force commander arrangements should be as given below:-

Theatre Command	Service	Remarks
Northern Theatre Command	Army	Based on existing Northern and Central

Eastern Theatre Command	Army	Commands Based on Existing Eastern Command
Air Defence Command	Air Force	Responsible for air defence of India
Strike Command	Air Force	Responsible for air strikes in the entire region
Indian Ocean Theatre Command	Navy	Responsible for eastern Indian Ocean Region less Andaman Sea and Malacca Straits
Andaman Command	Navy	Andaman Area and East Bay of Bengal
Peninsula Command	Army	Present Southern Command
Western Theatre Command	Army	Western and South Western Commands.

Present Force Commanders

Strategic Force Commander	Tri- service
Aerospace Command	Tri- service
Army Training Command	Army
Naval Training Command	Navy
Air Force Training Command	Air Force
Military Air Lift Command	Air Force
Special Operation Command	Army
Expeditionary Forces Command	Navy

The Chief of the Defence Staff (CDS)

In a conventional war across defined land frontiers i.e. defence of national territory the system of single service chiefs managing and commanding their respective services is workable, as there are no theatre commands. When the system has to cope with transnational operations there is little doubt that firstly, theatre commands are necessary; secondly, that theatre commanders have to be under a commander like the CDS and thirdly, the PM or the highest political authority needs single point military advice, which can come only from a CDS.

The geo-political scenario being made out for India in the next 15 years is that the chances of a war over territory are remote across the International Boundary Limits (IBLs). But on the other hand, we will have military interests in Tibet, in the Indian Ocean, in Myanmar, in the Andaman Sea and Malacca straits and possibly, in the Middle East. There is no military commander today mandated to handle any of these theatres militarily. For these reasons we have to shift from a 'defence of India' mode to a transnational military mode with theatre commanders and a CDS. The Kargil Review Committee (KRC) has made scathing remarks on the non-effectiveness of the Chiefs of Staff Committee (COSC) in providing single point military advice and in resolving disputes between the three Services. As is well known, the Arun Singh committee, set up after the KRC, went only half way in correcting the systemic dysfunctions and stopped short of creating a CDS because of internal opposition from the civil bureaucracy, the Air Force and the politicians. That process cannot remain incomplete forever.

Conclusion

There are many views on what the ideal national security planning process should be, but all processes suggested begin with the writing of a 'setting' or a 'strategic and technological environment' in which the national strategy is to be fitted into. That a territorial threat is a temporary and unreal threat that new found states may have to deal with during the early years of their existence, and that these threats disappear over a period of time. It was with this purpose that the author wrote his book '*The Long View from Delhi*' in the year 2010. That book described the scenarios that India would

find itself facing by the year 2025. In this paper some of the scenarios have been presented in a truncated manner so that the reader is clear as to what scenario is the strategy paper addressing.

In the second half or closing parts of the paper the organisation the country already has to deal with external threats have been amplified, beginning with the present organisation of commands during the British era. It is readily seen that the British left us with commands that grew organically, as the East India Company came to rule larger and larger parts of the country. The system of commands were never rationalised during British rule because the existing organisation fulfilled the requirements of London ruling the Country. On the one occasion when India was actually faced with an external threat, as from the Japanese invasion through Burma, the organisation that was created for the reconquest of Burma was external to the command organisation for India. In the reconquest of Burma, a theatre commander was appointed and he had three force commanders under him for the Army, Navy and Air Force. That organisation was wound up and took over South East Asia before finally being terminated in 1946. So theatre commands is an old and proven concept in the Indian scene and has actually been tried out already.

When one combines both parts of this paper i.e. the first part which describes what scenarios we might have to deal with and then look at what we were left with there is a huge mismatch. It is not enough that Delhi directly deals with Myanmar, Afghanistan, the Indian Ocean and the Middle East, while all that the commands do is worry about cross border threats that fail to emerge. To get rid of the mismatch and introduce the idea of theatre commands, a list of recommended theatre commands has been suggested. After doing so, it is found that many functions of a tri-service nature, like Space and Special Operations are still unaccounted for. So a separate list of tri-service organizations headed by three star officers have been listed in addition to theatre commands. If these two suggestions are implemented, the deficiencies in the present set up will be neutralised and the new organisation will reflect the actual scenarios confronting the Country.

This paper attempts to put out two major ideas – the first is that national security planning must address some specific scenarios and the scenarios must be articulated. It is not enough to say that national security is about safeguarding territorial integrity and merely fending possible threats to territorial integrity. The second postulate is that once the scenario is identified, national institutions assist to create a policy and execute a plan. Both processes are either weak in India or don't exist. Synergy can only be created when institutions are constantly audited to see whether they are functioning as they are meant to be. From that point of view, papers like this one commissioned by the USI perform a useful function to check the health of the system and suggest improvements.

Endnotes

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Journal of the United Service Institution of India, Vol. CXLI, No. 587, January-March 2012.