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EDITOR'S NOTE

Regular readers of this journal will, no doubt, have noticed that it covers considerable ground. A myriad subjects are addressed. Each subject comprises a part of the research areas undertaken by the Centre of Air Power Studies. We are confident that our readers will find some articles of interest, while some others will excite their desire for further study.

This issue has articles by young scholars as well as by the more seasoned and mature researchers. Some of the articles bear special mention. The first-hand account of Operation Cactus is fascinating and so are the views expressed regarding defence cooperation and environment change. One of our 'outreach' scholars from Manipal University has written on the Boeing P-8I aircraft and this is indicative of a growing welcome trend of university students wanting to pursue knowledge in defence studies and national security. Another such scholar has written on the live topic of "The Key to the Iranian Nuclear Impasse". The Centre continues to support such 'outreach' programmes.

The journal also includes articles on international relations, including besides Pakistan and China, a study on the East Asian paradox and Japan's rearmament.

It will be our endeavour to continue to publish articles covering diverse fields and we welcome contributions from our readers.

Happy Reading



OPERATION CACTUS: AN EYEWITNESS ACCOUNT

ASHOK K. CHORDIA

There are times to take well-reasoned risks, and victory is its own validation.

— Anthony S. Cordesman¹

OPERATION CACTUS: A QUICK TOUR

On November 2, 1988, there was an attempt to overthrow President Maumoon Abdul Gayoom of the Republic of Maldives. Some Maldivian nationals and their Sri Lankan allies plotted the coup in Colombo and about 80 mercenaries attempted to overthrow the government of the day. The President sent an S.O.S. message to the then Indian Prime Minister, Mr Rajiv Gandhi, seeking military assistance to save him and his country. The Indian response was prompt and decisive. Operation Cactus projected the prowess of Indian diplomacy and showcased the remarkable jointness of the country's armed forces. In a daring airborne operation, the Indian Air Force (IAF) airlifted paratroopers who rescued the President and secured the airstrip; the Indian Navy coerced the fleeing terrorists to surrender. Operation Cactus is a success story in as much as the Indian armed forces achieved the mission they had embarked on, namely, rescue of the President and restoration of the legitimate government.

Group Captain **Ashok K. Chordia** is a Senior Fellow at the Centre for Air Power Studies, New Delhi.

1. Anthony S. Cordesman, *The Iraq War: Strategy, Tactics and Military Lessons* (Dehra Dun: Natraj, 2006), p. 60.

A revisit and a closer look reveal some glitches and bring up points to ponder over for the conduct of similar operations in the future.

I was onboard the first IL-76 aircraft that landed at Hulule airport on the night of November 3/4, 1988. I led a team of Parachute Jump Instructors (PJIs) who were a part of the Task Force designated to despatch the troops in case it was decided to undertake a paradrop. I saw the historical event unfolding – the preparation for the airlift, the emplaning, the flight and the safe landing. I spent the fateful night on the island and witnessed the action till peace descended on the atoll in the wee hours of the morning. Here is a description of what I saw. The effort has been to restrict the narrative to my sphere of activity. Facts shared by others associated with the operation have been included to give some semblance of seamlessness. What follows is what I *saw* and *perceived*. The views expressed are my own.

THE MALDIVES: GEO-POLITICS AND THE GENESIS OF THE CRISIS

The republic of the Maldives is an island nation in the Indian Ocean with 26 atolls about 700 km southwest of Sri Lanka and 400 km southwest of India. The distance from Agra, the mounting base for *Operation Cactus* is over 2,000 km. The Maldives encompass a territory spread over roughly 90,000 sq. km. The population of nearly 3,30,000 is scattered over 192 of its 1,192 islands. Malé is the capital and the largest city. Though for most part of its history, the Maldives has been a free nation, it was ruled for varying periods by the Portuguese and the Dutch. The country remained a British protectorate from 1887 until 1965 and became a republic in 1968.

Maumoon Abdul Gayoom's election as the President in 1978 marked the beginning of a period of political stability and economic development. Some of Gayoom's critics felt that he was an autocrat who crushed dissent by curtailing freedom. There were two unsuccessful coup attempts – one in 1980 and the other in 1983. A third attempt, in November 1988, nearly succeeded. Abdulla Luthufee, a Maldivian businessman felt that Gayoom was an autocrat and the election process in his country never gave a reasonable opportunity to the opposition. He wanted to get rid

of Gayoom at any cost.² He organised and led the deployment of an 80-member People's Liberation Organisation of Tamil Eelam (PLOTE) team. Helped by some Maldivians on the islands, the rebels managed to land on the beaches and forced Gayoom to go into hiding.

President Gayoom requested Prime Minister Rajiv Gandhi for military assistance for his own safety and security and to save the island nation from the terrorists. Although the then Sri Lankan President J. R. Jayewardene offered elite Sri Lankan troops to quell the coup, India acted more swiftly and decisively.

DECISION AND TASKING

At a meeting headed by the then Prime Minister Rajiv Gandhi and attended by the Defence Minister, Mr. K. C. Pant, the Defence Secretary, the three Service Chiefs, and their staff, and representatives of the Ministry of External Affairs and some other departments, the issue was discussed at length. A paradrop was contemplated but was rejected on the advice of Brig Vivek Sapatnekar, a paratrooper himself. The officer suggested capture of the airfield by a '*coup de mains*' landing.³

No. 44 Squadron was tasked to airlift 6 Para Battalion and some elements of 17 Para Field Artillery from Agra to Hulule. There was a lingering uncertainty about the security of the runway at Hulule. Therefore, at some stage, it was decided to carry parachutes on board the aircraft with the intent of paradropping some of the troops in case the need arose. At that point, I was standing by to proceed to the National Defence Academy (NDA), Khadakwasla, to lead a skydiving demonstration by *Akashganga*⁴. I was dropped out of the demonstration team and was detailed to lead a team of Parachute Jump Instructors (PJIs) *heading south*⁵. People were being informed on a *need to know* basis.

2. Shamindra Ferdinando, "Male Plot Leader Speaks Out", *Sunday Island*, November 2, 2011, 10:04 pm (Online) available at http://www.island.lk/index.php?page_cat=article-details&page=article-details&code_title=38250, accessed on April 14, 2012.

3. Brig Vivek Sapatnekar (Retd), *Address C/O 56 APO: Location Unknown* (Copyright © Vivek Sapatnekar, 2008), p. 165.

4. *Akashganga* is the IAF Skydiving Demonstration Team.

5. The concern for secrecy was so great that I was not told anything about the paradrop or the possible Drop Zone (DZ). In those days, when IPKF operations were in full spate, the guess was Sri Lanka. Besides, on an earlier occasion, I had spent nearly a month in Sular with 10 Para SF awaiting operational instructions for a paradrop as a part of Operation Pawan.

Meanwhile, three AN-32 aircraft of the Aviation Research Centre had airlifted the National Security Guards (NSG) to Nagpur and were awaiting further instructions. At noon, the Prime Minister gave the go-ahead for a military operation.

TAKE-OFF

The first troops started arriving at the 44 Squadron dispersal around 1100 hrs. The mass briefing took place in the squadron's briefing hall. Meanwhile, I was engaged in organising the team of dispatchers. I understand that during the briefing, it was discovered that the coordinates of the island given by the Army were inaccurate. Also, the Air Force had reservations about the carriage of certain items of equipment, which the Army had brought along for the airlift. These issues, and more were resolved progressively. Among other things, the cargo and formation details were communicated. Soon, the tarmac near No. 44 Squadron became a beehive of activity – men loading the aircraft, preparing manifests, bowsers refuelling and technicians inspecting the aircraft. By evening, the activities reached a crescendo.

The PJs helped the troops in settling down in the aircraft. I was in the aircraft, which had the Army top brass – Brig Bulsara and Col Joshi. The aircrew moved to the cockpit and carried out the pre-flight checks. It was when the mighty jets started whining that Brig Bulsara enquired which aircraft was the *lead* aircraft. Amid the din, I pointed at the other aircraft and then added that our aircraft was number *two* in the formation. That surprised him. He asked me to tell Gp Capt Goel that the Army's planning mandated that the officers and men seated in his aircraft and equipment loaded therein arrive *first* at the objective. I conveyed the message to Gp Capt Goel. He said that it was rather late to effect the change. Since the status quo was not acceptable to Brig Bulsara, the crew of the two aircraft were interchanged without ado. The aircraft formation got airborne from Agra at 1800 hrs.

FLIGHT

Soon after take-off, the officers and Junior Commissioned Officers (JCOs) got busy discussing the operation. They did not have maps and were using the photocopies of pages of some tourist magazines.

It was about an hour after take-off from Agra that I came to know of the destination – *Hulule*. No one present in the aircraft, except Mr. A.K. Banerjee, the Indian High Commissioner to the Maldives, had first-hand knowledge of what the island, the runway and the area around looked like. We were oblivious of the likely reception on landing. In a calm moment during the flight, I approached Brig Bulsara to pen down for me the thought that was uppermost in his mind. The Brigadier wrote, “We’ll secure the air-strip and the President by 1000 hrs tomorrow.” To a similar request, the Indian High Commissioner responded with, “Everything should go off as planned.”

As we neared Hulule, the indications were that the runway was *still* secure for the lead aircraft to land, meaning: *not in the control of the rebels*. That state was fluid. The probability of resistance after landing of the first aircraft and threat to the subsequent aircraft could not be ruled out. Depending on the developing situation, the second aircraft would be able to land or, may be, forced to return. Alternatively, the second aircraft could drop 60 paratroopers and return with the remaining troops and the load onboard. If the second option i.e., paradrop had to be exercised, guidance from the ground would be invaluable. So I was asked to de-plane with the troops and control a probable paradrop later, if necessitated.

LANDING AT HULULE

There was bare minimum verbal communication between the aircraft and the control tower at Hulule, which was still under the control of people friendly to the regime. It goes to the credit of the crew that they landed the aircraft with limited facilities – the lights only on one side of the runway were switched on, very briefly, just before touchdown. The landing was uneventful, though tense. The troops walked out of the aircraft and vanished on the island. I, along with Warrant Officer Karam Singh, a PJI, followed them with a GU-734 communication set. Eeriness permeated the peace and calm that prevailed on the island. The second aircraft followed suit and landed unhindered. The troops hurried out and got into action. Both the aircraft returned after airlanding the troops.

ACTION FOLLOWS

Brig Bulsara spoke reassuringly on the telephone to President Gayoom, “Mr President we have arrived ...” He got details of friendly elements and contacts on the island of Malé from the President. Speedboats available at Hulule were commandeered by the troops to approach Malé. The rebels at Malé also saw the *mighty jets* landing at Hulule. They were left with no choice but to abandon their mission and leave the island. In vain, they retreated towards the harbour. Nineteen people were killed in the ensuing exchange of fire. Their escape was made difficult by the fact that they had allowed the trawlers that had got them to Malé, to leave⁶. So they seized a merchant vessel, the *MV Progress Light*, and took a group of hostages, including a Maldivian Minister, Ahmed Mujuthaba and his wife. The *MV Progress Light* sailed amidst firing by Indian troops and headed for the waters between India and Sri Lanka.

Luthufee and his band of rebels did not know that an Indian Navy Task Force led by the *INS Godavari* was following them. The naval ships caught up with the *MV Progress Light* and demanded immediate surrender. In a desperate bid, the rebels shot one of the hostages and threw his body overboard. While Capt (IN) Gopalachari coerced Luthufee verbally, the Indian Navy (IN) ships harassed the rebels by firing at them. A tough stance by the IN and the Maldivians present onboard the *INS Godavari*, and a direct hit on to the hijacked vessel, forced the rebels to raise the white flag. They were taken on board the *INS Godavari* as the *MV Progress Light* sank.

PEACE DESCENDS AS THE SUN RISES

Peace descended on the island as the sun rose on November 4. I took a vehicle and surveyed the island of Hulule. I realised that there was no possibility of a paradrop on that island – not at all with D-5 parachutes that the troops were carrying. The sea was very close on all sides of the runway – if the troops had been paradropped, the parachutes would have drifted into the sea due to the prevailing winds. Still later, I took a speedboat and visited Malé. There was devastation all around – bullet marks on walls; damaged buildings;

6. They had sent back their trawlers, as they were confident of capturing the President and taking over the island.

and shattered office equipment. I met Maj Mohammed Zahir⁷, the Chief of the National Security Service (NSS) of Maldives – a much relieved man. He wrote a note of thanks in my diary, which read, “Your Government’s kind assistance is very much appreciated by our Force. National Security Service.” He gave me a cap badge, a formation sign of the NSS and two *empties* of the rounds fired in the night. I returned with the souvenirs to Hulule in the afternoon. By then, the news of the surrender by the rebels had reached us.

I boarded an AN-32 that evening and returned to Agra via Hyderabad.

JOINTNESS

Operation Cactus was a demonstration of a high level of jointness and synergy among the Indian armed forces. There were hardly any disagreements. Whatever small issues that came up, were ironed out in a professional manner. Mr. A. K. Bannerjee’s presence and the information that he shared was crucial.⁸

A point, however, deserves a mention here. Joint briefing is an occasion when the key personnel involved in the operation and those providing the support services come together to give a final shape to the plan before execution – issues like, formation (aircraft fin number-wise), emplaning time, door close time, take-off time, etc. are made known to all concerned. It appears that the Army representatives did not take notice in this instance, forcing a last minute change of crew. Those few minutes spent in the changeover could have impacted the operation.

WHAT IF ...

What if the rebels had placed some *asparagus*⁹ on the runway? The first aircraft would have crashed, leaving no scope for the second

7. He rose to be a Brigadier and still later, he became the Defence Minister in the Gayoom Cabinet.

8. “Maldives: A Victim of Indian Foreign Policy? Nov 3, 1988 Terrorist Attack and GMR in Perspective”, *Rajje News*, Sunday, April 14, 2013 available at <http://raajjnews.blogspot.in/2012/11/maldives-victim-of-indian-foreign.html> accessed on April 14, 2013.

9. Allusion here is to *Rommel’s asparagus*, which was a barricade system used by the Germans in World War II that prevented aircraft landing. The contraption included a long, thick wooden beam erected on the ground to cause obstruction. Occasionally, mines were placed on top. In this case, a few barrels of gasoline would have spelled the nemesis of *Operation Cactus*.

aircraft to touch down. The second aircraft would have had no option but to head for Cape Comorin.

What if we had paradropped the troops?¹⁰ The answer is simply horrifying – most of the troops would have drowned. The parachutes that the troops were carrying were the D-5 parachutes along with Z-5 Reserves. The drop height of 2,500 ft above ground level would have exposed the descending troops to the effect of the prevailing winds and the enemy's eyes for a long duration. The drill for accidental landing in water with the D-5/ Z-5 parachute system is cumbersome; and failure to follow it would have meant drowning even in shallow waters. Besides, the D-5 parachute can be jumped with small arms only; INSAS/ SLR class weapons cannot be jumped with D-5 parachutes. High Altitude High Opening (HAHO)¹¹ insertion, with knowledge of the weather, could be a better solution for the future.

SOME POINTS TO PONDER OVER

Entire Leadership in one Aircraft: After the changeover of the crew, two of the most experienced pilots and decision-makers in the IL-76 fleet at that time were in the lead aircraft along with the Army top brass and the Indian High Commissioner to the Maldives. Had there been an unfriendly welcome, the top rung would have been wiped out. It may not be possible to avoid such situations altogether but an effort can be made to avoid pulling *all the eggs in one basket*.

Advice and Adherence to it: Brig Sapatnekar had ruled out paradrop in the meeting in Delhi. Yet half the troops carried parachutes to Hulule. PJs were conspicuous by their absence at the planning stage in both Delhi and Agra. The Assistant Director of Operations (Para) at Air Headquarters (HQ) and the Chief Instructor at Paratroopers Training School, Agra, were the professionals who should have been consulted on the issue related to the paradrop. The right advice and adherence to it would have enabled the Army to carry more troops and equipment in place of parachutes and the anchor cables fitted to facilitate jumps.

10. This option was on the minds of the leaders, despite advice to the contrary.

11. In a High Altitude High Opening (HAHO) jump, a Combat Freefaller exits the aircraft at a *high altitude*, generally above 20,000 ft AMSL. He deploys the parachute immediately on exit, and then *flies* the canopy to the landing zone. HAHO jump technique offers one of the best and most stealthy way to infiltrate a target.

Troop Fatigue: The troops started arriving at about 1100 hrs. They may have been on their feet since about 0500 hrs. The first aircraft landed at Hulule at 2200 hrs and the troops went into action within minutes after touchdown – they had had a 17-hour day before getting into action. Any effort to reduce the time at any stage would lower *troop fatigue*. This must be a joint concern in future operations.

Secrecy: In 1988, mobile phones were not in use. It would have been difficult for anyone to pass the information across to accomplices at the other end. Now, with the communication being what it is, extra effort would be needed to maintain secrecy. Use of abandoned airfields for mounting bases could be a possible solution. For the same reasons, media briefings will assume greater importance. Lastly, those who *need to know* must include professionals.

VARYING PERCEPTIONS

The Indian government had launched the military operation at the behest of the Maldivian President to prevent bloodshed in the Maldives and to save a democratically elected government. Most people all over the world consider the Indian action *bona fide*. But perceptions vary – some Maldivian commentators on the social media raise a question about the Indian intention. They wonder if Operation Cactus was a covert operation designed to jump-start India's security relations with the Maldives.

Luthufee, though caught by the Indian Navy and handed over to the Maldivians, praises the Indian government for fairness in action, and saving him and others from being hanged by President Gayoom.

CONCLUSION

The success/failure of operations is (and must always be) measured in terms of the aims and objectives, and the extent to which they are achieved. Even when seen in hindsight, they must be viewed in the context of the then existing time, people, leadership – military, political, local/ operational level, and organisation, technology, resources, situation, compulsions and factors that affected the situation and the decision-making, and not in the present context.

Military operations contain an element of uncertainty and ambiguity, "fog" as Clausewitz had emphasised. The effort must be

to build on the strengths and to learn from the mistakes of the past and minimise *fog*. Besides, for all such operations in the future, time will be at a premium. Realistic training and drills to simulate situations will reduce the time between the decision and the execution during operations. Maps were not available in this instance. The effort must be made to be familiarised with the possible areas of operation where such intervention may be required. Compilation and maintenance of information on possible locations will be valuable. An eye on the geopolitics of the regions of interest will help anticipate requirements.

Note: The opinions expressed in this paper are the author's own and do not convey the views of any organisation.

ENVIRONMENT CHANGE: THE NEW ARENA OF DEFENCE COOPERATION

MANOJ KUMAR

The perception of the common man is that the defence forces are one of the biggest polluters and have scant regard for the existentialism associated with the entire discourse on environment change. Nothing could be farther from the truth; the defence forces are as much affected by the threat to human security as the social institutions which they seek to protect. In addition, the traditional notion of security, implying securing only the borders of the state, is fast disappearing as newer threats to humankind are emerging which do not respect boundaries nor follow the direct relationship of cause-and-effect. Environment change is one such threat.

The threat of environment change has not been studied by the defence establishment due to factors that have their roots in the fact that governments tend to view the debate from the narrow prism of social progress and economic implications. This has kept the defence forces largely out of the picture, so much so that most of them have not even checked their preparation to meet any eventual fall-out of the changing climate. These military institutions would face eventual consequences of climate change as would any other organisation in the country. This mindset is also caused by the fallacy that environment

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change (rather climate change) is an issue for future generations, judging that all the erstwhile publications emanating under the aegis of the Intergovernmental Panel on Climate Change (IPCC) had placed the timelines close to 2050 and beyond. This viewpoint is now changing as more and more sudden climatic events are being faced with a frequency and intensity not earlier predicted and even now, not precisely understood – be it the extreme heat and cold waves of the US, in the European Union (EU) or the totally fickle monsoons in India, the science remains a little hazy. Greenhouse Gas (GHG) emissions are increasing and are very likely to continue to increase over the next few decades since there is hardly any worthwhile global agreement to control them. This will bring about changes in wind, precipitation and temperature patterns. Globally, it is very likely that there will be an increase in extremes, heat-waves, and it is likely that there will be an increase in heavy precipitation and tropical cyclone intensity. Precipitation is projected to generally increase in high latitudes and decrease in sub-tropical regions.

The environment change impacts would not differentiate between a developed or an undeveloped country, a well-prepared or an unprepared institution within a country (albeit the adaptive capability would differ), and between an organisation that pollutes or one that doesn't. In the same vein, when the world grapples with the adverse consequences of climate change on our environment, the affected communities would exhort all and sundry (irrespective of the differentiation mentioned above) to carry on mitigation activities, to the extent possible. So when India and other developing countries of Southern Asia would be called to undertake carbon mitigation activities, post 2020 (this is being optimistic and hoping that humanity wakes up and agrees to a post Kyoto Protocol II world order), it is unimaginable that their military institutions would be kept out of the control regimes. This did not happen when the Montreal Protocol for phasing out Ozone Depleting Substances (ODS) was signed in 1987 and ratified later by almost all countries, and it won't happen now. The military institutions of the developed countries (whether part of the Kyoto Protocol mitigation target regime or not) had to work within the local/international emission control regime ambit and were not given any concession just because they are cornerstones of national security.

With the requirement of managing another variable in operational planning, military institutions in many countries would now scramble to prepare themselves for the contingencies emanating from environmental change as well as their control regimes. When the existing procedures are being modified/upgraded to meet these challenges, it would be appropriate to learn from the institutions that have already taken a lead in the field. The distinctiveness of military operations as compared to any non-military organisation makes a strong case for this cooperation to manifest primarily between the defence organisations. This paper would endeavour to study 'why and how' the subject of environment change could be placed high on the agenda of inter-state defence cooperation. The scope of subjects that can be discussed within the ambit of environment change is very large. Therefore, the broad concept of conducting the defence cooperation on the subject would also be covered. This is a complex subject for the countries of Southern Asia, primarily because of the sensitivities involved with anything that has to do with the military. It would be, thus, apt to showcase the potential of environmental subjects in being able to break traditional mistrust barriers; and, in a few cases, build new ones, if the process is not handled sensitively.

WIDENING THE AGENDA

Defence cooperation normally exists between two friendly countries. It is also inbuilt in the relations-normalising exercise that nations undertake to showcase to the world at large that they are mature states that have the ability to rise above the squabbles of the past. In that sense, defence cooperation is more of a posture that nations adopt to convey a variety of meanings. The ambit of defence cooperation includes conduct of joint military exercises, exchanging military personnel for training in the respective training institutes, military-to-military dialogues, exchange visits of defence personnel and inviting defence personnel for conferences/workshops, etc. With the involvement of the respective Ministry of Defence, the entire exercise of defence cooperation is an important cog in the conduct of a country's external relations. It is also used to further the bilateral friendly relations.

The subject of environment change has never been a part of the defence cooperation agenda that India draws up till now. While the learning value for the Indian defence establishment is immense, one should not forget that this benign subject offers scope for a meeting of the minds even in respect of countries that are mutually suspicious in our neighbourhood. Additionally, India's Look East policy can be given a suitable boost with 'environment change' being made a part of the dialogue with the militaries of the Association of Southeast Asian Nations (ASEAN). Even in cases of countries where defence cooperation is not actively considered, a dialogue on a non-controversial subject like environment change is possible. This would present a window for an interaction that can benefit us by being able to project, and discuss, friendly ideas. This subject, thus, should be actively considered in the defence cooperation agenda and a pool of specialists who work on the subject within the militaries need to be created. Bringing out a White Paper on the subject would be a start that would invite participation from other countries, even as a part of Track-II diplomacy.

STUDY OF ENVIRONMENT CHANGE: REGIONS OF INTEREST

Climate change is transforming the conventional roles of the security actors. With the polar ice melting, there would be an increase in sea level, causing stress on land resources. Similarly, other resources like water and food would become inadequate due to the rise in global temperatures, thus, exacerbating the already existing paucity. In such a scenario, the defence organisations would have to contend with many related issues. Firstly, they would have to deal with internal and external tensions related to lack of the vital resources mentioned above. This paucity would be more and more acute in the developing nations of Southern Asia as the ability of a nation to adapt to changing weather patterns is directly proportional to its development status. Water tensions due to the melting of ice in the Tibetan plateau coupled with increase in desertification and rising population is quite unique to Southern Asia. All these would add to the already existing international fault lines in the region. As a threat

multiplier, environment change has the potential to exacerbate (if not directly generate) destabilising conditions that could reshape the regional security environment.

Secondly, the effect of environment change and resource crunch on military installations, would pose a challenge. The ability of the military to adapt to these changes would be dependent upon its acceptance of the problem in the present and then working towards finding a customised solution to the same. These are long-term strategies, and a case study on the subject that would be described in subsequent paragraphs, would focus on how the situation is crying out for intervention. Thirdly, as the consequences of environment change would cause more and more sudden climatic events, the defence organisations would have to increasingly showcase their readiness in dealing with the situation, materially and mentally. Climate change will affect all facets: *where, when, why* and *how* the military operates, as is visible in the studies undertaken by a few militaries around the globe.

IMPLICATIONS FOR THE INDIAN MILITARY ESTABLISHMENT

The Indian military will face increasing political pressure to not only respond to climate change disasters, but also to climate change mitigation. Clean energy specifications may increasingly become part of the new acquisition process. The projected impact of climate change on the regional and domestic scenario means that the Indian military will face new stresses on its force structure, personnel training and the border security roles, which it has traditionally undertaken. Defence is currently not the lead department charged with dealing with climate change; nor will it be in the future. It is not required that it be made the lead agency but there is definitely a need to make it a stakeholder at least. However, even without it, the military will have to learn to form partnerships and collaborate with other military agencies and even the industry, to respond to the security impacts of climate change, which are almost always likely to be indirect. These would not wait for the military to be officially made a stakeholder in the climate change debate. The cause of environment change may lie in one region/country but its effect may be felt at a different place

altogether. Therein lies the dilemma – when the military in this part of the world is facing so many direct threats to national security, studying the indirect ones may mean stretching the resources thin. To this line of thinking one can only recommend that the enormity of the scale of the environmental challenge would require the defence institutions to be ready, and ‘forewarned is forearmed’.

Climate-induced population displacement, resource (land, water and natural resources crunch) wars and the further weakening of fragile states in the neighbourhood are some of the potential consequences of a changing climate that the Indian military would have to face. The social institutions would have to face the consequences too. It’s possible that dissatisfaction with government actions to mitigate climate change, while so far limited to the urban educated population, could contribute to domestic and regional instability. In a democracy, popular movements have forced the government’s hand on more than one occasion, and this could be just one more of the same. The ‘*Chipko*’ movement of the 1970s and the 1980s is a case in point.

CONCURRENT DISASTERS

As government departments, and very visible ones at that, the defence organisations will need to plan more for their role in domestic disaster response missions. The National Disaster Management Authority (NDMA) in India has its own set of procedures to tackle contingencies – man-made or natural. The defence organisations though utilised to tackle all major natural crises, have not been considered stakeholders in these procedures. This lack of foresight in governance should not allow for a sense of complacency within the military. Going by its own past experience and also learning from what the militaries in other countries are capable of doing during such contingencies, the Indian military has to be ready to deal with natural and man-made disasters.

The Indian military needs to be prepared for the co-occurrence of extreme weather events with other traditional/non-traditional source of security stress. What will happen when domestic infrastructure is damaged by an extreme climatic event at the same time that another such disaster overseas requires a response? Alternatively, if the co-occurrence of an extreme weather event takes place where the security

apparatus is already under stress, for example, in Naxal infested areas in central India, the reaction of the NDMA, paramilitary and Indian military would have to be suitably dovetailed. The Indian military should start planning for responding to scenarios such as the ones described above as the solutions are not easy to come by considering the lack of knowledge of variables that can unfold. Many militaries around the world are already practising these contingencies; to join forces is a good option.

NEW ENVIRONMENTAL STANDARDS

Environmental restrictions on the operation of military hardware and their installations may well exceed what the Indian defence establishment deemed to be acceptable at the start of capability development planning. Procuring particular items of equipment in compliance with the standards will incur costs. A case in point comprises the restrictions pursuant to the Montreal Protocol. The phase-out of ODS and putting a stop to their production from January 1, 2010, meant that certain chemicals that were hitherto being used in military hardware, were no longer freely available. Their export and import was greatly affected as even existing virgin ODS were banned from crossing national boundaries; permission is given only for exporting recycled ODS. One such chemical comprises halons that are used as a fire suppressant in military hardware like aircraft, armoured vehicles, and ships/submarines. It is common knowledge that military hardware is extremely costly and its phase-out/replacement cannot be thought about merely due to unavailability of a small amount of gas, however, precarious its usage may be. So the right idea would be to find a replacement for the halons. This is easier said than done; these wonder chemicals possess properties of non-corrosion, non-toxicity and have great efficacy in volumetric terms. This has ensured that their replacements are not available for many military aviation usages and a few other military applications. In such a scenario, the defence forces have to find their own solutions to these restrictions. There is no doubt that it would have been easier for any organisation to be prepared with modified processes to conserve and recycle halons if they had prior knowledge of the control regimes being imposed. It is obvious that all users of these gases – private

or government institutions – are, thus, stakeholders when the nation takes such a decision and, therefore, need to be consulted. This lesson would be pertinent when the nation formulates carbon mitigation strategies in the coming years.

If the Indian military is to be called upon to act during national crises related to sudden weather events, then they would face an increase in non-combat activities, which would require the procurement of dual-use equipment. These operations are also known as 'Military Operations Other Than War (MOOTW)'. This would become critical as the budget is restricted and the expertise for such procurement process is limited. The laying down of qualitative requirements for the new hardware would also have to take into account new environmental standards, changes in temperature and extremes in weather conditions that will affect the operation of equipment and deployment conditions.

Particularly for the Indian Air Force (IAF), airlift capacity will become increasingly important for missions during the growing number of natural/man-made calamities and a fleet with the potential to function in multiple roles will be essential, thus, necessitating new requirements for capital acquisitions. Adequate numbers of helicopters and fixed-wing assets capable of operating in extreme weather will also be necessary. The Navy would similarly have to up its capabilities for such events with more inductions of dual use assets like hospital ships, etc.

ENERGY EFFICIENCY

Responding to climate change would see sectoral emissions caps being put in place. Although the Indian defence establishment may not be separately pointed out, it would have to abide by local rules on waste treatment, emissions and energy efficiency. This may see greater pressure to moderate its consumption of energy, reduce its impact on the environment and continue to lead other best-practice standards.¹ The amount of energy that the Indian defence establishment uses is not known at present. This may be the place for starting an efficiency

1. Air Mshl A. K. Singh, Wg Cdr Manoj Kumar (Retd) and Atul Bagai, *Ozone Protection and National Security: A Military Perspective (Toolkit for Defence Forces)* (United Nations Environment Programme, Multilateral Fund for the Implementation of the Montreal Protocol and Centre for Air Power Studies (Nepal: Jagadamba Press, 2009)

programme that could take a leaf from programmes already running on the same lines within and outside the country.

DATA MAPPING

As mentioned above, the process of preparation to face the multiple threats of environment change can only start with the gathering of environmental data and intelligence. This will help the Indian military to map potential scenarios and cascading impacts brought about by environment change, and formulate appropriate responses. These scenarios would be based on hard evidence and include studying the impact of environment change policies likely to be formulated by the government. Only with hard data can the military convey to the policy-makers a holistic picture of the impacts that may be seen once a proposed policy is being implemented. As an example, if the country is planning to phase-out HCFCs (Hydrochlorofluoro Carbons), as part of the Montreal Protocol, the military establishment can only react to the proposed time schedule and costs involved if they have the figures of equipment using the same. It is, therefore, imperative that the defence organisations learn from the experiences of each other, across different countries, by studying the effect of local environmental legislations on military procedures. This can be an easy starting dialogue considering that most of these issues would be in the public domain.

SEA-LEVEL RISE IMPACTS: CASE STUDY MUMBAI

It had been mentioned earlier that one of the adverse consequences of global warming would be sea level rise. The destruction, though not related to climate change, but, nevertheless, an adverse consequence of a natural calamity, caused by the tsunami of December 2004, would drive home the issue involved. The Indian Air Force's base at the Nicobar Island situated at the southern tip of its coastal borders, suffered damage to property as well as human life. This was a sudden environmental event, not easily predicted and, thus, forewarned. But the same cannot be said to be true for rising sea levels that would affect coastal towns like Mumbai in the coming decades. The naval administrative and other infrastructure situated on the southern tip of Mumbai city is specifically vulnerable as revealed by the state of the

adjacent Marine Drive during high tides. This situation is precarious even now, therefore, how it will degenerate in the coming decades, is anybody's guess. It takes on an ominous hue due to the serious paucity of land in Mumbai, as one moves inland. Nariman Point is the financial soul of Mumbai and is located in the near vicinity of the naval installations, thus, further reducing the scope of their relocation. With such a serious land crunch, it would be a difficult proposition to plan for relocation and easier to plan infrastructural safety measures. However, these moves require serious efforts and consultations with specialists, to learn from what the other institutions, within the country and abroad, are planning and their response. It's a long drawn effort that has to start now.

The case study described above is not just a one-off scenario and more such vulnerabilities would be evident once the defence forces take on the task of an environmental audit of their installations. Emerging environmental conditions will have implications for how the defence estate and associated military infrastructure are managed. The value of defence's coastal infrastructure and vulnerabilities to climate change effects will also have implications for defence budget planning. At present, there is little interest in climate change within the Indian defence establishment or its ministry. This is in contrast to the UK: its Ministry of Defence (MoD) has developed a climate change strategy and operational delivery plan that outlines how the British military will meet a fully legislated carbon budget. The UK military had appointed a star-ranked climate change and energy security envoy (now retired and appointed as the nation's envoy on the subject). The defence organisations in many developed countries have constituted groups that specifically study the vulnerabilities of their infrastructure. Learning from their experience would require cooperation and exchange of ideas/views. It is better than reinventing the wheel. Apart from reducing GHG emissions and increasing operational resilience, one of the major aims of defence cooperation being advocated in this paper will be to ensure that Indian military weapon platforms maintain full interoperability with friendly defence organisations in our areas of interest. This interoperability would not only be in the areas of force application but for humanitarian operations in hazardous situations.

THE THRUST...

The issues that can be discussed under the subject are indeed multi-dimensional. These may include the following and many more.

- As a threat multiplier, environment change has the potential to exacerbate destabilising conditions that could reshape the regional security environment.
- The effect of environment change would result in a resource crunch that would pose a challenge, to be managed effectively. The resource crunch would affect the military installations directly and could be a potential game changer.
- Since climate change would cause more and more sudden weather events, the defence organisations would have to increasingly showcase their readiness in dealing with disasters, materially and mentally. The militaries would need to be prepared for the co-occurrence of extreme weather events with other traditional/non-traditional source of security stresses. These can be jointly gamed.
- New environmental standards come up due to country specific legislations. An exchange of ideas on the impacts of such legislations would improve environmental governance and spread good practices of reducing carbon 'bootprints'. This is a win-win situation for all stakeholders.

Cooperation by the defence forces on the subject of environment has the potential to create new bonds and strengthen already existing ties. It should be actively considered owing to the benign nature of the subject and the possibilities that it offers in furthering bilateral and regional cooperation. Even in cases wherein a nation is not too keen to show military cooperation, the subject of environment change can help to remove the existing taboos.

ENVIRONMENTAL STRESSES AND REGIONAL CO-OPERATION: A PERSPECTIVE

NISHANT GUPTA

In the coming decades, changes in the environment—and the resulting upheavals, from droughts to inundated coastal areas—are likely to become a major driver of war and conflict.

— UN Secretary-General Ban Ki-moon

The greatest loss of human life and economic damage suffered by Southern Asia in the 21st century has not been due to inter-state wars or terrorism and its ensuing conflicts, but rather due to environmental disasters ranging from the 2005 Kashmir earthquake, the Indus floods of 2010, the Siachen avalanche of 2012 to the seasonal water shortages and droughts. Due to the enormity of destruction and loss of life, the most recent cloud burst in Uttarakhand has been termed the *Himalayan Tsunami*. For a better appreciation of these disasters, there is a need to study and understand issues related to environmental change.

Our past, present as well as future greatly depend upon the environment—natural, geographical, social as well as political. Since

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1996, the **Millennium Project** has been annually listing out the top 15 global challenges for humanity and the top three challenges in the 2011 Report are directly related to the environment. These are: **sustainable development and climate change; clean water; and population and resources.**¹ As per the **State of Future 2012** report, “*Environmental viability for our life support is diminishing ... climate change continues, and the gap between the rich and poor continues to widen dangerously.*”² ‘Sustainable development’ and ‘inclusive growth’ are essentially the core concerns of the 21st century.

Environmental changes have phenomenal social impacts like triggering, and intensification, of migration, possible increase in the number of weak and fragile states, risks to human rights, risks for global economic development, and risks of growing international distributional conflicts between the main drivers of climate change and those most affected. Climate change, one of the major constituents of environmental change and the most significant environmental threat, can exacerbate existing environmental crises like droughts, water scarcity, soil degradation; intensify land-use conflicts and trigger environmentally induced migration. Unabated climate change could further lead to large-scale changes in the earth systems like a glacial retreat in the Himalayas, sea-level rise, loss of the Asian monsoon or reduction/extinction of the Amazon rainforest. Nations and regions with political instability, weak governance structures, and low economic performance will be more vulnerable to climate change amplified conflicts. Demographic issues like high population density, resource scarcity and income disparity also add to the problem. Crisis and conflict management in such areas would be more challenging. Moreover, there is always a risk of spillover of the crisis to the neighbouring countries, transcending borders. The future prospects of water, food and energy security are bothering the world. There are concerns that ‘water’ could be the future ‘oil’. At least in the limited context of international competition, water security in the future is projected to be akin to the present-day’s oil (or energy) security.

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1. “The Millennium Project: Global Future Studies & Research,” accessed at <http://www.millennium-project.org> on June 12, 2013.
 2. “The State of Future 2012: Executive Summary,” accessed at <http://www.millennium-project.org/millennium/SOF2012-English.pdf>, on June 25, 2013.

WATER CRISIS

Water is the primary medium through which climate change influences the earth's ecosystem and, thus, the livelihood and well-being of societies. Higher temperatures and changes in extreme weather conditions are projected to affect availability and distribution of rainfall, snow melt, river flows and groundwater, and further deteriorate water quality. Globally, 783 million people do not have access to clean drinking water and water tables continue to fall around the world. The slow but steady Himalayan meltdown is one of the greatest environmental security threats in Asia. These mountains contain 40 percent of the world's freshwater, and provide water to 40 percent of humanity via seven great Asian rivers. The glacial retreat in the Himalayas will diminish the water supply for millions; changes in the annual monsoon pattern will badly affect agriculture; sea-level rise and cyclones will threaten human settlements and environmental refugees will cause disruption across the national borders.

According to the 2002 United Nations World Water Development Report, during the previous 50 years, there were 507 conflictive events over water. Amongst these, 37 involved violence, of which 21 consisted of military acts. Freshwater, whose consumption is increasing with rising population, would continue to be a crucial resource and its importance in the calculus of security dynamics is bound to enlarge. There is humongous international source interdependence on water as about 40 percent of humanity gets water from sources controlled by two or more countries. The **Kashmir** dispute also has its roots in water distribution and environmental survivability. As per some experts, Pakistan wanted Kashmir primarily to strengthen its survivability since all the rivers providing canal irrigation to West Punjab flowed through Kashmir. Religion is another dimension and face of the issue. In 1990, Gen Pervez Musharraf had argued as a young Brigadier that the Kashmir dispute was dependent on the distribution of the Indus river water between Pakistan and India, and if one were resolved, the other would not exist. He contended that from the Pakistani perspective, fair distribution of water is a prerequisite for resolving the Jammu and Kashmir (J&K) conflict.³

3. Nitin Pai, "Climate Change and National Security: Preparing India for New Conflict Scenarios," *The Indian National Interest Policy Brief*, no 1, April 2008.

Under the World Bank mediated 1960 'Indus Water Treaty' (IWT), the eastern rivers—Sutlej, Beas and Ravi—were allocated to India while the western rivers—Jhelum, Chenab and Indus—were allotted to Pakistan (barring their use by India under specified conditions in J&K), with limited consumption rights over these given to India. Despite three wars and several conflicts with Pakistan over the last five decades, India has been abiding by the treaty (though the Tulbul navigation project and the Baglihar, Kishanganga, and Salal hydroelectric power projects continue to be contentious issues revolving around the treaty between the two countries). During Operation Parakram, to end the stalemate and to pressurise Pakistan, in the summer of 2002, the Cabinet Committee on Security (CCS) had discussed the possibility of preventing water supply to the Pakistani deployments,⁴ but India finally decided in favour of abiding by the treaty and, thus, maintained the tradition of holding the high moral ground.

The Kashmir Valley greatly depends upon the glacier for its water supply as the rivers feeding the Valley draw water from the Himalayan glaciers, and climate change induced drying up of the glaciers will turn Kashmir from a *water surplus* state to a *water deficit* one.⁵ According to some climate change scenarios, following an initial period of high flows caused by accelerated glacial melt, it is predicted that the amount of water flowing into the Indus river system may decrease by as much as 30 to 40 percent within the next two decades. Additionally, the effects of climate change and siltation may reduce already-low reservoir capacity in the basin by 30 percent. The overall reduction in water availability may have a serious impact on irrigation. This, in turn, may affect food security. There are concerns about forecasts that increasing temperatures may reduce grain yields in Asia by 15 to 20 percent by 2050.⁶

As per the UN World Water Development Report, society is close to approaching the global limit of sustainable availability of water. It

4. Aditi Phadnis, "A Water Conflict in Kashmir" *Business Standard*, May 16, 2005, accessed at http://www.strategicforesight.com/sfgnews_122.htm, on May 13, 2013.

5. "How Green was my Valley?: Climate Change will Only Intensify Problems in Kashmir" *The Economist*, Asia Edition October 23, 2008, accessed at <http://www.economist.com/node/12480378> on March 18, 2013.

6. "The United Nations World Water Development Report 4" (Paris: UNESCO, 2012), ch. 44, p. 822.

also brings out that present global consumption is about 26,000KM³/ year and some assessments suggest that consumption of 'blue water' should not cross 4,000KM³/ year, as the ecosystem would not be able to sustain the supply. Whatever may be the case, there is no denial that some regions, including the Indus basin in Pakistan and India, have already crossed their sustainable water extraction limit.

A study on the water supply-demand balance in four rapidly growing countries and regions, including China and India, reflects that by 2030, current trajectories and unchanged policies would lead to growth projections incompatible with water endowments.⁷ In India, by 2030, there is expected to be a 50 percent gap between water demand and supply.⁸ Increasing water scarcity would make the cross-border water sharing a more sensitive issue, and may further exacerbate strained Indo-Pak relations. Any crisis between India and Pakistan is bound to draw in China, Pakistan's "all weather friend", and the United States, a longstanding ally of the Pakistani regimes but increasingly getting close to India. Thus, a water crisis in Southern Asia poses security challenges not only for India and Pakistan but the US and China may also get involved, and all the four states are nuclear armed.⁹ Let us further deliberate on the linkages between the environment and security.

LINKAGES BETWEEN ENVIRONMENT AND SECURITY

The interpretation and context of security may vary, but it is undeniable that generally every individual, group, institution and nation-state strives for greater security. The concept of security itself is inherently controversial, and international relations politics is no different. Security, in the post World War II era of international relations politics, generally connotes territorial integrity of a sovereign nation-state within the system of international laws as represented by the United Nations. Thus, in the 'classic' sense, the concept of security is primarily confined to preservation of the integrity of a state in the face of external threats in an anarchic international system; and the

7. Ibid., ch. 10, p. 279.

8. Ibid., ch. 13, p. 334.

9. On the other hand, China is also claiming Arunachal Pradesh, a rare regional area with rich water resources and great potential for hydroelectric power. But Indo-China issues have been kept out of the scope of this paper.

military is seen as the ultimate guardian of security. However, in the post Cold War era, the contours of security have been changing and expanding to include several other dimensions. It is generally recognised that increasing globalisation is changing the security dynamics, and insecurity, instability and violence are not due to external military aggression alone; rather, it may have complex political, economic, socio-cultural and ecological origins.

The North Atlantic Treaty Organisation (NATO) follows a concept of **comprehensive security** according to which military capability is not considered an adequate instrument; rather, comprehensive security calls for the ability to defend political and socio-economic crises that threaten to cross the threshold of violence, and to do so as early as possible, using non-military means, and if necessary, even military means. Thus, comprehensive security explicitly includes interests in securing strategic resources, which serve to safeguard affluence in the industrialised countries, and relates non-military areas with national security. And, slowly, concerns like environmental degradation and poverty, earlier known as 'soft' policy fields, have been accorded greater importance and hitherto non-military policy has been increasingly 'securitised'.¹⁰

In 1989, **Jessica Tuchman Mathews**, in her seminal work "Redefining Security", advocated that the 1990s will demand the need to broaden the definition of national security to include resources, environmental and demographic issues, as in the 1970s the notion of national security was expanded to include international economics. She brought out that the 1990s was the time to redefine the constituents of national security and include environmental and other issues, as in the 1970s, the USA had realised that its economy was no longer the independent force it had once been, but was powerfully affected by the economic policies of other nations.¹¹

The popularity of the concept and definition of the term '**human security**' also pertains to the beginning of the post Cold War period. In 1994, the UN Development Programme (UNDP) articulated the concept wherein the individual's security was given priority; since then, security needs are being reconceptualised in the international

10. *Climate Change as a Security Risk* (London: Earthscan, 2008), ch. 2, pp. 19-23.

11. Jessica Tuchman Mathews, "Redefining Security" *Foreign Affairs*, Spring 1989, pp. 162-177.

security discourse, shifting the focus from '**security of the state**' to '**security of the people**'. Resources and environment are amongst the core issues covered under the ambit of human security.¹² In the human security perspective, environmental security is not to be viewed through the prism of nation-states — rather, it has to be perceived as an ecosystem in which human beings as users and polluters are themselves the real threat to security. Emerging trends in defining security are definitely leading to the emergence of non-conventional security threats wherein environmental security is gaining prominence in no uncertain terms.

Environmental stresses would certainly overstretch the classic security policy and would lead to conflicts. The failure of the disaster management systems after extreme weather events and increasing environmental migration would pose unprecedented challenges to the national security framework. A well-coordinated policy and cooperation between development and security policy would be crucial. Environmental conflicts are more likely to place additional non-conventional demands on the security and defence forces, though the possibility of 'force on force' wars would continue to be factored into the security calculus since these cannot be ruled out. The inability of the large advanced military forces to establish peace in Iraq and Afghanistan clearly brings out an urgent need to remodel and transform the military forces so that they are suitably equipped, trained and prepared to meet the emerging non-conventional environmental security challenges that would also involve managing weak and fragile states and destabilised regions.¹³

But, as per the critics, the concept of human security blurs the boundaries between human development and human security; trivialises the importance of the state in dealing with such security threats; and plays down the traditional security risks. The concept of security should be confined to '*freedom from direct physical violence*'. Critics point out that enlargement of the scope of security makes identification of security risks, responsibilities and appropriate responses of the defence forces more difficult. As a result, it increases the scope and extent of militarisation and military intervention in non-

12. *Human Security Initiative*, accessed at <http://www.humansecurityinitiative.org/definition-human-security> on April 14, 2013.

13. n.10, p. 5.

military conflicts. Thus, diffusion of the concept of security would enhance militarisation by according legitimacy to the employment of the military in traditionally non-military conflicts.

At another level, the challenges of global environmental changes may be looked at as a vital reason for the global community to unite and coordinate counteractions. Since the environment is a global common and cannot be segregated and compartmentalised by political means, the international community must find reasons to unite and recognise environmental change as a threat to humankind and must make efforts to formulate a dynamic and well coordinated global environmental policy. Failure to do so would deepen the lines of division in international relations, and increase conflict and tension within and between states over resources. Other related issues like management of migration, compensation payments between the countries mainly responsible for the environmental degradation and the countries that are most affected by its destructive effects are also required to be adequately addressed.

REGIONAL COOPERATION: THE WAY FORWARD

Anthropogenic climate change is primarily caused by developed economies. There is a major difference between the per capita emissions of the developed nations and developing/newly industrialised nations, which is commonly termed as '*equity gap*'. Increasing industrialisation would lead to greater damage in the South and the worst affected countries would obviously strengthen their demand that the '*polluter pays*'. On the contrary, the developed nations are neither willing to share the technology nor to foot the bill as this would diminish their influence and technological edge over the developing nations. The convergence of North and South on such diverse interests does not appear to be materialising in the near future. Nevertheless, there is phenomenal scope for regional convergence within Southern Asia. One must always remember that the environment is a trans-national entity which cannot be compartmentalised according to political boundaries, thus, ecological cooperation amongst the nations is necessary to address environmental stresses. Only regional and global approaches have the potential to mitigate such stresses.

Besides the aforementioned IWT, there are several other examples of regional 'hydrodiplomacy'. Bangladesh, where the maximum numbers of people in the world are exposed to floods, cannot prevent tragic floods without cooperation from Nepal and India. The water sharing conflict between India and Bangladesh over the **Farakka Dam** was resolved in 1996 through a water allocation treaty. In the same year, the Indo-Nepal Treaty on the integrated Development of the Mahakali River was also signed.¹⁴

The region has been witness to many other environmental cooperation initiatives. In September 2012, the Pakistan-India Joint Commission (originally established in 1983) was revived after a gap of seven years. The Working Group on the environment agreed to cooperate on a variety of environmental issues, including climate change, energy, environmental protection, clean development mechanisms, biodiversity, sustainable forest conservation, and solid waste management. The commission's revival is one of the most promising signs, suggesting that some long-term cooperation on ecological issues may indeed be possible and could have a much larger impact on conflict resolution at the bilateral and regional levels. There are several other regional initiatives having a bearing on environmental cooperation like the South Asian Association for Regional Cooperation's (SAARC's) Thimphu Declaration on Climate Change (2010), Bay of Bengal Initiative for Multi-Sectoral Technical and Economic Cooperation (BIMSTEC), International Centre for Integrated Mountain Development (ICIMOD), a scientific organisation established in Kathmandu in 1983, the South Asian hub of the Climate and Development Knowledge Network (CDKN), established under the Copenhagen Climate Change Summit in 2009, South Asian Network for Development and Environmental Economics (SANDEE), South Asia Regional Initiative for Energy (SARI/Energy), South Asian Cooperative Environment Programme (SACEP), and Hindu Kush-Himalaya Hydrological Cycle Observation System (HKH-HYCOS).¹⁵ These initiatives are to be promoted, energised and strengthened

14. V.S. Ganesamurthy, *Environmental Status and Policy in India* (New Delhi: New Century Publication, 2011), p. 61.

15. Saleem H. Ali, *Ecological Cooperation in South Asia: The Way Forward* (Washington DC: New America Foundation, 2012), p.10.

further with a common agenda of achieving effective regional environmental governance.

However, rather than negotiating agreements that are structurally focussed on division of natural resources – the model followed in the Indus Water Treaty wherein rivers have been divided amongst both the nations on the basis of water flow metrics – it would be more judicious and productive to consider new cooperative mechanisms that focus on conservation and enhancement of the ecology and natural resources. Developments in more efficient use of natural resources would also reduce the scarcity and lessen the chances of conflicts over these resources. The mountain ecosystem, being environmentally vulnerable, critical in maintaining freshwater supply, and important in defining territorial borders, has to be conserved. The regional legitimacy and professional base of SAARC must be promoted and the organisation empowered to implement environmental diplomacy and regional peace-building. The cooperation and trust, thus, generated would also be helpful in resolving politically sensitive and long-standing regional territorial disputes, especially between India and Pakistan.

BOEING P-8I AND INDIA'S MARITIME SECURITY

SALONI SALIL

INTRODUCTION

In the new world order, wherein the types of challenges that nation-states face have changed, the focus has shifted from borders to the seas. With the Revolution in Naval Affairs (RNA), the tools used for fighting a war are driven by technology. In this regard, the importance of the Indian Ocean and India's pivotal position in the Indian Ocean Region cannot be ignored. With India's growing maritime threat perceptions, the Indian government has made significant efforts to procure sophisticated surveillance and sensor systems for better reconnaissance and security of its coastlines. Apart from acquiring aircraft carriers and strengthening stealth capabilities, there has been a rise in the role of air power, which has been greatly influencing the physical makeover of the Indian naval capacities. With a combination of air power and naval capabilities, India is fast moving towards becoming one of the most dominant forces in the region.

The aim of this paper would be to attain some functional knowledge about the most recent induction of the Boeing P-8I, an important addition to the Indian Navy (a surging blue water Navy

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in the making). Through this study, I would like to make a modest attempt to understand the features and technological relevance of this aircraft and analyse how it could address India's maritime threat perceptions; and its effectiveness in matching up to the Indian needs and countering challengers posing a threat to Indian national interests in the current security environment.

THE BOEING P-8I: FEATURES AND TECHNOLOGICAL RELEVANCE

In January 2009, the Boeing Company and India (becoming the first foreign buyer), signed a contract for acquiring eight P-8I maritime surveillance aircraft so that India could replace its Russian-made fleet with new and cutting-edge technology. So far, India has been the largest importer of defence equipment. Within four years of signing the contract, India received "the first Boeing [NYSE: BA] P-8I long-range maritime reconnaissance and anti-submarine warfare aircraft that arrived on schedule, at India Naval Station Rajali"¹ (also known as Arakkonam Naval Air Station, Tamil Nadu, with the longest runway in Asia).

As demonstrated by Boeing Company,² the P-8I is a long-range anti-submarine warfare, anti-surface warfare, intelligence, surveillance and reconnaissance aircraft capable of broad-area, maritime and littoral operations. The aircraft's speed, reliability, persistence and room for growth allow it to satisfy any customer's current and future requirements. It includes an open system architecture, advanced sensor and display technologies with a worldwide base of suppliers, parts and support equipment. It also includes the "APS-143C(V)3 Multi-Mode Radar (MMR), given by Telephonics Corporation as a part of the contract received by its Radar Systems Division from the Boeing Company. The contract includes systems to support the P-8I's aft radar installations integration and support services".³ The APY-10 surveillance radar installed in the P-8I

1. "1st Boeing P-8I Maritime Patrol Aircraft Arrives in India", May 15, 2013, available at <http://boeing.mediaroom.com/index.php?item=2677>
2. "P-8I", Defence, Space and Security, available at <http://www.boeing.com/boeing/defense-space/military/p8/>
3. "Telephonics Corp to Supply Aft Radar for India's Boeing P-8I Maritime Patrol Aircraft", available at <http://www.defence.pk/forums/indian-defence/81628-telephonics-corp-supply-aft-radar-indias-boeing-p-8i-maritime-patrol-aircraft.html>

is capable of providing accurate intelligence for all weather, day and night missions.

The P-8I is said to be equipped with the Indian-made sensor system built by Bharat Electronics Limited (BEL, state owned), with an identification friend or foe interrogator— a battle management system, capable of distinguishing between friendly and unfriendly forces⁴. The P-8I has an integrated “Avantel mobile satellite system and a speech secrecy system from the Electronics Corporation of India Limited (ECIL). The internal weapons bay can house Mark 54 torpedoes, depth charges and free-fall bombs. The underwing hardpoints can be armed with air-to-surface missiles”⁵. This technology has also reiterated India’s potential and commitment to achieve and augment the most sophisticated and avant-garde technology for building a strong offence and defence system. As stated by BEL Board member H.N. Ramakrishna, “The interrogator demonstrates our capability in cutting-edge work in avionics, software and structural components”⁶.

The next generation Boeing P-8I with its unique features and extremely strong and reliable system, is already a part of the United States Navy with three initial contracts already signed and is expected to get more buyers such as Australia and Canada, with Malaysia and Korea being among other probable customers.

INDIA’S MARITIME THREAT PERCEPTIONS

Despite the fact that the Indian periphery comprises a vast coastline, it was not paid much attention due to which it became an open gateway and also the most vulnerable gap in India’s security structure until recently, when non-states actors and activities such as piracy became an annoying reality. India has always been a victim of terrorist attacks; however, the attack of 26/11, in 2008, on its financial and commercial capital, Mumbai, opened a new kind of challenge for the Indian government to deal with, giving rise to yet another form of terrorism—“maritime terrorism”—defined as

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4. “P-8I Multimission Maritime Patrol Aircraft, India”, available at <http://www.naval-technology.com/projects/p-8i-maritime-patrol-aircraft-india/>
 5. Ibid. (P-8I MM patrol aircraft, India.)
 6. “Indian Designed Sensors Delivered to Boeing for P-8I Aircraft by Indian Navy (Notes: Social Networking Website) on Thursday, December 23, 2010.

“the undertaking of terrorist acts and activities within the maritime environment, using or against, vessels or fixed platforms at sea or in port, or against any one of their passengers or personnel, against coastal facilities or settlements, including tourist resorts, port areas and port towns or cities”⁷. This became one of the key reasons for India to seek and forge a naval capacity which cannot be deterred easily by belligerents. This event exposed the weaknesses of the Indian defence system. Firstly, the issue of intelligence failure came to the forefront. The problem of response timing was another issue. This event also reflected the gaps in the security system of the country all through its coastline. The attacks highlighted India’s inability to effectively monitor its coastline—a condition that is common to many littoral states in both the developing and developed world. Although R&AW (Research and Analyses Wing) had information (apparently secured from intercepts) about a possible terrorist landing by sea, whatever measures were taken proved insufficient to monitor the maritime traffic in and around Mumbai⁸.

India’s maritime threat perceptions are not unknown anymore. The Indian Ocean is home to five key strategic sea lanes, vital for trade. Any disruptions in the flow of trade through these can choke the economies of the nation-states. These choke points include the Strait of Hormuz; Strait of Malacca; Sunda Strait; Lombok Strait; Bab-el-Mandeb; and the Horn of Africa. More than 80 percent of the world’s seaborne trade in oil transits through the Indian Ocean choke points, with 40 percent passing through the Strait of Hormuz, 35 percent through the Strait of Malacca and 8 percent through the Bab el-Mandab Strait⁹. The Strait of Hormuz is the most crucial choke point connecting the Gulf of Oman and the Persian Gulf. If this transit is disrupted, it will lead to heavy cost and time overruns to the countries which carry out their trade from this part of the

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7. Akiva J. Lorenz, “Al-Qaeda’s Maritime Threat”, Maritime Research Centre (Institute for Counter Terrorism: April 2007), available at <http://www.maritimeterrorism.com/wp-content/uploads/2008/01/al-qaedas-maritime-threat.pdf>
 8. Angel Rabasa, Robert D. Blackwill, Peter Chalk, Kim Cragin, C. Christine Fair, Brian A. Jackson, Brian Michael Jenkins, Seth G. Jones, Nathaniel Shestak and Ashley J. Tellis, “The Lessons of Mumbai”, RAND Corporation (RAND Corporation, 2009), available at http://www.rand.org/pubs/occasional_papers/2009/RAND_OP249.pdf
 9. Sergei DeSilva-Ranasinghe, “Why The Indian Ocean Matters”, *The Diplomat*, March 2, 2011, available at <http://the-diplomat.com/2011/03/02/why-the-indian-ocean-matters/>

world. The Strait of Malacca links the Indian Ocean to the Pacific Ocean and, hence, is of great importance for the nation-states. It is a critical choke point with its narrowest point being the Philip Channel which is 1.5 nautical miles (nm) wide. This bottleneck, if blocked, can sunder a country's economy. Most of the trade that passes through this area comprises energy resources and, thus, needs an uninterrupted flow to provide the countries' economies a continuous growth. Closure of these routes would require the tankers or vessels to pass through the alternate sea lanes, namely, the Sunda Strait and the Lombok Strait. The Lombok Strait is wide enough for big vessels to pass through; however, it will cost more and will be more time consuming. On the other hand, the Sunda Strait restricts the passage of tankers due to its depth and strong currents. The Strait of Bab-el Mandeb connects the Gulf of Aden and the Red Sea. The blockade of this choke point would keep the vessels from the Persian Gulf from reaching the Suez Canal forcing the countries to go around the tip of Africa, adding to cost and time taken. These choke points also face threats from non-state actors. An oil tanker can be well used for a huge devastating explosive to disrupt the flow of trade through them, blocking oil supplies to a number of countries hugely dependent on the energy resources for the continued growth of their economies.

Piracy incidents have been a growing menace and can be said to be a result of several reasons, some of these being geographical area, failed governance and economic conditions. The spilling over of piracy incidents in India's neighbourhood, that is, the Arabian Sea and Bay of Bengal is a major issue of concern for India's national security environment. It is also feared that terrorists groups functioning in those areas to create instability in the region might fund these pirates. The sophisticated weaponry used by the pirates is an indicator that they could be more dangerous than the terrorist groups alone.

In addition, the most driving challenges are: China's so-called "string of pearls" strategy, viewed as an attempt to encircle India within its own theatre, the presence of extra-regional powers in the region, nuclearisation of the region and incursions into India through maritime as well as land borders. The practices of over-fishing, waste dumping, mining and illegal fishing are major concerns too. Due

to the increase in the number of reported oil-spills, the maritime environment of the country is being damaged. There are fears of oil-spills occurring in crucial choke points or closer to harbours that can have an impact on the flow of traffic in that area, leading to economic losses. Apart from this, all the important nuclear installations and industries are situated close to the coastlines. There is also the issue of wandering fishermen who claim to accidentally come close to, or enter, India's territorial water, that is, 12 nm and its Exclusive Economic Zone (EEZ) of 200 nm. India is, thus continuously facing, challenges to its interests and security.

In this regard, several scholars, security experts and key decision-makers have worked towards devising a forward looking strategy, with an ambition to make the Indian Navy one of the most dominant navies in the Indian Ocean Region (minding the presence of extra-regional powers in the region). The Indian Navy has been the area of focus and is being built up from strength to strength in every aspect.

Technology is doing so today, and will dictate the future of naval warfare. Strategic challenges arising from the issues related to maritime security are likely to force states to invest more in the navies in the coming years. Today, what is required is a manoeuvrable, networked surface combat ship. Apart from that, modifications in the hull design are required. New designs are being worked out for submarines, and fast patrol boats vessels.

P-8I: A POTENTIAL DEFENDER OF THE INDIAN COASTLINE?

The age old assertions made by the military strategist of the Spring and Autumn period, 'Sun Tzu', for continuous awareness of the adversary's intentions and movements, commend continual monitoring of the enemy's activities, as integral to the formation of a sound strategy or counter-strategy. This is essentially relevant to maintaining security and supremacy in battle. Prussian strategist Carl Von Clausewitz compounded "situational awareness" where a commander is to be thoroughly aware of all movements within the theatre of action, in order to craft a counter-strategy to defeat an enemy. However, both warn that the greatest victory in and for war, is the aversion of war itself. Clausewitz warns that war should not be fought for its own sake, as it has a tendency to escalate and, thus,

consume resources and weaken any country engaged in it, especially if the two parties engaged in the war possess capabilities that can inflict unacceptable destruction (weapons of mass destruction and super mach-speed modern delivery systems). The security dilemma, and the offence-defence balance are other dynamics that escalate the probability of conflict and war. 'Friction' as an accepted and unavoidable phenomenon, especially in regions with territorial disputes, constantly requires adequate attention and continual vigilance, otherwise it may provide the spark to trigger a major conflict, or even a general war.

Although the realisation for the need of a Revolution in Naval Affairs (RNA) came much later in India, it has been trying to acquire all the existing technologies to make its force structure more powerful in terms of countering threats. It has been able to achieve a certain amount of capabilities; however, in comparison to other nations in South Asia, India is still far behind China.

Sensor systems are used in the monitoring and verification of activities in regions and areas where a threat is likely to emanate from, or from an area where it is a challenge to put boots on the ground and maintain them there for that specific task. They are widely used for Intelligence, Surveillance, and Reconnaissance (ISR) activities. The strategic advantage of sensor systems is that they aid deterrence, as the idea that an adversary is aware of one's activities is a put off and constraint, since embarking on an operation can be hindered and foiled, making it a really risky and costly affair. Sensor technologies are critical to the enforcement of internationally declared ceasefire lines, maintenance of buffer zones, demilitarisation, and monitoring of borders against enemy infiltration with the intention to cause havoc and instability internally. They give a nation-state a robust edge over possible adversaries, and help to avert conflict in an increasingly complex, and highly unstable, security environment.

Nevertheless, the RNA in India has significantly impacted the strategic thinking and force structure. The Indian Navy has taken note of the developments in information warfare and has set in motion a series of initiatives towards a network-centric force focussed on network-centric warfare. According to the

2006-2007 Ministry of Defence Annual Report, networking and e-enabled solutions are two key thrusts of the Indian Navy¹⁰. For further understanding, the views expressed by Wg. Cdr AjeyLele, in his article, "**Technologies and National Security**", have been summarised here¹¹: nation-states believe that advances made in the field of science and technology provide solutions to a number of problems that the world is facing today. Today, the tools used for fighting a war are driven by technology. The impact of science and technology on the international security environment is all encompassing. Modern-day wars are not restricted to battlefields. In this regard, the essential requirements for securing a country's national interest, in this case for coastal security, are to obtain technologies which can help a country to achieve intelligence gathering, surveillance and reconnaissance capabilities.

India, to defend its borders, in this case, maritime borders, needs a hardcore and strongly effective system which can monitor each and every, even the most minute, movement in or around the Indian periphery that could potentially cause harm to the country's security. Learning lessons from the past, leaving no scope for repetition of history, India has been upgrading its naval as well as military capabilities by procuring the most advanced technologies.

The advances made in the field of Information and Communications Technology (ICT) have transformed the functioning of C4ISR (Command, Control, Communications, Computers, Intelligence, Surveillance and Reconnaissance), making it a cumbersome yet critical part of the operational activity of any military doctrine. All these technologies have their maritime aspects and the Indian Navy has expressed its intent, and is committed, to calibrate its force structure for network-centric warfare. Underwater vehicles for survey and inspection, high definition video systems, simulation of port security scenarios, a strong command and control system, effective intelligence gathering tools and airborne surveillance and reconnaissance equipment are what India is aspiring for.

10. Covered in the Annual Report of the Ministry of Defence, India, 2006-2007.

11. Wg. Cdr. Ajey Lele, "Technologies and National Security", *Indian Defence Review*, February 26, 2012, available at <http://www.indiandefencereview.com/defence-industry/Technologies-and-National-Security.html>

The P-8I is one such addition: with its most advanced features and up-to-date technology, it is expected to enhance the maritime surveillance capacity and capability in the Indian Ocean Region. "The P-8I incorporates not only design features unique to India, but also India-built subsystems that are tailored to the country's maritime patrol requirements. The P-8I is equipped with radar devices, which could detect ships and submarines within a radius of 200 nautical miles, while it could be fitted with missiles and torpedoes to attack the enemy submarines and ships."¹² The P-8I will supplement and improve India's endurance in anti-submarine and anti-shipping apart from surveillance capabilities¹³. The P-8I meant for India is also reportedly armed and equipped with "anti-ship Harpoon missiles, Mark-82 depth bombs and Mark-54 anti-submarine torpedoes"¹⁴. The "War-fighter's Weapon of Choice", will not be a part of the specific Indian made P-8Is that are meant to "convert unguided free-fall bombs into accurately guided, near-precision smart weapons". The tail section has a Global Positioning System (GPS)/Inertial Navigation System (INS) responsible for helping the bombs home on to the target with deadly accuracy¹⁵. However, with every technology there are some technological discrepancies.

In terms of operational effectiveness, certain gaps have been identified in the P-8I that concern India: "One is that the main fuel tank overheats in hot weather during grounding and low-level flight. This limits anti-submarine flight patterns, and has to be a 'must fix', given India's environment. The other concern involves faulty ESM systems for pinpointing radars and communications sources around the plane"¹⁶. The P-8Is also suffer from some problems such as "the

12. Defencekumar, "Indian Navy Adds Boeing's P-8I to Fleet", Asia Pacific Defence Forum, May 30, 2013, available at http://apdforum.com/en_GB/article/rmiap/articles/online/features/2013/05/30/india-navy-boeing

13. J. Shanmughasundram, "Navy Gets Hawk Eye as First of Eight Boeing P-8Is Flies in", *The Indian Express*, May 16, 2013, available at http://newindianexpress.com/states/tamil_nadu/Navy-gets-Hawk-Eye-as-first-of-eight-Boeing-P-8Is-flies-in/2013/05/16/article1591816.ece

14. Nirad Mudur, "India on Road to Tighten Coastal Security with Deadly P-8I from Boeing", February 7, 2013, *DNA*, available at <http://www.dnaindia.com/india/1797078/report-india-on-road-to-tighten-coastal-security-with-deadly-p8i-from-boeing>

15. Ibid.

16. "P-8I: India's Navy Picks Its Future High-End Maritime Patrol Aircraft", *Defence Industry Daily*, May 16, 2013, available at <https://www.defenseindustrydaily.com/indias-navy-holding-maritime-patrol-aircraft-competition-updated-01991/>

aircraft is working toward reliability goals, but its biggest problems lie with its sensors' ability to work as advertised, and to work together. Fortunately, India's P-8Is have alternatives in some cases, like different SATCOM and the APS-143(v)3 Ocean Eye radar¹⁷. However, the real-time effectiveness of the P-8I can only be time-tested now.

CONCLUSION

The Boeing P-8I has made a remarkable entry into the Indian Navy. "The Indian Navy is bolstering its blue water capabilities, strategically positioning itself to realise the country's stated aspiration to command a dominant role in the Indian Ocean"¹⁸. Regarding the volatile situation in India's immediate neighbourhood, the Indian Defence Minister, while addressing the media after the inaugural session of Aero India 2013, stated that the developments in the Indian Ocean Region are a matter of "real concern"¹⁹. Thus, acquisition of the P-8I is also one of the steps taken by India in order to safeguard its frontiers and backyard.

The current change in the security environment of the world has posed new types of challenges to nation-states, mostly emanating from the sea. The importance of the seas and the threats associated with them has led countries to augment their technological capabilities in order to secure their vulnerable coastlines. In this regard, India's vast coastline has challenged its national security owing to the volatility of the region. India has been trying to build its technological capacity by enhancing its current capabilities in the field of science and technology and has been making an attempt to acquire new ones by indigenous development as well as import from foreign sources. India needs to grab the opportunity and focus increasingly on technology transfers. It has not been able to articulate its requirements and is unable to make full use of foreign help as it fears that discussing such issues could enable that other countries to find the loopholes in India's security framework, which will expose its weaknesses, making it more vulnerable. India needs to grab the opportunity and focus more and more

17. Ibid.

18. "Indian Navy Aiming for Technological Self-Reliance", *India Strategic*, May 2013, available at http://www.indiastrategic.in/topstories2011_Indian_Navy_technological_self_reliance.htm

19. Mudur, n.13.

on technology transfers. India's research and development establishments include the National Technical Research Organisation (NTRO), Defence Research and Development Organisation (DRDO), Indian Space Research Organisation (ISRO), etc. that have been working to build technologies for maintaining the national security of the country with the help of public-private partnerships. Nevertheless, India has been lagging behind in terms of technologies and their applications in defence. The country has immense potential, which remains unexplored, but which can present India as a force to reckon with.

MAKING SENSE OF PAKISTAN'S STRATEGY

SHALINI CHAWLA

On August 6, 2013, Pakistani troops attacked an Indian post along the Line of Control (LoC) in the Poonch sector in Jammu and Kashmir(J&K), resulting in the killing of five Indian soldiers. Reports suggest that an unsuspecting Army patrol walked into an ambush by 15 to 20 men, close to Sarla and Chhaja posts, nearly a kilometre from the cross-LoC Trade Facilitation Centre (TFC) of Chakan Da Bagh in the early morning on August 6.¹

It was clearly a planned intrusion and not a routine ceasefire violation. According to senior Army officials, it was a professional assault carried out by regular Pakistani troops along with fully trained, armed militants. Pakistan, like always, has denied any involvement in the attack and the Pakistani Foreign Ministry issued a statement saying, "Our military authorities have confirmed that there had been no exchange of fire that could have resulted in such an incident."

The reaction from the Indian authorities was obviously much more fierce this time and the threshold of patience to tolerate acts of this nature has been breached. However, Pakistan has denied involvement in the incident and alleges that these were non-state actors from Kashmir (the so-called freedom fighters, Mujahids) who actually crossed the LoC and ambushed the Indian soldiers. But

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1. Ahmed Ali Fayyaz, "Five Indian Soldiers Killed Near LoC", *The Hindu*, August 6, 2013.

the fact remains that an act of this level could not have been carried without the full support of the Pakistan Army. The incident took place well inside the Indian side of the LoC and this does require sufficient operational planning with inputs from the professional army. Brig Gurmeet Kanwal, with ample experience of serving in the Indian Army, says:

A large-sized terrorist group simply cannot get through the Army's well-coordinated defences, navigate the anti-personnel minefields and then come back safely after several rounds of firing have taken place with enough noise having been generated to wake up the sleeping soldiers of the Pakistan Army -- that is, if they were asleep in the first place. They are more likely to have been waiting eagerly to welcome back the raiding party. In short, explicit connivance is an inescapable prerequisite for a trans-LoC raid to succeed.²

The political leadership in India has issued firm statements condemning the act. Congress President Sonia Gandhi said that the "Indian soldiers could not be cowed down by such blatant acts of deceit and urged the Government of India to take appropriate measures".³

There has been a significant increase in the number of ceasefire violations this year, and the number of infiltration attempts have reportedly doubled this year as compared to the previous year 2012. There have been 57 ceasefire violations till August 2013, which is 80 percent more than the violations last year during the same period.⁴

The recent incident did not take place in isolation and is part of a series of very crucial events which have taken place this year. Early this year, we had the incident of Indian soldiers being beheaded, followed by Sarabjit's death in a Pakistani prison. And on August 3, suicide bombers targeted the Indian Consulate in Jalalabad, killing 12 civilians.

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2. Gurmeet Kanwal, "Provocation on the LoC Merits a Befitting Response", August 12, 2013, <http://www.rediff.com/news/column/provocation-on-the-loc-merits-a-befitting-response/20130812.htm>
 3. "Congress President Sonia Gandhi's Statement on Five Indians Killed by Pakistani Troops", August 6, 2013, NDTV.com.
 4. "Defence Minister A. K. Antony's Statement on Five Indian Being Killed by Pakistani Troops", August 6, 2013, NDTV.com.

The ceasefire violation on August 6, 2013, took place just before India-Pakistan talks were about to take place. Pakistani Prime Minister Nawaz Sharif, from the time of his election campaign, has repeatedly expressed a desire to improve the relationship with India. In fact, India has been one of the leading items in his agenda. Also, Pakistan Army Chief Ashraf Kayani has talked about India not being *enemy number one*, and that the real threat to Pakistan lies within. In July, 2013, Sherry Rehman, former Pakistani Ambassador to the United States, in her detailed talk at the Jamia Millia University, New Delhi, repeatedly asserted that Pakistan does not see India as the “prime enemy” and the nation has far too many other pressing issues to worry about. Her talk revolved around the fact that both nations need to put the past behind and move forward.

Pakistan has major challenges to counter, which include rising extremism, economic downslide and massive power shortage deeply impacting the industrial and social sectors, leading to added unrest in the country. However, in recent times, a ray of hope is emerging in the country with democracy managing to sustain itself. With the civilian regime seemingly keen on the normalisation of relations between the two countries, the question that needs to be asked is why such ceasefire violations recur at such frequent intervals. In fact, their frequency has significantly increased in the recent times even with the ray of hope surfacing in Pakistan.

Another question that needs an answer is: who would actually benefit in Pakistan by the disruption of talks or by the impeding normalisation of the relationship with India? The Nawaz Sharif government, even after the ceasefire violation, was insistent on the continuation of the scheduled dialogue between the two, till Pakistan’s National Assembly passed an anti-India resolution on August 13, 2013. The resolution, moved by Science and Technology Minister Zahid Hamid, who is a senior leader of the ruling party, Pakistan Muslim League-Nawaz [PML(N)], accused Indian troops of “unprovoked aggression” on the LoC and the Minister purportedly wants to extend support to the “struggle” of the Kashmiri people.⁵The resolution comes after Pakistan’s Finance Minister, Ishaq Dar,

5. “Pakistan Adopts Anti-India Resolution”, August 13, 2013, <http://www.timesnow.tv/Pakistan-adopts-anti-India-resolution/articleshow/4434400.cms>

said that India would not be given the Most Favoured Nation (MFN) status in the future. There is a clear change in the posture of the civilian regime which initially appeared to not be in sync with the military when the ceasefire violation happened. There has been intermittent firing along the LoC after the killing of the five Indian soldiers.

What has happened now is nothing new in the India-Pakistan relations and should not surprise us. The army in Pakistan has been consistent in its strategy (against India) of maintaining the centrality of covert war (guerrilla war through terrorism). We have faced Pakistan's covert war for six decades now and one should not expect that this mindset will change. Pakistan's reliance on covert war through terrorism will continue in the coming years, although the tactics and intensity may undergo changes. Similarly, its acquisition of nuclear weapons will continue to be rationalised as a deterrent to Indian conventional military superiority and to provide an umbrella under which to pursue a proxy war through terrorism. The military and Inter-Services Intelligence (ISI) have conducted the covert war with the direct and indirect support of the civilian regimes in the last six decades and are likely to continue doing so.

PAKISTAN'S STRATEGY TOWARDS INDIA

We need to understand and evaluate Pakistan's strategy in order to find viable solutions. Pakistan has opted for a three-dimensional approach in its strategy towards India: conventional level, sub-conventional level and nuclear level.

Conventional Level

Pakistan has tried hard to attain parity with India in terms of the military build up. The military leadership in Pakistan has focussed primarily on defence build-up and modernisation, highlighting the strategic threats in the region. *Kashmir*, which eventually became more of an excuse than the real cause, has been a bone of contention between India and Pakistan for more than 50 years, and the military in Pakistan has boosted the issue within the country, adding to the insecurity of the nation and building a legitimate basis for Pakistan's weapon modernisation.

Pakistan has maintained a high defence budget, at an average rate of 5.5 per cent of the Gross Domestic Product (GDP), which, according to a retired Air Marshal of the Pakistan Air Force, did not include major weapon systems.⁶

This insecurity has been further deepened by the fragmentation of the Pakistani society as the frequently changing regimes in Pakistan and fragile democratic structure have failed to generate a sense of nationalism in the country. Islamic extremism and *jihadi* terrorism have continued to prosper in the country creating a deep armament culture in the country.

Basic Objectives Shaping Pakistan's Military Capability

Security concerns have always dominated the minds of Pakistan's leadership. Pervez Iqbal Cheema believes in "three possible roads to peace and security – disarmament, arms control and armament." According to him, "Most Third World countries view the first as idealistic, arms control as somewhat more pragmatic, and armament as necessary and realistic."⁷ Pakistan has looked at arms procurement to satisfy its security concerns. The perceived threat perception from India, strategic developments on the border with Afghanistan and the emerging technologies, have been the dominant factors contributing to the sources and kind of arms procurement by the nation. The basic objectives shaping the arms acquisitions of Pakistan are as follows:

- From its creation, Pakistan has been highly suspicious of India and the adversarial relationship with India has played a major role in the formation of its threat perception. The commonly accepted notion is that India, with its hegemonic ambitions, would dominate the South Asian region. The dominant military lobby in Pakistan has aggressively propagated the Indian threat within Pakistan to legitimise Pakistan's high defence spending, and on the international front to support the acquisition of high

6. Air Mshl A. Rashid Shaikh, PAF (Retd), "Security and Development: Hobson's Choice", *Defence Journal*, vol. XXI, May-June 1996, p.13, as cited in Jasjit Singh, "Trends in Defence Expenditure", *Asian Strategic Review 1998-99* (New Delhi: Knowledge World, 1999) p. 75.

7. Pervez Iqbal Cheema, " Arms Procurement in Pakistan: Balancing the Needs for Quality, Self-Reliance and Diversity of Supply", in Eric Arnett, ed., *Military Capacity and the Risk of War- China, India, Pakistan and Iran* (Sipri, Oxford University Press, 1997), p. 148.

technology weaponry. This also interacts with, and promotes, the military's special and dominant role in the country's power structure.

- Pakistan has been constantly engaged in the battle of matching Indian conventional military superiority. The strategic aims, as brought out in the Pakistani writings, are: "to strengthen national power; to prevent open aggression by India; to induce India to modify its goals, strategies, tactics and operations; to attain a position of security or, if possible, dominance, which would enhance the role of other (non-military) means of conflict; to promote and capitalize on advances in technology in order to reach parity or superiority in military power."⁸
- Pakistan has relied more on high technology weapons to seek competitive military advantage. The perceived military threat from India, which Pakistan considers an "intelligent and implacable enemy"⁹, has shaped Pakistan's decision to acquire and maintain technological superiority. "Pakistan must have a counter system for every Indian system, either to defend or to deter through the threat of riposte. If access to foreign aid is not assured, Pakistan needs to develop and keep a technology base sufficient to allow it to generate counter-systems to any new weapons the enemy might acquire through import or indigenous development"¹⁰.

The desire to acquire high technology weapons has been very strong in the Pakistan military and the alliance with the United States has provided Pakistan with opportunities to acquire these weapons. Pakistan believes that acquisition of high technology weapons would boost the morale and capability of the air force and, hence, improvement of the technological base and acquisition of advanced weaponry is vital for victory in war.¹¹

Pakistan has believed in offensive aggressive strategies and has

8. Ross Masood Husain, "Threat Perception and Military Planning in Pakistan; The Impact of Technology, Doctrine and Arms Control", in Eric Arnett, ed., *Threat Perception in Pakistan* (Oxford University Press, 1997), p. 130.

9. Ibid.

10. Ibid., p. 131.

11. See, Sobia Nisar, "The Pakistan Air Force", at <http://www.defencejournal.com/2001/august/airforce.htm>

had a deep-rooted belief that by going on the offensive, smaller size forces in history have won wars against bigger enemies. All the four wars which Pakistan has fought with India (in 1947-48, 1965, 1971 and 1999), have been initiated by Pakistan. The war in 1971 was caused by Pakistan's internal instability. But the actual war was initiated by Pakistan with a preemptive air strike against Indian Air Force bases on December 3. In addition, it has adopted the offensive route for its covert war through terrorism in J&K since 1988 (besides that in Punjab in 1983-93). Pakistan has relied heavily on the strategy of offensive action and, thus, the acquisitions of high technology weapons are sought to support this strategy.

The defence build-up in Pakistan has been facilitated by mainly three factors:

- Military's alliance with the United States
- Pakistan's consistently growing relationship with China
- Financial autonomy of the military within Pakistan

Sub-Conventional Level

Pakistan opted for the covert war option as early as 1947, when it launched its first aggression in the name of a tribal revolt. All the three wars initiated by Pakistan have been started in a covert manner. It has relied on the strategy of terrorism for more than six decades.

Pakistan opted for the covert route in its first aggression, which had the concurrence of the Pakistani leadership. The Pakistan Army, with the approval of the political leadership, decided to exploit a local uprising which had broken out in Poonch, hence, taking the initial step in covert warfare. Pakistan accelerated its infiltration activities and in order to carry out guerrilla warfare operations, sent a large number of Pathan tribesmen, Punjabis and other Pakistani nationals to defeat the Jammu and Kashmir (J&K) State Forces.

The aggression of 1947-48, formed the basic guidelines for Pakistan's future military strategy against India. The war established the pattern of Pakistan's covert war strategy as an important component of its grand strategy. The Pakistan Army leadership learnt many lessons to improve its strategy. The ceasefire agreement of 1949 failed to stop Pakistan in its covert actions in the Valley. During the 1965 War, Operation Gibraltar was the covert component and again,

in 1999, the Kargil War started under the guise of infiltration by the militants.

The role of religious ideology which took a radical turn, played a major role in intensifying Pakistan's covert actions. In the 1970s, Pakistan moved towards increasing Islamisation and the religious ideology, initially promoted by Zulfikar Ali Bhutto, was followed by the aggressive fundamentalist policies of Gen Zia-ul-Haq, which shaped the military's mindset. It was under Zia's leadership that the Pakistan Army changed its motto to include *jihad* as one of the three guiding principles. The loss of East Pakistan and rise of insurgency in Balochistan led the military and political leadership in Pakistan to intensify the religious ideology to counter any further division of Pakistan and also to motivate the nation for a aggressive posture against India.

In the 1980s, religious resurgence, coupled with increasing alienation of the youth for diverse reasons, started to grow in Kashmir, and Pakistan's strategy began to concretise. The insurgency in Kashmir became much more organised after 1988. The militants gained experience in Afghanistan and were more professional in carrying out covert warfare. Highly trained Mujahideen, many of them professional Special Forces, and terrorists joined the fighting in Kashmir. The ISI nurtured and trained the anti-India groups which have continued to be the military's assets and have been used successfully as proxies against India till date. In the 1990s and, 2000s Pakistan's covert war expanded to other parts of India with much more intensity.

Nuclear Level

For more than two decades, Pakistan has relied on nuclear weapons to conduct its grand strategy (of indirect approach) against India. Nuclear weapons are perceived as providing a foolproof guarantee of its sovereignty and survivability. The central assumption on which Pakistan has progressed and built up its nuclear arsenal is that a credible nuclear deterrent would compensate for the inferiority of its defence forces. According to Hasan Askari Rizvi, Pakistan lacks well trained, adequately equipped and numerically sufficient armed forces

vis-à-vis India.¹² The basic rationale for Pakistan acquiring nuclear weapons has been its expectation to neutralise India's perceived conventional military superiority and the way it was employed by it in the 1971 War. Former Foreign Minister Agha Shahi referred to it as the "Sword of Damocles" hanging over Pakistan's head; when stating the objectives of Pakistan's nuclear weapons, he said: "..... to equalise, to compensate our military imbalance that hangs like a sword of Damocles over the head of the nation which cut our country into two in 1971".

It is believed that Pakistan had acquired a credible nuclear deterrent capability by 1987 after which started the expansion and intensification of its covert war in India. The acquisition of nuclear capability enhanced Pakistan's capability to wage and escalate the covert war in Kashmir as nuclear weapons were believed to deter India from responding with conventional military retaliation.

Pakistan became more vocal about the possession of nuclear weapons in the late 1980s and then in the 1990s, in order to give the impression that any military move from the Indian side might be retaliated with the *Islamic bomb*. The Pakistan military now had the nuclear umbrella to shield it from the Indian military response. In 1989, the then Army Chief, Gen Aslam Beg asserted that Pakistan lost the previous wars with India due to "lack of clear strategic vision." He announced that Pakistan had a coherent strategy now. "One aspect of the strategy was launching of the militant proxy war in J&K from July 31, 1988; and the other was the achievement of nuclear deterrence (to provide "defence" in the offensive-defence strategic doctrine, while irregular war was used for the "offensive" component)."¹³

Pakistan's non-adherence to no first use was believed to serve the purpose of deterring India from responding with conventional military retaliation. Policy-makers in Pakistan seem to be convinced that they will be able to carry on, or rather accelerate, their activities in Kashmir under the broader threat of use of nuclear weapons, if required, and this would constrain India's strategic moves. This has

12. See, Hasan Askari Rizvi, *Military, State and Society in Pakistan* (London: Macmillan, 2000).

13. Gen Mirza Aslam Beg, *The Nation*, December 13, 1993, as cited in Jasjit Singh, "The Army in Pakistan", in Air Cmde Jasjit Singh, ed., *Kargil 1999: Pakistan's Fourth War for Kashmir* (New Delhi: Knowledge World, 1999), p. 47.

been the Pakistani thinking for long, but it has increased tremendously with Pakistan's acquisition of nuclear weapons and announcement of the first use policy.

CONCLUSION

Pakistan's military has been most confident about the sub-conventional or covert war dimension of its strategy and has continued its reliance on it. Over the past two decades, covert war has been carefully calibrated by the *bleeding through a thousand cuts philosophy*, so as to not to incite a major military response and a punitive action.

Pakistan has continued to adopt a posture of denial for its covert actions conducted along with the anti-India militant groups which the ISI has nurtured for decades now. For India, a critical imperative is to evaluate Pakistan's strategy and to probingly ask the question -- have we worked out a viable and effective strategy to defeat Pakistan's covert-war strategy?

Even though the civilian regime denies its involvement in the repeated acts of terror/infiltration, eventually, the Government of Pakistan has to be accountable for such incidents. India cannot afford a soft stance in response to continued acts of terrorism, even if Pakistan claims these are conducted by non-state factions. Peace talks between the two countries cannot take place parallel to blatant acts of terror and continued breach of the ceasefire agreement. Any steps towards normalisation of the relationship between the two necessarily needs to be conditional. India's posturing is vital in dealing with Pakistan. India's restraint should not be perceived as its weakness or lack of capability and resolve to retaliate.

APPLICABILITY OF *PANCHSHEEL* IN INDIA-CHINA RELATIONS

SANA HASHMI

BACKDROP

The year 2014 will be the sixtieth anniversary of the Five Principles of Peaceful Coexistence (popularly known as *Panchsheel* in India) jointly expounded by India and China in 1954. The mid-20th century witnessed a wave of struggles for liberation and independence by most Asian and African countries from the colonial and imperial powers. By the beginning of the 1950s, the newly independent countries were in acute need of a cardinal set of principles of conduct to govern their foreign policy behaviour with each other and the countries of the West. The idea of the Five Principles of Peaceful Coexistence was basically mooted in the post-colonial world in order to provide the ideological foundation for this developing paradigm of international interaction, allowing all nations to work towards peace and prosperity in cooperation, while maintaining their national identity, spirit and character where many were seeking an alternative ideology dedicated to peace and development of all.¹ The aim behind the proclamation

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1. External Publicity Division, "*Panchsheel*", Ministry of External Affairs, Government of India, at <http://meahindi.nic.in/hindixpsite/celdemo/panchsheel.pdf>, accessed on May 29, 2013.

of the Five Principles was perhaps that they would help to limit the damage caused by the vigorous pursuit of the Cold War by the two blocs ideologically opposed to each other, especially on the newly decolonised nations which did not want to be embroiled in the Cold War conflict.² In brief, *Panchsheel* had two dimensions: the first to regulate and lay the framework for relations between India and China [with the latter accepting the key principles of the United Nations (UN) Charter when it was not a member of the UN]; and, the second, as a framework for the conduct of international relations on a cooperative, non-ideological, non-intrusive, non-conflictual and equal basis.³

India and China were undergoing significant transformation almost at the same time. India became independent on August 15, 1947, and the People's Republic of China (PRC) was established on October 1, 1949. India established diplomatic relations with China on April 1, 1950, and was the first non-socialist country to recognise it. These two newly independent countries were apprehensive of the future course of action of the colonialists, and in the climate of uncertainties, Indian Prime Minister Jawaharlal Nehru and Chinese Premier Zhou Enlai issued a India-China joint communiqué on June 28, 1954, emphasising that it was the primary task of the newly independent countries of Asia and Africa to safeguard their national sovereignty and independence, and oppose interference from outside.⁴ Admittedly, these were the fundamental guidelines for handling the foreign relations between two developing nations, particularly India-China bilateral relations. The introduction of *Panchsheel* symbolised a great commencement of India-China bonhomie in the changing international system.

In the 1950s, the status of Tibet was a major point of divergence between India and China. Both countries held negotiations on the matter of the status of Tibet in the early 1950s. *Panchsheel*, or the Five Principles of Peaceful Coexistence, were first formally enunciated in the Agreement on Trade and Intercourse between the Tibet region of China and India signed on April 29, 1954, which stated, in its

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2. K. Subrahmanyam, "*Panchsheel* in the Twenty-First Century", in Jasjit Singh, ed., *India-China and Panchsheel* (New Delhi: Sanchar Publishing House, 1996), p. 64.
 3. Sujit Dutta, "*Panchsheel* and the Global Order", in *Ibid.*, p. 84.
 4. Yang Chengxu, "The Five Principles of Peaceful Coexistence are Full of Vitality", in *Ibid.*, p. 43.

preamble, that the two governments “have resolved to enter into the present Agreement based on the following principles”:⁵

- Mutual respect for each other’s territorial integrity and sovereignty;
- Mutual non-aggression;
- Mutual non-interference;
- Equality and mutual benefit; and
- Peaceful coexistence.

Most of the treaties and bilateral documents signed by China with more than 160 countries contain references to *Panchsheel* and it is also in harmony with the goals of the UN Charter.⁶ *Panchsheel* has also been widely accepted by most Asian and African countries while formulating their foreign policy doctrine. In April 1955, one year after China, India and Myanmar initiated the Five Principles of Peaceful Coexistence, a total of 29 newly independent nations from Asia and Africa held the historic “Asian-African Conference” in Bandung, Indonesia, and the conference adopted the “Declaration on Promotion of World Peace and Cooperation” encompassing the 10 principles of the Bandung Conference.⁷ Emphasising the importance of the Five Principles, China’s paramount leader Deng Xiaoping, in 1988, stated that “after all, the Five Principles of Peaceful Coexistence are the best principles to pursue. They are well defined, clear and concise. We should take the Five Principles of Peaceful Coexistence as norms to handle relations among countries”.⁸ In the views of India’s former Prime Minister P. V. Narasimha Rao, the architect of India’s Look East Policy, the modern doctrine of *Panchsheel* is essentially Asian, not just in linguistic terms, but because of the spirit that pervades the political declaration that was propounded by the leaders of the two largest nations in the world, India and China, sixty years ago.⁹

5. n. 1.

6. John Cherian, “India and China Celebrate the 50th Anniversary of the Signing of the *Panchsheel* Agreement”, *Frontline*, vol. 21, issue 15, July 17-30, 2004.

7. “Background: Five Principles of Peaceful Coexistence,” at http://news.xinhuanet.com/english/2005-04/08/content_2803638.htm, accessed on June 15, 2013.

8. “Build a New International Order on the Basis of the Five Principles of Peaceful Coexistence”, at <http://www.fmprc.gov.cn/eng/ziliao/3602/3604/t18016.htm>, accessed on June 1, 2013.

9. P. V. Narasimha Rao, “Inaugural Address,” in Singh, ed., n. 2, p. 21.

SIGNIFICANCE OF *PANCHSHEEL* IN INDIA-CHINA RELATIONS

India-China relations date back centuries and the two countries have historical, cultural and social linkages. Though they adopted different political, social and economic systems after independence, both found a long-lost friend in each other. The phrase *Hindi-Chini Bhai Bhai* (Indians and Chinese are brothers) came into being during this era which led to the signing of *Panchsheel* followed by the landmark visit of Jawaharlal Nehru to China in October 1954. The first ever milestone in their relations was achieved in 1954 with the ratification of the *Panchsheel* Agreement consisting of the Five Principles of Peaceful Coexistence. In a true sense, *Panchsheel* had laid the foundation of India-China relations for the simple fact that it is the first ever formal codification between them. Both India and China were in dire need of reliable friends in the initial years of their inception. The five principles made it easier for them to strengthen mutual trust and also put forth a set of guiding principles for shaping their bilateral relations constructively.

Implementation of these principles was extremely important for maintaining cordial relations between India and China. With China controlling Tibet, it was much closer to the Indian mainland than ever before; the two countries had never had a common frontier before the so-called Chinese reunification of Tibet with the motherland in 1950. Adopting new norms in order to give a distinct direction to their relations and govern the new frontiers was the need of the hour.

As far as China was concerned, India's conformity to these principles was crucial. The first-ever agreement between India and China mentioned Tibet as a part of China. Negotiations for the Agreement on Trade and Intercourse Between the Tibet Region of China and India which was based on the Five Principles of Peaceful Coexistence led India to recognise Tibet as a region of China which was a major success for the Chinese leadership. Though India formally accepted the Tibetan Autonomous Region as an integral part of China in 2003, it made it apparent even in 1954 that it had no reservations in accepting China's sovereignty over Tibet. Zhou Enlai, had good reasons to push for the agreement. When China emphasised on the non-intervention principle, it was about insisting that India lay

off Tibet and cede the many special privileges Delhi had inherited from the British Raj.¹⁰ Under the agreement, the Government of India agreed to withdraw its armed forces in Tibet and to hand over to the Chinese government all the posts, telegraph and telephone offices, together with all the equipment.¹¹

VIOLATION OF PANCHSHEEL

Unsurprisingly, in the years that have passed since the *Panchsheel* principles were formulated, they have been practised more in the breach than in observance.¹² The trajectory of India-China bilateral relations shows that India has always tried to conform to the principles of *Panchsheel*; whereas, China, on a number of occasions, did not hesitate to breach them. The 1962 India-China War and several other incursions along the India-China border are classic examples of violation of the first principle of peaceful coexistence, i.e., “mutual respect for each other’s territorial integrity and sovereignty”. The second principle, “mutual non-aggression”, was also violated just eight years after the formal codification of these principles. The India-China War of 1962 was not only a breach of these principles but also of India’s trust. It comprised a major setback in their relations and put *Panchsheel* on the backburner. *Panchsheel* became an inevitable casualty of the India-China conflict in 1962: it led to disenchantment with the significance of the principles in India, while in China, *Panchsheel* was forgotten during the Cultural Revolution (1966-76).¹³

Prime Minister Rajiv Gandhi’s landmark visit in 1988 put the relations back on track. In the joint statement, Rajiv Gandhi and Chinese Premier Li Peng stressed on the importance of *Panchsheel*:¹⁴

10. C. Raja Mohan, “How to Intervene”, *The Indian Express*, March 7, 2011.

11. Agreement Between the Republic of India and the People’s Republic of China on Trade and Intercourse Between Tibet Region of China and India (Beijing: Ministry of External Affairs of India, April 29, 1954) and *China’s Foreign Relations: A Chronology of Events (1949-88)* (Beijing: Foreign Languages Press, 1988), p. 257.

12. Subrahmanyam, n. 2, p. 63.

13. Sanjeev Kumar, “Time to Debate the Principles of *Panchsheel*”, *ICWA Viewpoints*, June 4, 2013, at <http://www.icwa.in/pdfs/VPtimetodebate.pdf>, accessed on June 5, 2013.

14. n. 1.

In 1954, India and China enunciated the *Panchsheel*, the Five Principles of Peaceful Coexistence. The principles we commended commanded scant acceptance then. The world was too intent on pursuing the path of confrontation to consider the alternative path that *Panchsheel* represented. Now, thirty tortured years later, the trajectory which the Five Principles indicated for the evolution of the world order is beginning to emerge as the world's path. We believe, as you do, that the Five Principles of Peaceful Coexistence provide the best way to handle relations between nations. Bloc politics and spheres of influence lead only to conflict, sharpening international relations.

Despite high level visits and proclamation of the Five Principles as the foundation of India-China bilateral relations, *Panchsheel* was always overlooked in practice. It is important to note that while India has never failed to acknowledge the 'One China Policy' without putting forth any conditions, China has been laying its claim of sovereignty over Indian territories since the 1950s. On the contrary, India recognises Tibet and Taiwan as integral parts of China. India had already lost Aksai Chin to China in 1962, and China continues to claim further Indian-controlled areas, including most of Arunachal Pradesh. As a matter of fact, border violations have become a common feature of their bilateral relations. The Chinese incursions into Indian territory, by land and air, increased after 2005, with as many as 233 violations in 2008 and more than 500 transgressions from 2010 to 2012.¹⁵ Most recently, in May 2013, Chinese platoons entered 19 km inside the Indian side of the Line of Actual Control (LAC) and established tents for three weeks, the reason for which is still uncertain.

China has, time and again, accused India of meddling in its internal affairs. Granting political asylum to the 14th Dalai Lama along with 80,000 Tibetans in 1959, according to the Chinese leadership, was a violation of the Five Principles. However, India has maintained that the Tibetans are not allowed to carry out any

15. Suman Sharma, "Army Accessed China War-Game Plan, Did Not Enhance Security", *The Sunday Guardian*, April 27, 2013, at, <http://www.sundayguardian.com/news/army-accessed-china-war-game-plan-did-not-enhance-security>, accessed on May 15, 2013.

anti-China activity on Indian soil. India-Vietnam cooperation in joint oil exploration activities in the South China Sea – what China calls its core internal matter – is also categorised by China as India's interference in China's internal affairs. The protest by China resulted in India eventually withdrawing from joint oil exploration activities. India has refuted all the blame and reiterated that it has always kept itself away from China's internal matters. Furthermore, the alleged Brahmaputra diversion project undertaken by China also threatens the possibility of coexisting peacefully. Such unpleasant incidents and blame games generated debates in the Indian corridors of power about the feasibility of being at peace with China, and scholars began to doubt the credibility of the Five Principles vis-à-vis India-China bilateral relations.¹⁶

CONTEMPORARY RELEVANCE OF PANCHSHEEL

The Five Principles of Peaceful Coexistence, undeniably, have been the major reference point in India-China relations and, for that matter, China's foreign relations with other countries since its inception as a modern nation-state in 1949. In fact, the principles of *Panchsheel* have occupied a vital space in most of the joint agreements signed between India and China from 1954 till date. Most recently, during newly appointed Chinese Premier Li Keqiang's India visit in May 2013, Indian Prime Minister Manmohan Singh and Premier Li affirmed that "in order to further consolidate the strategic and cooperative partnership for peace and prosperity, realisation of the Five Principles of Peaceful Coexistence is conducive".¹⁷ Nevertheless, almost 60 years have passed by, and many questions still linger vis-à-vis the relevance and validity of these principles such as: do they still hold the same relevance they did at the time of initiation? Despite being such an ideal set of ideas, why is *Panchsheel* no longer pertinent? And, more importantly, why do India and China need to incorporate principles as moralistic as *Panchsheel* in their foreign policies?

16. Sana Hashmi, "Le Keqiang's India Visit: Rhetoric Over Results", *Rediff*, May 21, 2013, at <http://www.rediff.com/news/column/li-keqiangs-india-visit-rhetoric-over-results/20130521.htm>, accessed on May 21, 2013.

17. Joint Statement on the State Visit of Chinese Premier Li Keqiang to India, May 20, 2013, at <http://www.mea.gov.in/bilateral-documents.htm?dtl/21723/Joint+Statement+on+the+State+Visit+of+Chinese++Li+Keqiang+to+India>, accessed on May 20, 2013.

India-China relations are a victim of a constant dilemma in the Chinese foreign policy, i.e., whether to opt for a maximalist approach or peaceful coexistence with neighbours. China's maximalist approach in Asia is for political dominance of the region by replacing the US/Japanese influence in the long run as that would constitute a step toward becoming a major power.¹⁸ Likewise, South Asia, as a region, has the utmost importance in the Chinese foreign policy. China's reaching out to South Asia for establishing its foothold in the region is seen by the strategic community of the West as a tactic to ascertain its hegemony in the region and, in a broader context, in the Indian Ocean Region, which is being termed by the West as the "String of Pearls". There is clear evidence pointing towards China's reluctance to comply with the Five Principles of Peaceful Coexistence. China's maximalist approach to its foreign policy with reference to India has put a question mark on the relevance of *Panchsheel* in the contemporary times. However, China's breaching of these principles does not mean that they have no relevance. The failure in realising the Five Principles of *Panchsheel*, in no way, undermines their importance. *Panchsheel* is still an influential factor in India-China relations. If it can be made more relevant to India-China relations, it is bound to have an impact on the rest of the world given that India and China together constitute nearly 40 per cent of the world's total population.¹⁹

History reveals that it is inherent in the Chinese mindset to keep alive the old rivalries; whereas Nehru had a different vision altogether. For Nehru, the independence of the Asian and African countries brought in a new era where countries could coexist and cooperate peacefully, without any historical baggage. This difference in ideology and approach was, in a way, responsible for the violation of the principles for the simple fact that China was more interested in taking revenge than ensuring peaceful coexistence. However, as of now, the ideological differences have been left behind and India and China are walking together towards the path of peaceful coexistence of different ideologies.

Like all other countries in the international system, India and China also have certain objectives which shape their internal functioning as

18. Srikanth Kondapalli, "India's Northeast and Southeast Asia: Chinese Interests and Strategies", *IPCS Issue Brief*, No. 106, June 2009.

19. Jasjit Singh, "Introduction", in Singh, ed., n. 2, p. 8.

well as foreign policy conduct. While a country rightfully pursues its national interest, it is a prerequisite for it to seek a fine balance in ensuring its own national interest by abstaining from jeopardising other countries' national interest. In such a situation, these Five Principles provide countries with a roadmap to socialise with other countries without imperilling their national interests. Likewise, both India and China still need to highlight these principles while dealing with each other which, in turn, would help them to coexist peacefully without hurting each other's national interests.

India-China relations have seen many ups and downs since the 1950s. In the last six decades, India-China bilateral ties have been subjugated by mutual distrust due to the prolonged boundary dispute. Their bilateral relations are completely different from what these were in the initial years. The approach of the leadership towards each other has also changed though not so much from the Indian side. China's newly appointed President Xi Jinping, as soon as he assumed his responsibilities in March 2013, listed a "Five-Point Proposal" for guiding India-China relations. These are: maintain strategic communication and keep bilateral relations on the right track; harness each other's comparative strength and expand win-win cooperation in infrastructure, mutual investment and other areas; strengthen cultural ties and increase mutual understanding and friendship between our peoples; expand coordination and collaboration in multilateral affairs to jointly safeguard the legitimate rights and interests of developing countries and tackle global challenges; accommodate each other's core concerns and properly handle problems and differences existing between the two countries.²⁰ It would not be wrong to assert that the Five-Point Formula is an extension of the Five Principles of Peaceful Coexistence. It seems the current leadership is eager to adopt *Panchsheel* as the guiding principles in India-China relations. Nonetheless, the focus needs to be shifted to many untouched areas which have the potential to alter India-China relations in a productive manner. A non-aggression pact between India and China requires to be put on the priority list. Meaningful implementation of these principles would be an

20. Sanjay Baru, "Five Thoughts on China", *The Indian Express*, March 23, 2013, at <http://www.indianexpress.com/news/five-thoughts-on-china/1092790/>, accessed on May 28, 2013.

impeccable paragon of South-South cooperation. A sincere approach towards the realisation of *Panchsheel* in India-China relations is the prerequisite for healthy India-China relations in the 21st century.

Moreover, both countries have decided to commemorate the 60th anniversary of the Five Principles of Peaceful Coexistence in 2014 by designating it as the “Year of Friendly Exchanges”. In order to give a new direction to their bilateral relations, it is important for both India and China to underpin these principles not only in the joint statements but also in reality. Needless to say that repudiation of these principles is partly responsible for the numerous border incursions. Reinforcement of *Panchsheel* is central to the final settlement of the protracted border row. In the given situation where India-China relations have been marred by the more than fifty-year-old border dispute and ever-escalating mutual distrust, putting emphasis on the principles of *Panchsheel* is the need of the hour.

Lasting peace and prosperity in the world are not possible without the Five Principles of Peaceful Coexistence. *Panchsheel* is a means to mitigate distrust and improve relations. India-China problems can be resolved by following it religiously. Today, the need to promote these principles is greater than ever before given that India and China are economically dependent on each other. With the advent of globalisation and prevalence of economic interdependence, war or escalation of conflicts is no longer viable, which further enhances the importance of peaceful coexistence. Given that India and China have a profusion of convergent interests in the contemporary time, it provides them with infinite unexplored opportunities to rejuvenate their relations through the framework of *Panchsheel*.

INDIA'S NUCLEAR GRAND BARGAIN

SITAKANTA MISHRA

Amidst prolonged domestic opposition to new nuclear projects, India has received positive gestures from three countries that have so far remained adamant about its requirements for civil nuclear energy. On May 20, 2013, in a Joint Statement during the visit of Chinese Premier Li Keqiang, China and India agreed “for carrying out bilateral cooperation in civil nuclear energy”.¹ On May 29, Prime Minister Manmohan Singh agreed in a Joint Statement with the Japanese Prime Minister on the importance of such cooperation between the two countries.² On June 3, the Australian Prime Minister Julia Gillard expressed that her main aim was “to get away from the problem that prevented Australia into entering a uranium sale with India” and now she is “working on the safeguards agreement”.³

All this happening together may be coincidental; but, if these agreements really reach their logical conclusions, it would be a *grand*

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1. “Joint Statement on the State Visit of Chinese Premier Li Keqiang to India”, <http://www.mea.gov.in/bilateral-documents.htm?dtl/21723>, May 20, 2013.
2. “Joint Statement on Prime Minister’s Visit to Japan: Strengthening the Strategic and Global Partnership Between India and Japan beyond the 60th Anniversary of Diplomatic Relations”, <http://www.pib.nic.in/newsite/erelease.aspx?relid=96288>, May 29, 2013.
3. “Progress on Uranium Sale to India on Expected Lines: Australia”, <http://www.thehindubusinessline.com/news/international/progress-on-uranium-sale-to-india-on-expected-lines-australia/article4777497.ece>, June 3, 2013.

bargain to liberate India from the 'nuclear apartheid' once for all. However, the pace of the bargain and consequent achievements will depend on the degree of public acceptance, as well as expedition, of nuclear energy projects at home. Secondly, India needs to take stock of all the nuclear pacts it has signed so far to evaluate how many of them have really shown results. Thirdly, as national elections are due in Japan and Australia later this year and in India early next year, the contours of the bargains may alter in consonance with the outcomes of the polls and the ideology of the political party that assumes power. Therefore, it would be prudent to scrutinise all possible contours of the respective deals in advance while addressing genuine public concerns patiently.

CONTOURS OF SINO-INDIAN PROPOSAL

In the May 20, Joint Statement, Chinese Premier Li Keqiang and Prime Minister Manmohan Singh acknowledged that "expansion of the civil nuclear energy program is an essential component of their national energy plans to ensure energy security". Therefore, in line with their respective international commitments, the two countries "will carry out bilateral cooperation in civil nuclear energy". This certainly promises a new chapter in Sino-Indian relations and has the potential of a stable addition to the booming bilateral economic relationship provided both countries keep the nuclear trade away from bilateral contentious issues.

In 1993, China had supplied low enriched uranium for the Tarapur nuclear plant after the USA, in 1974, and France, in 1993, stopped their supplies. Ever since, there were limited opportunities for India-China cooperation in the nuclear energy sector. Though its uranium reserves comprise only one per cent of global reserves – even less than India's – China has an ambitious nuclear energy programme underway. China – a relative latecomer to the civil nuclear industry – is edging its way to become of a frontline nuclear energy nation. Following a two-pronged strategy, comprising both outbound activities and domestic capacity building, Beijing is fast becoming the "favoured nuclear partner" for nuclear developments across the world. Partnering in the nuclear front with China will certainly help India draw lessons from its strategy to become a "favoured guest"

both as an investor in international projects and as a customer for its own domestic demands.⁴

First of all, the absence of any nuclear cooperation between India and China would lead to unwarranted competition as both countries are targeting the same source for uranium procurement. Secondly, cooperation in the civil nuclear field would foster bilateral exchanges which will restore some balance in India's foreign policy undertaking as it is criticised as being West-oriented. Thirdly, since China is planning a major expansion of its nuclear energy programme and is expected to become the second biggest consumer of the radioactive metal (around 20 percent of global uranium demand), New Delhi's partnering with Beijing would help both become stakeholders in each other's programmes. In the process, foreign companies involved in China may get attracted to India's nuclear energy expansion programme.

However, imagining a Sino-Indian civil nuclear deal in line with the Indo-US nuclear deal at this point would be far-fetched. At the initial stage, both countries can focus their cooperation on safety and security, social acceptance, nuclear information management, uranium procurement issues and, perhaps, some technical exchanges. A few small cooperative steps initially would help in setting the tone of nuclear cooperation and develop mutual understanding, especially on India's credentials for membership of the Nuclear Suppliers Group (NSG) for which China is found to be a stumbling block.

A PROBLEMATIC PACT WITH JAPAN

Indicating a major shift in Japan's post-Hiroshima nuclear policy, the May 29 India-Japan Joint Statement has reaffirmed the importance of civil nuclear cooperation between India and Japan. However, many in Japan are of the view that such a "pact is problematic, especially in view of the fact that India is not a party to the nuclear nonproliferation treaty (NPT)".⁵ In fact, clause 31 of the Joint Statement gives an impression that "India, Japan differ on the Comprehensive Test Ban Treaty (CTBT)".⁶

4. Antony Froggatt, "Chinese Nuclear Goes Global", <http://www.chinadialogue.net/article/show/single/en/4957>, June 6, 2012.

5. "Problematic Pact with India", <http://www.japantimes.co.jp/opinion/2013/06/01/editorials/problematic-pact-with-india/>, May 31, 2013.

6. "India, Japan Differ on CTBT in Joint Statement", http://articles.timesofindia.indiatimes.com/2013-05-29/india/39600490_1_indian-ocean-joint-statement-ctbt, May 29, 2013.

While the Japanese Prime Minister “stressed the importance of bringing into force the CTBT at an early date”, his Indian counterpart reiterated New Delhi’s voluntary moratorium on nuclear tests.

Moreover, the Japanese domestic critics feel that such a pact with India “would further undermine the effectiveness and relevance of the NPT system”.⁷ An editorial in the Japanese national daily newspaper *Asahi Shimbun* opined, “Tokyo should ask New Delhi to become a party to the NPT and sign the CTBT”.⁸ In protest against the start of negotiations, the 2010 Nagasaki Peace Declaration said that Japan, despite having suffered due to the atomic bombing, by now dealing with a state that was a non-signatory to the NPT, was “severely weakening the NPT which is beyond intolerable”.⁹

Although an actual India-Japan civil nuclear deal may take a few more years to fructify, it is time to introspect if Japan is really going to compromise on its principled nuclear stand with India; if yes, why? Second, what would be the terms of negotiation for India to win a deal with Japan while maintaining its strategic programme, reprocessing rights, and non-proliferation stand? Third, what benefits, technological or otherwise, will accrue to India from Japan through the deal?

Taking into account the Japanese economic situation in the past two decades followed by the Fukushima disaster, Tokyo may come to terms with India for its potential as a huge market for nuclear energy technology. As the prospects for constructing new nuclear reactors in Japan are fading as a result of the 2011 disaster, the export of nuclear energy technology is of extreme interest to roughly 10,000 companies in Japan.¹⁰ Experts view that “the economic trickle-down effects from exports are huge. ... Japan’s technology is indispensable for the US and France”¹¹ As the US and France use Japanese-made parts for nuclear plants, the absence of a nuclear agreement between India and Japan slows down the nuclear business deals for those two nations as well.¹²

7. “Japan Should Ask India to Join NPT First”, Editorial, *Asahi Shimbun*, May 25, 2013.

8. Ibid.

9. P.K. Sundaram, “Nuclear Hazard in Tokyo, Delhi Embrace”, http://www.atimes.com/atimes/South_Asia/SOU-02-070613.html, June 7, 2013.

10. Jun Tabushi, Yuriko and Masaaki Shoji, “Abe Pushes Ahead with India Nuclear Agreement, Despite Concerns”, *The Asahi Shimbun*, May 30, 2013.

11. “Abe Pushes Ahead with India Nuclear Agreement, Despite Concerns”, *The Asahi Shimbun*, May 30, 2013.

12. Tabushi, et. al., n. 10.

To carry forward the deal, India may satisfy Japan by a separate bilateral pact or safeguards agreement ensuring its commitment to the moratorium nuclear tests and non-proliferation. As the stakes seem high for both India and Japan in such a pact, India should ensure that Japan agrees to the terms of its nuclear liability provisions for any future purchases. However, outright acceptance of, or a shifting attitude towards, the NPT or CTBT in their present forms would be difficult for the United Progressive Alliance (UPA) government which would have to convince the domestic public when the national election is at the doorstep. India's sentiments and compulsions should be conveyed to Japan in clear and sound terms.

In reference to the benefits of dealing with Japan, India's expectations of getting membership of international export control regimes like the NSG, Missile Technology Control Regime (MTCR), etc. would be facilitated. The most important benefit that would accrue to India through the Japanese cooperation is in the area of nuclear safety, by learning from Japan's experiences and lessons derived from the nuclear accident. However, in terms of other technological benefits, according to Dr A. Gopalakrishnan, Japan does not have any comprehensive nuclear reactor technology of its own today. It will either be GE-Hitachi or Westinghouse-Toshiba plants, which comprise mostly licence-based production in Japan wherein the technology control is mostly with the US companies.¹³ Therefore, to get reactors from GE or Westinghouse, India has to have a separate understanding or play ball with Japan as these companies have term and condition agreements with Tokyo on third-country sales.

Secondly, for the purchase of "Japanese reactors", according to Gopalakrishnan, India may not expect, or receive, much financing as the Japanese finances are in a shambles in the post-Fukushima years. Moreover, it would be prudent to wait until their "nuclear sector, including their questionable quality control system, is put back in order to repose confidence in them".¹⁴

Nevertheless, the Japanese interest in resuming the debate

13. "Japan to Sell Reactors to India!", email interaction with Dr A. Gopalakrishnan on June 1, 2013.

14. Ibid.

for a civil nuclear deal with India is a “big leap” in Japan’s nuclear policy. It is clear that Japan understands the symbolic and practical importance of a nuclear deal with India, especially after Australia lifted its ban on uranium exports to India in 2011. According to David Brewster, the issue may remain highly controversial in Japan, with formidable political opposition. Abe has been consistently forced to reiterate his desire for India to sign the CTBT, if not the NPT.¹⁵ However, there is a good chance that after the elections in the Japanese Upper House in July, Abe may have the political strength to push through an agreement. “This would represent a major conceptual change in Japan’s nuclear non-proliferation posture.... There could be wider implications than just making an exception for India”.¹⁶ Equally, this would be a major breakthrough in India’s nuclear diplomacy after the Indo-US civil nuclear deal.

AUSTRALIA’S FIRST NON-NPT CUSTOMER

If things move as planned, “India will be the first customer that is not a signatory to the NPT to get Australian uranium”.¹⁷ Normally, Canberra bans export of uranium to countries that are not a party to the NPT. Making an exception to this policy has been a quite big political issue in Australia, despite India’s strong non-proliferation credentials.

In fact, after the initial hesitation, Australia had agreed in principle in 2007 to export uranium to India “subject to India agreeing to very stringent safeguards and conditions”.¹⁸ Defending the Australian government’s decision to lift the ban on uranium sales to India, former Australian Premier John Howard spoke to Manmohan Singh (August 16, 2007) after which he announced negotiations between the two countries. But the “Australian government’s chief nuclear adviser Ziggy Switkowski expected a ban on further nuclear testing

15. David Brewster, “India, Japan and the Grand Bargain”, <http://www.indianexpress.com/news/india-japan-and-the-grand-bargain/1124537/2>, June 4, 2013.

16. Ibid.

17. PTI, “Progress on Uranium Sale to India on Expected Lines: Australian PM”, *Business Line*, June 3, 2013.

18. “Australia to Sell Uranium to India: Howard”, <http://www.expressindia.com/news/fullstory.php?newsid=90916>, August 16, 2007.

by India to be part of any deal".¹⁹ After the defeat of the Australian Labour Party (ALP) in the 2007 federal election, the momentum and willingness to cooperate with India in the civil nuclear field had waned. However, during the visit of the new Australian Prime Minister Kevin Rudd to New Delhi in November 2009, India pressed hard for uranium sales.²⁰

After the ALP came into power in 2010, Prime Minister Julia Gillard resumed the debate and faced down many in her own party to force a change in Australia's uranium sale policy specifically for India. Senator Scott Ludlam is of the view that India has a history of nuclear accidents, near misses and misadventure, and it is only a matter of time before a serious incident occurs.²¹ He argues that India is buying uranium from a foreign source to lock up its own domestic reserves for weapon purposes; this would beget an arms race with Pakistan. Suffice it to say that Australia also supplies uranium to China which obviously frees up Chinese domestic reserves. Also, Ludlam views that the nuclear sector worldwide is in huge trouble at this moment and the Australian government, at the behest of the mining industry, is looking for markets.²² As India is an industrialising nation with a growing nuclear energy sector, the uranium industrial lobby finds it a green pasture.

Whatever may be the motives and drivers, while aiming for, and working towards, a uranium supply deal with Australia (which holds about a third of the world's recoverable uranium reserves), India must be ready with the defined terms of a bargain. To satisfy Australia's national resolve and non-proliferation sentiments, India needs to reassure it, may be in the form of a separate agreement in good faith, for peaceful use of the uranium supplied. All this has to be finalised keeping in mind the federal elections in Australia scheduled in September this year and the Parliamentary elections in India in 2014.

19. "Australia will Raise Policy Bar for Uranium Export to India", *The Financial Express*, August 16, 2007.

20. "Rudd Open to Persuasion on Selling Uranium to India", <http://uranium-news.com/2009/11/14/rudd-open-to-persuasion-on-selling-uranium-to-india/>, November 14, 2009.

21. "Uranium Sales to India Fuel Nuclear Arms Fears", <http://www.sbs.com.au/news/article/1763258/Uranium-sales-to-india-fuel-nuclear-arms-fears>, May 6, 2013.

22. *Ibid.*

GRAND BARGAIN SIDE EFFECTS

In order to achieve the end of the discriminatory nuclear regimes that have circumscribed India's inherent right to tame the atom, and to break out from the 'nuclear apartheid' it has been languishing in, specific deals with these three nations constitute a 'grand bargain' for India. The road and the process to achieve this would certainly not be smooth. Besides the procedural and conditional issues of such deals, India is likely to face complications and manage their implications on three critical spheres: domestic, regional and global.

With the opening of these negotiations, India would be the target of an intensive anti-nuclear lobby operating in these countries which would exacerbate the domestic anti-nuclear movement in India. Early settlement of public concerns and enhancement of public acceptance of new nuclear projects should be priorities for the Manmohan Singh government. With a comprehensive 'nuclear information management' network, the nuclear establishment must address all public concerns before jumping into more new projects. Otherwise, India's image as a responsible nuclear power would be affected when domestic opposition hinders its global commitments through the various deals it is signing for.

Also India needs to consider Pakistan's probable reactions and moves, and its implications in a regional context, especially for getting through Japan's and Australia's nod for exceptional nuclear deals. It is necessary to ponder over whether China will give Pakistan an edge over India in the nuclear area. China has already inked a civil nuclear deal secretly with Pakistan which is rapidly expanding its nuclear arsenal and missile inventory. With Chinese backing, Pakistan will never miss a chance to hinder India's entry into multilateral nuclear groups. The Sino-Pak strategic nexus would become deeper in the years ahead due to sheer frustration at India's diplomatic manoeuvres. Managing Pakistan for a soft landing in its incessant struggle for maintaining strategic parity with India should be a major diplomatic task, as part of India's current nuclear diplomacy.

On the international front, India's strategic relations, especially with Japan and Australia, may have provoking ramifications on the global power configuration. The US has been encouraging a strategic partnership among the US, Japan and India and also among the US,

Japan and Australia. This quadrilateral equation, according to S.D. Muni, may attract critical attention in China. On the other hand, the US has also floated the idea of a triangular strategic equation among the US, India and China which would also attract the critical attention of Japan.²³ The proposed nuclear deals alongside India's strategic cooperation with all these actors would be a tight-rope walk for New Delhi in the years ahead.

TOWARDS NUCLEAR NON-ALIGNMENT

In the pursuit of ensuring nuclear energy as a viable source of the national energy mix, India has visualised an ambitious nuclear energy expansion plan. It has initiated nuclear cooperation deals with around ten countries and a dozen industrial houses. As global leaders in nuclear energy commerce, countries like the USA, France, Russia, Japan, Australia, China and a few Central Asian countries constitute India's core and determining partners. However, inherent adversarial and competing relations among them may sometimes land India in awkward situations. For example, Manmohan Singh's visit to Japan in May and India's strategic partnership initiative with Tokyo seem to have worried China. Beijing has accused Tokyo of attempting to forge an alliance with New Delhi to "encircle China".²⁴ The ruling Chinese Communist Party-run *Global Times*, on May 30, came out with an opinion piece titled "India gets close to Japan at its own peril".²⁵ This suggests that China views India-Japan relations as being "animated by a shared strategic agenda of encircling and countering China".²⁶ This would be counter-productive for India's aspirations to get access to multilateral nuclear trading cartels.

Such developments might, in fact, give rise to the Cold War type of bloc politics which is completely against India's foreign policy ideals. "India does not fancy a situation in which it might have

23. S.D. Muni, "Introduction", in S.D. Muni and Vivek Chadha, eds., *Asian Strategic Review* (New Delhi: Pentagon Press, 2013), p. 5.

24. Press Trust of India, "Japan Trying to 'Encircle' China by Cozying Up to India: Chinese Media", *NDTV*, May 30, 2013.

25. Liu Zongyi, "India Gets Close to Japan at Its Own Peril", http://www.globaltimes.cn/content/785656.shtml#UcE_n-fA7Ic, May 30, 2013.

26. K. Sundaram, "The Emerging Japan-India Relationship: Nuclear Anachronism, Militarism and Growth Fetish", *The Asia-Pacific Journal*, vol. 11, issue 22, no. 1, June 2, 2013.

to choose one nation over the other" by overlooking its national interest.²⁷ Therefore, New Delhi will have to maintain an equidistance from all, not getting entangled in the rivalries among its partners. India must express loudly and clearly to all concerned that New Delhi only means nuclear business and nothing else. While setting its own house in order by taking along the domestic public in its quest for new nuclear projects, India has to devise a *nuclear non-alignment* strategy to insulate its nuclear dealings from the global/regional power politics. However, while bargaining for grand deals with the important nuclear players, India has to take cognisance of US help in achieving a breakthrough.

27. Manpreet Sethi, "India's Iran Dance", <http://thediplomat.com/flashpoints-blog/2012/02/13/indias-iran-dance/>, February 13, 2012.

NUCLEAR TERRORISM: ASSESSING THE THREAT TO INDIA

MANPREET SETHI

In recent times, nuclear terrorism by Non-State Actors (NSAs) has emerged as a challenge to national and international security. It was especially in the first half of the decade of the 2000s that multiple reports on the interest of NSAs in acquiring this weapon surfaced. For instance, Al Qaeda was reported to have expressed a desire to acquire the nuclear weapon and/or recruit nuclear personnel. In 2000, an official of Russia's National Security Council announced that the Taliban regime in Afghanistan had tried to recruit a nuclear expert from a Russian facility.¹ In 2003, it was reported that the then second in command of Al Qaeda, Ayman al-Zawahiri, had issued a *fatwa* authorising the use of nuclear weapons for terrorism. Investigations undertaken after the revelation of the A.Q. Khan network in 2004 revealed that some nuclear scientists from the Pakistani nuclear establishment had been in touch with Osama bin Laden.² With his death, it is surmised that there could be a disruption in these plans. But the risk can obviously not be written off since the organisation

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1. John Pichtel, *Terrorism and WMDs: Awareness and Response* (Boca Raton, FL: CRC Press, 2011), p. 215.
2. For more on this see David Albright and Hunter, "A Bomb for the Ummah", *The Bulletin of Atomic Scientists*, vol. 59, no. 2, March-April 2003, pp. 49-55.

has certainly not withered away and many others across the world are known to have the financial resources and networking abilities to link up for acts of terrorism.

The International Atomic Energy Agency (IAEA) Annual Report of 2008 had stated, "Malicious acts involving nuclear or other radiological material are a continuing worldwide threat". The assessment was based on the data it had collected between 1993 and 2006 which confirmed 1,080 incidents of illicit trafficking and unauthorised activities involving nuclear and radiological materials worldwide: 18 of these involved plutonium and highly enriched uranium, the two materials needed for making a nuclear weapon; and 124 of these incidents involved material that could be used to make a Radiological Dispersal Device (RDD) or a dirty bomb³ -- a term that has quickly become a part of security lexicon.

Given this background, it is not surprising that the US Nuclear Posture Review (NPR) 2010 placed the threat of nuclear terrorism above that posed by the nuclear weapons of Russia or other "near peers". Several American analysts too have estimated that an incident of nuclear terrorism is more than likely to happen before the end of this decade. Therefore, it is hardly surprising that President Obama invested so much of the energies of his Administration in his first term in addressing this problem.

Where does the threat of nuclear terrorism stand today? What is the likelihood of such an event happening and which types are more likely to occur? Can one evaluate the motives, or lack of them, for terrorist organisations to engage in nuclear terrorism? What can nations do – individually and collectively – to prevent nuclear terrorism? What steps have been taken? These are some of the issues that this article addresses in two main sections.

TYPES OF NUCLEAR TERRORISM AND ASSESSMENT OF THEIR LIKELIHOOD

How does one define nuclear terrorism? Traditionally, three activities have been identified as constituting an act of nuclear terrorism. The first of these includes the use of a readymade nuclear weapon

3. Pietro Egidi, ed., *Detection of Nuclear Weapons and Materials* (New York: Nova Science Publishers Inc., 2010), p. 135.

from an existing national nuclear arsenal by a non-state actor. Since current assessments do not attribute any terrorist organisation or network as having the ability to build such a weapon on its own, the possibility of this eventuality boils down to the acquisition of the weapon through theft, illegal purchase or state complicity in handing it over to a terrorist organisation. None of these three routes can be easy, given that nations are known to secure their arsenals with great care. Of course, there is the case of the missing 100-odd 'suitcase bombs' of 1 kiloton yield that are still unaccounted for from the Soviet arsenal. In 1998, the Russian officer, Lt Gen Lebed was ordered to account for 132 suitcase bombs that the USSR had manufactured in the 1970s and 1980s. He could locate and account for only 48 of them. For the others, he said, "We do not know what the status of the other devices is, we just could not locate them..."⁴ Fortunately, these are not known to have surfaced with any terrorist outfit yet, and with heightened vigilance and awareness, hopefully they will not, but their portability does pose a huge risk.

This is in contrast to the normal nuclear weapon which is generally difficult to move around, especially clandestinely, owing to its size and related paraphernalia. Nuclear warheads are big devices, need delivery systems to be launched, and also have control mechanisms, such as permissive action links or codes, depending on their level of sophistication, which are meant to prevent unauthorised detonation.

Therefore, the likelihood of a ready 'nuclear weapon' from an existing national arsenal being used by an NSA is least likely unless, of course, a state sponsoring terrorism were to provide such a weapon to the terrorists. The possibility of occurrence of such an act, however, is deemed to be low given that a state (as a functional, rational entity) should be inhibited by the consequences of its act once its culpability was to be established through the strides being made in attribution analysis through nuclear forensics.

The second activity that constitutes nuclear terrorism involves the use of fissile/radiological material along with conventional explosives in a dirty bomb to disperse the radioactive material. This could be possible if the terrorist could lay his hands on enough nuclear material

4. Pichtel, n.1, p. 214.

through theft, purchase of the material on the illicit market, or insider cooperation from an employee at a nuclear facility. In this context, it is noteworthy that the possibility of smuggling of Highly Enriched Uranium (HEU) is relatively higher since it is easier to handle and more difficult to detect, given its faint radiation signals. Plutonium is more dangerous to handle without sophisticated equipment and, hence, is considered less prone to smuggling. But, crafting a dirty bomb is also possible by mixing high explosives with relatively long-lived radioactive isotopes such as cesium 137, strontium 90, or cobalt 60. These are available at universities, hospitals and industries that may be less well secured than nuclear facilities. Given the portability of radiological materials, the chances of lax security at sites where they are used, and the likelihood of some of these sources being orphaned or casually discarded over time, RDDs are far easier to construct, conceal or detonate by terrorists. An RDD may also be perceived as being more useful to terrorise rather than kill too many people since the impact of such an incident would be more in terms of creating economic problems and psychological panic.

The third kind of nuclear terrorism involves an act of sabotage of a nuclear facility that contains fissile/radiological material. This could be undertaken through an airplane or a truckload of explosives crashing into a reactor or a facility housing nuclear material, the use of commandos from land or from the sea (considering that many nuclear reactors are built along the coast) to attack a facility, or through cyber attacks that interfere with the command and control of the facility, making it malfunction. Sabotage of a reactor in such a way that causes a Loss Of Coolant Accident (LOCA) remains a concern in addressing the challenge of nuclear terrorism.

Apart from these three traditional activities constituting nuclear terrorism, there is another kind of activity too that can be defined as nuclear terrorism but which is undertaken by a state possessing nuclear weapons. A nation that considers terrorism as a tool of foreign policy against an adversary that is conventionally better equipped can effectively use the shield of nuclear weapons to neutralise that superiority and gain immunity for its own acts of terrorism.

While the USA or other Western powers have largely been concerned with the possibility of the first three types of nuclear

terrorism, India's threat perceptions traverse all four. In fact, the last form of nuclear terrorism has been around for India since the late 1980s once Pakistan indicated that it had acquired nuclear weapons. Since then, its nuclear strategy has been crafted to indicate shallow redlines or a low threshold for its use of its nuclear weapons in order to checkmate India's ability to undertake conventional retaliation against Inter-Services Intelligence (ISI) sponsored acts of terrorism. While the international community presently pays little attention to this form of terrorism, there is every likelihood that more states that perceive value in using terrorism as a tool of foreign policy may be tempted to follow this model in the future.

In assessing the threat of nuclear terrorism, while it is essential to examine the capability of terrorists to undertake the first three types of terrorism, it is equally important to consider whether they find it at all useful to acquire and use these weapons for terrorism. What would they gain through nuclear terrorism that they could not through conventional terrorism? Are there factors that make these Weapons of Mass Destruction (WMDs) less appropriate or desirable for terrorism?

Terrorists are generally assumed to have an interest in creating terror by "having a lot of people watching rather than a lot of people dead". The purpose of the terrorist act is to create fear and panic rather than simply causing mass casualties. Seen from this perspective, using nuclear weapons for acts of terrorism does not seem to be an appealing proposition. Rather, the horrific damage caused by a nuclear explosion could, in fact, lead to the group being alienated from its support base and being subjected to widespread opprobrium. It could also trigger forceful joint military action by the international community. Given that there has been no nuclear use since 1945, there is a nuclear taboo in place, and it is assumed that even terrorist organisations may not find it worthwhile to breach this.

Of course, these are only assumptions. The possibility of terrorists wanting to get nuclear weapons/material to hold out a threat of blackmail cannot be ruled out. Also, radical fundamentalist groups that harbour suicidal tendencies and are motivated by a desire for revenge may find sense in causing catastrophic acts of nuclear terrorism. So, while political groups that have an agenda of setting

right a perceived wrong might find little use for nuclear terrorism, a group that is ready to trigger apocalypse because it does not fear or value the consequences, may find it useful.

MEASURES TO AVERT NUCLEAR TERRORISM

Since 9/11, much international attention and effort has been devoted to building measures that can minimise the possibility of nuclear terrorism. It is generally presumed that conventional deterrence premised on retaliation to cause unacceptable punishment cannot apply to terrorists since they have no assets that can be threatened with damage to deter them. However, the fact of the matter is that terrorists do operate from somewhere and mostly this happens to be a country that either has a lax attitude towards them or is an active promoter of such activities. Therefore, the threat of retaliation against a host or sponsor state of the terrorist organisation can be used to effectively deter an act of nuclear terrorism. Through its NPR, for instance, the US has warned that it would “hold fully accountable any state, terrorist group, or other non-state actor that supports or enables terrorist efforts” to obtain or use WMDs.

In order to establish culpability, research and development in the field of nuclear forensics has increased rapidly. This would enable tracing the weapon to its source through a detailed chemical and radiological analysis of the fallout which could reveal details that could be checked with IAEA maintained records on the types of isotopes present in each batch of fissile material produced under its safeguards.

Besides deterrence, some other measures of nuclear security are also today in place such as international instruments to secure nuclear materials and dry up potential supply sources. One such mechanism is the Convention on the Physical Protection of Nuclear Material (CPPNM) that has existed from the 1970s but which then was applied only to the material in transit. The scope of this convention was expanded in 2005 through an amendment. It now applies to domestic handling of relevant material and, thus, provides for better material accounting and protection. However, it has yet to enter into force since 97 of the 145 countries are yet to ratify the amendment to the convention. Also, it does not set any mandatory minimum security requirements, and nor does it allow for verification or peer review of the country processes. In

2005, an International Convention for the Suppression of Acts of Nuclear Terrorism was also created. It makes the possession, use or threat of use of radiological devices by NSAs a criminal offence while also providing for prosecution of suspects in the country where the crime has been committed or their extradition to the home country. However, it does suffer from the limitations of it being a voluntary national commitment.

Another relevant multilateral measure that came about in 2005 was as result of UN Security Council Resolution (UNSCR) 1540. This criminalised WMD proliferation by mandating all states to enact legislation and national rules and regulations, including national control lists, to prevent unauthorised access, transfer, use or possession of WMD material. It calls upon all states to develop and maintain effective measures for accounting, securing and physically protecting these items as well as ensuring effective border controls with suitably trained and equipped border and enforcement personnel. Export control laws and trans-shipment controls have since entered the vocabulary of nuclear security. In 2006, the Global Initiative to Combat Nuclear Terrorism was launched by Presidents Bush and Putin to prevent acquisition, transport or use by terrorists of nuclear materials and radioactive substances or improvised explosive devices and hostile actions against nuclear facilities.

Further, in order to raise awareness of the threat and to create a greater sensibility of the need for making these instruments as widespread as possible, President Obama held the first Nuclear Security Summit in Washington in 2010. It was attended by 47 heads of state and went towards addressing some of the ambivalence toward nuclear terrorism. The second such summit was held in Seoul in March 2012. Coming as it did after the Fukushima nuclear accident, it brought in safety issues and the interface between safety and security. Information security, minimisation of the use of HEU in research reactors, as well as focus on securing radiological sources in places other than nuclear facilities were the areas of special focus of the second summit. It has also been agreed that a third such summit would be held in 2014 in the Netherlands. However, it is unclear whether the future summit would be able to get anything more substantive on national commitments.

Another indirect way of combating nuclear terrorism lies in further reinforcing the norm of non-use of nuclear weapons. While it is true that a terrorist may not live by the rules of civilised nations, a legally binding, universally accepted prohibition on use or threat of use of nuclear weapons and radiological materials for terrorism would have at least two impacts for nuclear terrorism too. One, it would reduce the value of nuclear weapons as usable instruments by nations, thereby reducing the requirements of nuclear deterrence such as secrecy and opacity on numbers and stockpiles. This would promote transparency in material and warhead accounting, and also their reduction, thus, reducing chances of pilferage too. Secondly, such a convention would have a positive impact on international security by increasing transparency and trust levels. This, in turn, would facilitate better cooperation in intelligence sharing and law enforcement. The nations would be united on one side against the breach of the norm of nuclear non-use and, hence, collectively better equipped – politically, economically and morally – to handle violations, whether by state or non-state actors.

CONCLUSION

It can neither be stated with any certainty that an act of nuclear terrorism can never occur and nor that it would. Therefore, it is important that the threat is neither exaggerated nor minimised. While nuclear security and safety remain national responsibilities and every nation must craft its own domestic sets of legislation and regulatory mechanisms to enforce these, there is no doubt that effective measures to avoid all possibilities of nuclear terrorism have to be jointly worked out by the international community since any weak link could prove catastrophic. Therefore, averting nuclear terrorism calls for a cooperative security framework in which all states are sensitive to the threat and apply measures with equal vigour.

India has long been a victim of terrorism – of the homegrown variety as well as that sponsored from across the border. With an expansive nuclear infrastructure that encompasses the entire nuclear fuel cycle, the physical security and operational safety of nuclear facilities is of critical concern. The Central Industrial Security Force

(CISF) is entrusted with the task of the security of these establishments and over the last years, the training and equipment of the personnel has been given special attention.

India's preparedness to handle nuclear terrorism traverses four main domains – legal provisions, surveillance and safety mechanisms, emergency response mechanisms and external collaboration. While elements of all the four domains are in place, one can never assert with any guarantee that the nation's nuclear security is perfect since it is heavily dependent on the international climate as well as the support, or lack of it, from other countries. In the case of India, the enforcement of these measures by the countries in the region is of particular importance and it must do all it can to support their implementation in its neighbourhood nations through bilateral and international efforts, while effectively securing its own borders and improving its intelligence infrastructure and analysis capabilities.

HASSAN ROUHANI: THE KEY TO THE IRANIAN NUCLEAR IMPASSE?

CARON NATASHA TAURO

Iran has always provided the international community with a series of events that have had the capacity to change the existing dynamics of the world order. The recent presidential election in the Islamic Republic of Iran has been hailed as a “turning point” in the recent history of the country. The election was closely monitored by the international media because of the controversy that surrounded the election of 2009 and the reelection of Mahmoud Ahmadinejad. The democratic process of elections has been viewed as an assertive answer to the West, especially to their doubts and ambiguities about the compatibility of Islam and democracy. The Iranian President-elect, Hassan Rouhani won Iran’s presidential election of June 14, which was marked by a high voter turnout, winning 50.7 percent of a total of over 36 million ballots counted¹.

“This victory is a victory of wisdom, moderation and maturity... over extremism.”²

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1. “Presidential Election ‘Turning Point’ in Iran’s Political History: Rouhani”, Iranian Press TV, June 29, 2013, <http://www.presstv.ir/detail/2013/06/29/311382/pres-election-turning-point-rouhani/>, accessed on June 30, 2013.
2. “Hassan Rouhani Wins Presidential Elections in Iran,” *BBC News*, June 15, 2013, <http://www.bbc.co.uk/news/world-middle-east-22916174>, accessed on 26 June, 2013.

Hassan Rouhani's victory speech has brought about a wave of mixed reactions in the international community. Some analysts have portrayed Rouhani as a reformist and hardliner, while others have pictured him as a moderate negotiator. Rouhani's personality, alliances and friendships have raised several debates about his choice of the path forward in his presidential term.

Hassan Rouhani is a cleric who was born in a religious and revolutionary family in 1948. His close association with Ayatollah Ruhollah Khomeini dates back to the time when the Supreme Leader was in exile in France. He was involved at the peak of the Iranian Revolution and developed close relations with several important personalities like Akbar Hashemi Rafsanjani, who would later change the image of Iran in the world. Rouhani has been called the ultimate insider because of his almost three-decade-long political stint of holding sensitive and key positions in the Parliament. He was the National Security Adviser to President Akbar Hashemi Rafsanjani and President Mohammad Khatami during the period 1989-97 and 2000-05 respectively. He held the position of the head of the Iranian Parliament's Defence and Security Committees and functioned as the senior adviser to Rafsanjani when he was the Commander-in-Chief during the Iran-Iraq War³. He has been the adviser to Supreme Leader Ayatollah Ali Khomeini since 2003. Rouhani currently represents the Leader of the Islamic Revolution Ayatollah Ali Khomeini in the country's Supreme National Security Council, is a member of the Expediency Council and the Assembly of Experts, and is also President of the Expediency Council's Centre for Strategic Research⁴. The major debate in the international community about the future of a nuclear Iran stems from the fact that Rouhani held the position of the chief negotiator of Iran's nuclear programme between 2003 and 2005. When Rouhani was Iran's chief nuclear negotiator a decade ago, Iran temporarily suspended all uranium enrichment-related

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3. Ariane Tabatabai, "Rouhani's Rise and Implications for Iranian Foreign Policy and Nuclear Politics" *Middle East Arms Control*, <http://www.middleeast-armscontrol.com/2013/06/24/rouhanis-rise-and-implications-for-iranian-foreign-policy-and-nuclear-politics/>
 4. "Persian Gulf Arab States Congratulate President Elect, Rohani", *Iran Press TV*, June 16, 2013, <http://www.presstv.ir/detail/2013/06/16/309350/persian-gulf-states-congratulate-rohani/>, accessed on June 29, 2013.

activities to avoid possible sanctions by the UN Security Council⁵. Hassan Rouhani was named Iran's diplomatic Sheikh during his stint as the nuclear negotiator. Rouhani's memoirs published in the *Iranian National Security and Public Diplomacy Journal* in 2011 mention the new President-elect's views on the nuclear issues. He has outlined two major challenges in the domestic environment in the realm of the nuclear negotiations. They are as follows:

1. Lack of legal and political information in the Atomic Energy Organisation of Iran (AEOI). He reasserted this point by stating the ignorance of the head of the AEOI who thought that Iran could enrich under 20 percent of uranium lawfully, without reporting to the IAEA.
2. Although the political community in Iran agrees with the fact that Iran should be a nuclear state, there is a lack of consensus regarding the diplomatic relations with the US in this regard. There is divided opinion regarding improving relations with the US in order to secure Iranian nuclear ambitions⁶.

ROUHANI'S ELECTION MANIFESTO

"The Administration of Prudence and Hope will be the administration of peace, friendship and reconciliation; reconciliation with the elite, scholars and competent managers, reconciliation with the people and the world in an attempt to put an end to the oppressive pressure against the Iranian nation," Rouhani said in his first election campaign documentary broadcast on national TV⁷. Hassan Rouhani's election manifesto was based on the revival of the dysfunctional economy of the Islamic Republic. Eight years of the conservative rule of Mahmoud Ahmadinejad had crippled the economy, with harsh international economic sanctions imposed to curb Iranian nuclear ambitions. The domestic economy of the country as well as the morale of the citizens was in shambles. Rouhani's election manifesto, therefore, concentrated on the revival of the Iranian economy. This is, however, not possible without engaging with the West on the

5. "Profile: Hassan Rouhani," *BBC News*, June 18, 2013, <http://www.bbc.co.uk/news/world-middle-east-22886729>, accessed on June 26, 2013.

6. Tabatabai, n. 3.

7. "Rouhani Vows Amicable Ties With the World", *Iranian Press TV*, June 5, 2013, <http://www.presstv.ir/detail/2013/06/05/307304/rohani-vows-amicable-ties-with-world/>, accessed on June 29, 2013.

nuclear crisis. Rouhani's priorities seemed clear when he mentioned, "Our centrifuges are good to spin only if the people's economy is also spinning in the right direction" during a presidential debate.⁸ Thus, Rouhani aims at enhancing the dialogue with the West in order to completely remove the sanctions regime and eventually revive the economy.⁹ Rouhani's election manifesto can be summarised as follows:

- Reviving the economy and removing the sanctions regime
- Diplomatic solution to the impasse of Iran's nuclear programme
- Engaging with the West (especially the US) and ending Iran's political isolation
- Treatment of political prisoners¹⁰.

The victory of Hassan Rouhani came after a tumultuous series of events which involved backing off of the reformist candidate and a related political upheaval. His victory can be accredited to the support he received from the two pragmatist predecessors, namely, Akbar Hashemi Rafsanjani and Mohammad Khatami. The Iranian citizens rejoiced at the victory of the cleric who campaigned under the reformist banner. Hassan Rouhani's victory is symbolic for the Iranian community. The key, his election symbol, has been interpreted by the West as the key to Iranian modernisation and moderation¹¹. It must be noted that Rouhani has to face all the domestic challenges of a dysfunctional economy that is wracked by sanctions. The immediate task at hand is to negotiate with the West and completely lift the sanctions regime that has crippled the economy of the Islamic Republic. The other major challenges include taking a decisive but moderate stance on the Syrian crisis, ending

8. Max Fisher, "Iran's Next President Hassan Rouhani Seen as the Best Hope For Ending Nuclear Standoff With the West" *The Washington Post*, June 15, 2013, <http://www.washingtonpost.com/blogs/worldviews/wp/2013/06/15/irans-next-president-hassan-rouhani-seen-as-best-hope-for-ending-nuclear-standoff-with-west/>, accessed on June 29, 2013.

9. "Hassan Rouhani Pledges 'Change' Iranian's Seek, *Gulf News*, June 17, 2013, <http://m.gulfnews.com/news/region/iran/hassan-rouhani-pledges-change-iranians-see-1.1198271>, accessed on June 29, 2013.

10. Tabatabai, n. 6

11. Ian Black and Saeed Kamali Dehghan, "Hassan Rouhani, 'Ultimate Insider' Who Holds Key to a More Moderate Iran," *The Guardian*, June 20, 2013, <http://www.guardian.co.uk/world/2013/jun/20/hassan-rouhani-iran-president-profile>, accessed on June 27, 2013.

Iran's political isolation and establishing a new acknowledgement of the nuclear programme. He is portrayed to have a moderate, calm and negotiating personality. However, the Iranian political system functions directly under the Supreme Leader. Despite being one of the most trusted nuclear advisers, Rouhani has been unsuccessful in changing the firm mindset of the Ayatollah on this issue. The hardliner Ayatollah Khomeini will eventually wield all decision-making powers about Iran's nuclear ambition.

CAUTIOUS OPTIMISM: THE US PERSPECTIVE

Since the 1979 Islamic revolution, relations between the US and Iran have been rather tumultuous, spiked by the defiance and aggressive posture of Iran and the overriding influence of the US in international politics. The nuclear ambition of Iran has been the major bone of contention between the two states. The US and its trusted ally, Israel, fear that Iran is developing nuclear weapons under the guise of its peaceful civil nuclear programme. In a series of allegations and sanctions that followed it, Iran's position on nuclear weapons has become even more assertive since the early 2000s. The Supreme Leader Ayatollah Ali Khomeini holds a hardline position on the Iranian nuclear ambition, which was fuelled by the controversial personality of President Ahmadinejad. Israel and Iran have, since 2005, engaged in a battle of rhetoric in the context of possession, acquisition and use of nuclear weapons. The US has been successful in influencing the international community to impose economic sanctions on the Islamic republic which has led to the devastation and crippling of its economy. However, the victory of Hassan Rouhani brings a renewed hope of improving relations between the US and Iran.

The US has reacted in a positive way, welcoming the victory of the moderate reformist. The US congratulated Rouhani and pledged to engage Iran directly through diplomatic channels¹². The US Administration is hopeful that the international community's concern over Iran's nuclear programme will be fully addressed under the auspices of the new President. White House spokesman, Jay Carney said, "It is our hope that the Iranian government will heed the will of

12. "US Prepared to Engage Iran Directly," *Al Jazeera*, June 16, 2013, <http://www.aljazeera.com/news/middleeast/2013/06/2013615193023927274.html>, accessed on June 27, 2013.

the Iranian people and make responsible choices that create a better future for all Iranians”¹³. The strategic and academic communities of the US are, however, at loggerheads with regards to their reaction to the election. There seems to be disagreement on whether the U.S should view the victory of Rouhani with cautious optimism or scepticism. The West is keen on ending the impasse on the Iranian nuclear programme that has kept the International Atomic Energy Agency (IAEA) and the UN occupied for more than a decade. Iran’s supreme leader said a solution to the nuclear impasse with the West would be “easy” if the United States and its allies are serious about seeking a deal, Iranian media reported after the results of the elections were declared¹⁴.

SCEPTICISM AND CONCERN: THE ISRAELI FACTOR

The reaction of the US seems hopeful, but the Israeli administration is concerned with what it calls ‘wishful thinking’. Years of intelligence reports from the Mossad and the intelligence corps of the Israeli Defence Force (IDF) have led Israel to believe that the younger generation of Iranian citizens is dejected with the Ayatollah’s reign. Hence, the victory of the cleric has come as a major shock for the Israeli administration. Israel partially succeeded in portraying to the world that the Iranian nuclear programme has reached the threshold in the visual presentation of Prime Minister Netanyahu in the United Nations General Assembly last year. However, the international response to Hassan Rouhani’s victory has put forward major challenges to Israel. “Let us not delude ourselves. The international community must not become caught up in wishful thinking and be tempted to relax the pressure on Iran to stop its nuclear programme,” Prime Minister Benjamin Netanyahu said¹⁵. This seems to be the common sentiment among the strategic community as well as a section of the citizen population of Israel. Comparisons have also been made between Bashar Al-Assad and Hassan Rouhani because of the common hope

13. Josh Lederman, “US Respects Iran Election Result, White House Says”, *Huffington Post*, June 15, 2013, http://www.huffingtonpost.com/2013/06/15/us-iran-election_n_3447697.html, accessed on June 27, 2013.

14. “Iran’s Supreme Leader: Nuclear Solution ‘Easy’ if West is Serious,” *Haaretz*, June 27, 2013, <http://www.haaretz.com/news/middle-east/iran-s-supreme-leader-nuclear-solution-easy-if-west-is-serious-1.532374>, accessed on June 28, 2013.

15. <http://www.al-monitor.com/pulse/originals/2013/06/failure-israeli-assessment-iran-elections.html>

and optimism expressed by the international community¹⁶. The Israeli President Shimon Peres, however, showed more optimism than the Prime Minister. He expressed joy at the fact that the voice of the Iranian people was finally heard and a dissatisfactory leadership was removed. He remains hopeful that the election of Rouhani could pave a path for a peaceful stand-off in the nuclear issue.

The burning question in this context is: what will be the future of the Israel-Iran nuclear imbroglio? Will Israel be able to continue to justify the need for more sanctions on the Iranian regime?

While it is too early to assess the future of this issue, some speculations can be made based on the past experience of Hassan Rouhani in the nuclear scenario. Many Iranian and international observers welcomed the election of Rouhani as a new opportunity to build a rapprochement with the Islamic Republic of Iran and eventually solve the nuclear crisis¹⁷. Israel is concerned over the overwhelming optimism shown by the international community. This means that there is a possibility that more than a decade of allegations and sanctions against the Iranian regime for pursuing a nuclear programme can be reversed. Israel has cashed upon the hardliner stance and defiance of Mahmoud Ahmadinejad to present its case against the nuclear ambitions of Iran to the international community. However, the moderate, negotiating personality of Hassan Rouhani may weaken Israel's position and the overriding sanctions regime. This could change the entire dynamics in West Asia. Considering that the Israeli stand is weakened, there will be a possibility that the international community will turn its attention to fully concentrate on the Israel-Palestine issue. Although the idea of such a scenario is still distant, it has become a major concern in the Israeli government.

FOREIGN POLICY CHALLENGES: ROUHANI'S TASKS AT HAND

Iran's domestic challenges are closely related to its foreign policy decisions. For almost two decades, the Iranian administration has taken an isolationist posture, holding firm to its stance. This decision

16. "Iran's Hassan Rouhani is Just As Moderate As Syria's Bashar Al- Assad," *The Jewish Press*, June 17, 2013, <http://www.jewishpress.com/blogs/muqata/irans-hassan-rohani-is-just-as-moderate-as-syrias-bashar-al-assad/2013/06/17/>, accessed on June 27, 2013.

17. Tabatabai, n. 3.

has had overwhelming consequences for the Iranian economy and its status in international politics. The 'Axis of Evil' label imposed on Iran by the former US President George W. Bush in the aftermath of the September 11, 2001 attack has also had negative implications for the Islamic Republic. Mahmoud Ahmadinejad and the controversial reelection of 2009 made the world perceive Iran as a rogue state where there is no place for democratic values. However, the peaceful election of Hassan Rouhani and the overwhelming political participation of the Iranian citizens proved otherwise. It will be interesting to note the developments in the Iranian foreign policy, especially after Hassan Rouhani takes office in August. The world awaits with bated breath to see the unfolding of events that are likely to change the international nuclear scenario and the West Asian dynamics as we know it. The following foreign policy decisions will have to be addressed immediately after Rouhani assumes his post:

- **Garner international support for the civil nuclear programme and ease the sanctions regime:** The nuclear issue has haunted the Iranian citizens for over a decade. Since the economy and the nuclear issue are closely connected, Rouhani will have to assess the best possible solution in order to revive the economy as well as garner support for the Iranian nuclear programme. This will be a crucial act of balance keeping in mind that Iran as a nation has very clearly stated its long-term foreign policy aims and its ambitions of being recognised as a nuclear weapon state. Almost immediately after his election, Hassan Rouhani appointed a group to examine the continuation of talks with the P5+1 (permanent members of the UN Security Council plus Germany) and assess the future rounds of comprehensive negotiation¹⁸.
- **Negotiate a status quo between the Western perception and the Iranian support to Assad's regime in Syria, Lebanese Hezbollah and Palestinian Hamas:** While it is an established fact that the ulterior motives behind Iran's support for the abovementioned remain its key foreign policy aims, Rouhani's negotiating capabilities may come to the rescue in securing a

18. "Rouhani Appoints Group to Examine P5+1 Talks: Iran FM," *Iranian Press TV*, June 26, 2013, <http://www.presstv.ir/detail/2013/06/26/310949/rouhani-forms-group-to-weigh-p51-talks/>, accessed on June 30, 2013.

status quo with regards to this issue. A perfect balance between the Western perception and Iranian position on the support for the abovementioned is a distant dream. However, a status quo may prove to be instrumental in rescuing Iran from its isolation in the international arena. Russia's policy on the Syrian issue may provide the space for Hassan Rouhani to achieve this objective.

- **Ease tensions with the neighbourhood (Persian Gulf States, Israel, Iraq, Afghanistan, etc.):** In order to revive the economy of Iran, Rouhani needs to convert it into an export base economy, as already declared by him in the election manifesto. However, this ambition is impossible with the present geo-political equations of Iran's neighbourhood. The Persian Gulf states have congratulated and welcomed the election of Hassan Rouhani, which can be seen as the genesis of a good relationship between Iran and the Gulf Cooperation Council states. In response to the congratulatory message from Kazakh President Nursultan Nazarbayev, Rouhani said, "The enhancement of relations with regional and neighboring countries is among the priorities of the Islamic Republic of Iran's foreign policy"¹⁹

These issues have been the major cause for the isolation of Iran in the international political arena. In order to ease the sanctions regime and revive the dysfunctional economy of the Islamic Republic of Iran, Hassan Rouhani will have to immediately address these issues in a carefully calculated and diplomatic way. The decisions of Rouhani, especially in the following few months, will be crucial not only to Iran but also to the entire region of West Asia.

CONCLUSION

The reactions from the international community may be termed as "wishful thinking" by the Israeli Prime Minister, but the optimism cannot be disregarded as baseless. Rouhani's personality as a negotiator will definitely have a positive impact on the Iranian administration. Rouhani will have to create a semblance of openness

19. "Iran Seeks Closer Ties With Regional, Neighbouring Countries: Rouhani," *Iranian Press TV*, June 27, 2013, <http://www.presstv.ir/detail/2013/06/27/311055/iran-seeks-ties-with-regional-countries/>, accessed on June 30, 2013.

and transparency in order to ease the sanctions that have destroyed the economy. The West is hopeful that negotiations and solutions through the diplomatic channels can be reached with the new Iranian administration. This does not suggest a quantum shift in the Iranian position in international relations. The political system of Iran is concentrated in the powers of the Supreme Leader. Therefore, the President is restricted in using his capabilities, especially in matters relating to foreign policy. The fact that Hassan Rouhani is the ultimate 'insider' and holds almost all the secrets of the nation can prove to work in his favour. He will have to make full use of his relations with the Supreme Leader, the Assembly of Experts and the Expediency Council as well as the Majlis e- Shura e- Islami (Lower House of the Parliament). The election of Hassan Rouhani is an indication of some changes that can be possibly made by the new regime, especially in terms of economic and foreign policy decisions. The next few months will, thus, be crucial to decipher the true nature of Rouhani's leadership and the changing dynamics of West Asia.

US ALLIANCE SYSTEM AND THE EAST ASIAN PARADOX

NIDHI PRASAD

INTRODUCTION

What is new about the emerging world order is that, for the first time, the United States can neither withdraw from the world nor dominate it¹. During the Cold War, ideological fault lines deepened hostilities between nation-states. National identities were constructed in antithetical constituents that were most visible in East Asia and Europe. The Cold War animosities have now been contained, constrained or ameliorated. But East Asia is one region where the security dynamics of the Cold War have remained, where historic ties of hostility have not been done away with and, as a corollary, liberal institutions have not got anchored in the region. This region comprises the once-great power Japan, the reemerging power China, and South Korea, North Korea and Taiwan². The 'San Francisco' Alliance network presented a revelatory vision of *Pax Americana* in the Asia-Pacific during the Cold War. The alliance system in the region was a *modus operandi* of US foreign policy that sustained its dominance in the international system.

There has been much speculation regarding the dynamics of this region, with a reemerging China supposedly cordoning off maritime

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1. Henry Kissinger, *Diplomacy* (NY: Simon and Schuster, 1994), p. 19.
2. This paper would delimit the geographic scope of East Asia to the US' relations with China, Japan, South Korea, North Korea and Taiwan.

trade routes, and a belligerent North Korea seeking to alter the status quo of the region, as energy dependent Japan and South Korea fear the gradually escalating tensions. As each state attempts to bolster its security, their mutually converging and diverging interests is what complicates the regional dynamics. This article seeks to examine the vicissitudes in the current political season in East Asia and questions the interests at stake in this “regional security complex³” that anchors the US pivot strategy.

EVOLUTION OF THE US ALLIANCE SYSTEM IN EAST ASIA

Several studies have compared the multilateral institutionalism in Europe to the bilateral alliance system in Asia. Realist explanations argue that alliance formations arise as a response to threats⁴. This is formalised through a ‘balancing versus bandwagoning strategy’. Europe is cited as the best example for this realist examination of inter-state relations. There are liberal explanations that theorise about institutionalism through economic development and constructivist arguments that emphasise on “norms, identities and interests” in guiding state actors to devise a regional security architecture. In East Asia, the lack of a multilateral security framework is attributed to the bilateral alliances that mould and dominate inter-state relations. The constructivist argument is synonymous with the insecurities of nation-states arising from the “politics of memory” as a result of the history of Japanese colonialism, leading to anxieties about regional integration. Hence, this insecurity is seen as an impediment to the formation of a coherent and amiable infrastructure. But the question to be asked is why the American bilateral model seems to be functioning well *au contraire* to a multilateral one.

According to Victor Cha, the rationale for ‘powerplay’ in an alliance system in Asia is that “security dependency for the lesser state” is possible “for the purpose of inhibiting the smaller ally’s unilateral and aggressive actions that might entrap the ally”⁵. This

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3. Barry Buzan and Olaf Wæver, *Regions and Powers: The Structure of International Security* (UK: CUP, 2003), pp. 40-83.
 4. Stephen M. Walt, “Alliance Formation and the Balance of World Power”, *International Security*, vol.9, no. 4, Spring 1985, p.4.
 5. Victor D. Cha. “Powerplay: Origins of the U.S. Alliance System in Asia”, *International Security*, vol.34, no. 3, Winter 2009/10, pp.158-196.

nexus of power asymmetries and institutions is well illustrated in his argument. Alliances in the East Asian region were created with the rationale to constrain the aggressive behaviour of states with an objective to preclude US involvement in the regional disputes or conflicts. One should note that the Cold War spill over into Asia in 1953 when the Korean War was actually fought. The 'hub and spoke' model of bilateral alliance networks in the region is also rendered as the 'San Francisco System'. In 1951, in a peace conference in San Francisco, individual defence accords were signed between the United States and Australia/New Zealand and Japan. Subsequently, the US signed them with South Korea, Thailand and the Philippines.

Constraint and Control

The Americans were cautious about getting entangled in any sort of conflagration in East Asia that would by default include the People's Republic of China (PRC) and the former Soviet Union. This strategy of restraint was reflected in the objectives of their alliance formation with Taiwan and South Korea. Both Chiang Kai-shek and Syngman Rhee were persistent to take over the mainland (in Rhee's case, unification by marching north). Hence, the United States sought to institutionalise this asymmetry in power by signing the defence treaty. The treaty with the Republic of Korea (ROC) had a clause stating that in case of any eventuality, wherein if South Korea unilaterally takes on the North or the Chinese, the United States will not "support such operations directly or indirectly", "not furnish any military or logistic support for such operations", and "US economic aid to Korea will cease immediately"⁶. Dean Acheson constructed the US "defensive perimeter [which] runs from Ryukyus to the Philippine Islands"⁷. This perimeter was exclusive of South Korea in 1950 and some scholars believe this is what motivated the North to attack the South. The "disastrous Korean War" was stated to be a result of the "United States moving to abandon the security of Korea"⁸.

6. *Foreign Relations of the United States, 1958-1960*, vol XVIII; Japan; Korea, Document 237, <http://history.state.gov/historicaldocuments/frus1958-60v18/d237>

7. "Secretary Acheson and the Defense of Korea", http://www.trumanlibrary.org/whistlestop/study_collections/korea/large/documents/pdfs/kr-3-13.pdf

8. Kenneth B. Lee, *Korea and East Asia: The Story of the Phoenix* (USA: Library of Congress, 1997), p. 253.

America's bilateral alliance system in East Asia was initially focussed on Japanese disarmament and demilitarisation. In "order to break the vicious cycle of war, victory, peace, war", as mentioned by John Foster Dulles in a *Foreign Affairs* article in 1952, Japan was moulded to be the democratic, demilitarised answer to the Communist bloc in East Asia. Japan was the lynchpin of US strategy in the Pacific during the Cold War. Japan's interaction with the West was most pronounced during the Meiji Restoration, when it "...tried to square the circle between being both a part of Asia and a part of the West"⁹. Japan has been at the crossroads at points of drafting a foreign policy, security framework or pursuing policies of internationalism and nationalism. This Asian versus Western dichotomy has preoccupied many Japanese statesmen. Post American occupation in Japan, with the drafting of the Japanese Constitution, with special emphasis on 'Article 9', Japan shifted its strategic preferences to a pacifist post-war policy. The "Yoshida Doctrine" was the revelatory moment in Japanese foreign policy. Cautious about 'free riding' on the bilateral alliance and its isolation from its neighbours, Japan moved to a policy of internationalism, asking for integration of the Asia-Pacific as a region. Hence, present-day Japan's policy could be seen as an "optimal orientation" translated in Japanese to be "*Shin-bei nyu-a*" (*close to America and entering Asia*)¹⁰.

DEVELOPMENTS IN EAST ASIA

East Asia recently witnessed a peaceful political transition with newly (except Abe) elected/ appointed leaders. North Korea's Kim Jong-un, South Korea's first female President Park Geun-hye, Japan's Shinzo Abe and China's Xi Jinping have sought to consolidate their power by fuelling nationalist tendencies, with security and economic reconstruction in mind. The wave of rising nationalist tendencies is most visible in the bilateral, inter-state relations between China and Japan, and North and South Korea. It is the 'hub and spoke' alliance model that brings in an element

9. Peter J. Katzenstein, Nobuo Okawara, "Japan and Asian-Pacific Security" in J.J. Suh et al, eds., *Rethinking Security in East Asia: Identity, Power, and Efficiency* (Singapore: NUS, 2008), p. 101.
10. Mike M. Mochizuki, "Japan's Changing International Role", in Thomas Berger, et al eds., *Japan in International Politics: The Foreign Policies of an Adaptive State* (USA: Library of Congress, 2007), p.17.

of regional complexity, with US involvement in these bilateral relations.

Sino-Japanese Ties

Sino-Japanese relations now manifest a combination of centrifugal and centripetal forces¹¹. The following argument substantiates the statement mentioned above. The East China Sea dispute as a security flashpoint involving two of the world's greatest powers remained the apogee of the geo-economic competition between China and Japan. Trade was severely impacted due to their interlinked economies, as several Japanese factories in China were shut down. Protests erupted on the streets in China against the Japanese as the tensions heightened after nationalisation of the Senkaku Islands by Japan. Mutually interdependent security relations between Japan and the United States complicate the situation even more with probable US involvement in the dispute in case Japan's sovereignty is threatened. Recent incidents such as a 'radar lock' by a Chinese vessel of a Japanese ship were noted¹². As the security dynamics became volatile, Shinzo Abe proposed a reformed growth and security strategy to optimise Japan's national interests. It contained a "three-arrow" strategy to restructure the economy and alter fiscal policy. The conservatives have also backed a constitutional change and Abe's campaign agenda is to modify the name of the 'Self-Defence Forces' as well as amend Article 96 of the Japanese Constitution which would pave the way for the amendment of Article 9 in the Constitution.

The Sino-Japanese equation doesn't congeal at the balance-of-power level but penetrates deeper into the 'politics of memory' and the 'culture of insecurity'. Japan's military aggressions during the World War and its expansionist policies have severed ties with China and this is reflected in the political class and political culture of Japan. The textbook controversies, the official visits to the Yasukuni shrine, official apologies by the statesmen is what modifies Japan's national identity and shapes its domestic political campaigns as well as foreign policy outlook. A hawkish Shinzo Abe's attempt at ruffling feathers

11. *Ibid.*, p.251.

12. "Japan-China Relations: Surrounding the Situation on Senkaku Islands", Ministry of Foreign Affairs, http://www.mofa.go.jp/region/asia-paci/senkaku/position_paper3_en.html, February 7, 2013.

with neighbours can be foreseen in his revision of the Constitution and redrafting of the political apology so as to “Take Back Japan”¹³. As he emphasises in his book, “I’ll go so far as to say that we are in a battle to take back the country of Japan from post war history by the hands of the Japanese people (*Nihon kokumin*)”¹⁴. Japan’s re-modelling of the ad hoc security network in the region, through tools of economic diplomacy and proactive defence policies with countries like India will modify the strategic landscape of the region, gradually and dramatically.

KOREAN CRISIS

The Korean peninsula spiralled into conflict again this year beginning with Kim Jong-un attempting to consolidate his power by ‘testing’ the South Korean President’s mettle in international affairs. This was actualised in February 2013 when Pyongyang conducted a third nuclear test and the UNSC (UN Security Council) Resolution 2094 against Pyongyang’s nuclear test was passed on March 7. The North has frequently declared a “perpetual state of war against the South”, but this time, the situation was “ripe for conflict”. In barely three months, North Korea has launched long-range rockets, conducted an underground nuclear test, signalled its withdrawal from the 1953 Korean Armistice, and threatened a preemptive nuclear strike against the United States¹⁵. This year marks the sixtieth anniversary of the Korean Armistice Agreement as well as the US-South Korean Mutual Defence Treaty¹⁶.

The Obama Administration, meanwhile, welcomed its South Korean counterpart, President Park Geun-hye in Washington as the anniversary of the US-Korea Free Trade Agreement (KORUS) was

13. “Abe Playing with War Apology Fire, Kono Warns”, *The Japan Times*, <http://www.japantimes.co.jp/news/2013/07/01/national/abe-playing-with-war-apology-fire-kono-warns/#.UdHNsDunBIM>, July 1, 2013.

14. Kevin Doak, “Shinzo Abe’s Civic Nationalism”, <http://csis.org/publication/japan-chair-platform-shinzo-abes-civic-nationalism>, Centre for Strategic and International Studies, May 15, 2013.

15. Evan Osnos, “The Korean Crisis: Kim’s Dangerous Game”, *The New Yorker*, <http://www.newyorker.com/online/blogs/evanosnos/2013/03/the-korean-crisis-kims-dangerous-game.html>, March 29, 2013.

16. “Joint Declaration in Commemoration of the 60th Anniversary of the Alliance Between the Republic of Korea and the United States of America”, May 7, 2013, http://seoul.usembassy.gov/p_pv_050713b.html

celebrated. According to Park Geun-hye, the “peace and prosperity on the Korean peninsula owes a great deal to the robust alliance relationship that we (the United States and Republic of South Korea) have had”¹⁷. The US and South Korea began regularly scheduled joint exercises on March 12. This led to a downward security spiral on the Korean peninsula, with military drills and a war of words launched by North Korean leader, Kim Jong-un. The Korean Armistice Agreement was nullified as Operations Foal Eagle and Key Resolve, which included use of strategic bombers by the United States, were undertaken¹⁸. The United States, meanwhile, responded by installing 14 additional missile interceptors in Alaska as well installing a second radar in Japan to track early warnings of a possible missile launch from North Korea¹⁹. Diplomatic ties between the North and South were further strained when the former shut down the industrial complex at Kaesong where hundreds of Korean workers were stranded and subject to North Korean brinkmanship and “bellicose rhetoric”. A “shrimp between two whales” as it has been throughout history, the Korean peninsula has always been seen as the vortex of the respective political and security interests of the great powers in Northeast Asia²⁰.

The recent visit by South Korean President Park Geun-hye to China symbolised a new turn of events as this was the first time a Chinese leader issued a warning to the DPRK (Democratic People’s Republic of Korea) in the presence of a South Korean leader. Traditionally, incoming South Korean Presidents first visited the United States, the country’s main ally, and then Japan, before going elsewhere²¹. This time, diplomatic affairs in East Asia proceeded through a different conduit. Hedley Bull has aptly theorised the

17. “Meeting with Republic of Korea President-elect Park Geun-hye at Her Office”, <http://www.state.gov/p/eap/rls/rm/2013/01/202907.htm>, January 16, 2013.

18. “DPRK Militarymen Ready for All-Out Action”, *Korean Central News Agency*, <http://www.kcna.co.jp/item/2013/201303/news12/20130312-20ee.html>, March 27, 2013.

19. Chris McGreal, “US to Reinforce Missile Defences to Counter North Korea ‘Provocations’”, *The Guardian*, <http://www.guardian.co.uk/world/2013/mar/15/us-strengthen-missile-defence-north-korea>, March 15, 2013.

20. Scott Snyder, “The Korean Peninsula and Northeast Asian Stability”, in David Shambaugh and Michael Yahuda, eds., *International Relations of Asia* (Bowman and Littlefield Publishers, 2008), p.277.

21. “Japan Pushed into a Corner as Beijing, Seoul Put on United Front”, *The Asahi Shimbun*, <http://ajw.asahi.com/article/asia/china/AJ201306280079>, June 28, 2013.

state behaviour. His assessment of states surviving in an “anarchical society” rests on the claim that it is peace and not war that shapes the contours of international relations²².

PIVOTING THE CHINESE DREAM

The US’ rebalancing strategy has generated an entire discourse on the possible conflict between the vision and grand strategies of *Pax Sinica* and *Pax Americana*. The region appears to be as “ripe for multilateralism” as it appears “ripe for rivalry”.²³ Several premonitory remarks have been made on the present state of affairs in East Asia. Some believe an ‘Asian Cold War’ is on the horizon, while others argue that a European-style balance of power logic is dominant in East Asia at the moment. But this paper would emphasise on the contrary, arguing not for a zero-sum game between the two powers but a fluid system that suits both Chinese and American interests. The mutually exclusive territorial consolidations that were dominant during the Cold War will cease to formulate in the present era because of the mutually coexistent and interdependent economic, environmental, cyber-security related issues that populate the minds of the present political leadership.

“If power is the ability to obtain the outcomes one wants, it is important to remember that sometimes our power is greater when we [United States] act *with* others rather than merely *over* others”²⁴, Joseph Nye’s statement ushers in an alternate strand of thinking of the diplomatic pursuits by the East Asian countries with American involvement. China’s maritime ambitions, its ‘peaceful rise’ as a revisionist global and regional power is perceived to be in contrast to Japanese policies of maintaining and upholding international law and securing maritime trade routes. As the United States and its patrons seek to strengthen alliances, with active military bases and troop occupations, the geo-political aspect of the pivot strategy is in order.

22. Hedley Bull, *The Anarchical Society: A Study of Order in World Politics* (NY: Palgrave, 1977).

23. G. John Ikenberry, “American Hegemony and East Asian Order”, *Australian Journal of International Affairs*, vol. 58, no. 3, p. 353.

24. Joseph Nye, “Should China be ‘Contained’?” *Project Syndicate*, July 4, 2011 <http://www.project-syndicate.org/commentary/should-china-be--contained--#1oJszF15qOlwaj5x.99>, accessed on July 2, 2013.

What is now visible is the geo-economic supplement of the pivot strategy which is the formulation of the Regional Comprehensive Economic Partnership (RCEP) and the Trans-Pacific Partnership (TPP), the former initiated by the Association of Southeast Asian Nations (ASEAN) countries along with the East Asia Summit and the latter by the United States. The mutual exclusivity of these trade blocs has caught the attention of the international community but as of now, it seems to be a fluid conception armed with potential.

As a region, Northeast Asia lacks an official multilateral security organisation that assists the states in resolving the security threats, bridging the historical differences and erasing the past memories of colonisation. The interlinking and intersecting of the security of all the five member states in this region (including the two extra-territorial superpowers) results in status quoist resolutions to perceived security threats.

CONCLUSION

This East Asian security puzzle is a byproduct of the Cold War ideological rivalry that never sought to get resolved. The Korean Armistice Agreement still legitimises the existence of the Demilitarised Zone between North and South Korea. While China, South Korea and the United States have declared that a denuclearised Korean peninsula is in everyone's interest, North Korea is selectively deaf to such propositions. These overt converging security interests as expressed by the states involved do not match with the actual reality in the region. A controlled nuclear, Communist and totalitarian North serves its domestic interests as well as Chinese interests in terms of being a check on the US presence in the region. The American allies, Japan, South Korea and Taiwan are benefactors of the alliance network while they share some of the 'defence burden', and are secure under the nuclear umbrella. Japan, South Korea and Taiwan are liberal, democratic answers to the Communist states in the neighbourhood.

Now when North Korea acts belligerent and conducts nuclear tests, this creates security tension in the Japanese and South Korean minds which leads to beefing up of American defence in the region. The International Institute for Strategic Studies (IISS) conducted

a study that estimates Asian defence spending to have overtaken Europe's in 2012 in direct proportion to their rising economies²⁵. The Chinese foreign policy keeps the American policies in check because the status quo seems to be an amiable solution to the East Asian countries. Hence, what appear to be diverging security interests are actually implicit converging ones that suit all the parties the involved. Cha illustrates this as a linkage between the US alliance system and the East Asian regional architecture and terms it as a "complex patchwork of bilaterals, trilaterals, and other plurilateral configurations. The complexity of this geometry is a useful tool for muting regional security dilemmas"²⁶. Xi Jinping's acceptance speech in the National People's Congress was dedicated to the idealistic construct of the 'Chinese Dream', a futuristic goal of "national rejuvenation". Meanwhile the international community eagerly awaits the 'substance' of this dream-project. What might be paradoxical is that the US strategy is 'pivoting' the 'Chinese dream'.

25. *The Military Balance 2012*, <http://www.iiss.org/en/publications/military%20balance/issues/the-military-balance-2012-77da>, March 7, 2012.

26. Victor Cha, "Complex Patchworks: U.S Alliances as Part of Regional Architecture", *Asia Policy*, no. 11, January 2011, p. 28.

JAPAN'S REARMAMENT AND ITS POSSIBLE CONSEQUENCES

ANKIT KUMAR

Come the July 2013 Upper House election, and Japan will be all set to proceed with its long stalled plan of revision of its post-war Constitution, particularly of its Article 9 which limits its self-defence forces capabilities in matters of national security; but, of course, the final revision is going to take a while due to the long and tiring process of decision-making in Japanese politics. Books by prominent politicians like *The Japan That Can Say No* by Shintaro Ishihara, a known nationalist, and Akio Morita, and *Blueprint For A New Japan* by Ozawa Ichiro have been bestsellers in Japan and provide a view of the opinion that is building up in Japan.

The Constitution which was drawn up by the Supreme Commander of Allied Powers (SCAP) staff during the Allied powers' occupation of Japan, had been, more or less, left untouched by the Japanese legislators for fear of tampering with a model of an instrument of which had yielded tremendous economic growth to Japan. However, the right wing Liberal Democratic Party (LDP) has had its mind set on the revision of the Constitution for quite some time now, considering the strategic environment in and around Japan. The LDP which already commands a majority in the Lower House, is expected to secure a majority in the Upper House election as well, voting for which is scheduled on July 21. The recent success

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in the Tokyo metropolitan election is being viewed by many as a pointer to the LDP's impending victory in the Upper House election.¹ Popular leaders of the party have been persuading the legislators to make the revision as soon as possible so that Japan may become self-reliant in the handling of its security. The LDP's unique selling point in the Lower House election campaign was its promise to bring in reforms in the economic and security policies of Japan.

Apart from the right wing politicians and hardcore nationalists, there are several other factors which have strengthened Japan's position on revision of Article 9 such as the threat of a military showdown between China and Japan over the territorial dispute, North Korea's nuclear weapon tests and the potential unreliability of the US as an ally and guarantor of Japan's security.² Moreover, the US too is keenly supporting Japan's decision to rearm itself as it will reduce the burden on the US to provide security to Japan by a significant extent. The revision is likely to invite severe criticism and vehement protests from countries which were 'victims' of Japan's aggression during World War II. At the same time, there are several countries, including India, which would welcome the decision.

In this article, the author has presented the background in which Article 9 was imposed on Japan and then has analysed the factors which have encouraged and pushed Japan to some extent towards the amendment of Article 9. This article looks at the various positive and negative consequences of this decision and how it is going to benefit India in its quest of becoming a regional superpower and securing its national interests in the region.

THE PEACE CONSTITUTION

The post-war peace Constitution has been the base of Japan's pacifist foreign policy. The main aim with which the 1947 Constitution was created was to democratise, deregulate and demilitarise Japan so that it would not rise as a military power again. In a way, it was a vindictive measure by the US and its Allies to punish Japan for its World War II conduct. The Constitution severely limited Japan's sovereignty.

1. "Abe's LDP Sweeps Tokyo Assembly Poll Ahead of Upper House Election," www.japantimes.co.jp, June 24, 2013.
2. Richard Samuels, *Securing Japan: Tokyo's Grand Strategy and the Future of East Asia* (Cornell University Press, 2007).

The Allied occupation was imposed on Japan and its security was left in the hands of the United States. Article 9 was drafted specially to render Japan unable to start another war. The Article states that Japan cannot have a military force and that it renounces war as an instrument to settle international disputes.

The Japanese politicians under the leadership of Japan's then Prime Minister Yoshida Shigeru were happy to comply with the contents of the Constitution framed by the US, as their main concern at that time was to revive the Japanese economy which had been devastated by the war. Poverty and inflation were at an unprecedented level. The Prime Minister came up with the "Yoshida Doctrine" which stated that Japan would concentrate only on rebuilding its economic power and would not have its own military forces but would rely on the US for its security. Fortunately, the plan worked well and within two decades after the devastation caused by the war, Japan achieved the status of an economic superpower by becoming the world's second largest economy in 1968, and held on to that position for more than 40 years, which is quite an impressive accomplishment.

Once Japan achieved the 'economic miracle,' some people started demanding that the government amend Article 9. The most famous example is of a popular novelist who committed suicide at Japan's Self-Defence Forces (SDF) Headquarters (HQ) saying that his last wish was for Japan's SDF to regain its honour by scrapping Article 9 from the Constitution. Following this incident, the demand for revision of the Constitution suddenly shot up but the majority of the population was still against it, partly because they felt they did not face any security threat and the US' protection was enough, and partly because of the fear of rise of militarism in Japan again if the restrictions were to be lifted. But post the Gulf War of 1991, the situation changed to a great extent.

THE SHOCKS

Japan actually had no intention of rearming itself, but a couple of incidents, which strategists call "shocks", revived the debate on rearmament in Japanese political circles.

Normalisation of US-China Relations: Till 1972, Japan had no diplomatic relations with China because of the Communist regime

which had taken over China and the decade-long-war between the two during World War II. However, after the "Nixon shocks," Japan normalised its relations with China and signed a friendship treaty in 1978. Japan made huge investments in China and the latter also received lot of Official Development Assistance (ODA) funds from Japan to develop its infrastructure. But once China's economy started growing, it started showing its true colours. China started claiming the Senkaku Islands which it called Diyaou, despite an agreement between the two countries that both would mutually and cooperatively exploit the natural resources in and around the islands. Later, China started demanding an apology from Japan for the aggression and atrocities, especially the rape of Nanking, committed by Japanese soldiers in China. When China conducted its nuclear tests in 1995, Japan threatened to stop the ODA to China but China claimed that the ODA was not a loan or financial assistance but rather, war reparation that Japan had to pay to China. By 2003, Japan had stopped ODA to China considering the latter's immense economic growth. China has achieved the status of, and subsequently replaced Japan as, the world's second largest economy.

1991 Gulf War: When Iraq invaded Kuwait in 1991, the UN called for joint action against Iraq under US leadership. As it was a UN mandated mission, most countries participated in it by sending their troops. The US asked Japan to send its combat forces to participate in the operation but Japan refused citing Article 9 which prohibits overseas deployment of Japanese soldiers. By the time the Japanese legislators finished their debate on whether to send troops, the war was over. Though Japan did not participate in the war, it footed a bill of \$13 billion as its share of war expenditure. But Japan was in for a shock when the US thanked various countries for their support in the war but did not mention Japan's name despite its huge monetary contribution to the war expenditure. Japan felt insulted and made a provision that it would send its troops on UN peacekeeping missions but only in non-combatant roles.

FACTORS AUGMENTING THE DECISION FOR REARMAMENT

There are quite a few factors behind the demand for rearmament in Japan. Four important ones are:

1. The biggest threat to Japan comes in the form of a territorial dispute with China which has been fuelled mostly by the nationalistic sentiments of the public of both countries who claim sovereignty over the Senkaku/Diyaou Islands. According to the initial agreement, China and Japan had agreed to jointly exploit the islands and surrounding areas for resources but by the 1990s, Chinese fishing vessels and reconnaissance ships were frequently spotted in the area by the Japanese Coast Guard. There were also reports of Chinese and Russian Air Force fighters violating the Japanese air space.
2. The imminent threat of a missile attack from North Korea also looms large on Japan. Back in 1998, when a North Korean missile was suddenly launched over the Japanese air space, the Japanese government and SDF were in dismay. Their intelligence completely failed to predict the North Korean intention of launching the missile. Japan has no serious dispute with North Korea; only the case of the Japanese citizens abducted by the North Koreans over the years remained an issue between them. The main reason why North Korea threatens Japan more than South Korea is because of the support Japan has lent to US forces which are stationed in Japan. So in case a war breaks out, Japan will be pulled into it, whether it is willing or not. In such a scenario, it will be beneficial for Japan if it has a full-fledged force to launch an offensive against North Korea.
3. The potential of the unreliability of the United States to provide security has gone up recently. The US and its North Atlantic Treaty Organisation (NATO) allies have been involved in operations in Afghanistan and Iraq for over a decade now and have sustained significant losses, with no credible output in terms of stability. The recession in the US economy has led to a massive cut in the defence budget which restricts the US options of military usage in future conflicts. The US itself would prefer not be involved in any conflict which is likely to result in a stalemate. In such a situation, Japan will be left to fend for itself unless it builds a force capable of not only defending itself but also contributing towards the stability of the region.

4. Japan is one of the members of the G-4 countries which are demanding expansion of the UNSC (United Nations Security Council) to gain a permanent seat in the Security Council. One condition set by the US is that in order for Japan to become a permanent member, it should contribute its forces in combat roles for the UN peacekeeping operations. Also, many countries have not supported Japan's candidature for a permanent seat because they see Japan as a puppet whose strings are in the US' hands and, hence, regard Japan as not capable of taking any independent decision. Hence, it has become necessary for Japan to establish an identity for itself and participate more effectively in world affairs.

POSSIBLE CONSEQUENCES

If and when Japan amends its Constitution and decides to rearm itself or, more precisely, if and when Japan gives itself the right to retaliate if attacked or make a preemptive strike if it perceives any imminent threat to its security, then huge repercussions are expected in the East Asian region. In theory, this could lead to varied perceptions by different states; but on the ground, the situation will not change much. Many Chinese strategists who have the habit of exaggerating facts and blowing things out of proportion would say that Japan is trying to threaten China with war over the island dispute. But the fact is that China is responsible to quite an extent in pushing Japan towards rearmament. Japan is going to continue its alliance with the United States in the foreseeable future. There are plenty of indicators which suggest that. The only significant change it is going to make is to Japan itself. Japan would get new confidence and, therefore, can be expected to be more audacious in regional and international affairs. The threats to regional stability are countries like North Korea whose regimes are dictatorial, with scant regard for the welfare of their own citizens, and China, which is adamant in its approach and believes in aggression to settle disputes.

In the international system, every state has the right to make and change its policies based on its national interest, hence, Japan will not be wrong if it follows through the decision to rearm, as it will enhance its security capabilities significantly. This, in turn, may lead

to more stability in the region which China is trying to dominate or it may escalate the tensions in the region, at least vocally. It will be worth watching how the turn of events will shape the regional game in the Asia-Pacific.

WHAT DOES IT HOLD FOR INDIA?

Considering the threats it is facing, the situation of Japan is quite similar to that of India. Both Japan and India have neighbours as their adversaries, propped up by China. While North Korea as an immediate neighbour is a threat to Japan, Pakistan is the arch rival of India. China is a common adversary of both Japan and India and it is China which actually supports and supplies weapons and other logistics to both Pakistan and North Korea. If we look at the bigger picture, it can be deduced that China has been pursuing the plan of using Pakistan as a proxy to India and North Korea as a proxy to Japan and the US.

Japan had been complacent about its security because of the US-Japan security agreement for a long time but with the changes in the strategic environment of East Asia in the last decade, coupled with the divergence in the interests of the US and Japan, it has become necessary for Japan to have a force capable of securing its national interests.

The main problem Japan encounters in creating a dynamic defence force is its ageing society coupled with decreasing birth rates. Japan has about 220,000 soldiers in various branches of its SDF which may seem sufficient against an enemy such as North Korea, but against China, this number is comparatively inferior. The youngsters, mostly college graduates who pass out of the top colleges, have no motivation to join the defence forces. According to various surveys, Japanese students prefer working for a company rather than serving in the self-defence forces because of reasons such as high disparity in the salary of a company employee and a self-defence force personnel, and the comparatively lower status in society, as Japan remains a hierarchical society.

India, on the other hand, has a professional volunteer conventional military power thanks to its million plus strong military personnel, but when it comes to the technological aspects of the military, India

lags behind. The extended period of completion of projects, coupled with cost overruns and the inferior quality of the end products, makes the situation more difficult.

In such circumstances, it would behove both India and Japan if they can establish a robust partnership which would act as a deterrent to China from participating directly in a war against either of them. Both Japan and India face the possibility of fighting a two-front war and if it is possible to deter at least one of the adversaries, then the scenario of a two-front war could be avoided. Also, India would benefit immensely from technological collaboration with Japan.

The defence cooperation between Japan and India is still in a nascent stage but its future looks really bright. The focus of India-Japan relations is still mainly on the economy. Japan's ODA (Official Development Assistance) which is implemented by its agency JICA (Japan International Cooperation Agency) has been funding various major projects in India such as the metro rail system in all the metropolitan cities, the Delhi-Mumbai industrial corridor and freight corridor, technical assistance on high speed railway development, etc.³ India also seized the opportunity to export rare earth metals to Japan, which is the life-line of Japan's electronic industry following the suspension of supply of these metals from China when the island dispute flared up enormously after the nationalisation of the Senkaku/Diyaou Islands by Japan.

CONCLUSION

The stability of the East Asian region is of vital interest to all the major players, including Japan and India. With the volatility of the region in the background, it is imperative for some external powers to maintain a strong presence in the region. Japan itself has border disputes with South Korea, China and Russia, which add to the instability of the region. Apart from those issues, the historical factor also augments the problems, with Korea and China repeatedly demanding an official written apology from Japan and making a hue and cry over Japan's playing down of the war atrocities committed by imperial Japan during World War II and distortion of historical

3. JICA Annual Report 2012.

facts in its textbooks.⁴ If Japan goes for the amendment of Article 9 of its Constitution, China is likely to protest the move and may also threaten Japan with preemptive military action because China obviously is going to consider it as a move against itself. In fact, China has kept playing the historical card time and again only to keep Japan from rearming itself and also to obtain concessions. According to Chinese scholars, Japanese rearmament is not only a danger to China but to the whole East and Southeast Asia: the countries that suffered the brutal Imperial Japanese assault during World War II have not forgotten history, and still feel jittery at the thought of Japan becoming a potent military power again. But the fact is that Japan has a better track record to show than China after World War II. Japan has supported nuclear weapons non-proliferation whereas there is evidence to show that China has been involved in nuclear weapon proliferation by actively and latently supporting the Pakistani and North Korean nuclear weapon programmes by providing technology and blueprints for a nuclear bomb.

While these countries have their view-point, what they need to also consider is that Japan is a complete democracy now with its military firmly under civilian control which was not the case during the pre-war era. We also have the example of other Axis powers such as Italy and Germany that have established a significantly strong military force and are not bound with any war guilt to compromise on their national security. Japan, on the other hand, has been repetitively subjected to the war guilt syndrome which has kept it from gaining the respect and position in the international arena which is its due. War always leads to collateral damage. While Korea, China, Philippines and other Southeast Asian countries suffered at Japan's hands, Japan too was ravaged by conventional and nuclear bombs. Japan deserves one more chance to show to the world that it has evolved into a mature and responsible nation and is capable of becoming a 'normal' country which is free from the dark phase of its past.

No nation can afford to mortgage its national security interests to the defence policies of another nation, however powerful that nation may be. Japan's strategic vulnerabilities and its volatile

4. Thomas Berger, *War, Guild and World Politics After World War II* (Cambridge University Press, 2012).

security environment provide it adequate justification to acquire nuclear weapons capability to safeguard its existence. Japan should not worry about international reactions in this regard. The loudest outcry is likely to come from China.⁵ A strong Japanese military has become essential for the stability and prosperity of the region. Japan has shown its unilateral commitment towards the non-proliferation of nuclear weapons and is helping various developing countries in their endeavour towards achieving full development.

5. Dr. Subhash Kapila, "Japan's Imperatives for a Nuclear Weapon Arsenal," www.southasiaanalysis.org/paper487, September 26, 2012.

DRIFT OF NUCLEAR ENERGY MARKET COOPERATION, COMPETITION, AND INTERDEPENDENCE

JI YEON-JUNG

Despite the trauma over the Fukushima incident, the growing demand for reliable energy sources has created a larger global nuclear energy market. At present, leading nuclear exporters are looking at Africa, Asia, Eastern Europe and the Middle East to boost the nuclear industries in these attractive regions. In particular, South Africa, India, Pakistan, Bangladesh, Indonesia, the Czech Republic, Hungary, Slovakia, Turkey, Ukraine, Saudi Arabia, Iran, the United Arab Emirates, and Brazil are more focussed than other countries in calling attention to the nuclear business. For nuclear exporters, newly expanding markets not only provide financial advantage but also open up networks of technological dependence that are bound to strengthen bilateral and multilateral strategic circles.

Pursuing the long-term goals, some exporters have demonstrated trail-blazing ideas of cooperation even if other areas of the policies clash. For instance, the US-China nuclear technology cooperation, and France-Japan joint venture on Turkey's nuclear market illustrates how nuclear exporters react to rapidly changing circumstances. Simultaneously, other major stakeholders like Russia and South

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Korea also keep exploring approaches to reserve market shares in collaboration with other countries. Other newcomers like China are aiming at holding some market portions with the last-mover advantage on exporting nuclear reactors and developing indigenous technology.

LOOMING CLASH IN THE MARKET

In the nuclear business venture, the major nuclear exporters face keen competition with an increasing number of dealers and the downturns in the market. The share of nuclear energy peaked to 17 percent in 1993, producing 2,660 terawatt-hours of electricity¹, which reduced by 13.5 percent in 2011,² generating 2,518 terawatt-hours³. By June 2013, 436 nuclear reactors in 31 countries⁴ were operating, downsized from 444 reactors in 2002.⁵ Additionally, 69 reactors were under construction in 13 countries and 27 countries planned to construct 159 more reactors according to the Power Reactor Information System (PRIS) in the International Atomic Energy Agency (IAEA)⁶. Eleven countries – Bangladesh, Belarus, Egypt, Indonesia, Iran, Jordan, Kazakhstan, Lithuania, Poland, Turkey, and Vietnam – are new purchasers that did not possess nuclear reactors earlier. Other countries such as Israel, North Korea, Malaysia, Saudi Arabia, and Thailand and those not operating any nuclear reactors, are also mulling over nuclear energy with the reactors proposed. Overall, 318 more reactors (total capacity of 359,750 MWe) are being considered in the near and long-term future in 36 countries, especially in China (120 reactors), India (39), Russia (20), Saudi Arabia (16), US (15), Ukraine (11), Italy (10), UAE (10), UK (9), Vietnam (6), and Indonesia (4).⁷ Hence, it is anticipated that the nuclear commercial market will grow due to the growing demand of electricity and upgrades or replacements of old nuclear reactors.

1. Mycle Schneider and Antony Froggatt , "2011-2012 World Nuclear Industry Status Report", *The Bulletin of the Atomic Scientists*, vol. 65, no.8, September/October 2012, pp. 9-10.
2. World Nuclear Association, "Plans For New Reactors Worldwide", <http://world-nuclear.org/info/Current-and-Future-Generation/Plans-For-New-Reactors-Worldwide/#.UblS0OdvAfg>
3. Schneider and Froggatt , n. 1, pp. 9-10.
4. IAEA, Power Reactor Information System, <http://www.iaea.org/pris/>
5. Schneider and Froggatt , n. 1, pp. 9-10.
6. n. 4.
7. n. 2.

Table 1: Nuclear Reactors under Construction and Planned (June 2013)⁸

Countries	Reactors under Construction		Reactors Planned or Ordered		Countries	Reactors under Construction		Reactors Planned or Ordered	
	No	MWe	No	MWe		No	MWe	No	MWe
Argentina	1	745	1	33	Lithuania	0	0	1	1350
Bangladesh	0	0	2	2000	Japan	3	3036	9	12947
Belarus	0	0	2	2400	Jordan	0	0	1	1000
Brazil	1	1405	0	0	Kazakhstan	0	0	2	600
Bulgaria	0	0	1	950	Korea, South	4	5415	6	8730
Canada	0	0	2	1500	Pakistan	2	680	0	0
Chile	0	0	4	4400	Poland	0	0	6	6000
China	28	30550	49	56020	Romania	0	0	2	1310
Czech Rep	0	0	2	2400	Russia	10	9160	24	24180
Egypt	0	0	1	1000	Slovakia	2	880	0	0
Finland	1	1700	0	0	Turkey	0	0	4	4800
France	1	1720	1	1720	Ukraine	0	0	2	1900
India	7	5300	18	15100	UAE	2	2800	2	2800
Indonesia	0	0	2	2000	UK	0	0	4	6680
Italy	0	0	10	17000	US	3	3618	9	10860
Iran	0	0	1	1000	Vietnam	0	0	4	4000

With such an optimistic picture of the market, the major nuclear exporters have ambitious plans in the race for advanced technology, the price well-offered or the price offered in alliance. Currently, only seven countries are engaged in exporting nuclear reactors: Canada, China, France, Japan, Russia, South Korea, and the United States. In addition, India is expected to create a space for itself amongst them in the near future⁹. The seven competing exporters design their own programmes and strategies, with a variety of approaches and interpretations of the technological assessment of reactor designs, components, enrichment or reprocessing techniques, fuel supply and international opinion.

8. World Nuclear Association, <http://www.world-nuclear.org/info/Facts-and-Figures/World-Nuclear-Power-Reactors-and-Uranium-Requirements/#.UblSw-dvAfg>

9. Paul K. Kerr, Mark Holt and Mary Beth Nikitin, "Nuclear Energy Cooperation with Foreign Countries: Issues for Congress", *CRS Report for Congress*, Congressional Research Service, United States, 2011, p.2.

CIVIL NUCLEAR EXPORT STRATEGIES

In principle, all the exporters in nuclear commerce abide by the requirement of the safeguards of the international regime, the International Atomic Energy Agency (IAEA) and the Nuclear Suppliers Group (NSG) guidelines. However, the terms and conditions to conclude a deal vary depending upon their political calculations and will. In the United States' case, although its share of the civil nuclear market has diminished compared to the 1970s and 1980s, the US continues to seek leadership in nuclear commerce and the non-proliferation regime. By 2012, the US signed the 123 Agreement with 22 countries that authorised the limits by the US government in transferring fissile materials and nuclear reactors. Largely, the 123 Agreement comprises a broad framework of nuclear commerce with stringent non-proliferation norms covering nuclear material, equipment or components, including "technical changes, scientific research and safeguards".¹⁰ However, it is adduced that the US nuclear commerce strategy adheres to the case-by-case approach, with exceptional conditions applied.

For instance, the US-India nuclear deal shows evidence of contrast with the US-UAE pact. In lieu of the 123 Agreement, New Delhi secured its right to reprocess US-obligated material with the condition of separating the nuclear reactors into civil and military ones for international safeguards. The exceptional consent, called "blanket consent", also applied in signing deals with EURATOM (the European Atomic Energy Community) and Japan.¹¹ The US, in general, stipulates prior consent for the reprocessing, or use in any altered form, of nuclear material provided by the US to the signatory. On the other hand, the agreement with the UAE for a thorium-fuelled high-temperature reactor was known to be more stringent than the standard 123 Agreement and required the UAE Federal Law No.6 to be amended. The US-UAE agreement states that the countries are not permitted to "develop, construct or operate uranium enrichment and

10. "123 Agreements for Peaceful Cooperation", National Nuclear Security Administration, <http://nnsa.energy.gov/aboutus/ourprograms/nonproliferation/treatiesagreements/123agreementsforpeacefulcooperation>

11. Jessica C. Varnum, "U.S. Nuclear Cooperation as Nonproliferation: Reforms, or the Devil You Know?", *NTI Articles*, November 27, 2012, http://www.nti.org/analysis/articles/us-nuclear-cooperation-nonproliferation-reforms-or-devil-you-know/#_edn9

spent fuel processing facilities within the country's border."¹² The strict clauses codified in the US-UAE agreement state the possibility for renegotiation, if other countries in the Middle East sign the same agreement in a more favoured manner. The US nuclear commerce strategy, therefore, is committed within the "already developed defense relationship model".¹³

Russia's strategic approach is dissimilar to the US in view of its compliance with international regulations. Moscow perceives that the nuclear industry is one of the "biggest assets in its quest for industry leadership" with its fast neutron reactor technology.¹⁴ Evidently, even after the Fukushima accident in 2011, Russia recorded \$50 billion in foreign orders in 2012, which is double that in the previous year.¹⁵ It indicates that the Russian nuclear industry complex is perceived as a stable source of strategic advantage for Russia. In addition, Moscow follows its geo-political interests by constructing nuclear reactors and providing fuel and related services to meet the unwavering energy security strategy in the world energy market.¹⁶

Moscow and Washington often clash on nuclear energy collaboration in the Middle Eastern countries on the issue of Russia's hands-on policy toward Iran, Syria and Libya despite US tensions with those countries.¹⁷ Russia's approach to the vendors is less known, but Russia's approach to Europe and the Middle Eastern countries, is more pragmatic, including in the utilisation of the tension between the West and the some parts of the Middle East, rather than imposing

12. Saurav Jha, "UAE Nuclear Ambitions Have Washington's Blessings", *World Politics Review*, Briefing, October 30, 2009. <http://www.worldpoliticsreview.com/articles/4526/uae-nuclear-ambitions-have-washingtons-blessings>

13. Ibid.

14. "Benchmarking the Global Nuclear Industry 2012", Ernst & Young, [http://www.ey.com/Publication/vwLUAssets/Benchmarking_the_global_nuclear_industry_2012/\\$FILE/Benchmarking-the-global-nuclear-industry_2012.pdf](http://www.ey.com/Publication/vwLUAssets/Benchmarking_the_global_nuclear_industry_2012/$FILE/Benchmarking-the-global-nuclear-industry_2012.pdf)

15. "Russia Doubles Nuclear Exports Despite Fukushima", *KyivPost*, March 23, 2012, <http://www.kyivpost.com/content/russia-and-former-soviet-union/russia-doubles-nuclear-exports-despite-fukushima-124856.html>

16. P.N. Alekseev, et. al, "On a Nuclear Power Strategy of Russia to 2050", *Atomic Energy*, vol. 111, no.4, February 2012, p. 240.

17. "Russia Pursues Nuclear Energy Collaboration with Syria", *Global Security News*, NTI, May 11, 2010. <http://www.nti.org/gsn/article/russia-pursues-nuclear-energy-collaboration-with-syria/> "Why Russia Stays Loyal to Iran Despite Tensions", *DW*, May 27, 2013, <http://www.dw.de/why-russia-stays-loyal-to-iran-despite-tensions/a-16834496>

a blockade.¹⁸ In exploring new markets like South Africa, Moscow's endeavour is to create nuclear contracts included in a package of comprehensive defence collaboration, such as the proposal for the production of a light multi-purpose helicopter for joint defence.¹⁹

In France, a civil nuclear cooperation agreement has comprised an endorsed political gesture, which has not changed since the 1950s²⁰. Since then, France has signed nuclear cooperation agreements with more than 34 countries, marked by a number of study cases of nuclear transference. In cases of transferring sensitive nuclear exports, Paris made successful deals with Israel: pre-processing plant (1956-65); Japan: pilot-scale reprocessing plant (1971-74); Pakistan: reprocessing plants (1974-82); South Korea: reprocessing plant components (1974-75); Taiwan: reprocessing plant components (1975); and Egypt: hot cells for reprocessing (1980-82).²¹

Concurrently, the AREVA group, formed in 2001, plays a key role in civil nuclear exports in France. AREVA provides a two-step strategy in the civil nuclear market: (i) positioning itself as a leader in exploring accessible markets with high-edge technology and safety measurements that can leverage its experience and knowhow; and (ii) a responsible growth strategy which encompasses sustainable nuclear energy development aiming at enlarging its share to construct nuclear reactors (one-third in the accessible market), fuel management and safety measurement.²²

In the case of South Korea, Seoul has emerged as one of the major exporters over the deal with the UAE valued at \$20.4 billion, in competition with France and the US.²³ The Korea Electricity Power Corporation (KEPCO) has focussed on its brand of the APR-1400 design, on sale with the related services. In addition, Seoul penetrated the Jordan market to first assist in a research reactor and a programme of training in nuclear expertise as part of a package deal for human

18. Ibid.

19. "Russia to Help SA With Nuclear Power", *ioL News*, May 17, 2013, <http://www.ioL.co.za/news/politics/russia-to-help-sa-with-nuclear-power-1.1517380>

20. Mycle Schneider, "Nuclear France Abroad", Mycle Schneider Consulting, Paris, May 2009, p.15

21. Ibid.

22. AREVA group website. <http://www.aveva.com/EN/group-731/vision-leading-the-nuclear-renaissance-and-the-renewable-energies-boom.html>

23. "Korean Team to Build U.A.E. Nuclear Plants", *The Wall Street Journal*, December 28, 2009.

resource development along with financial support of a \$70 million soft loan.²⁴ Ostensibly, Seoul cultivates its nuclear deals with political and technical factors like other key players, yet its strategies are linked to structuring a more flexible business model to avoid the pitfalls of international politics. Rather, Seoul seeks to reduce litigation risk by allotting the one-stop service of one organisation, KEPCO, along with other financial incentives by offering a cost-effective reactor model.²⁵

For Japan, nuclear export remains an urgent national priority. Despite domestic safety concerns over the Fukushima incident in 2011, Tokyo vigorously seeks breakthroughs to export nuclear technology.²⁶ On-going negotiations with various countries like Brazil, India, or countries in the Middle East and Eastern Europe are visible in the growing energy diplomacy. The Tokyo Electric Power Company (TEPCO) constantly promotes nuclear safety monitoring measures, sharing its experience at Fukushima, with an offer of financial assistance to customers.²⁷ Tokyo's aim in nuclear commerce at present is to refresh the international opinion and image of Japan and enhance public opinion in the domestic area on the topic of nuclear energy. Domestically, however, a number of enquiries are on-going concerning the Japanese government's position on the Fukushima incident and its *ex post facto* management, with a view to determining whether Tokyo is targeting nuclear commerce in a resolute manner.²⁸

Along with the two Asian giants in nuclear commerce, China's strategic position is strengthened by active promotion of export of nuclear reactors. China is acknowledged for its ability to design and assemble 300,000 KWe, 600,000 KWe, and 1 million KWe reactor units by the China National Nuclear Corporation (CNNC), China Guangdong Nuclear Power Group and State Nuclear Power

24. Chen Kane and Miles A. Pomper, "Reactor Race: South Korea's Nuclear Export Successes and Challenges", *Academic Paper Series*, Korea Economic Insitutive of America, May 21, 2013, pp.1-8.

25. Ibid.

26. "Japan To Export Nuclear Technology Despite Domestic Safety Concerns", *RTT News*, June 20, 2013, <http://www.rttnews.com/2138828/japan-to-export-nuclear-technology-despite-domestic-safety-concerns.aspx>

27. "Japan Courts the Money in Reactors", *The New York Times*, October 10, 2011.

28. "Export of Nuclear Technology", *The Japan Times*, May 14, 2013, <http://www.japantimes.co.jp/opinion/2013/05/14/editorials/export-of-nuclear-technology/>

Technology Corporation (SNPTC), respectively.²⁹ In addition, the public expects China to have a bigger stake in the civil nuclear market, confirming China's leadership in the world through confidence in its homegrown technology.³⁰ Beijing seems to consider nuclear commerce as a means to pursue a national development strategy to meet the urgent need for new energy supplies; therefore, it announced a \$50 billion budget allocation for 32 new reactors by 2020.³¹ However, China's nuclear reactor exports to its allied-strategic circle, including Pakistan, arouse concerns about nuclear proliferation.³² Beijing recently confirmed a deal with Pakistan for a 1,000 MW nuclear plant which is regarded as controversial by the IAEA and NSG, yet the allegation is rejected by the two parties, China and Pakistan.³³

COMPARISON OF DOMESTIC REGULATION ON NUCLEAR EXPORTS

In the case of the US, domestic political and legalistic procedures are ostensibly interlinked with Congressional approval and the multilateral nuclear non-proliferation mechanism. US nuclear cooperation requires an agreement in compliance with the US Atomic Energy Act, and there is Congressional approval that the government is not the sole authoriser to guarantee the cooperation³⁴. In essence, the US' nuclear cooperation agreements adhere to five criteria: (1) US safeguards on transferring nuclear material and equipment and IAEA safeguards are applied in full-scope; (2) the US can demand the return of any nuclear explosive device intended for military use (with an exception in agreement thereto); (3) US consent is required for retransfer of material or classified data; (4) physical security of

29. "Official: China Should Export Nuclear Power", *People's Daily Online*, March 11, 2011. <http://english.people.com.cn/90001/7316074.html>

30. Ibid.

31. "China Defrosts Nuclear Plans, Though Issues Remain", *China Digital Times*, July 4, 2013, <http://chinadigitaltimes.net/2012/03/china-defrosts-nuclear-plans-though-issues-remain/> United States Government Accountability Office (2010), "Nuclear Commerce", *Report to the Committee on Foreign Affairs, House of Representatives*, United States Government, November 2010, pp.1-32. <http://www.gao.gov/new.items/d1136.pdf>

32. "China, Pakistan Reach Secret Nuclear Reactor Deal for Pakistan", *The Washington Times*, March 21, 2013.

33. "China Defends Deal to Build 1000 MW Nuclear Plant for Pakistan", *The Economic Times*, March 25, 2013.

34. Kerr, et. al., n. 9, p.13

the nuclear material; (5) no enrichment or reprocessing activity and nuclear materials (plutonium and Highly Enriched Uranium – HEU) applied in the recipient state without former approval.³⁵ However, not all forms of nuclear technology and service transference require the 123 Agreement or Congressional approvals. The exemption of “nuclear technology and services related to the production of Special Nuclear Material” can be granted under the Section 810 Agreement, if the Secretary of Energy’s authorisation is made.³⁶

Other countries like France, South Korea, Russia, and China and so on, do not need a parliamentary vote or any other form of legislative apparatus on concluding a nuclear deal. France has a National Public Debate Commission, established in 2004, but neither this nor representatives of the electorate influence the government decision-making.³⁷ A similar situation over the executive dominance in nuclear export decision-making can be observed in Japan and South Korea as well. On the other hand, little is known about China’s and Russia’s domestic law and procedures.

INEVITABLE STRATEGIC COOPERATION FOR NUCLEAR MARKET

Currently, there is no sign of perpetual enmity in the civil nuclear market but there are strategic partnerships. There are two patterns of strategic cooperation amongst the major stakeholders: (1) technology cooperation; and (2) strategic partnership for joint projects. The US, France and Japan represent a well-known case of bilateral nuclear collaboration, as they have shared knowledge and technology for many years.

The US-China joint venture, *inter alia*, is an interesting one in the stable improvement in such deals, among others. Westinghouse (US) and Nuclear Power Technology Corporation (SNPTC, China) keep extending their nuclear cooperation

35. Ibid., p. 14.

36. Jessica C. Varnum, “US Nuclear Cooperation as Nonproliferation: Reforms, or the Devil You Know?”, *NTI Articles*, November 27, 2012, http://www.nti.org/analysis/articles/us-nuclear-cooperation-nonproliferation-reforms-or-devil-you-know/#_edn9

37. Mycle Schneider, “Nuclear Power in France”, *The Greens/European Free Alliance*, commissioned by the Greens-EFA Group in the European Parliament, December 2008, pp. 1-40. <http://www.nirs.org/international/westerne/258614beyondmythfr.pdf>

agreement since first agreeing in 2008.³⁸ The joint research lays emphasis on safer nuclear reactor designs than the molten salt coolant operating at higher temperatures³⁹. This collaboration also invites academic-industrial cooperation in science and technology. However, criticism arises when it is perceived that a leading country in nuclear technology like the US may not be positioned dominantly.⁴⁰

Another case that defies stereotypes also occurred in Europe. France had made great strides in cooperating through a series of strategic agreements. On April 25, 2013, France and China concluded a strategic civil nuclear partnership that included a key agreement for future contracts, including sale of facilities between AREVA in France and CNNC (China National Nuclear Corporation) and CGNPC (China Guangdong Nuclear Power Holding Company)⁴¹. AREVA also inked a strategic agreement with JNFL (Japan Nuclear Fuel Ltd) on fuel processing facilities at the Rokkasho-Mura site in collaboration with safety assessments.⁴²

Rosatom (Russia) proposed its partnership with EDF (France) in nuclear power stations in Kaliningrad and Turkey.⁴³ On May 7, 2013, Nikolai Spasskyi, Deputy Chairman of Rosatom, announced further cooperation with AREVA, which seems to be influenced by the France-Japan consortium in Turkey.⁴⁴ South Korea's KEPCO has also been involved in a consortium with Westinghouse to produce

38. "Westinghouse, China SNPTC Extends Nuclear Cooperation Agreement", *PR Newswire*, January 13, 2011, <http://www.prnewswire.com/news-releases/westinghouse-china-snptc-extend-nuclear-cooperation-agreement-114162644.html>

39. "Westinghouse Enters US-China Nuclear Collaboration", *Smartplanet*, July 3, 2012, <http://www.smartplanet.com/blog/intelligent-energy/westinghouse-enters-us-china-nuclear-collaboration/17252>

40. William Tucker, "America No Longer Leads in Nuclear Technology", *Real Clear Politics*, May 22, 2013, http://www.realclearpolitics.com/articles/2013/05/22/america_no_longer_leads_in_nuclear_technology_118505.html

41. "AREVA Signs a Series of Strategic Agreements with Its Chinese Partners", Press Release, AREVA Group Website, April 25, 2013, <http://www.aveva.com/EN/news-9812/aveva-signs-a-series-of-strategic-agreements-with-its-chinese-partners.html>

42. "AREVA Signs Series of Strategic Agreements With Japanese Partners", Press Release, AREVA Group Website, June 7, 2013, <http://www.aveva.com/EN/news-9857/aveva-signs-series-of-strategic-agreements-with-japanese-partners.html>

43. "Russian Rosatom Seeking Partnership for Nuke Plant in Turkey", *Daily News*, May 7, 2013, <http://www.hurriyetdailynews.com/russian-rosatom-seeking-partnership-for-nuke-plant-in-turkey-.aspx?pageID=238&nid=46374>

44. *Ibid.*

“Control Element Assemblies (CEAs) for combustion engineering-designed nuclear plant customers” since 2011.⁴⁵

CONCLUSION

The nuclear energy market now invites more competitors aiming to export nuclear equipment and technologies. The strategies and calculations of the major exporters have become more dynamic, seeking every possibility for survival, either on the platform of independent competition or strategic partnerships. The view that ‘my enemy’s enemy is my friend’ no longer applies, rather, the logic that ‘my enemy can also be my partner’ prevails in this field. However, how recipients will respond to the exporters in the overheated bidding is a concern left over for further research. Since exporters lure them with giant financial or defence packages that will benefit them in some way, it would be welcomed by the customer countries. Unfortunately, however, there has been a lack of research on the lax security culture or other factors to cause more competition among exporters in the respondent countries, as the position of the exporters is primarily highlighted in most cases.

45. “Westinghouse and KEPCO Nuclear Fuel Joint Venture Begins Production of Control Element Assemblies in Korea”, *PR Newswire*, December 13, 2011, <http://www.prnewswire.com/news-releases/westinghouse-and-kepco-nuclear-fuel-joint-venture-begins-production-of-control-element-assemblies-in-korea-135523113.html>

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