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DEFENCE AND DIPLOMACY



# DEFENCE AND DIPLOMACY

IN PURSUIT OF NATIONAL SECURITY

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JOURNAL OF THE CENTRE FOR AIR POWER STUDIES

# DEFENCE AND DIPLOMACY

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## EDITOR'S NOTE

The attack on September 18, 2016, by Pakistan on our forces in Uri, a small post in Kashmir, resulted in 18 casualties and made Uri a household word throughout the world. The attack was condemned globally and in India there were many voices that called for strong military action against Pakistan. As this issue of the journal is readied for the press, India made a strong diplomatic push to show once again that Pakistan is the hotbed of international terrorism. This time, our concerns found considerable traction with many countries and Pakistan must have felt the resultant isolation. The continued denials by Pakistan to the effect that it had no hand in the attack were not accepted by any country. Its once too often brandishing of the nuclear card is now met with derision and disbelief. The fact that Pakistan is an exporter of terrorism and uses terrorism as an instrument of state policy has been ingrained in the minds of the people of most countries. The latest act of terror will remain in public memory for a long time and any repeat of such a terror strike will make Pakistan's position far more tenuous. India has not yet foreclosed the military option and has maintained that it will use whatever means are necessary to make Pakistan pay for yet another dastardly act. In spite of no overt military preparation on our side, it appears that Pakistan perceives that a military action could be imminent and this has forced it to start making preparations for what it considers a probable eventuality. It is a moot point whether such a psychological impact on Pakistan is the result of a guilty conscience or the success of our diplomatic endeavours or both. The salient issue is that the incident and its aftermath has once again shown that defence and diplomacy are two sides of the same coin and operate best when they act in

unison. That proves yet again that the title of our journal *Defence and Diplomacy* is indeed appropriate.

This issue of the journal has no article on Pakistan. In fact, Pakistan becomes relevant only when it indulges in acts of terror. Otherwise, in Indian eyes, Pakistan occupies a position of singularly low significance.

This issue of the journal has articles on India's quest to join the Nuclear Suppliers Group (NSG); the possible significance of India's South Asian Association for Regional Cooperation (SAARC) satellite project; three articles on China; India-Iran relations; Central Asia; and the Caspian region. Also included is an article on suicide terrorism and another on the quest for accuracy in aerial delivery of men and material. The issue covers a wide cross-section of thought.

**Rajiv Nayan** traces the history of the formation of the NSG and its charter. He then gives cogent reasons as to why India's admission to the group will be advantageous to India as well as of benefit to the NSG. China's successful attempt to not allow India's acceptance as a member is well known and fresh in our minds. The article is timely to explain the road ahead and the author recommends a course of action that India should adopt.

India has joined the ranks of major space-faring nations. **Wg Cdr KK Nair** argues that it is time for India to explore the possibilities of space cooperation with countries that do not share contiguous borders with it. He explores the space capabilities and plans of South Korea and opines that there is great commonality of approach and we will do well to encourage South Korea to cooperate with us in space activities. He feels that there is considerable synergy that could be exploited.

In the first of three articles on China, **Dr Temjenmeran Ao** suggests that China is heading for an emerging economic crisis. It is well known that China's debt as percentage of Gross Domestic Product (GDP) at 282 percent in 2014 had quadrupled in the seven years from 2007. The debt as percentage of GDP is greater than that of the USA and the world has often accused the USA of profligacy in its governmental spending. It is certain that China has to weather the looming economic storm and there are many who, unlike the author,

state that China will recover. Time will tell but the story of China's likely economic peril has yet to run its course.

In July 2016, the Permanent Court of Arbitration at The Hague delivered its verdict on the South China Sea in favour of the Philippines. The verdict was of great interest to the countries around the South China Sea and it was recognised that China would reject the verdict. China promptly did so. **Sana Hashmi** looks at the cause of the dispute, the reasons for the Philippines to appeal to the Court of Arbitration, and the likely impact of the verdict on China, the other interested countries in the region and on India as well.

The Central Asian Republics (CARs) that became independent after the break-up of the erstwhile Soviet Union continued to maintain a strong relationship with Russia. It is in China's interest to gain more than a foothold in the region and for the last many years, China has been making large investments in the region. The investments are welcome but the CAR countries are apprehensive that China may get to exercise undue clout over them. **Dr Poonam Mann** examines the nature of the relationship, the objectives of the different countries and the possible outcomes in the years to come.

With the lifting of sanctions on Iran after the nuclear deal, India was quick to establish good relations with it once again. A number of high level visits were undertaken to underscore the mutual benefits of good relations. The Chabahar project has been 'inked' with India committing \$500 million for development of the port. **Anu Sharma** looks at the increasing importance of Iran as a regional player and discusses the development of Indo-Iran relations, with a peek at the future as well.

In another article on Central Asia, **Gp Capt Vivek Kapur** briefly traces the history of the region from the times of the 'Great Game', through the period when the region was part of the erstwhile USSR to the present times. The importance of the region requires no emphasis and the author argues that Russia's hold on the Central Asian countries remains strong, and good Indo-Russian relations should help us gain access to, and a foothold in, the region.



The Caspian Sea region boasts of large, proven oil and natural gas reserves. As energy requirements will increase with development, the importance of the region that is already high, will also increase. **Ngangom Dhruba Tara Singh** examines the relationship of India with the five countries that abut the Caspian Sea and the importance of the region to meet India's future energy needs.

The last two articles deal with somewhat novel aspects. **Radhika Halder** discusses the subject of suicide terrorism, its history, impact and the changes effected with time. It is an important subject that is topical and will remain relevant for a long time. **Gp Capt Ashok K Chordia**, who is a parachute jump instructor, writes on the increasing importance of accuracy in parachute delivery of men and material and the improvements that are on the anvil.

Happy reading



# NUCLEAR SUPPLIERS GROUP AND INDIA

RAJIV NAYAN

The Nuclear Suppliers Group (NSG) and India share a special relationship, which has been evolving over the years. The group, initially named as the London Suppliers Group, reflected the nuclear dynamics of the Cold War world, especially of the 1970s. It came into existence to address the complexity raised by the 1974 Peaceful Nuclear Explosion (PNE) of India. The PNE was an established and accepted tool for peaceful activity during the Cold War, but the advent of the nuclear Non-Proliferation Treaty (NPT) started creating complications in its application and legality.

In May 1974, then Prime Minister Indira Gandhi, decided to conduct a PNE. Like other countries, India also conducted the explosion for mining and earth-moving operations. However, the advent of the NPT created some conceptual problems. Some countries said there was no difference between a PNE and “other types of explosions”. This position implied that the country that conducted a PNE automatically became a nuclear weapon country. So, the Indian PNE was considered a *de facto* nuclear weapon test.

The Indian government resented this changed interpretation of the PNE. It reminded the world of India’s consistent affirmation that such experimentation was “its inherent right to use nuclear explosion

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technology for peaceful purposes". Then Foreign Minister Sardar Swaran Singh, stated: "The present experiment is important because it represents our resolve to develop our indigenous resources for energy for the benefit of our people through own efforts." He also asserted that "in performing this scientific test, India has not violated any of her international obligations".

Actually, that PNE took place more than 100 metres underground. India is an initial signatory of the Treaty Banning Nuclear Weapon Tests in the Atmosphere, in Outer Space and Under Water, also known as the Partial Test Ban Treaty or Limited Test Ban Treaty. The treaty was opened for signature in August 1963. India not only signed it but also ratified the treaty in 1963. The treaty does not ban underground tests, so the Indian test was not illegal. Regarding the use of nuclear materials, too, even traditional critics now accept the uncertainty of the facts.

The PNE, under the NPT, was given a *de facto* nuclear weapon status, and, thus, became a target of non-proliferation. The NPT, which became operational in 1970, divides the world into two categories: Nuclear Weapon States (NWS) and Non-Nuclear Weapon States (NNWS). All the countries, which tested their nuclear devices by January 1, 1967, are categorised as nuclear weapon states and the rest are non-nuclear weapon states.

There are differential obligations and rights for both the categories of states. The NPT allows nuclear commerce among all the states, but Article III of the treaty explicitly prohibits the creation of a new nuclear weapon states and transfer of any item, which may contribute to nuclear weapons development. The member countries of the NPT set up a body, called the Zangger Committee, in the early 1970s, to interpret the ambiguous language of the NPT. Gradually, the Zangger Committee created its own guidelines, and a list of nuclear items for regulating the nuclear trade.

Even if the world appreciated the Indian position on the PNE, a few countries decided to establish a group of suppliers, seemingly to curb countries like Pakistan, which had signed nuclear cooperation agreements with countries like France—a non-NPT country. The National Security Decision Memorandum 255 signed by the then US Secretary of State, Henry Kissinger, on June 3, 1974, advised: "(1)

Establishing agreed international guidelines, preferably based on US practice, to ensure the physical security of weapons useable and highly toxic materials whether internationally transferred or indigenously produced; (2) reaching some common principles regarding the supply of sensitive enrichment technology or equipment; (3) avoiding or applying stricter terms for supply in situations where special hazards could be present; and (4) encouraging, where appropriate, multinational enrichment, fuel fabrication and reprocessing facilities." However, these were preliminary points for discussion with like-minded countries, and the memorandum clearly indicated that changes could occur in due course.

A group of dominant powers persuaded some important nuclear supplier countries like France to adopt a control framework for the transfer of nuclear materials, otherwise used for peaceful purposes. Thus, the London Suppliers Group, the predecessor of the NSG was established in 1975 as an alternative to the NPT body—the Zangger Committee. Later, the participant countries arrived at a consensus on guidelines in 1975. Most of the elements of the guidelines still exist.

During negotiations for the NSG and even after that, members, which later rechristened themselves as participants, in general favoured maintaining secrecy. Some of these countries were apprehensive of the reaction of the developing world. They feared that the developing world would accuse them of developing a cartel. France, Germany and the United Kingdom asked the member countries to maintain a low profile. The idea of a dialogue between suppliers and recipients was also mooted. However, some countries resented the North-South kind of dialogue on nuclear commerce.

The end of the Cold War saw new political dynamics in the nuclear realm. The bipolar world disappeared. However, nuclear weapons continued to exist. Non-proliferation became the dominant *mantra*. The non-proliferation regime started taking a new shape. In the 1990s, the NSG, which was created to accommodate non-NPT members, added the NPT as one of the factors for NSG membership.

After the end of the Cold War, the NSG became more comprehensive as it put stringent inspection as a condition for the supply of a nuclear item. In 1992, the NSG adopted a highly stringent inspection system, known as the full-scope safeguards, as a condition

for transfer of any item listed on its technology annex. In the same year, it also added a differently defined list of dual-use technology. Generally, dual-use technology is considered technology with both military and civilian uses. The NSG dual-use technology is defined as technology having implications for both non-nuclear and nuclear uses. Otherwise, a dual-use item refers to use for both military and non-military purposes.

The group, popularly known as the London Club, remained dormant throughout the Cold War. Yet its membership kept increasing. Interestingly, in the early years, the dominant members were reluctant to expand the membership base. Later, they realised the significance of its expansion. By 1991, membership had grown to 27 from the original seven, with some Eastern European countries among the new additions. At present, it has 48 members. The comprehensive nature of the regime has made it more attractive for new countries. Somehow, by the 21st century, the NSG had a large number of countries, many of which were earlier targeted by the multilateral export control regimes. Several ex-Socialist bloc countries joined it. China also joined it in 2004. Besides, some developing countries such as South Africa, Mexico, Argentina and Brazil joined the NSG in due course. The current members are from all the continents, yet the European countries dominate.

India also desired to join the NSG and in 2010, for the first time, officially and publicly, the then industry's minister went to Washington to state India's demand to join it. Later, in November 2010, during President Obama's visit, India and the US issued a joint statement, in which the US supported the Indian case. Thereafter, several countries openly and publicly supported Indian membership for the NSG and other multilateral export control regimes, namely, the Missile Technology Control Regime (MTCR), the Australia Group, and the Wassenaar Arrangement.

India applied for membership of the two strategically relevant multilateral export controls regimes. In June 2015, India applied for membership of the MTCR which it got this year. Last year, the Indian case was rejected in the October 2015 plenary meeting of the MTCR because of the objection of Italy. On May 12, 2016, India applied for membership of the NSG. On June 9-10, 2016, the NSG held an

extraordinary plenary meeting in Vienna to consider the Indian membership. And on June 23-24, 2016, the NSG once again discussed the Indian membership application in its plenary meeting. The Indian membership application did not attract the required consensus.

However, Rafael Grossi, the outgoing chairman of the NSG has been appointed as a facilitator of the current chairman to enter into dialogue with participant or member countries. The idea is to develop an understanding on the Indian membership by consulting the participant countries of the NSG. He clearly stated that the NSG would not like to repeat the June 2016 experience next time. In general, the members were positive. China may also fall in line the next time.

### **WHY NSG MEMBERSHIP FOR INDIA?**

When India succeeds in becoming a member of the NSG, it will have several long-term gains. It will join a body that virtually makes the rules for global nuclear commerce. It is true that our friends may help us, but even to seek support from friends, generally, a country has to pay some price. The best alternative is to enter the NSG sooner or later even if the membership campaign may have some initial cost.

India's membership of the NSG will facilitate its entry into a body which was created because of its PNE, though other factors were also responsible and other countries were also the targets of the regime. India, a victim of the NSG, may become its partner if the membership issue is resolved. India is fully eligible to become a member of the NSG. It has an effervescent nuclear industrial base, robust legal and regulatory system for export control, commitment to non-proliferation, and willingness to work with the international community to fight proliferation. So far, it has only duties as it has adopted the guidelines and the lists of the NSG for the 2008 exemptions, but has no role in the decision-making process, for which the time has come.

The Indian membership will be beneficial for the NSG as well. The nature of any organisation's membership reflects that organisation's value system. And for anybody or organisational entity – whether national or international, formal or informal, large or small – the nature of its membership is important for its effectiveness and efficacy. When an organisation is international, not to mention

informal like the NSG, the group's objectives must be internationally acceptable. Therefore, in order for the NSG's decision-making to gain international acceptance, the regime's membership must be representative of the world community.

Today, the NSG has 48 members, but it nonetheless needs to diversify its stakeholders. The group's membership manifests a distinct bias toward the developed world in general and Europe in particular. Well over 30 members are European: not all of these belong to the European Union, and only a few of them are classified as developing by the World Bank. Beyond Europe, the developed world gains further representation from Australia, Canada, New Zealand, and the United States. Among Asia's four NSG members – China, Japan, Kazakhstan, and South Korea – only two are developing nations. Meanwhile, Latin America is represented only by Argentina and Brazil, and Africa by South Africa alone.

In the early days of the NSG's membership expansion, the countries that produced nuclear goods and services, and the countries that decided which nations gained access to those goods and services, were one and the same. But many countries with a limited role in nuclear commerce have since gained membership in the group. Meanwhile, several countries that are capable of contributing to the objectives of the NSG have been left out of the group and even subjected to stringent rules for nuclear transactions. Today, several countries that have mastered the nuclear fuel cycle are not members of the group. And certain other countries, which may not have mastered the entire nuclear fuel cycle but still possess resources or expertise valuable to one or more stages of the fuel cycle, have not gained membership either.

Many observers have predicted that the 21st century will prove to be the Asian century. Though only a few Asian countries qualify as developed today, Asia, with its rising powers, is the continent that promises to shape a new global order. Moreover, Asia is a continent with large, fast-growing economies that will demand a great deal of energy – including nuclear energy.

Going forward, the NSG will have to reflect emerging trends in the global nuclear power industry. New producers will have to become controllers, otherwise, the group might be undermined, and

its ability to accomplish its objectives will be severely constrained. The NSG will have to make a decision about what it wants to be in the 21st century.

Although India is not a member of the NPT, it has adopted a constructive approach to the treaty. As stated by Indian officials: "India's policies have been consistent with the key provisions of the NPT that apply to nuclear weapon states. These provisions are contained in Articles I, III and VI. Article I obliges a nuclear weapon state not to transfer nuclear weapons to any other country or assist any other country to acquire them and India's record on non-proliferation has been impeccable. Article III requires a party to the Treaty to provide nuclear materials and related equipment to any other country only under safeguards; India's exports of such materials have always been under safeguards."

In fact, the very objective of the creation of the NSG was to bring non-NPT countries into a nuclear export control framework. France was the most important country in the 1970s, and some member countries of the NPT wanted to get it into some supply side control. Currently, India is the country that is being seen as the representative country for membership of the NSG.

### **NEW DELHI'S CHALLENGES**

The most important issue for membership of an informal body like the NSG, which operates on the principle of consensus, is that it gets a member that gives a net contribution to the aim and objective of the NSG. If the member countries are satisfied that India's inclusion will be useful for the body, the NPT factor may be managed. Anyway, for the Indian membership, all the NSG participant countries will have to forge a consensus, and it could be for overlooking the NPT membership factor.

A question being raised is: why has India overexposed the American card for its membership? The answer is very simple: without American support, it is difficult to get entry into an international organisation or get any international law changed in favour of India. In fact, whether it was the India-specific clean exemption in the NSG guidelines in 2008 or the current membership drive, US support is clearly visible in the outcome. The 2008 exemptions could become



possible because of the “Bush drive”. Several opponents from Europe and Asia were persuaded by the then American president to support the exemptions for India. Even the membership drive has mustered the support of several American allies and friends. Pakistan was seemingly not discussed in the June Seoul Plenary meet because of the lack of American support.

Admittedly, some countries such as Austria and Switzerland seemed reluctant to support India for a long period, and many reports indicated that they raised questions during the summit. It is also a fact that the Obama Administration may not have been as forthcoming as the Bush Administration, but even with a different approach, the Obama Administration has mobilised support for India. Many of the European countries and New Zealand, as other reports specify, may have just discussed the procedures for India’s entry into the group. They may have done so to respond to the Chinese aggressive behaviour. Apparently, apart from resisting India’s membership move in the Seoul Plenary, China had circulated a note against putting the membership of the non-NPT countries on the agenda of the June 9 extraordinary plenary meeting of the NSG.

However, the Indian strategy is not focussed on America alone. When the Prime Minister visited Switzerland and the US, he also went to Mexico, seeking its support for the Indian membership. Other countries such as Russia and Brazil were also approached. The foreign secretary went to China, and most likely, took the help of non-Western countries to make China understand the merit of the Indian case. The reality is that as of today, China is resisting, and many other friendly countries like Russia do not look very happy about it.

The challenge for the Indian policy or strategy is to work with all the major powers or global actors. India has to take a balanced approach. This is necessary not only for membership of the NSG but also for other global issues. The Indian government needs to allay the apprehension that the current Indian regime has aligned with the US. This impression may harm India’s relationship with even the European countries.

The political leadership will have to take the lead and make some changes in the Foreign Office bureaucracy. A couple of diplomats who are not supposed to have a pro-American image need to be

included in the team for the NSG membership campaign. Some of these diplomats could be taken from the team which was involved in the second round of negotiations for the 2008 exemptions in the NSG guidelines. The middle level diplomats who did commendable work for the current round of negotiations, which resulted in at least the membership of the MTCR, need to be supported and encouraged.

We need to remember that this was a complex and tough job, and the outcome has not been so bad.

The Indian prime minister and foreign minister should also try to build a domestic consensus on membership. The need is to reach out and explain the rationale of the act. The ruling party has changed its course and the communication gap will demoralise both cadres and the common people. Even opposition leaders may be used to seek support from China and for energising Russia.

India also needs to have patience in the negotiations. It should not act in a hurry. If it is in a hurry, it may tend to concede more than the membership deserves. India should not alter the roadmap for membership of the other two regimes. Only after becoming a member of the NSG, should India start working on the requirements of the other two regimes. We are not going to lose much even if membership is delayed for a couple of years. We have the 2008 exemptions for nuclear commerce. In the near future, no adverse rule seems to be in the offing. Even if it comes, we have our friends to support us, at least in the short-term.

India has, by and large, been quiet about its efforts for the MTCR. Of late, the NSG membership drive has generated too much noise. The media is often misinformed about the regimes, mainly because of its ignorance. This sent negative signals abroad and raised expectations from the negotiations and, hence, put pressure on the government to make the negotiations/event successful. This kind of situation, at times, forces a government to give unnecessary concessions. There is also merit in the argument that secret diplomacy also results in unnecessary concessions because of the lack of scrutiny. A balanced approach, preferring quiet diplomacy, backed by a domestic political consensus, should be adopted.

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Note: Some sections of this article have previously been published in Rajiv Nayan, "Deconstructing India's N-Doctrine", *The Pioneer*, July 17, 2016 at <http://www.dailypioneer.com/sunday-edition/agenda/Cover-Story/deconstructing-ind-as-n-doctrine.html>

# SPACE FOR INTERNATIONAL COOPERATION AND REGIONAL STABILITY: EXPANDING INDIA'S SAARC SATELLITE PROJECT TO NORTHEAST ASIA

KIRAN KRISHNAN NAIR

## OUTER SPACE, DEFENCE AND THE SPECIAL STRATEGIC PARTNERSHIP BETWEEN INDIA AND SOUTH KOREA

Outer space and communications make a heady mix. North Korea's unconventional usage exemplifies this in ample measure. In January 2014, North Korea landed an astronaut on the sun! So went the report of the Irish journal *Waterford Whispers* that was then mindlessly taken up by the global media, including news sites like the Canada Free Press, technology site Tweaktown, the Arizona radio station K-TAR, etc, creating quite a storm across the world.<sup>1</sup> The report was a hoax, satire at its best (or worst) and served to take the spotlight away from a far more significant space event at the same time: the signing of

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1. Ref editorial, "Whoops...Media Outlets Duped by North Korea Rocket to the Sun Story", *The Journal*, January 21, 2014, at <http://www.thejournal.ie/north-korea-sun-1283188-Jan2014/>. Accessed on July 22, 2016.

the Implementation Agreement between the Indian Space Research Organisation (ISRO) and its South Korean counterpart, the Korea Aerospace Research Institute (KARI) on the peaceful uses of outer space. Amongst a variety of aspects, India offered to launch South Korean satellites on Indian launch vehicles on a commercial basis.<sup>2</sup> While North Korea went about its exotic endeavours, South Korea was purposefully and pragmatically realigning its foreign relations, national strategy and structures to prevail and sustain in an ever-changing world.

The implementation agreement provided the right impetus for development of cooperation in a number of areas and by May 2015, the bilateral relations progressed to a 'Special Strategic Partnership' between India and South Korea. In addition to space cooperation, in May, both sides agreed that defence and security cooperation had large potential to grow and needed to be intensified.<sup>3</sup> A similar agreement with China that was inked around the same time, has many areas in common, in both letter and spirit, like cooperation in defence, space, trade, etc. On similar lines, there is also an agreement with Japan, dating back to September 2014.<sup>4</sup> Put together, the Indian footprint has effectively expanded beyond its contiguous neighbours and the South Asian Association for Regional Cooperation (SAARC) to Northeast Asia.

It is well understood that the definition of Northeast Asia is not static, however, the Northeast Asia referred to herein is the one in common usage and relevant to the context. It comprises the core countries of China, Japan, North Korea and South Korea. Amongst these, defence and space issues, with respect to China and Japan, have been covered in some detail earlier<sup>5</sup> and, hence, it would be in order to now focus on Korea.

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2. Refer Site of Embassy of India at [http://www.indembassy.or.kr/press\\_detail.php?nid=210](http://www.indembassy.or.kr/press_detail.php?nid=210). Accessed on July 21, 2016.

3. For details, see report of Prime Minister's Office, Government of India, "India- Republic of Korea Joint statement for Special Strategic Partnership", dated May 18, 2015 at <http://pib.nic.in/newsite/PrintRelease.aspx?relid=121821>. Accessed on July 22, 2016.

4. For details, see Wg Cdr Kiran Krishnan Nair, "India's Military Space Command: Lessons from Japan's Proposed Military Space Force", *Defence and Diplomacy Journal*, at [http://www.academia.edu/14733988/India-China\\_Military\\_Space\\_Cooperation](http://www.academia.edu/14733988/India-China_Military_Space_Cooperation). Accessed on July 19, 2016.

5. See Kiran Krishnan Nair, "India-China Military Space Cooperation", *Defence and Diplomacy Journal*, at [http://www.academia.edu/14733988/India-China\\_Military\\_Space\\_Cooperation](http://www.academia.edu/14733988/India-China_Military_Space_Cooperation); and *Ibid*. Accessed on July 19, 2016.

## **SOUTH KOREA'S SPACE ENDEAVOUR**

South Korea's space agency is called the Korea Aerospace Research Institute (KARI). As in the case of India's ISRO, its prime objective is to contribute to the development of the national economy and improvement in the public life through aerospace science and technology. In addition to continued development of scientific and remote sensing satellites, Korea's national space plans include: further work on its new Korea Space Launch Vehicle (KSLV) rocket; participation in international space exploration initiatives, including the International Space Station (ISS); a continued astronaut training programme; and long-term plans for a lunar orbiter and lander spacecraft.

In addition to India, on April 2016, South Korea also signed a Framework Agreement for Cooperation in Aeronautics and the Exploration and Use of Air Space and Outer Space for Civil and Peaceful Purposes with the United States. Thus, on the face of it, South Korea seems to be in an overdrive to harness the peaceful use of outer space.

## **MILITARY ASPECTS OF SOUTH KOREA'S SPACE PROGRAMME**

The "*peaceful use of outer space*" encompasses much more than the literal interpretation of the term peaceful. For instance, the existing interpretation of the term peaceful allows a host of military activities essential to any military modernisation; it allows for military satellites, use of civil satellites for military uses and the entire panoply of military activities that are not deemed "*aggressive*". Also, peaceful use of outer space includes dual use satellites. The number of dedicated military satellites is progressively falling and dual use/multi-use rather than just military space assets are the order of the day. Thus, it would be essential to place South Korea's quest for space capabilities within the larger context of securing its uninterrupted growth and development instead of looking at it from a narrow military angle. Development is all-encompassing, including a variety of factors ranging from social and commercial growth to redressal of its national security issues, primary amongst these being the North Korean belligerence. Consequently, it would not be surprising to see South Korea use space beyond the stringent literal interpretation of

peaceful use. It needs space capabilities for military modernisation as much as any other country. As a matter of fact, aerospace capabilities are inherent to any military modernisation and South Korea is not likely to be an exception to the rule, especially since it has a vibrant aviation capability.

As in the case of most aspiring nations, South Korea discovered the enormous utility of aerospace capabilities in furthering national security goals after the first Gulf War of the 1990s that was also popularly known as the first space war in view of the large number of space assets used and their effects-based operations. As Chang-hee Nam writes,<sup>6</sup> in the mid to late 1990s, a small group of researchers within the Korean Institute of Defence Analysis (KIDA) became keenly interested in the Revolution in Military Affairs (RMA) studies emanating from the Pentagon, and their practical application in US wars in the Balkans and, later, Afghanistan. Briefly put, RMA involved the transformation of a country's military strategy, tactics, and organisation through adoption of advanced technologies, enhancing the awareness, responsiveness, mobility, and interoperability of the different armed Services. Intelligence, Surveillance, and Reconnaissance (ISR) capability is an integral element of RMA, and outer space a particularly important domain within which ISR assets operate. Interest in the theory and practice of RMA led some of these South Korean researchers to take on a lead role in the RMA Promotion Office (군사혁신기획단) within the South Korean Ministry of National Defence (MND).

Their cutting edge research catalysed efforts within each Service of the Korean military, including the Republic of Korea (ROK) Air Force (ROKAF). In 1998, the ROKAF opened the Space Weaponry Branch in the Weapon Systems Bureau of the Air Force Studies and Analyses Wing, and, in September 2007, replaced it with the Space Development Branch within Air Force Headquarters. In addition to signing a memorandum of understanding with the civilian-run KARI and the Astronomical Centre, in support of the construction of the Naro Space Centre and the first Korean astronaut programme, the

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6. Clint Work and Seon Hee Kim, "Its not about the Moon: The Military & Economic Logics to South Korean Space Exploration", *Sino NK*, May 31, 2016, at <http://sinok.com/2016/05/31/its-not-about-the-moon-the-military-and-economic-logics-to-south-korean-space-exploration/>. Accessed on July 27, 2016.

ROKAF began to recruit personnel with space expertise as well as send a handful of officers each year to train at the US Air Force's National Security Space Institute in Colorado Springs, Colorado. In short, the ROKAF and the larger Korean defence community saw the importance of space in improving ISR capability as part of its emergent strategy regarding future warfare. The development and deployment of different types of remote sensing and communications satellites figured prominently in their thinking.

The future-oriented planning in the various armed Services and the MND was eventually brought together in the Defence Reform Plan 2020, released in September 2005 under then President Roh Moo-hyun. Although the subsequent Lee Myung-Bak Administration would adjust the plan's more ambitious goals as well as its cost, the importance of the military use of space remained in play. It has been repeatedly and more systematically featured in successive ROK defence White Papers in 2008, 2010, 2012, and 2014, as well as in the 2014 National Security Strategy.

### **THE COMMERCIAL ASPECTS OF SOUTH KOREA'S SPACE PROGRAMME**

Apart from a clear military purpose, Seoul's current efforts in space also display a clear economic logic. Space capabilities promote not just military modernisation but also commercial aggrandisement. The entire system of plans, policies and implementation perpetuates integration of efforts and resources by the state and the private sector. For instance, in cognisance of the need for indigenous space capabilities, there are clear directives as also long, medium and short-term space capability development plans that promote commercial efforts to obtain space capabilities under state oversight that ensures fair practices and competitiveness amongst South Korean private industries for space-based imagery, communications and other applications.

South Korea recognises space technology as the leading industry of the 21st century that will help the country climb the technology ladder, create and expand high-tech firms, improve the quality of life, and have ripple effects throughout other industries. Over the next several years, the size of the Korean market for space services

is expected to triple, the number of venture capital firms involved to grow from six to roughly 50, and the number of jobs to increase almost five times to 4,500.

Earlier this year, the Park Administration announced it would allocate Won 746.4 billion to space, a notable 20 percent increase over the last year's budget. Despite (or because of) the deteriorating economic conditions, the increased funding is a way "to secure a new growth engine," according to Hong Nam-ki, vice future minister at the Ministry of Science, Information and Communication Technology (ICT), and Future Planning. Action plans include crafting a number of satellites for public use and national security; reorganising state-led satellite development plans by fostering partnerships between the state and local think-tanks and small and medium-sized firms; and providing Won 286.6 billion for marketing and technology support for companies in the satellite sector.

### **THE IMPACT OF COMMERCIAL AND MILITARY INTEGRATION**

A brief sketch of some of the ROK's most advanced communications and earth-observation satellites reveals the interconnected factors examined above. Koreasat 5 (or Mugungwha 5), part of the larger Koreasat series, is the ROK's first dual-use commercial and military communications satellite. Manufactured by Alcatel Alenia Space (now Thales Alenia Space) and launched in August 2006, it is jointly owned and operated by the ROK's Agency for Defence Development (ADD) and the KT Corporation.

On the one hand, Koreasat 5 offers high-quality data and video services to KT's customer base throughout East Asia. On the other hand, it fits within the ROK military's effort to build an infrastructure for military support operations in space and offers a secure route for critical communications throughout the armed forces. "Koreasat 5 will be the essential equipment for the future combat system in Korea," said Maj Gen Chi Gue Rim of the country's Joint Chiefs of Staff. "It will play one of the most important roles for military operations in the Asia-Pacific area." Koreasat 5 and the ADD's military space communications facility in Taejon are part of the push toward greater interoperability and "net-centric" capabilities.



The ROK's multipurpose earth observation satellite programme (its KOMPSAT or Arirang series) demonstrates a similar trajectory. The KOMPSAT programme was begun in order to develop and enhance the ROK's independent remote sensing capabilities (for civil and military purposes), gain understanding of systems engineering for indigenous satellite development, transfer technology to domestic firms, and promote the satellite industry for both domestic and export markets. Although at the outset, KARI worked alongside foreign partners, with each successive satellite it took on a more expansive role and passed off greater responsibility to Korean firms, such as Korean Aerospace Industries and Satrec Initiative (founded by a group of former KAIST engineers).

Kompsat 3 provided the ROK its first observation capability of less than one metre resolution; Kompsat 5, its first all weather observation satellite (equipped with synthetic aperture radar) offers the ROK armed forces day-and-night, all weather imaging for targeting, reconnaissance and surveillance; and Kompsat 3A, its most precise earth observation capability (at 55cm resolution) and first infra-red camera that can sense heat on the ground during both day and night, with obvious application for monitoring the Democratic People's Republic of Korea's (DPRK's) missile and nuclear tests.

Apart from the above, South Korea has significant aspirations for inter-planetary exploration. It plans to spend a total of Won 746 billion (\$603 million) on its space programme this year, as part of efforts to realise its long-cherished goal of reaching the moon. As per the *Korea Herald*,<sup>7</sup> the Science Ministry has agreed to allocate Won 200 billion for the next three years to launch its first lunar exploration project. The three-year project is the first phase of the nation's space programme aimed at sending a landing vessel to the moon by 2020.

### **AREAS OF SPACE COOPERATION**

India has a full-fledged civilian space programme that is focussed on the peaceful uses of outer space. It has a full range of communication and observation satellites that enable civil growth and development, the same factors that South Korea looks to harnessing as part of its

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7. Refer IANS, "South Korea to Spend \$ 603 Million on Space Programme", *Seoul*, February 29, 2016.

developmental quest. The South Korean programme is focussed on using space comprehensively, not just for military purposes. In fact, its remote sensing satellites enable dual-use, allowing both security applications as also a wide range of areas such as national land management, natural disaster monitoring, marine resource management, agriculture and forestry, and environmental weather observation. Their efforts are largely in the areas of civilian space applications and to a very nascent extent, interplanetary exploration. In addition, it is KARI and other non-military government institutions that manage satellite imagery, not the ROK armed forces.

Overall, South Korea's efforts are in line with India's existing space capabilities and India has great potential to fulfil its demands with regards to communication and observation satellites. India provides a much cheaper alternative as opposed to the US that is inherently costly and comes with a variety of strings attached. As a matter of fact, the prime areas to which South Korea aims to apply space are the same as those in which India has over the years gained a significant amount of expertise. Natural resource management has been the mainstay of the Indian observation satellites for decades and the expertise in the Geographical Information System (GIS) could be shared with South Korea now that the requisite agreements are in place. Additionally, as in the case of the much touted SAARC satellite, there would be no additional effort involved in extending capabilities beyond the SAARC nations to South Korea. The prevailing Indian satellites, in terms of both communication and observation satellites, have coverage over South Korea and it only makes more sense to optimally utilise extant capabilities by operationalising procedures, channels and systems for use during disasters, for agricultural use, land planning, urban development, etc. The areas of cooperation are enormous and it makes sense for the two countries to combine their strengths rather than go after their aims individually. Apart from communication and observation satellites, India's navigational satellite system, the Indian Regional Navigation Satellite System (IRNSS) called NAVIC, covers Korea and, hence, the potential for applications could be explored to enhance security and development in the region. At the very least, the alternatives for South Korea to contain neighbourly belligerence increase. On similar lines, there is a

variety of areas of cooperation in space applications amongst the two nations that could be gainfully exploited now that the partnership agreement is in place.

Additionally, India now provides a much cheaper and reliable launch service that is especially suited to the nascent needs of South Korea, particularly in terms of low earth observation satellites that South Korea typically makes. India's ability to undertake multi-orbit launch of satellites would be of great use to South Korea's security and developmental needs. A variety of permutations and combinations that fulfil the needs of both countries is possible. Apart from launch of application satellites, the area of inter-planetary exploration is also of great promise to both countries. India could mull over sharing of competencies and capabilities in areas of common interest that would one day fulfil the aspirations of both countries.

## CONCLUSION

The above areas of possible cooperation are nothing more than a listing of what is immediately apparent. There is a variety of other areas and the potential for mutual gain is significant for both countries. Space capabilities are inherently trans-border and it makes sense for India to expand beyond its own borders, beyond contiguous borders and beyond SAARC countries onto Northeast Asia to optimally use its resources in furthering international cooperation and regional stability. The desire, in letter and spirit, exists, the requisite space resources that can give effect to the potential inherent in the agreement exist and, hence, there is little reason why India and South Korea cannot tread together for common and mutual benefit. The SAARC satellite mooted in 2014 has seen little participation traction in 2016 due to the security perceptions of certain countries. Expanding to more participants who comprehend the immense potential of space and actively seek space capabilities for civil development and growth is a better option than forcing space capabilities on nations that have little known interest in civil development. The requisite space capability and coverage to give wings to India's attempts for regional stability exists, hence, it augurs well to look beyond contiguous borders and SAARC to Northeast Asia and, indeed, all of Asia as well. After all, every country in Northeast Asia, including China,

Japan, South and North Korea, has space capabilities in varying measure and it makes sense to join hands and cooperate for overall development rather than frittering away capabilities over perceptions of insecurity. India's satellite outreach could trigger cooperation in other promising area of outer space like navigational satellites. As of today, the area is most densely covered with a range of navigational satellites ranging from China's 21-satellite Beidou constellation to Japan's QZSS and India's IRNSS, and yet aircraft and other vessels regularly go missing in the area. Reaching out to cooperate for the location, search and rescue, positioning, etc using navigational satellites amongst other applications would pave the way for further engagement, cooperation and stability in the region.

# CHINA'S EMERGING CRISIS

**TEMJENMEREN AO**

The slowdown seen in China's economic growth may well be attributed towards the global slowdown as well as the internal reforms that seem to be underway. However, what is interesting to note is that since the 2008 sub-prime crises<sup>1</sup> that led to a global financial meltdown, the Chinese authorities started to infuse growth through stimulus in order to maintain the growth. This resulted in a huge increase in China's debt to Gross Domestic Product (GDP) percentage over the last few fiscals. This mounting debt has reached a gigantic scale and may well unleash China into a state of a financial debt crisis, and may well have a bad spillover effect globally if it is not contained. This paper aims to analyse China's emerging economic crisis. An attempt has been made to study the impact of the 2008 financial crisis on the Chinese economy and the Chinese response to it.

## **IMPACT OF THE 2008 FINANCIAL CRISIS ON CHINA**

The global financial crisis – that continued to inflate since the mid-2000 – which erupted when the Lehman Brothers filed for bankruptcy on September 15, 2008, created shock waves globally. China, with its relatively strong control over capital and financial regulations, and was able to ensure that its financial institutions resisted the shock

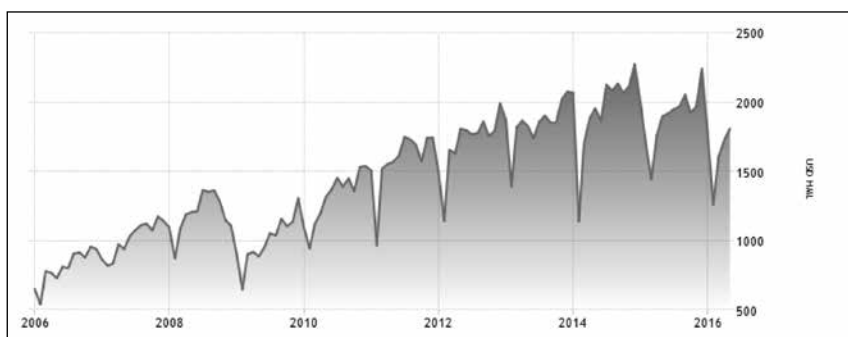
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1. Sub-prime loans are those given to people who do not have the ability or would face difficulty maintaining the repayment schedule. The 2008 sub-prime crisis arose in the US mortgage industry.

of the subprime debt and other related problems compared to its counterparts in the West and other developed economies. However, the financial crisis clearly affected China's real economy, as a result of a massive fall in the global demand levels which the crisis had caused. Fig 1 gives a trend on China's global exports in terms of US million dollars. As can be seen in the area graph, since the advent of the global financial crisis, foreign demand dropped dramatically, leading to a fall in China's exports. China's export growth achieved unprecedented negative rates of around 2.5 percent towards the end of 2008, a contrast to the continuous year on year growth experienced since 2001.

**Fig 1: China's Export, 2006-2016 (in million US \$)<sup>2</sup>**



This fall in China's exports by as much as 20 percent in early 2009 had a negative impact on its economic growth, with its economy being highly dependent on foreign trade—with 40 percent of its GDP being driven by exports. When foreign demand dropped sharply, a large number of factories located in the southeast of China—that were mainly export-oriented—closed down. This led to an overall slowdown of the Chinese economy, with its growth in the third quarter of 2008 being a modest 9 percent in comparison to 13 percent achieved in 2007. The same period also saw a fall in China's foreign investments. In the first half of 2009, Foreign Direct Investment (FDI) into China decreased by 17.9 percent, according to the 2009 World Investment Report issued by the United Nations Conference on

2. "China's Export", *Trading Economics*, at <http://www.tradingeconomics.com/china/exports>. Accessed on July 4, 2016.

Trade and Development (UNCTAD). This was the first time in 30 years that China's FDI receipts had dropped dramatically. Chinese firms also began reducing investment in fixed assets and made sales on the basis of large accumulated inventories, rather than via new production. Overall, it has been argued that the decline in domestic demand accounted for over 75 percent of the reduction in the industrial growth rate, with the decline in export demand accounting for the remainder. The US subprime crisis also brought China the potential nightmare that its huge foreign exchange reserves would fall drastically in value. The Chinese government, as well as Chinese banks and fund companies, held large amounts of stocks and funds on Wall Street. According to the National Bureau of Statistics, as of the end of September 2008, China's foreign exchange reserve balance was more than US \$ 1.9 trillion, of which a large proportion was invested in US treasury bonds or equities. A sharp depreciation of the dollar, the US bear bond market and the downturn of the consumer credit market meant that China's foreign exchange reserves also took a beating. In the aftermath effect of the financial crisis, it led to a consensus amongst economists and policy-makers in China that there was a need to change the mode of economic development from dependence on foreign trade to an economy driven by domestic consumption.<sup>3</sup>

### **CHINA'S EXPANSIONARY FISCAL AND MONETARY RESPONSE**

According to the Governor of the People's Bank of China, Zhou Xiaochuan, since the global financial crisis, China's fiscal policy was not adequately employed, which led to passive overreliance on the monetary policy.<sup>4</sup> The Central Bank of China initiated a policy of monetary easing in September 2008. The State Council, China's Cabinet, followed up a few weeks later by rolling out a Yuan 4 trillion (US \$ 586 billion) stimulus programme that immediately ramped up expenditures on affordable housing, rural and other infrastructure

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3. Qixiang Sun and Xiaolan Fu, "China's Battle against the Global Economic Crisis", in Xiaolan Fu, ed., *China's Role in Global Economic Recovery* (Oxon: Routledge, 2012), pp. 10-11.
  4. Zhou Xiaochuan, "From the Perspective of Transitioning Chinese Economy", speech delivered at the IMF Central Banking Lecture, Washington D.C., on June 24, 2016, at <http://www.pbc.gov.cn/english/130721/3090372/index.html>. Accessed on July 4, 2016.

such as highways, railways and airports, public health and education, environment and technical innovation. This programme started immediately with the goal of spending Yuan 100 billion in the fourth quarter of 2008, with the balance to be spent over the following two calendar years. The results of China's stimulus programme were impressive, making China the first globally significant economy to begin to recover from the global economic recession. As the stimulus package began to take hold, China's growth accelerated significantly, to 9.5 and 11.4 percent respectively, in the first and second quarters of 2009. China's growth in 2009-11 was impressive compared with the absolute downturns in economic output in the United States, Europe, Japan, and many other developed economies.<sup>5</sup> This expansionary fiscal policy approved by the People's Congress in 2009, led to a total government deficit of Yuan 950 billion (US \$ 139 billion), the highest in six decades, compared with Yuan 111 billion in 2008. The expected budget deficit/GDP ratio was around 3 percent of the GDP, compared with the budget deficit/GDP ratio of 0.4 percent in 2008.<sup>6</sup>

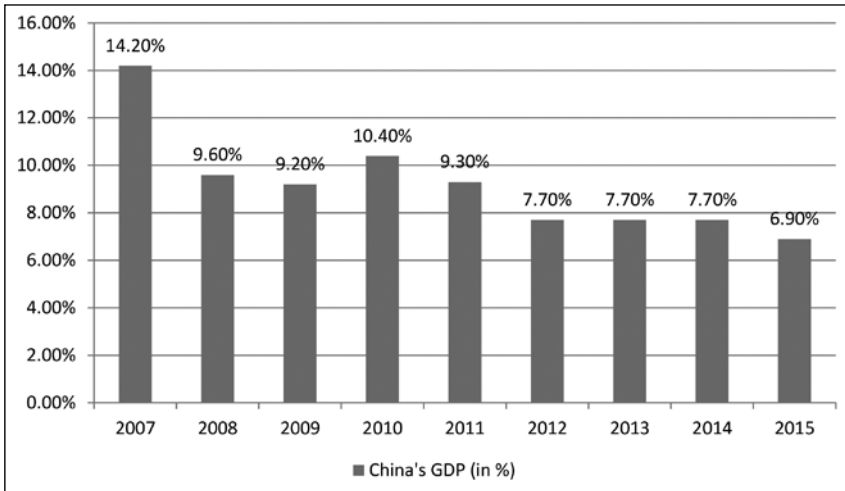
The impact of China's stimulus package could be better understood by looking into the data on China's GDP growth as shown in Fig 2. It can be seen from the bar diagram that there has been a fall in the GDP from the double digit growth witnessed in 2007. However, with the expansionary monetary and fiscal policies, China's economy managed to remain close to the double digit mark with a double digit growth of 10.4 percent in 2010. The concern is on the fall in the GDP since 2011, which fell to 6.9 percent in 2015. This raises serious doubt on whether China has really overstretched its fiscal as well as monetary policies, leading to a rise of its debt.

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5. Nicholas R. Lardy, *Sustaining China's Economic Growth After the Global Financial Crisis* (Washington DC: Peterson Institute for International Economics: 2012), pp.5-11.

6. Sun and Fu, n. 3, pp. 11-12.



Fig 2: China's GDP, 2007-2015 (in %)<sup>7</sup>

An expansionary monetary policy was also adopted which saw China switching away from the moderately tight policy adopted in 2003 to an expansionary policy from November 2008 onwards. Interest rates were cut to a historic low with bank reserve requirement ratios being lowered, while quota controls on lending by commercial banks were removed. In order to encourage banks to increase lending, the government announced the development of credit guarantee services. Moreover, it also decided to loosen control on mortgage loans to some extent to stimulate the sale of properties. These measures led to Chinese money supply and bank credits increasing rapidly in the first half of 2009. Furthermore, new bank lending in the first half of 2009 surged dramatically by Yuan 7.37 trillion, which roughly equalled 90 percent of the total increase targeted for the whole year. In contrast, the annual increase in bank lending in 2006 and 2007 was Yuan 3.18 and 3.63 trillion, respectively. Towards promotion of the development of the real estate market during 2008 and 2009, the Chinese government reduced the mortgage rate to 70 percent of the benchmark lending rate to boost the economy as it required a reduced minimum down payment of 20 percent. In order to promote the development of economically affordable houses, the government

7. "GDP Growth in China 1952-2014", at <http://www.chinability.com/GDP.htm>. Accessed on March 15, 2016.

also gave a 10 percent discount on the central lending rate for real estate developers. In addition, a two-year extension was given to the loan repayment period. The People's Bank of China disclosed that it would no longer impose hard constraints on credit lending in order to release funds from banks and stimulate a multiplier effect, hence, promoting economic growth. Since China's imports and exports were significantly affected by the financial crisis and a large number of workers had become unemployed, the government increased the tax rebates on textiles, clothing, toys, and other labour-intensive products to enhance export competitiveness—an adjustment which involved 3,500 products and accounted for 25.8 percent of the total trade items.<sup>8</sup>

The statement released after the meeting of China's Central Economic Work Conference (which was held from December 18-21, 2015), clearly laid out that in 2016, the macroeconomic policy would be stable, providing appropriate conditions for structural reforms. In terms of the monetary policy, the minutes of the conference called for more flexibility in order to help cut the costs for financing, maintaining sufficient liquidity and improving the exchange rate formation regime. Further, in order to help business reduce financing cost, the Central Bank would likely cut interest rates. This would be the sixth cut since January 2015 and would lead to a further outflow of capital from China to the other side of the Pacific where interest rates have already begun to rise and are expected to continue to do so in 2016 and beyond – with America's Federal Reserve indicating a further push in interest rates in the near future, as indicated by US Federal Reserve Chairman Janet L. Yellen during the annual symposium of the Federal Reserve Bank held at Jackson Hole, Wyoming, on August 26, 2016. Thus, China's foreign investments will continue to see a decline as Foreign Institutional Investors (FIIs) would begin to seek investments outside of China. In terms of its fiscal policy, China would seek to deal with the emerging overcapacity of its manufacturing and help reduce business costs through its tax reduction initiatives. However, in terms of its deficit ratio, there would be an increase due to the continued government spending. This spending would accrue as a result of China's investments in infrastructural projects,

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8. Sun and Fu, n. 3, pp. 11-12.

in pursuit of its economic engagement such as its grand economic initiative of “One Belt, One Road”, through which China seeks not only to secure its energy needs and shorten its transit routes, but also entry into new markets in order to sell the excess supply of its manufacturing sector.<sup>9</sup>

### **DANGERS OF CHINA’S EXPANSIONARY POLICY**

The Chinese stimulus programme that was initiated to push and maintain the growth of the economy, and it managed to do so in the three years after the global financial meltdown, has reached its saturation point. From the very onset of any expansionary, fiscal or monetary policy, there always remains a question on its long-term sustainability, since it has to be backed by investments in productive assets to stimulate overall growth through the multiplier effect. However, due to an overall fall in international demand, post the global financial crisis, this could not happen as exports continued to fall.

One critique was that China’s growth during and following the crisis was especially imbalanced, relying on an unsustainable burst of investment financed largely by an unprecedented increase in bank lending. China’s largest bank and also the world’s largest bank, with half a billion customers—the Industrial and Commercial Bank of China (ICBM)—has about \$ 300 trillion of US assets that have been diverted towards various state enterprises and local state bodies, most of which remain highly unprofitable.<sup>10</sup> According to the data released by China’s Ministry of Commerce on China’s bank lending in 2015, the total amount of yuan credit by banks stood at Yuan 11.72 trillion (US\$ 1.79 trillion), up by Yuan 1.81 trillion since 2014. According to the People’s Bank of China, the broad measure of money supply (M2), that includes cash in circulation and all deposits, increased by 13.3 percent year on year to Yuan 139.23 trillion in 2015. The narrow measure of money supply (M1), which covers cash in circulation plus demand

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9. Renee Mu, “China Announced Fiscal and Monetary Policy for 2016 at the Key Economic Meeting”, *Daily FX*, December 21, 2015, at [https://www.dailyfx.com/forex/fundamental/daily\\_briefing/daily\\_pieces/china\\_news/2015/12/21/China-Announced-Fiscal-and-Monetary-Policy-for-2016-At-the-Key-Economic-Meeting.html](https://www.dailyfx.com/forex/fundamental/daily_briefing/daily_pieces/china_news/2015/12/21/China-Announced-Fiscal-and-Monetary-Policy-for-2016-At-the-Key-Economic-Meeting.html). Accessed on July 4, 2016.

10. “How Healthy is China’s Bank?” *BBC News*, July 19, 2016, at <http://www.bbc.co.uk/programmes/p041xhhj>. Accessed on July 19, 2016.

deposits, rose 15.2 percent year on year to Yuan 40.1 trillion in 2015.<sup>11</sup>

This massive increase in loans in the form of credit would have several adverse consequences. First, it inevitably entailed the risk of rising inflation, a risk that materialised in the closing months of 2010 and in 2011 when inflation for several months exceeded 5 percent on a year over year basis, the highest rate since mid-2008. The credit boom also created bubbles in the property and equity markets based on mortgage lending to households and the leakage of funds lent to corporations for construction and other forms of investments. According to critics, massive investment programme financed with the expanded supply of credit inevitably led to an excess industrial capacity, and with the fall in the demands in the international market, led to increase in the non-performing loans; thus, increasing the debt percentage. While many critics acknowledged that the stimulus programme did increase the economic growth, they argued that this was temporary and that the stimulus programme worsened China's underlying structural problems which have ultimately led to the slowdown being witnessed today. Critics also argued that the stimulus programme substantially enhanced the role of the state at the expense of the private sector, fundamentally setting back China's long-term reform trajectory.<sup>12</sup>

China's continuous expansionary monetary policy is evident when we consider the People's Bank of China's monetary policy report for the third quarter (July-September) 2015. According to the monetary report, at the end of the third quarter, China's total outstanding loans in domestic and foreign currencies which includes all financial institutions, stood at 97.8 trillion Yuan, up by 14.5 percent in comparison to the preceding year and with an increase of 2 percentage points in comparison to the second quarter (April-June) 2015. Further at the end of the third quarter in 2015, the total outstanding RMB loans stood at 92.1 trillion Yuan, representing an increase of 15.4 percent in comparison to 2014 and a 2 percentage point increase from the second quarter in 2015. The report also stated that

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11. "Chinese Banks Lent More in 2015", Ministry of Commerce, People's Republic of China, January 15, 2016, at [http://english.mofcom.gov.cn/article/zt\\_economicdata2015/news/201603/20160301287299.shtml](http://english.mofcom.gov.cn/article/zt_economicdata2015/news/201603/20160301287299.shtml). Accessed on July 18, 2016.

12. Nicholas R. Lardy, *Sustaining China's Economic Growth After the Global Financial Crisis* (Washington DC: Peter G. Peterson Institute for International Economics, 2012), pp.10-12.

loans to the household sector continued to accelerate, whereas loans to non-financial businesses and other sectors remained relatively stable. The loans to the household sector stood at 26.2 trillion Yuan, up 16.2 percent (in comparison to 2014) and represented an increase of 0.7 percentage point in comparison to the second quarter 2015. This was an increase of Yuan 3.0 trillion from the beginning of the year and an acceleration of Yuan 346.1 billion for the same period of the previous year.<sup>13</sup>

On the fiscal side, as mentioned in the earlier section, the massive increase in government expenditure has resulted in a massive increase in implicit government debt that ultimately could lead to a banking crisis that would threaten the health of government finances. Most of the fiscal stimulus was financed primarily by bank credit rather than deficit spending financed by the sale of government bonds. The medium- and long-term bank lending for infrastructure investment went to local government-linked agencies, called local investment companies. Although local governments legally are not allowed to borrow or run budget deficits, lending to these local investment companies is legal and has been a successful mechanism for financing local infrastructure for more than a decade. However, starting 2009, the scale of borrowing by these platform companies has increased so rapidly that they are unlikely to be able to repay these loans—and the obligation to repay lies with the central government, further increasing the fiscal debt. Thus, the total government debt, including not only outstanding Ministry of Finance bonds but also this implicit local government debt, is much higher than the one-fifth of GDP figure commonly cited for government debt.<sup>14</sup> According to a report by the McKinsey Global Institute, China's debt has quadrupled since 2007, rising to \$ 28 trillion by mid-2014, from \$ 7 trillion in 2007. At 282 percent of GDP, China's debt as a share of GDP is larger than that of the United States or Germany.<sup>15</sup>

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13. "China Monetary Policy Report, Quarter Three, 2015", The People's Bank of China, November 7, 2015, at <http://www.pbc.gov.cn/english/130727/130879/2941536/3066734/index.html>. Accessed on July 18, 2016.

14. Lardy, n.. 12, p. 26.

15. Richard Dobbs, Susan Lund, Jonathan Woetzel and Mina Mutafchieva, "Debt and (not much) Deliveraging", McKinsey Global Institute, February 2015, at <http://www.mckinsey.com/global-themes/employment-and-growth/debt-and-not-much-deleveraging>. Accessed on July 19, 2016.

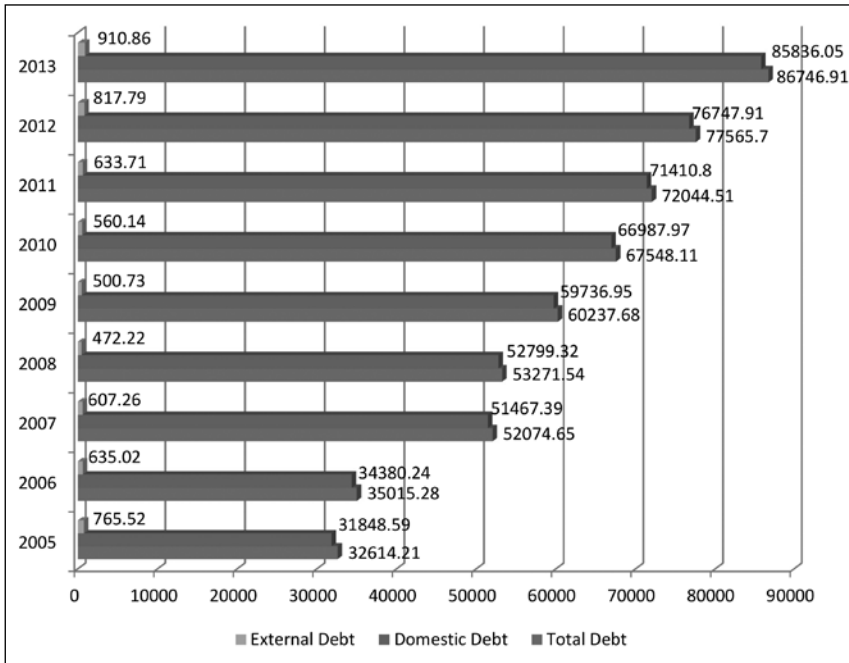
**Fig 3: China's Outstanding Debt (in Yuan 100 million)<sup>16</sup>**

Fig 3 shows the total year on year outstanding debts incurred by China's central government. It can be seen from the bar diagram (Fig 3) that since 2005, China's debt which stood at Yuan 3.2 trillion has increased almost three-fold to Yuan 8.6 trillion; indicating a rampant stimulus policy being adopted by the Chinese central authority.

According to some estimates, China's total debt hit 237 percent of the GDP at the end of the first quarter of 2016, mainly on account of a surge in new lending in the early months of the year. The International Monetary Fund (IMF) has warned China about the risk of its growing debt burden and urged a more aggressive action to curb its credit growth. The IMF's annual assessment of China's economy, presented by IMF Deputy Managing Director David Lipton indicated the possibility of high risk spillovers to the broader global economy if its debt burden due to its excessive credit is not contained. Further,

16. "Outstanding of Debt of Central Government, China Statistical Yearbook 2014", National Bureau of Statistics of China, at <http://www.stats.gov.cn/tjsj/ndsj/2014/indexeh.htm>. Accessed on July 18, 2016.

according to the report, the rebalancing of China's economy away from heavy industry towards consumption and services, which has been done in a significant manner, has not been met with the same level of effort in order to tackle its credit growth.<sup>17</sup>

According to McKinsey, three developments in China are potentially worrisome; half of all loans in China are linked, directly or indirectly, to China's overheated real estate markets. Second, nearly half of all new lendings are accounted by unregulated shadow banking such as hedge funds. The final worrisome issue is that the debt of many local governments is probably unsustainable. The McKinsey report states that China's government has the capacity to bail out the financial sector should a property-related debt crisis develop. The challenge will be to contain future debt increases and reduce the risk of such crises, without putting brakes on the countries economic growth.<sup>18</sup>

## CONCLUSION

While debt as a source to fuel economic growth is an essential tool, if it is not contained beyond a limit, it will have a negative impact on the overall growth of the economy. Presently, China's expansionary economic stimulus has been able to somehow maintain the economic growth, however, it has also led to too much of wasteful debt arising from diversion into propped up state-owned businesses and real estate projects. These state owned enterprises have a high percentage of defaults on payments on account of being unprofitable, and this has led to a massive build-up of China's bad loans, which stand at an eleven year high of 1.4 trillion Yuan. China's GDP in the second quarter of 2016 is about 6.7 percent, which is above the expected 6.6 percent; indicating an attempt to achieve stability through its expansionary policy. Its industrial growth has also increased by 6.2 percent compared to the forecast of 5.9 percent in the same quarter,<sup>19</sup> indicating concerns about overcapacity and massive stockpiling in

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17. Gabriel Wildau and Tom Mitchell, "IMF Warns China's 'High and Rising' Debt Risk", June 14, 2016, at <http://www.ft.com/cms/s/0/eddb1c24-31ff-11e6-bda0-04585c31b153.html>. Accessed on July 19, 2016.

18. Dobbs et al., n. 15.

19. "China's Economy Grows More Than Expected in Second Quarter", *BBC News*, July 16, 2016, at <http://www.bbc.co.uk/news/business-36801223>. Accessed on July 19, 2016.

the warehouses of its factories, given the current state of low demand in the international market.

Post-2008, China has continued to push and maintain its growth through a boom in its credit by cutting its interest rates, along with increasing government spending. This trend seems to be continuing, and, at this rate, China's financial market may crash and this would have a bad spillover effect globally. China can avoid a crash by rebalancing its economy towards consumption – which it is currently pursuing – but, more importantly, it needs to reduce its credit flow which is the main cause of the imbalances being witnessed in its economy. However, the government is continuing with its high credit flow, in the hope of keeping its economic growth respectable, but this is resulting in an increasing bad debt.



# SOUTH CHINA SEA DISPUTE AFTER THE TRIBUNAL DECISION

**SANA HASHMI**

With the announcement of the verdict of the Permanent Court of Arbitration (PCA) at The Hague on July 12, 2016, the South China Sea dispute has once again become a much-debated issue in the international arena. The ruling, which was in favour of the Philippines, is a major setback for China's efforts to convince the world of its peaceful development. It was the first time in the history of the People's Republic of China (PRC) that any country had initiated proceedings against it in the PCA. On January 22, 2013, the Philippines, one of the six claimants in the South China Sea dispute, filed a case against China under Annex VII to the United Nations Convention on the Law of the Sea (UNCLOS). The Philippines and China are two of the six claimants in the South China Sea dispute. The other claimants are Brunei, Malaysia, Vietnam, and Taiwan.

The Philippines' decision to drag China to the PCA was largely motivated by three factors:

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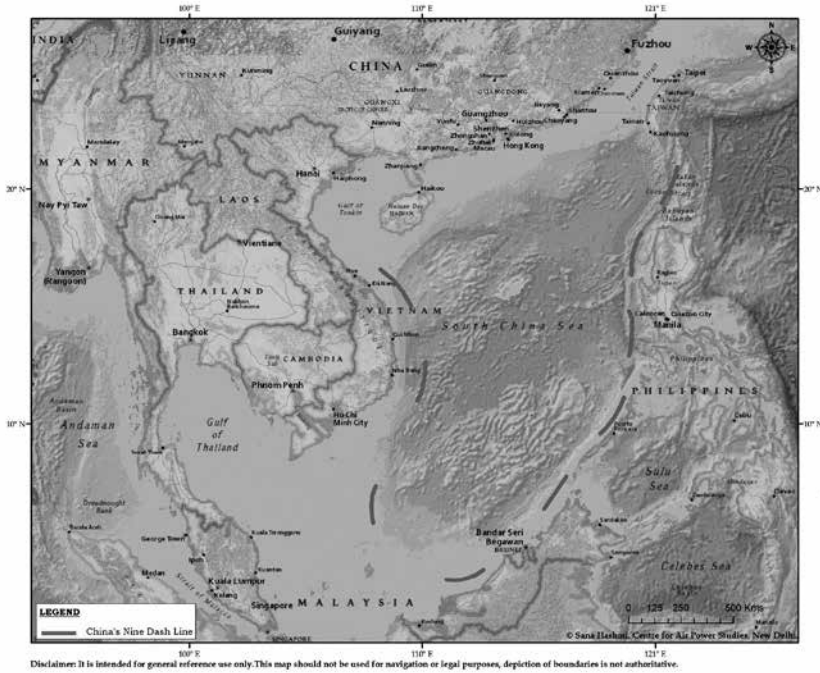
**Disclaimer:** The views expressed are those of the author and do not represent the views of the MEA, India.

- First, in 2009, China's submission of a map containing the u-shaped nine-dash line to the United Nations caused outrage in the region. Since the beginning, the Philippines has been firm on the question of China's 'nine-dash line', which shows almost the entire South China Sea as China's territory.
- Second, the 2012 military standoff at the Scarborough Shoal (claimed by both) between the two countries compelled the Philippines to file a formal case against China in the PCA. As a result of the confrontation, the Scarborough Shoal is now controlled by China.
- The year 2012 is historic for the Association of Southeast Asian Nations (ASEAN) as it was the first time in the history of ASEAN that a joint communiqué could not be issued. A joint communiqué can be issued only at the end of the summit every year by the consensus of all 10 member states. Cambodia was the chair and host of the 2012 ASEAN Summit and, being an ally of China in the ASEAN region, it did not let Vietnam and the Philippines mention the issue of the South China Sea in the summit. In addition, that was one of the first instances when differences within ASEAN began to surface.<sup>1</sup>

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1. Sana Hashmi, "South China Sea Verdict: Chinese Win Some, Lose Some", *South Asia Monitor*, August 4, 2016, at <http://southasiamonitor.org/detail.php?type=emerging&nid=18609>. Accessed on August 4, 2016.

**Fig 1: China's Nine-Dash Line in the South China Sea**



Source: Sana Hashmi, *China's Approach Towards Territorial Disputes: Lessons and Prospects* (New Delhi: KW Publishers Pvt Ltd, 2016), p. 137.

## RESPONSES IN THE AFTERMATH OF THE VERDICT

China has always maintained that it would not entertain any of the Philippines' demands to participate in the proceedings, which are 'unilaterally' initiated by the latter. However, Annex VII provides that the "absence of a party or failure of a party to defend its case shall not constitute a bar to the proceedings" and that, in the event that a party does not participate in the proceedings, a tribunal "must satisfy itself not only that it has jurisdiction over the dispute but also that the claim is well founded in fact and law."<sup>2</sup> Therefore, the

- For details on the judgment by the Permanent Court of Arbitration on the South China Sea dispute, see, Press Release, *The South China Sea Arbitration*, (The Republic Of The Philippines V. The People's Republic Of China), *The Hague*, July 12, 2016, at <https://pca-cpa.org/wp-content/uploads/sites/175/2016/07/PH-CN-20160712-Press-Release-No-11-English.pdf>. Accessed on July 12, 2016. Also see, In the Matter of the South China Sea Arbitration before an Arbitral Tribunal Constituted under Annex VII to the 1982 UNCLOS between the Republic of the Philippines and the People's Republic of China Award, Permanent Court of Arbitration, July 12, 2016, at <https://pca-cpa.org/wp-content/uploads/sites/175/2016/07/PH-CN-20160712-Award.pdf>. Accessed on July 12, 2016.

PCA in its press release as well as its lengthy judgment states, “The Tribunal found that it has jurisdiction to consider the Parties’ dispute concerning historic rights and the source of maritime entitlements in the South China Sea... That there was no legal basis for China to claim historic rights to resources within the sea areas falling within the ‘nine-dash line’.”<sup>3</sup> On the lawfulness of Chinese actions in the disputed sea, the tribunal found that China had violated the Philippines’ sovereign rights in its exclusive economic zone by (a) interfering with the Philippines’ fishing and petroleum exploration; (b) constructing artificial islands; and (c) failing to prevent Chinese fishermen from fishing in the zone.<sup>4</sup>

### *China*

Though China has always refused to take part, and defend its case, in the proceedings, the Philippines has been keen on resolving the dispute multilaterally. There has always been a difference in the approach of both parties while dealing with the matter. China has always advocated having negotiations with the other disputant at the bilateral level, without the intervention of any multilateral/regional grouping. Most importantly, China has never preferred the involvement of any third party in its territorial disputes. In the case of the South China Sea dispute, China has always shown a strong dislike for interference by the United States. However, the Philippines’ approach has been in total contrast. It has not only preferred to internationalise the issue by inviting the extra-regional powers to boost their presence in the region, it has also taken recourse to the legal way. Therefore, on January 22, 2013, the Philippines registered a written case over maritime rights and jurisdiction against China in the PCA.<sup>5</sup> A month later, in February 2013, China submitted a *Note Verbale* to the United Nations, rejecting the claims made by the Philippines in the notification and statement of claim, and calling on the Philippines to resolve the dispute through bilateral negotiations.<sup>6</sup>

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3. Ibid.

4. Ibid.

5. “Arbitration on the South China Sea: Rulings from The Hague”, *Centre for Strategic and International Studies Asia Maritime Transparency Initiative*, at <https://amti.csis.org/ArbitrationTL/>. Accessed on July 15, 2016.

6. Ibid.

China has never participated in the arbitration, citing that the decision will not be a binding one on China as the issue of the South China Sea does not come under the jurisdiction of the PCA but is governed by international law. While the verdict was predictable, China's response to the ruling has also come as no surprise. In fact, amid the PCA ruling, the Chinese Foreign Ministry was quick to issue a statement:

China solemnly declares that the award is null and void and has no binding force. China neither accepts nor recognises it... The initiation of this arbitration violates international law. Fully aware that territorial issues are not subject to UNCLOS, and that maritime delimitation disputes have been excluded from the UNCLOS compulsory dispute settlement procedures by China's 2006 declaration, the Philippines deliberately packaged the relevant disputes as mere issues concerning the interpretation or application of UNCLOS... The Philippines' unilateral initiation of arbitration infringes upon China's right as a state party to UNCLOS to choose on its own will the procedures and means for dispute settlement... The Chinese government will continue to abide by the international law. It will also continue to work with states directly concerned to resolve the relevant disputes in the South China Sea through negotiations and consultations on the basis of respecting historical facts and in accordance with international law, so as to maintain peace and stability in the South China Sea.<sup>7</sup>

Nevertheless, the ruling certainly had an impact on China. The Position Paper on the South China Sea issued in December 2014, the recently published White Paper titled *China Adheres to the Position of Settling Through Negotiation the Relevant Disputes Between China and The Philippines in the South China Sea*, and statements from several officials in China have signalled its fear about the response of the international community in the aftermath of the ruling. China faces

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7. For details on the Statement of the Chinese Foreign Ministry on the South China Sea Arbitration, see "Full Text of Statement of China's Foreign Ministry on Award of the South China Sea Arbitration Initiated by the Philippines", *Xinhua*, July 12, 2016, at [http://news.xinhuanet.com/english/2016-07/12/c\\_135507744.htm](http://news.xinhuanet.com/english/2016-07/12/c_135507744.htm). Accessed on July 12, 2016.

heightened international perceptions that it is neither a responsible nor law-abiding global power; Beijing is also concerned about the acceptability of its claims in the international community, which is illustrated by the fact that it has decided to play a South China Sea propaganda video 120 times a day in Times Square, New York.<sup>8</sup> China believes that countries such as the United States and Japan have instigated the verdict.

It seems there are two options left with China. First, China becomes all the more assertive which, of course, will lead to more instability in the Asia-Pacific. In such a scenario, China will set up an Air Defence Identification Zone (ADIZ) on the South China Sea, like it had established on the East China Sea in 2013. Vice-Foreign Minister Liu Zhenmin, at a press briefing at the Information Office of the State Council, stated that China “will decide whether to declare an ADIZ in the South China Sea in accordance with the extent of threat... The ADIZ is not a Chinese invention, but rather that of some big powers. If our security were threatened, of course, we have the right. It depends on our comprehensive judgment.”<sup>9</sup> China might also consider advancing its land reclamation activities, mainly in the Scarborough Shoal. While such moves have no long-term implications, they certainly help in reinforcing the Chinese claims.

Second, China finds itself stuck in a dilemma, as it is evident that the unfavourable ruling will have an ‘undesirable’ impact on China’s image building process. The verdict has not only dented its much self-projected image of a benign major power, but has also exposed its vulnerabilities on the security front, proving that it is several steps behind being a secure and stable global power with considerable international repute.<sup>10</sup> It has put China into the category of an aggressor, which wants to maintain its supremacy, and shows an uncompromising stance towards the smaller states.

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8. Rahul Mishra, “Storm Clouds Gathering Over South China Sea”, *East Asia Forum*, July 30, 2016, at <http://www.eastasiaforum.org/2016/07/30/storm-clouds-gathering-in-the-south-china-sea/>. Accessed on July 30, 2016.

9. “China Says ADIZ in South China Sea Depends on Threat”, *Xinhua*, July 13, 2016, at [http://news.xinhuanet.com/english/2016-07/13/c\\_135510516.htm](http://news.xinhuanet.com/english/2016-07/13/c_135510516.htm). Accessed on July 13, 2016.

10. Rahul Mishra, “China After Hague Ruling is Vulnerable, Insecure”, *Sunday Guardian*, July 23, 2016, at <http://www.sundayguardianlive.com/opinion/5798-china-after-hague-ruling-vulnerable-insecure>. Accessed on July 23, 2016.

One of the reasons why China went ahead with the resolution of its boundary disputes with 12 out of 14 neighbouring countries is that China, since 1949, has been involved in the process of building an image of a responsible and benign power. It has invested money as well as efforts to improve its international image and attempted to assuage fears vis-a-vis its inevitable rise. It certainly does not want its efforts to go waste. Furthermore, China's image of an aggressor has the potential to become a hurdle in its much talked about One Belt, One Road (OBOR) initiative. OBOR has two parts: its land component, known as the Silk Road Economic Belt (SREB), and the maritime one, famously known as the 21st Century Maritime Silk Road (MSR). Given that the MSR passes through the disputed South China Sea linking East Asia to maritime Europe, China wants to unlink the dispute from the Silk Road initiative. Nevertheless, this is a far-fetched desire and the differences between China and the two Southeast Asian countries, Vietnam and the Philippines, are bound to affect the OBOR; and thereby, have the potential to delay the implementation of projects under the framework of the MSR. In such a scenario, China will attempt to be less assertive and attempt to engage its opponents constructively. It will further opt to persuade the Philippines and other claimants to start negotiations at the bilateral level.

### *What it Means for the Philippines?*

Though the ruling might not have long-term implications for the resolution of the issue, it is, indeed, a win for the Philippines, which has neither the economic clout nor the military capability to fight China. As of now, the Philippines has also responded sensibly, with President Rodrigo Duterte saying he would not adopt a "flaunt or taunt" position against Beijing.<sup>11</sup> Now that the ruling has strengthened the Philippines' claims in the dispute, it is in a better position to negotiate with China and will, most probably, push China to hold talks at both bilateral and multilateral levels. However, in addition to Vietnam, the Philippines is one of the two most assertive claimants

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11. William Choong, "America and China Must Step Back from the Brink in the South China Sea", *National Interest*, August 1, 2016, at <http://nationalinterest.org/blog/the-buzz/america-china-must-step-back-the-brink-the-south-china-sea-17202>. Accessed on August 1, 2016.

China has to deal with in the South China Sea. It is not likely that direct talks between China and the Philippines will take place any time soon. After the ruling, the Chinese side suggested that the Philippines ignore the ruling and opt for bilateral talks. As of now, the Philippines has rejected China's request for talks on the South China Sea dispute. However, it seems that with the coming of the new Philippines President, Rodrigo Duterte, to power, the Philippines will be less confrontational in its approach towards China.

### *United States' Response*

"The ruling should be treated as final and binding. We certainly would urge all parties not to use this as an opportunity to engage in escalatory or provocative action", White House spokesman, Josh Earnest remarked in a press briefing. Ever since US President Barack Obama introduced the Rebalancing to Asia Strategy, the United States has been vocal about the South China Sea dispute. The verdict will have the maximum impact on China-United States relations as the United States has been advocating safeguarding of freedom of navigation in the South China Sea, which China refers to as interference in its internal matters. China feels more threatened by the presence of the United States and its support to its allies in the region. China faces an emboldened US naval presence to safeguard its interests and those of its allies in the region; backed by the tribunal's decision, the United States would find greater justification in patrolling the South China Sea waters and carrying on with its FONOPs (Freedom of Navigation Operations).<sup>12</sup>

In the medium term, the best approach for the United States is not to pummel China with the 501-page judgment, but rather, to ensure that it has enough face to pursue tangible and functional outcomes, which could include accelerating the talks for the Code of Conduct (CoC), an expansion of the Code of Unplanned Encounters at Sea (CUES) to include coast guard ships, and getting claimants, like the Philippines to postpone negotiate directly with the Chinese.<sup>13</sup>

The United States has been perceived as a potential counterweight to China's influence in the region. Given that the United States is the

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12. Mishra, n. 8.

13. Choong, n. 11.



Philippines' only option in the South China Sea now, it will continue to rely on the former for military assistance. The dilemma for the countries of the Asia-Pacific region is that while the United States has been a security provider to several countries in the region,<sup>14</sup> China is increasingly emerging as an economic guarantor. This imbalance has the potential to determine the future of the South China Sea dispute.

### *Response from India*

India welcomed the verdict by the PCA. It was mentioned in the press release, "As a State Party to the UNCLOS, India urged all parties to show utmost respect for the UNCLOS, which establishes the international legal order of the seas and oceans".<sup>15</sup> India believes that, "States should resolve disputes through peaceful means without threat or use of force and exercise self-restraint in the conduct of activities that could complicate or escalate disputes affecting peace and stability."<sup>16</sup>

India's position has been consistent throughout. Given that India is not a direct party to the conflict, its approach seems to be measured and calibrated. Since there is so much at stake, India is less likely to be assertive and involved in the issue. However, there is still a dilemma for India. ASEAN member states such as Vietnam and the Philippines want India to play a bigger role in the region, whereas China wants India to stay out of the conflict.

## **CONCLUSION**

The ruling will not bring about major changes immediately and the status quo will be maintained. However, this is going to be a test for ASEAN as the countries are divided over their stance on China, as also on the issue. The fear is that the 2016 ASEAN Summit in Lao People's Democratic Republic (PDR) might also suffer the same fate

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14. Rosemary Foot and Andrew Walter, *China, The United States, and the Global Order*, (Cambridge: Cambridge University Press, 2011), p. 20.

15. "Question No.2014 India's Interest In South China Sea Region", Ministry of External Affairs, Government of India, August 4, 2016, at <http://www.mea.gov.in/rajya-sabha.htm?dtl/27229/QUESTION+NO2014+INDIAS+INTEREST+IN+SOUTH+CHINA+SEA+REGION>. Accessed on August 4, 2016.

16. "India's Statement on SCS: China Reacts Guardedly", *PTI News*, July 13, 2016, at [http://www.ptinews.com/news/7647838\\_India-s-statement-on-SCS-China-reacts-guardedly.html/](http://www.ptinews.com/news/7647838_India-s-statement-on-SCS-China-reacts-guardedly.html/). Accessed on July 14, 2016.

as the 2012 Summit hosted by Cambodia, an ally of China in the Southeast Asian region. Further, the chances are that the South China Sea might hijack the talks at the 6th East Asia Summit (EAS), which also hosts countries such as the United States, Japan, Australia, and India.

However, the ruling will help in easing the tension in the region as it has the potential to leave a lasting impact on China's image building process. In the long run, all the involved parties need to ensure that peace and stability are maintained in the region and the only way to guarantee peace and stability is to have regular talks.

# CHINA'S ENGAGEMENT IN CENTRAL ASIA: CULTURAL DIPLOMACY

POONAM MANN

The last two decades have seen the gradual but substantial rise of China in the Central Asian region. Rapidly increasing trade, huge investments in the energy sector and infrastructure (pipelines, hydropower plants, bridges, roads, airports), granting of loans, etc. through bilateral and multilateral initiatives, are the main determinants for making China a powerful geopolitical player in Central Asia. This has been the result of a carefully crafted and relatively cautious strategy adopted by Beijing towards the region since 1991, when China, after having absorbed the ideological shock of the collapse of the Soviet Union, drew up a new approach to develop diplomatic, political and economic relations with these newly emerged states.

Although China sees Central Asia as a critical frontier for its energy security, trade expansion, etc., the key factor that defines the Chinese engagement with the region is the aspiration to pacify the restive northwestern region of Xinjiang. Three of the Central Asian Republics (CARs) i.e. Kazakhstan, Kyrgyzstan and Tajikistan are neighbours of the troubled Xinjiang Uyghur Autonomous Region,

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where a segment of the ethnic Uyghur population continues to strive for independence. According to China's development logic, economic incentives can undermine the Uyghur calls for independence, and Xinjiang's problems. Therefore, as a part of its development plans, Beijing is connecting Xinjiang to Central Asia through roads, rails and pipelines.

The Central Asian Republics are benefitting from the Chinese economic dynamism and the Central Asian leaders are publicly praising Beijing for its diplomacy and good neighbourly measures. However, the local experts and residents are not very optimistic about the increased Chinese involvement in the region and are suspicious about the real objectives of China.<sup>1</sup> There is a persistent sense among the local experts and officials that China's investments and interests in the region mask some sort of hidden agenda.<sup>2</sup> This paper intends to examine the fears of the local population towards China's economic expansion in the region and how China plans to combat this.

### **THE PREVALENT SUSPICIONS OF THE LOCALS IN CENTRAL ASIA**

The local perceptions of China in Central Asia highlight not only the growing anti-Chinese sentiments, but also a cause of worry. The invasion of Central Asian markets by Chinese goods has seriously damaged the national production, and the growing number of Chinese migrants in the Central Asian Republics is causing resentment among the locals. Chinese goods have captured a large percentage of the local market for consumer goods and processed food. Chinese entrepreneurs have established several large business and trade centres mainly in Kazakhstan, Kyrgyzstan and Tajikistan. They have also entered the construction sector, regularly winning deals and contracts.<sup>3</sup> Thus, the Chinese community has grown steadily and has

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1. Diana Gurbanmyradova, "The Sources of China's Soft power in Central Asia: Cultural Diplomacy", at [www.etd.ceu.hu/2015/gurbanmyradova\\_diana\\_pdf](http://www.etd.ceu.hu/2015/gurbanmyradova_diana_pdf). Accessed on June 13, 2016.
  2. Raffaello Pantucci, "China's Place in Central Asia", *Eurasianet*, at <http://www.eurasianet.org/print/29306>. Accessed on July 18, 2016.
  3. Rafis Abazov, "Chinese in Central Asia: Loyal Citizens or Fifth Column?", *The Central Asia – Caucasus Analyst*, at <http://www.cacianalyst.org/publications/analytical/item/10620-analytical-articles-caci-analyst-2006-2-8-art-10620.html?tmpl=component&print=1>. Accessed on August 17, 2016.

become more visible in the Central Asian Republics. This unchecked growth has many implications, like additional pressure on the labour market, considerable competition for jobs and business opportunities and open conflict between the indigenous population and the newcomers, and encouragement to corrupt practices.<sup>4</sup> Consequently, the local media, opposition groups and public opinion are sceptical about China's rising presence in Central Asia. These anti-Chinese sentiments have turned violent in some of the republics and hostility towards the Chinese migrants is increasing.

Most of the protests are happening in Kazakhstan, Kyrgyzstan and Tajikistan, as they border China. For instance, over the years, the influx of Chinese workers, businessmen and money has increased dramatically in Tajikistan. Unofficial estimates suggest that there are now 150,000 Chinese working in Tajikistan, when the government quota for foreign workers is 8,000 per year.<sup>5</sup> This influx is more visible around the countryside, where the officials have started renting out increasing tracts of land to Chinese farmers for 49-year terms. Reportedly, the land controlled by the Chinese has risen by 3,000 percent over the last several years.<sup>6</sup> Further, they try and get the best land with more water, allegedly, by paying off the local officials. This enables them to produce more for every hectare than the Tajik farmers, resulting in depressing commodity prices, and forcing more locals off their land. Chinese landlords also hire Tajik labourers and then treat them as 'second class' people by lording over them and paying less than they pay the Chinese labourers. These trends have sparked conflicts between the Tajiks and Chinese, which are becoming quite frequent.<sup>7</sup>

Similar instances are also visible in Kazakhstan, where the locals have expressed their anger at the government's decision to change legislation governing the foreigners' ability to rent land for lengthy periods of time. The main concern of the people here is that the Chinese firms can exploit this legislation to slowly lease larger tracts

4. Ibid.

5. Paul Goble, "China Quietly Displacing Both Russia and US from Central Asia", *The Jamestown Foundation – Global Research & Analyses*, at [http://www.jamestown.org/programs/edm/single/?tx\\_ttnews%5BbackPid%5D=27&tx\\_ttnews%5Btt\\_news%5D=457&V6giitj961S](http://www.jamestown.org/programs/edm/single/?tx_ttnews%5BbackPid%5D=27&tx_ttnews%5Btt_news%5D=457&V6giitj961S). Accessed on August 8, 2016.

6. Ibid.

7. Ibid.

of Kazakhstani land.<sup>8</sup> In Kyrgyzstan also, some of the social activists and media outlets are calling for a halt to Chinese migration into the country.<sup>9</sup> According to the Kyrgyz Ministry of Justice, around 90,000 Chinese nationals are staying illegally in Kyrgyzstan. The influx makes migration a dangerous issue, exacerbated by the fact that thousands of Kyrgyz people are forced to migrate to either Russia or Kazakhstan in search of jobs.<sup>10</sup> In Kyrgyzstan, the 'bazaar economy' plays a crucial role in the country's functioning and it has been observed that the locals are sensitive to the Chinese presence due to commercial considerations. "Chinese migrants are seen as competitors: hard working, entrepreneurial and able to live and work in poor conditions. There are fears that they could take up a share of the already scarce labour market and even gain control over some sectors of the national economy."<sup>11</sup>

Furthermore, the perceptions of corruption also hang around many of the Chinese ventures, adding to China's unpopularity. It has been argued that with its trade, economic and investment policy in Central Asia, Beijing is focussing on the implementation of its own interests in the region, rather than its support to the local producers. The management of Chinese companies operating in Central Asia prefers to employ Han Chinese rather than the local residents. Additionally, Beijing is intensifying the lobbying of the interests of its national companies in Central Asia by encouraging local senior officials to give preference to Chinese companies at the expense of domestic companies, which leads to an increase of corruption in the Central Asian Republics.<sup>12</sup> These concerns are further elevated by the fact that the infrastructure projects funded by Chinese companies are, as a rule, also accompanied by Chinese contractors and management,

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8. Pantucci, n.2.

9. Cholpon Orozobekova, "China Relocating Heavy Enterprises to Kyrgyzstan", *The Jamestown Foundation – Global Research & Analyses*, at [http://www.jamestown.org/single/?tk\\_ttnews%5Btt\\_news%5D=45546&tx\\_ttnews%5BbackPid%5D=7&cHash=5c686b20cc853543e07e5c5058ac2045E.V4yc...](http://www.jamestown.org/single/?tk_ttnews%5Btt_news%5D=45546&tx_ttnews%5BbackPid%5D=7&cHash=5c686b20cc853543e07e5c5058ac2045E.V4yc...), Accessed on July 18, 2016.

10. Fazil Mashrab, "Anti-China Mood Threatens Push for Kyrgyz Railway Link", *Asia Times*, at [http://www.atimes.com/atimes/Central\\_Asia/NE17Ag02.html](http://www.atimes.com/atimes/Central_Asia/NE17Ag02.html). Accessed on August 9, 2016.

11. Gurbanmyradova, n.1.

12. Vladimir Odintsov, "China's Strategic Presence in Central Asia", *New Eastern Outlook*, at [journal-neo.org/2016/03/24/chinas-strategic-presence-in-central-asia/](http://journal-neo.org/2016/03/24/chinas-strategic-presence-in-central-asia/). Accessed on August 16, 2016.

which do not always take local regulations into account. This often leads to protests and assaults on the Chinese workers.<sup>13</sup>

The above factors show that on the one hand, China's business practices are generating its negative image in Central Asia by reminding the people of China's dominance each time they go to the market and, on the other, they are creating social disruption. Also, it seems that the governments of these republics are doing very little to stem the flow of migration or mitigate the concerns. Therefore, the Central Asian elites and population are often at odds over issues like land lease, Chinese migrants, etc. A clear-cut strategy and well established rules about how the government should deal with the issue of legal and illegal migration will prove to be helpful.

The Chinese leadership is well aware of this perception issue, and is increasingly compelled to secure its interests through even more agreements. This was visible during Chinese Premier Xi Jinping's visit to Central Asia in September 2013, when he specifically sought to address this issue through China's soft power initiatives. Besides, the Westward strategy articulated by him in his "New Silk Road Economic Belt" highlighted Central Asia's importance for China's economy and development. Signing of a series of contracts with Kazakhstan worth \$30 billion; 31 agreements valued at \$15 billion with Uzbekistan; natural gas transactions worth about \$16 billion with Turkmenistan; aid of \$8 billion to Turkmenistan; expected aid of \$1 billion to Tajikistan; and upgradation of relations with Kyrgyzstan to a strategic level,<sup>14</sup> demonstrated China's determination to improve public relations efforts in the region and encourage positive perceptions of China.

### **CULTURAL DIPLOMACY**

A part of Beijing's policy to enhance its outreach and improve its image in Central Asia, is the development of cultural relations, specifically by teaching the Chinese language to the locals in the region and establishing branches of the Confucius Institute. An indication of the success of such a policy was evident when Dariga,

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13. Ibid.

14. Virginia Marantidou and Ralph A. Cossa, "China and Russia's Great Game in Central Asia", *The National Interest*, at <http://nationalinterest.org/print/blog/the-buzz/china-russias-great-game-central-asia-11385?page=show>. Accessed on August 10, 2016.

the daughter of the Kazakh president stated that besides Kazakh, Russian and English, the Kazakhstan people "will also need to speak Chinese in the near future."<sup>15</sup>

Prior to Chinese President Xi Jinping's visit to the Central Asian Republics in September 2013, China's soft power in Central Asia was very limited.<sup>16</sup> To strengthen its soft power, it had established trading houses to facilitate commerce and increase contacts in Central Asia. China Radio International was being broadcast twenty-four hours a day. Transmissions to Kazakhstan were increased in length and quality. At the political level, parliamentary exchanges between China and the Central Asian Republics were taking place. But the impact has not been very visible. Instead, the people of some of the Central Asian Republics remain wary of the Chinese influence and harbour fears of Chinese expansionism.<sup>17</sup>

However, President Xi's visit in 2013 and his speech at Nazarbayev's University in Kazakhstan can be viewed as China's attempt to convey the message that China is a friendly actor and that the relationship with China is beneficial to both sides. In his keynote speech, Xi said:

The over two thousand years of history of exchanges (between China and Kazakhstan) demonstrate that on the basis of solidarity, mutual trust, equality, inclusiveness, mutual learning and win-win cooperation, countries of different races, beliefs and cultural backgrounds are fully capable of sharing peace and development.<sup>18</sup>

In fact, the title of his speech was "Promote Friendship Between Our People and Work Together to Build a Bright Future."<sup>19</sup> The final part of his speech highlighted China's objectives to engage more actively in its public and cultural diplomacy. He said:

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15. Ibid.

16. Niklas Swanstrom, "China's Role in Central Asia: Soft and Hard Power", *Global Dialogue*, volume 9, no. 1-2, January 2007, at <http://www.worlddialogue.org/Print.php?id=402>. Accessed on May 20, 2016.

17. Ibid.

18. "Promoting Friendship Between China and Eurasian Countries," at [www.china-embassy.org/program/newsupdate/20130907/102421.shtml](http://www.china-embassy.org/program/newsupdate/20130907/102421.shtml). Accessed on June 12, 2016.

19. "Ministry of Foreign Affairs of the People's Republic of China," at [www.fmprc.gov.cn/mfa\\_eng/wjdt\\_665385/zyjh\\_665391/t1078088.shtml](http://www.fmprc.gov.cn/mfa_eng/wjdt_665385/zyjh_665391/t1078088.shtml). Accessed on June 12, 2016.



To facilitate youth exchanges within the Shanghai Cooperation Organisation (SCO) framework, China will, in the coming ten years, provide 30,000 government scholarships to SCO member states and invite 10,000 teachers and students from Confucius Institutes in these countries to China for study tours. I also wish to invite 200 faculty members and students from Nazarbayev University to go to China next year and attend summer camp activities.<sup>20</sup>

Also, during the SCO meeting in September 2013, President Xi brought up a four-point proposal to help SCO members promote development and carry forward the Shanghai spirit. The fourth point of the proposal emphasises the need that China sees in strengthening “people-to-people communications and non-governmental exchanges, laying solid public opinion and social foundations for the development of the SCO.”<sup>21</sup> Therefore, it can be assumed that cultural diplomacy is becoming one of the major tools to project China’s positive image in Central Asia.

One of the main sources that China is using to enhance its cultural diplomacy are the Confucius Institutes. Kyrgyzstan has the largest number of these institutes. The Chinese pay for the teachers for the classes of Chinese language in these institutes, which enroll more than 3,000 local students every year. In 2012, 38 teachers were teaching in the schools and universities across Kyrgyzstan. It is assumed that over 100 Kyrgyz graduates head to China for higher learning or in search of jobs every year. In fact, it was reported that Chinese language lessons have been introduced in some of the Kyrgyz schools.<sup>22</sup> It was also announced that China’s Xinjiang University had discussed the idea of opening a Kyrgyz-Chinese University, and kindergartens and schools with the Chinese language as a medium of instruction.<sup>23</sup>

Similarly, Confucius Institutes are also active in Kazakhstan. For example, the Confucius Institute at Aktobe conducts various cultural activities that involve students and workers. Out of 38 students from the Regional State University who applied for grants to study in

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20. Ibid.

21. n.19.

22. P. Stobdan, *Central Asia : Democracy, Instability and Strategic Game in Kyrgyzstan* (New Delhi: Pentagon Press, 2014), pp. 190-191.

23. Ibid.

China, 35 were selected for the academic year 2014-15. However, not only students, but also employees working for Chinese companies are also being sponsored for exchange programmes.<sup>24</sup>

Tajikistan too has one Confucius Institute, but it is poorly managed.<sup>25</sup> China has also undertaken other attempts to increase its soft power in the region. Since China lacks information about the region and acknowledges that Sino-phobia requires to be better understood, it has funded many researchers in the region. Additionally, in 2013, five separate research centres were opened in Xinjiang, where scholars would work on knowledge about the region and each Central Asian Republic separately.<sup>26</sup>

Further, China has increased the availability of media for local Central Asians. China is trying to create its positive image via the media. The Chinese State Television broadcasts on the territory of a number of Central Asian Republics and the state channels regularly show programmes on China. The Chinese official press agency "Xinhua" news blocks are also often distributed there.<sup>27</sup>

These local soft power initiatives are being generally well received. Confucius Institutes are welcomed in cities across Central Asia. Their number has increased over the years. These institutes are being seen as a smart way of creating a good image of China and furthering the study of the Chinese culture and language, and, at the same time, helping the people of the Central Asian Republics learn the language for practical purposes – it can help facilitate their business interests in China. Students from the Central Asian Republics are also getting opportunities to travel to China after obtaining internships, thus, widening their horizons and connecting with the outside world.

However, for some experts, the Chinese policy in Central Asia is not without ambiguity. There is a growing feeling of mistrust about Beijing's possible hidden objectives. For instance, the cession of some territories to China has been viewed negatively by sections of the population. It is suspected that China could lay down additional

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24. Gurbanmyradova, n.1.

25. Ibid.

26. Ibid.

27. Odintsov, n.12.

claims.<sup>28</sup> Also, China's treaties with the republics have not been published, therefore, assumptions about the possibility of these having secret clauses, questions about their timeframes and the possibility of renegotiation of some of the territories in the decades to come are rife. These are the legitimate public concerns in Kazakhstan, Kyrgyzstan and Tajikistan.<sup>29</sup>

Hence, there are pros and cons of China's engagement in the region. The Central Asian Republics are desirous of taking advantage of China's economic dynamism and geostrategic influence (in fact, the active rapprochement with China is bringing benefits for the region) but, at the same time, they are fearful of the potential demographic and cultural implications as they wonder whether, if beyond increasing Chinese economic influence, there are intentions for cultural and political control? Hence, local opposition to the "Chinese domination" or "Sino-phobia," is becoming a key strategic challenge for Beijing in some parts of the region. Perhaps, this is one of the consequences of too tight an embrace by China.

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28. Sebastien Peyrouse, "Discussing China: Sinophilia and Sinophobia in Central Asia", *Journal of Eurasian Studies*, vol. 7, 2016, p. 19.

29. Ibid.

# ANALYSING INDIA-IRAN RELATIONS POST REMOVAL OF SANCTIONS

ANU SHARMA

India's relations with Iran in the present times have been constantly viewed in the context of India's growing priorities in the Indian subcontinent and its need for increasing its sphere of influence in West Asia. The landmark nuclear deal and the removal of sanctions from Iran have further increased Iran's stakes in the regional geopolitics, thereby making it a very viable future ally for New Delhi, in view of Iran's endowment in oil and natural gas reserves. Prime Minister (PM) Narendra Modi's two-day visit to Iran in the first week of June 2016 is being seen as the next big step in the economic relationship between the two nations. A run-up to this visit was given by top Indian Cabinet Ministers including Sushma Swaraj, Nitin Gadkari and Dharmendra Pradhan.<sup>1</sup> Various issues like ownership of the Farzad B gas fields, energy security and connectivity through Chabahar port, investment and industrial collaboration and payment of oil dues have been the major thrusts of the talks between the Indian

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1. Anu Sharma, "Energy and Physical Connectivity: Centrepieces of Indian External Affairs Minister Sushma Swaraj's visit to Iran", *In Focus*, April 22, 2016, at [http://capsindia.org/files/documents/CAPS\\_Infocus\\_ANS\\_04.pdf](http://capsindia.org/files/documents/CAPS_Infocus_ANS_04.pdf); and Anu Sharma, "Decoding PM Narendra Modi's Forthcoming Visit to Iran: Opportunities for India", *In Focus*, May 10, 2016, at [http://capsindia.org/files/documents/CAPS\\_Infocus\\_ANS\\_05.pdf](http://capsindia.org/files/documents/CAPS_Infocus_ANS_05.pdf).

and Iranian leadership counterparts during these visits. The visits by the Indian leaders came at a time when Iran was emerging as a key economic and strategic player in the region post sanctions. Iran holds about 10 per cent of the world's oil reserves and 17 per cent of the natural gas reserves. This makes Iran's the fourth largest oil reserves globally and the second largest in terms of natural gas.<sup>2</sup> These oil and gas reserves have also provided Iran with ample opportunities for increasing its economic and security cooperation not only in the Persian Gulf region but also beyond. This paper aims to discuss the various contours of Indo-Iranian relations post removal of sanctions, with an emphasis on the energy security and connectivity being the highlight of the relationship between the two nations.

Globally, New Delhi and Tehran are on the same page in their opposition to terrorist groups like Al Qaeda and Islamic State of Syria and Iraq (ISIS). Both nations are also constant supporters of a strong and stable government in Kabul, free from the dominance of the Taliban. India is capable in steel, aluminium, mines and metals, railroads, software, Information Technology (IT), and technology. There is a lot of demand in these sectors in Iran. One of the biggest advantages in recent times is that Indians are offering a credit line to the Iranians through which the Iranian economy can benefit significantly.<sup>3</sup>

### EARLY PHASE

India had shared borders with both Iran and Afghanistan till 1947, but after partition, India lost its contiguity with both Iran and Afghanistan. India established diplomatic relations with Iran in 1950. Nehru's regime worked hard to have cordial relations with Iran, however, balancing this tight-rope walk with maintaining its relations with Egypt too. This was happening despite the fact that Iran maintained close ties with the US and was part of the Central Treaty Organisation (CENTO—also known as the Baghdad Pact—of which Pakistan was also a member). The Cold War, Western hostility

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2. ABD EIA, "Iran Overview", at <http://www.eia.gov/beta/international/analysis.cfm?iso=IRN>. Accessed on June 12, 2016.
  3. Tanvi Madan, "India's Relationship with Iran: It's Complicated", February 28, 2014, *Brookings*, at <http://www.brookings.edu/blogs/markaz/posts/2014/02/28-iran-india-complicated-relationship-madan>. Accessed on June 6, 2016.

and, particularly, the emerging Iran-China-Pakistan nexus, propelled India to have closer ties with Moscow. Iran, under the Shah's regime was developing close ties with the US, Israel and the pro-US Arab monarchs, and his authoritarian style of functioning kept bilateral ties between Iran and India from burgeoning. Added to this, India's support to Iraq during the Iran-Iraq War and Iran's continued support to Pakistan had further impeded the relations between India and Iran.<sup>4</sup> Despite recognition of the importance of Iran for India's development, various factors on both the sides had pushed the two countries onto the back foot as far as bilateral relations were concerned. However, it was P.V. Narasimha Rao's landmark visit in 1993, as the first Indian PM to visit Iran since the Iranian Revolution, that was seen as heralding a new bilateral cooperation in the era of economic liberalisation for India.<sup>5</sup> The high level visits over the years culminated in the signing of the "Tehran Declaration" in April 2001, further strengthening ties between the two nations. The Tehran Declaration also castigated terrorism "in all its forms", condemning "states that aid, abet and directly support international terrorism" in a barely veiled reference to Pakistan.<sup>6</sup> These declarations indicated the strategic convergence between India and Iran over the issues related to terrorism.

One of the major factors that influenced Indo-Iranian relations in the past have been related to India's energy demands—a prerequisite for its economic growth as well as economic sustainability. In fact, it can be said that energy security has been the dominant aspect of the Indo-Iranian relationship. India and Iran, in the past few years, have been struggling to manage trade and economic ties during the sanctions imposed by the US. At the same time, Iran, a diversified economy of 80 million people, needs to increase its trade and economic cooperation with India. Despite the sanctions imposed by the US on Iran, both India and Iran were keen to strengthen the economic

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4. Shireen Hunter, *Iran's Foreign Policy in the Post-Soviet Era: Resisting the New International Order* (California: Praeger, 2010).

5. Javed Ahmad Khan, "Indo-Iran Economic Relations since 1990s", in Anwar Alam, ed., *India and Iran: An Assessment of Contemporary Relations* (New Delhi: New Century Publications, 2011), pp. 238-257.

6. Sushil J. Aaron, "Straddling Faultlines: India's Foreign Policy Toward the Greater Middle East, *CSH Occasional Paper* (New Delhi: French Research Institutes in India, 2003), pp. 35-51.

relationship that principally looked at fulfilling India's energy requirements. At the same time, it facilitated the Iranian attempts to circumvent US sanctions that were inhibiting its economic growth. However, Iran's isolation, post US involvement in the region, by the Gulf Cooperation Council (GCC) states, scuttled Tehran's intent of normalising economic relations with India, highlighting its need to look for other profitable partnerships.

However, in the present times, India-Iran relations have been somewhat "complicated". India is looking forward to providing impetus to its energy cooperation and regional connectivity in the region through Iran.<sup>7</sup> PM Modi's recent visit to Iran and the signing of the Chabahar port deal have been milestones in starting a fruitful relationship between India and Iran. Geographically, Iran shares borders' with five vital regions, namely, Eurasia, Central Asia, Afghanistan (as the buffer zone), South Asia and West Asia and two strategically significant energy hubs i.e., the Caspian Basin and Persian Gulf, making Iran the most sought after nation for energy security. Likewise, India is the second largest geographical and political entity in South Asia, bordering almost all the states in the region.<sup>8</sup> For Iran, engaging with India to regain its pre-sanctions status in the economics of the West Asian region seems like the best possible option. At the same time, Iran, unlike many other West Asian nations, has a large and very qualified workforce which can be utilised for realising these aims which Iran seeks to achieve apart from gaining access to low-cost space, IT and pharmaceutical technologies available in India for its benefit.<sup>9</sup>

## ENERGY RESOURCES

In India-Iran bilateral relations, energy is the key aspect. Iran is the second largest supplier of crude oil to India. The aim of Prime Minister Modi's two-day trip to Iran was also important from the point of view of India's energy security, payment of the pending dues to Iran and finalising the ownership issues relating to the Farzad B gas fields. India's Oil and Natural Gas Corporation (ONGC)

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7. n. 3.

8. Ibid.

9. Vikas Kumar, "India-Iran: Part 2—After A—"Belated" Re-start", *Future Directions International*, at <http://www.futuredirections.org.au/publication/india-iran-relations-belated-re-start/>. Accessed on August 2, 2016.

Ltd. -led consortium (consisting of three Indian companies namely ONGC Videsh Ltd., Oil India Ltd. and Indian Oil) had discovered the Farzad B offshore gas fields in 2008, but due to the sanctions on Iran, the negotiations could not proceed. Farzad B has estimated reserves of 12.8 trillion cubic feet of gas. In April this year, Minister of State (MoS) PNG Dharmendra Pradhan visited Iran to follow up on the negotiations related to these gas fields.

In an answer to a question raised in the Lok Sabha, External Affairs Minister Sushma Swaraj made it clear that discussions are going on with the Iranian authorities on the participation of ONGC Videsh Ltd. on the issues relating to the exploration, development and off-take from the Farzad B gas fields. The minister also stated that progress has been achieved to a point with the Iranian authorities indicating that the gas fields would be made available to India. She further added that the concerned companies have been directed to complete their negotiations on the Farzad B gas fields in a time-bound manner.<sup>10</sup> The Indian government is also negotiating with its Iranian counterparts for the development plan for the Farzad B gas fields with options to export the gas either in the form of Liquefied Natural Gas (LNG) or through a subsea pipeline.<sup>11</sup>

Apart from this, India has interests in other blocks of oil and gas. It should be noted here that Iran's production cost for both crude and natural gas is very low. For crude oil, it ranges between \$ 8-10 per barrel. ONGC Videsh and Indian Oil Corporation each hold 40 per cent interest in the Farsi block, while Oil India Ltd. owns the remaining 20 per cent.<sup>12</sup> This clearly indicates that with its burgeoning energy requirements India is well placed to provide a substantive alternative energy market for Iran.

According to Reuters, India-Iran oil trade has also increased in the year 2016 by 48 per cent as compared to 2015, with the average annual imports in this fiscal year being higher as compared to the last

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10. The question and answer available at <http://mea.gov.in/lok-sabha.htm?dtl/26732/QUESTION+NO152+CHABAHAR+PORT>. Accessed on June 10, 2016.

11. "India, Iran Plan to Seal a Deal on Farzad B Field Development", June 6, 2016, *Iran Daily*, at <http://iran-daily.com/News/152748.html?catid=3&title=India--Iran-plan-to-seal-deal-on-Farzad-B-field-development>. Accessed on June 10, 2016.

12. Ibid.



seven years.<sup>13</sup> With the Chabahar deal in place, the import cost of oil for India would go down. The increase in the oil trade between the two nations, as mentioned above, will allow India to have reduced transportation costs to import crude oil along with other products such as urea and dry fruits at much lower prices. With India investing heavily in the Iranian oil and gas sector, there are chances of increased bilateral trade between India and Iran, apart from enhancing energy propositions between the two nations.

India's bilateral engagement with Iran was affected severely by the "Comprehensive Iran Sanctions, Accountability and Divestment Act of 2010 (CISADA)" which was signed into law by President Obama on July 1, 2010.<sup>14</sup> The Act broadened the scope of all the sanctionable activities to Iran's energy and other sectors and also sought to make sure that the sanctions were enforced. India's exports to Iran and imports from Iran showed a declining trend in 2009-10 as compared to 2008-09. In 2008-09, the total trade with Iran was worth US\$ 14,910.78 million which decreased to US\$ 13,394.02 million during 2009-10. This was essentially because of the sanctions announced by the US in dealing with Iranian banks, as a result of which, both exporters and importers were facing trouble in recovering payments. After the inclusion of Iran's major banks under various UN, US and EU (European Union) sanctions, normal trade transactions/opening of Letters of Credit (LCs), etc. had suffered. Payment settlement had been the main issue for trade with Iran. India's trade with Iran had increased substantially from US\$ 9,065.03 million in 2006-07 to US\$ 13,670.72 million in 2010-11, as indicated in Table 1.

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13. Nidhi Verma, "India's Iran Oil Imports set to Surge to Seven-Year High in 2016/17: Sources", April 4, 2016, *Reuters*, at <http://www.reuters.com/article/us-india-iran-oil-imports-idUSKCN0X11ZH>. Accessed on June 10, 2016.

14. Sujata Ashwarya Cheema, "India-Iran Relations in the Post-Cold War: A Neo-Realist Analysis", in R. Sidda Goud and Manisha Mookherjee, eds., *India and Iran in Contemporary Relations* (New Delhi: Allied Publishers, 2014), p. 32.

**Table 1: Bilateral Trade with Iran (value in US \$ million)**

Year	Exports	Import	Total Trade	Balance of Trade
2006-07	1,446.48	7,618.55	9,065.03	(-)6,172.07
2007-08	1,943.92	10,943.61	12,887.53	(-) 8,999.69
2008-09	2,534.01	12,376.77	14,910.78	(-) 9,842.76
2009-10	1,853.17	11,540.85	13,394.02	(-) 9,687.68
2010-11	2,742.51	10,928.21	13,670.72	(-) 8,185.70
2010-11 (April-Oct)	1,351.01	5,819.93	7,170.94	-4,468.92
2011-12 (April-Oct)	1,432.22	5,939.94	7,372.16	-4,507.72

Source: DGC&S at [http://commerce.nic.in/publications/anualreport\\_chapter7-2011-12.asp](http://commerce.nic.in/publications/anualreport_chapter7-2011-12.asp)

After the lifting of sanctions, Iran expects to receive about \$30 billion of its frozen funds in the coming months.<sup>15</sup> Iran will also increase its investments in terms of oil revenues and foreign investments post-removal of the sanctions. PM Modi's recent visit has led to the signing of various agreements and Memorandums of Understanding (MoUs) which are aimed at increasing the bilateral trade to an estimated \$30 billion from the present \$15 billion.<sup>16</sup> In fact, prior to PM Modi's visit, India had cleared its partial debt of \$6.4 billion towards Iran. Moreover, being the second largest oil importer, India was also the fourth largest importer of non-oil Iranian products in the year 2015. Iran exported \$10.3 billion of non-oil goods to India while India's non-oil exports to Iran stood at \$4.31 billion. Basmati rice is a significant component of this trade, amounting to \$2 billion in 2013-14.<sup>17</sup> In 2014-15, India's exports to Iran stood at \$4.17 billion while imports amounted to \$8.95 billion. Among other sectors, Iran is also looking at cooperation in agro processing, information, technology, steel and hotels/tourism.<sup>18</sup>

15. Harsh V. Pant, "India's Challenge in New Iran", January 25, 2016, *Live Mint*, at <http://www.livemint.com/Opinion/xsRubLrXKdpjcZZHZa5f8N/Indias-challenge-in-a-new-Iran.html>. Accessed on June 11, 2016.

16. Ibid.

17. "Can India Overtake China as Iran's Top Trade Partner", May 27, 2015, *Financial Tribune*, at <http://financialtribune.com/articles/domestic-economy/17706/can-india-overtake-china-iran%E2%80%99s-top-trade-partner>. Accessed on June 12, 2016.

18. Kritika Suneja, "Iran Accords Priority Status to India for Trade", October 14, 2015, *Economic Times*, at <http://economictimes.indiatimes.com/news/economy/foreign-trade/iran-accords-priority-status-to-india-for-trade/articleshow/49345080.cms>. Accessed on June 13, 2016.

Both Iran and India have outside options in the petroleum sector, with the former being one of the largest producers in the world (that is struggling to regain its share in the oil market) and the latter being one of the world's largest energy consumers (that is looking for ways to diversify its supplies). However, it seems profitable for both India and Iran to cooperate with each other for mutual benefit.

### **REGIONAL CONNECTIVITY**

India's participation in the Iranian Chabahar port project has been under discussion for the last few years. It should be noted that Chabahar (previously Bandar Beheshti), located on the Makran coast of the Sistan and Baluchistan province of Iran, criss-crosses some of the most important international corridors and can be considered as one of the most strategic transit locations.

The visit of the Indian Prime Minister also concluded a deal, according to which, India plans to spend \$500 million on the development of Chabahar port. India and Iran have signed a bilateral contract for the port's development and operations, between India Ports Global Private Ltd. (IPGPL) and Arya Bander of Iran. The contract envisages the development and operation for 10 years of two terminals and five berths with cargo handling (multipurpose and general) capacities.<sup>19</sup> The idea of building a port on the southeastern coast of Iran first came up when Iranian President Mohammed Khatami visited Delhi in 2003. However, the international environment and the Western pressure at that time made India's engagement with Iran difficult, with India's domestic and internal political situation adding to these problems.

From India's point of view, Chabahar is of enormous strategic importance. It not only gives access to the oil and gas resources in Iran but also opens up India's access to the Central Asian Republics. An important initiative was taken by both countries when India and Iran signed an agreement to establish a new rail link between Iran and Russia. India offered assistance for technical training of personnel, railroad signalling projects as well as the supply of locomotives and

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19. "List of Agreements/MOUs Signed during the visit of Prime Minister to Iran (May 23, 2016)" at [http://www.mea.gov.in/bilateral-documents.htm?dtl/26841/List\\_of\\_AgreementsMOUs\\_signed\\_during\\_the\\_visit\\_of\\_Prime\\_Minister\\_to\\_Iran\\_May\\_23\\_2016#](http://www.mea.gov.in/bilateral-documents.htm?dtl/26841/List_of_AgreementsMOUs_signed_during_the_visit_of_Prime_Minister_to_Iran_May_23_2016#). Accessed on June 10, 2016.

spare parts.<sup>20</sup> The trilateral agreement among the Governments of India, Iran and Afghanistan to develop the Chabahar route through Melak, Zaranj and Delaram will also facilitate regional trade and transit and, thus, contribute to regional economic prosperity.<sup>21</sup> The potential of these corridors is immense along with the increase in opportunities through them.

Chabahar port is approximately 80 km (50 miles) from Gwadar, which is a deep water port in Pakistan being developed by China. Chabahar gives an opportunity to Iran to have its own, first ever deep water port, and allows it to conduct global trade with big ships. This will also end Iran's dependence on the United Arab Emirates (UAE) as a shipping intermediary.<sup>22</sup> For India, the development of Chabahar port will help it to bypass Pakistan and deepen its ties with the energy rich Central Asian nations such as Turkmenistan and Uzbekistan. Developing Chabahar will also help Afghanistan in enhancing its trade prospects by providing a channel to the sea, thereby helping the war-torn, landlocked nation.<sup>23</sup>

Chabahar also marks an important milestone in the building of a partnership between India and Iran. The deal which PM Modi signed also pledged a sum of Rs 3,000 crore for developing the rail line linking Afghanistan to Chabahar.<sup>24</sup> However, as quite fittingly pointed out by C. Rajamohan, foreign policy analyst, the delay in the execution of the Chabahar port project so far has exposed the vast gap between the expansive rhetoric on promoting regional connectivity and the lack of institutional capacity to implement strategic projects across and beyond borders. Progress on the Chabahar port project can help in plugging this gap.<sup>25</sup> Additionally, India had also showed interest

20. Meena Singh Roy, "India and Iran Relations: Sustaining the Momentum", *IDSIA Issue Brief*, May 20, 2013, at [http://www.idsa.in/issuebrief/India-IranRelations\\_msroy\\_200513](http://www.idsa.in/issuebrief/India-IranRelations_msroy_200513). Accessed on June 18, 2016.

21. *Ibid.*

22. Keith Johnson, "India's \$500 Million Bet on Iran", May 31, 2016, *Foreign Policy*, at <http://foreignpolicy.com/2016/05/31/indias-500-million-bet-on-iran>. Accessed on June 9, 2016.

23. *Ibid.*

24. G Parthasarthy, "India Cannot Afford to lose Chabahar Test", June 4, 2016, *New Indian Express*, at <http://newindianexpress.com/magazine/voices/india-cannot-afford-to-lose-the-chabahar-test/2016-06-04/article3463202.ece>. Accessed on June 9, 2016.

25. C. Rajamohan, "India's Chabahar Test", May 23, 2016, *Carnegie India*, at <http://Carnegieindia.org/2016/05/23/India-s-Chabahar-test/izei>. Accessed on June 9, 2016.

in joining the Ashgabat Agreement which is a multimodal transport agreement signed by Oman, Iran, Turkmenistan, Uzbekistan and Kazakhstan and India for creating an international transport and transit corridor facilitating transportation of goods between Central Asia and the Persian Gulf. This would help India synchronise its efforts to implement the International North-South Transport Corridor (INSTC)<sup>26</sup> for enhanced connectivity.<sup>27</sup> In the same tenor, the signing of the MoU among India, Iran and Afghanistan will enable an Indian construction company, IRCON, to provide the requisite services for the construction of the Chabahar-Zahedan railway line which forms part of the transit and transportation corridor in the trilateral agreement among India, Iran and Afghanistan. The services to be provided by IRCON include all superstructure work and financing of the project (around US\$ 1.6 billion).<sup>28</sup> This transit corridor will help India to enhance its energy security and gain better access to Afghanistan as well as the energy resources of Central Asia, thereby increasing its presence in the region. It also comes with the added advantage of bypassing Pakistan altogether. In addition to that, Iran is a more stable state than Pakistan and the route passes through the relatively less conflicting parts of Afghanistan and connecting the areas in Central Asia. Iran has good relations with most of the nations in Central Asia.

### **THE WAY FORWARD FOR INDIA**

India-Iran relations have been intertwined with various challenges such as the payment deficit of around Euro 6 billion by the Indian oil refiners towards Iran, and India's stand against the Iranian nuclear programme due to international pressure which had undermined the bilateral ties between the two nations. Besides, there are other

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26. International North-South Transport Corridor (INSTC) is a multi-modal transportation established by Iran, Russia and India for the purpose of facilitating transportation cooperation among member states. This corridor connects Indian Ocean and Persian Gulf to Caspian Sea via Iran and North European federation through Russia. INSTC expanded to include eleven new members namely Azerbaijan, Armenia, Kazakhstan, Kyrgyzstan, Tajikistan, Turkey, Ukraine, Belarus, Oman and Syria with Bulgaria as the observer nation. See [http://www.instc-org.ir/Pages/Home\\_Page.aspx](http://www.instc-org.ir/Pages/Home_Page.aspx). Accessed on June 18, 2016.

27. "India to accede to the Ashgabat Agreement", March 23, 2016 at <http://pib.nic.in/newsite/printrelease.aspx?relid=138309>. Accessed on June 9, 2016.

28. no. 6.

challenges which could be met effectively by a constant engagement between India and Iran.<sup>29</sup> Due to these reasons, India is navigating its external relations cautiously through this environment of uncertainty and the changing equations between the major players such as Saudi Arabia and Israel in the region. Both India and Iran have commonality of interests when it comes to countering terrorism, having a stable government in Kabul and striving to become a regional power as well as similarity in their national aspirations, especially relating towards preserving their strategic autonomy in their respective regions.

For both India and Iran, the challenges have also come through the international pressure from the US for "subverting or else reversing the already vigorous course of Indo-Iranian relations"<sup>30</sup> to the extent of dictating India's relations with Iran. Recent years have witnessed various obstacles in the Indo-Iranian relations which were affected after the US imposed economic sanctions on Iran for its controversial nuclear programme. India's voting against Iran, with the US, on the International Atomic Energy Association (IAEA) resolution, thereby finding Iran in non-compliance with its international obligations, were signs of international pressure on the country for taking an anti-Iranian stance.<sup>31</sup>

History has demonstrated that US pressure in the past had led to the minimisation of India's involvement in Iran. From the Iranian perspective, it seems that Iran has started on the right track of acquiring strategic partnerships in the post sanctions era. Many scholars have argued that the India-Iran Chabahar agreement can be a win-win situation for both nations. The visits by Indian leaders in the past one year have enhanced India's options about its relations with Iran, as compared to China, and India overtaking Pakistan. The visit by PM Modi is a part of India's wider initiative to increase its influence in the region which is also home to a large Indian diaspora. Keeping this in mind, it is high time that the political leadership and

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29. Alvite Singh Ningthoujam, "Iran" in P.R. Kumaraswamy, ed., *Persian Gulf 2013: India's Relations with the Region* (New Delhi: Sage Publications, 2014), pp. 90-91.

30. Ashok K. Behuria, "India and Iran: In Search of a New Rhythm", in Anwar Alam, ed., *India and Iran: An Assessment of Contemporary Relations* (New Delhi: New Century Publications, 2011), pp. 52-71.

31. Chintamani Mahapatra, "India, Iran and the United States: Nuclear Diplomacy" in Alam, ed., *Ibid.*, pp. 95-105.

bureaucracy in both countries cleared the hurdles in the path of a mutually beneficial relationship that can satisfy the economic and strategic needs of each other. As Vikas Kumar, Assistant Professor, Azim Premji University, Bengaluru, and an expert on Iranian affairs, puts it, "The success of India's economic diplomacy in Iran will depend upon both the speedy completion of infrastructure and energy projects and partnership in the new economy. At the moment, the bilateral relationship is standing on just one leg as the latter has not received much attention. This imbalance has to be corrected if India wants a lasting partnership with a youthful Iran, which does not view oil and gas as its future."<sup>32</sup>

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32. n. 9.

# IMPLICATIONS OF GREAT POWER PRESENCE IN CENTRAL ASIA

VIVEK KAPUR

## BACKGROUND

The Central Asian region comprises the states of Kazakhstan, Kyrgyzstan, Tajikistan, Uzbekistan and Turkmenistan, and lies between the Caspian Sea and western China. This region occupies a central position in world geography. The region lay at the heart of the great Asian empires of the 1st to the 18th centuries.<sup>1</sup> Babur emerged from this region to invade India and establish the Moghul Empire.<sup>2</sup> In geopolitical terms, whichever country is able to establish its control and influence over Central Asia is in a geographically favourable position to access all other parts of Asia, as well as Eastern Europe and the Middle East with relative ease; this makes this area a hotbed of competition between the major powers, with aspirations of global preeminence. The Imperial Russian Empire expanded eastwards and brought Central Asia under its sway by the latter half of the

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1. Invictus, "History of Central Asia - an Overview", January 2006, at [http://www.allempires.com/article/index.php?q=history\\_central\\_asia](http://www.allempires.com/article/index.php?q=history_central_asia). Accessed on June 20, 2016.
2. D. Kaushik, *Central Asia in Modern Times* (New Delhi: Prince Art Printers, 2011), pp. 5-22



19th century.<sup>3</sup> Given the fact that Central Asia was quite close to the northern reaches of the British colonies in South Asia, the Middle East and Persia, the British contested the increase of Russian influence in Central Asia. This competition between Russia and Britain in Central Asia has been called the 'Great Game'.<sup>4</sup> Given the importance and sensitivity of Central Asia, it is necessary to examine the presence and influence of the superpowers in this region. Central Asia is important for India economically and strategically and any attempt by India to establish deeper cooperation with the countries of Central Asia, would, in all probability, have to be with the tacit or express consent and engagement of the active and dominant major players in Central Asia.

#### **CENTRAL ASIA AND THE UNION OF SOVIET SOCIALIST REPUBLICS (USSR)**

The Bolshevik Revolution in Russia ushered in the formation of the Soviet Union.<sup>5</sup> The Soviets expanded their influence into Central Asia in a piecemeal manner.<sup>6</sup> Attempts by a few local ruling elites to stem the ingress of Bolshevik thought and ideology through political control were supported by Great Britain, the other great European imperial power of the time.<sup>7</sup> This contest was won by the Bolsheviks and Central Asia came under the sway of the then newly constituted USSR.<sup>8</sup> In three stages, in 1920, 1924 and 1930, the Soviets formed <sup>9</sup> separate autonomous socialist republics in the Central Asian region. These were the autonomous

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3. Z. Ubaidulloev, "The Russian-Soviet Legacies in Reshaping the National Territories in Central Asia: A Catastrophic Case of Tajikistan", *Journal of Eurasian Studies*, vol 6, issue 1, January 2015, p. 79-87, at <http://www.sciencedirect.com/science/article/pii/S1879366514000104>. Accessed on June 21, 2016.
  4. The origin of the phrase 'Great Game' lay in describing the rivalry between the United Kingdom and Russia for control over Central Asia. Today, the term 'New Great Game' is used to describe the power rivalry taking place in Central Asia. The players in the current version of the 'Great Game' or 'New Great Game' are the US, Russia, China and the European Union.
  5. Kaushik, n. 2, pp. 77-95
  6. *Ibid.*, pp. 65-76.
  7. V. Kapur, "US and Russian Air Bases in Central Asia", *Air Power Journal*, vol. 9, no. 2, p. 33-53, at <http://capsindia.org/files/documents/APJ-Apr-Jun-1305-14.pdf>. Accessed on June 22, 2016.
  8. Kaushik, n. 2, pp. 77-95.
  9. *Ibid.*, pp. 202-213.

Soviet Socialist Republics of Kazakhstan, Kyrgyzstan, Tajikistan, Uzbekistan and Turkmenistan.

### **SOVIET THREAT PERCEPTIONS**

The main threat faced by the USSR, since the end of World War II came from the West comprising America and the North Atlantic Treaty Organisation (NATO). NATO had been formed specifically to check or even reverse the spread of Communist Russia's influence in Europe. It is interesting to note that the USSR did justifiably feel threatened by the West in the post World War II years. NATO was formed in 1949<sup>10</sup> with the express aim of containing the USSR. The Warsaw Pact was formed on May 14, 1955 (after NATO).<sup>11</sup> The West had made and spread a narrative about the USSR being inherently aggressive in intent towards the West. The Western media coined the label "warpact" from the much less belligerent sounding "Warsaw Treaty Organisation", and spread its version that the "warpact" was formed to wage war against the West; in response to which, the West was forced, in self-defence, to form NATO. The relative formation dates of NATO and the Warsaw Pact indicate that this Western narrative was just Cold War propaganda and that the Warsaw Pact was actually a reaction to the creation of the anti-Soviet bloc multinational military pact, NATO. This propaganda was spread with the polish and finish one has come to expect from media experts in the West. As the power of the US and NATO built up, it was matched out of compulsion by the USSR and Warsaw Pact. Thus, the USSR's military might was oriented towards the West into Europe where NATO, its main threat, was located. This was only natural as the US and NATO were the only two major powers with developed military capability and a stated intention of being against the USSR in all respects, hence, it was from Western Europe that the USSR saw its existential threat emerging. The regions in the centre of the USSR,

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10. "A Brief History of NATO", at <http://brittwww.nato.int/history/nato-history.html>. Accessed on June 23, 2016.

11. "The Warsaw Pact", at <http://www.coldwar.org/articles/50s/TheWarsawPact.asp>. Accessed on June 22, 2016.

southeast and east of the Ural mountains in Central Asia<sup>12</sup>, were seen to be at relatively little risk compared with the western parts of the USSR. To the south, the USSR faced a collection of Third World countries with little military or economic might and these countries came into prominence for security reasons, primarily when 'client states', such as Iran under the Shahs of the Pahlavi dynasty, were set up with Western connivance.<sup>13</sup> To the east lay Communist China, which was an ally till the early 1960s, when a rift developed<sup>14</sup> between the leadership of the two Communist states, seen as a client state or a sympathetic fellow Communist nation. The Far East saw some major military deployment due to the presence of US forces in Japan and unresolved territorial disagreements with Japan itself. The USSR's territorial disputes with Communist China were, at the time, less problematic.

Hence, the Central Asian region, at the peak of Soviet power, saw relatively less deployments by the Soviet Army and Soviet Air Force. In contrast, the portions of the USSR facing Western Europe were heavily militarised. The Soviets treated the Central Asian region as a source of raw materials to feed industry set up in other parts of the USSR. Some light industry was, however, developed in the region. The USSR also set up its first and largest space launch complex at Baikonur (in current-day Kazakhstan). New military equipment, including even advanced naval weapons, were often tested in the Central Asian region, naval equipment at Dastan Engineering's Issyk Kul test facility (in current-day Kyrgyzstan), due to its location deep within the USSR, far from the active western borders.

In Soviet times, the Central Asian region was seen as essential for overall security, especially as the region was considered to be the USSR's 'soft underbelly'. While the western regions of the USSR were heavily militarised, the Central Asian region, as discussed above, was considered to be at much less threat and so it was less militarised,

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12. "Geography: Asia Mountains", at <http://www.worldatlas.com/webimage/countrys/aslandmnts.htm>. Accessed on June 22, 2016.

13. "Rise of Reza Khan", at <http://www.EBchecked/topic/293359/Iran/32184/Rise-of-Reza-Khan>. Accessed on June 23, 2016.

14. "The Great Debate Documents of the Sino-Soviet Split", at <http://www.marxists.org/history/international/comintern/sino-soviet-split/>. Accessed on June 24, 2016.

or 'soft' in military terms. Hence, the term 'soft underbelly' is used to describe this region.<sup>15</sup> The Central Asian Military District of the USSR, which was carved out of the Turkestan Military District in 1969, enabled the USSR to double the forces available in the region to meet a possible Chinese contingency,<sup>16</sup> and was an important and powerful military region that sought to ensure stability of the USSR's borders and to provide security to the Soviet heartland while keeping a check on potentially hostile forces across the border in China and in the Muslim countries to the south, southwest, and southeast.<sup>17</sup> The Soviet Union's Afghan intervention in 1979 increased the importance of the region exponentially. The Soviet Union's intervention in Afghanistan provided the US with an opportunity to make this the Soviets' 'Vietnam' and, seizing this opportunity, to put down its arch rival in the Cold War, the US actively supported, armed and trained local warlords and extremist elements in Afghanistan. The Soviet intervention, thus, became a long drawn out 10-year-long war for the Soviet forces against the insurgents who followed quasi-guerrilla tactics.<sup>18</sup> Sustaining the war in Afghanistan required heavy use of the Soviet Central Asian Republics bordering Afghanistan.

## POST USSR DISINTEGRATION

While the demise of the USSR, a mere two years after the cessation of its active military involvement in Afghanistan, led to a temporary fall in the importance of the region for Russia, the USSR's successor

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15. The term 'soft underbelly' owes its origin to the animal kingdom. Some big cats, such as leopards and cheetahs kill their prey by holding it with the big cat's jaws clamped on the neck while the cat's sharp hind leg claws are used to rip up the prey's belly to expose the internal organs. Typically the head of most animals is well protected by the hard bony skull and also has, in some cases, horns. The lungs and heart lie behind the bony cage of the ribs while the spinal cord is encased by the backbone. The belly, however, comprises soft skin and under-tissue with no hard bones etc. to provide protection and several vital organs lie beneath it. This explains the term 'soft underbelly'.
  16. "Russian Military Districts", at <http://fas.org/nuke/guide/russia/agency/mo-md.htm>. Accessed on June 25, 2016.
  17. I. Torbakov, "The West, Russia and China in Central Asia: What Kind of Game is Being Played in the Region?", at <http://www.turkishweekly.net/article/204/the-west-russia-and-china-in-central-asia-whatkind-of-game-is-being-played-in-%20the-region.html>. Accessed on June 26, 2016.
  18. "Soviet Union (target: Afghanistan) 1979-91", at <http://www.us-foreign-policyperspective.org/index.php?id=322>. Accessed on June 28, 2016.

state, events after the 9/11 terrorist attacks in the US increased its importance in Russia's world view.<sup>19</sup> When the USSR was dismantled, giving the Central Asian states independence, the military, industrial, and other Soviet central government controlled facilities located within the borders of these new states were handed over to their governments. Russia, however, still leased for its own use some of these erstwhile Soviet facilities such as the Baikonur cosmodrome located in southern Kazakhstan.

### **DECLARATION OF THE US' GLOBAL WAR ON TERROR (GWOT)**

The US became convinced that the perpetrators of the 9/11 terrorist attacks were harboured in Afghanistan under Taliban protection and so marshalled its European allies and commenced military operations in Afghanistan against the Taliban and suspected Al Qaeda elements. To facilitate induction of forces, equipment and supplies to support military operations in Afghanistan, the US and its allies required supply routes into the region. The Western allies obtained Pakistani cooperation to set up the International Security Assistance Force (ISAF), and US supply routes from the southern coast of Pakistan into Afghanistan. The West also looked at obtaining access to air bases in Central Asia as a back up to ensure logistics support for its Afghanistan operations.<sup>20</sup> These attempts met with some initial success as the newly independent Central Asian Republics (CARs) were interested in balancing Russia's influence in the area and trying to play one party against the other (Russia against the US and the West) for their own benefit. Russia, however, expectedly viewed this development of the US / West presence in Central Asia with concern, especially in view of seeing its earlier chain of East European buffer states being incorporated into the EU (European Union) and NATO, thus, bringing potentially hostile forces right up to Russia's western borders for the first time in over a century.<sup>21</sup> This resulted

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19. A. Feickert, "US Military Operations in the Global War on Terrorism: Afghanistan, Africa, the Philippines, and Colombia August 26, 2005", at <http://www.fas.org/sgp/crs/natsec/RL32758.pdf>. Accessed on June 28, 2016.

20. Kapur, n. 7, pp. 33-53, at <http://capsindia.org/files/documents/APJ-Apr-Jun-1305-14.pdf>. Accessed on June 29, 2016.

21. Ibid.

in a struggle between the West and Russia. The former attempted to gain and retain a foothold in Central Asia while Russia tried through similar measures to get the West removed from the area.

Disintegration of the USSR had also led to renewed interest in Central Asia by the Muslim states located close to the region. Turkey, Iran, Pakistan saw an opportunity to enhance their influence in this region, based upon cultural and religious links. The leaderships of the central newly independent CARs, by and large, rebuffed these advances in favour of maintaining close ties with Russia and the remnants of the Soviet Union. The radical Islamic regime established in Afghanistan by the Taliban led to the spread of radical Islam into Central Asia across Afghanistan's borders with Tajikistan. As radical Islam spread into Central Asia, a need was felt by the states of the region to curb this extremist Islamic influence spilling over from Afghanistan, and for further means to increase their security.

The intervention in Afghanistan by the US and NATO led to these Western countries seeking alternative routes of access to Afghanistan, apart from the route through Pakistan as the latter has been beset by problems from the very beginning.<sup>22</sup> The West's troubled relations with Iran did not allow for an Iran-based access route. As an alternative to the Pakistan-based access routes to landlocked Afghanistan, the ISAF,<sup>23</sup> the UN sanctioned United Nations Assistance Mission in Afghanistan (UNAMA)<sup>24</sup> and the US military forces' "Operation Enduring Freedom" set up the Northern Distribution Network (NDN).<sup>25</sup> The NDN was operationalised in 2010-11 and comprises a series of marine, rail and road lines of communication that join the Baltic and Caspian Seas to Afghanistan through Russia, the Caucasus and the CARs. The NDN route was 3,500 km long and suffered from the characteristic of requiring

22. U. Hayat, "An Analysis of Logistic Support to the US and NATO in Afghanistan: Is Pakistan Still Relevant?" at <http://zameer36.com/an-analysis-of-logistic-support-to-the-us-and-nato-in-afghanistan-ispakistan-still-relevant/>. Accessed on June 29, 2016.

23. "ISAF Welcomes UNAMA Protection of Civilians in Armed Conflict Report", at <http://www.rs.nato.int/article/isaf-news/isaf-welcomes-unama-protection-of-civilians-inarmed-conflict-report.html>. Accessed on June 29, 2016.

24. Ibid.

25. Kuchins and Sanderson, "Northern Distribution Network (NDN)", at <https://csis.org/program/northern-distributionnetwork-ndn>. Accessed on June 30, 2016.

frequent offloading and reloading of cargo travelling along it due to its multimodal nature.<sup>26</sup> In addition, the poor state of transport infrastructure along several major stretches of the NDN also made this route well below ideal. The West, in the time immediately after the 9/11 attacks, looked at the newly independent CARs as a stepping stone into Afghanistan.

The American push to make inroads into Central Asia, while initially spurred on by the imperatives of maintaining open supply routes into Afghanistan, appears to have also been motivated, at least in part, by a desire to establish a presence in the strategically important areas of the erstwhile Soviet Union and now Russia's 'soft underbelly'. Substantial US inroads into Central Asia would also have helped ensure that the US was in a position to be able to threaten Russia from both the south/southeast as well as from the west. Such a situation would have ensured that the US was in a position to retard or even deny any possibility of a Russian resurgence to increased power, able to challenge the near absolute global hegemony exercised by the US since the disintegration of the Soviet Union.<sup>27</sup> The Central Asia region is also rich in important natural mineral resources, including oil and natural gas. The presence of important mineral resources was an additional factor in the US interest in establishing a presence in the region.<sup>28</sup> The outside power (the US, EU, China, or Russia) able to establish a superior position in the Central Asian region could be expected to exploit the resources of Central Asia through exercising its political, economic, and military influence over the local systems of governance. This outside power would, thus, benefit at the cost of other interested parties vying to exploit the resources in Central Asia. The initial

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26. Equipment and stores need to be shifted from ships to railroad wagons and trucks based on the best means of transport available at different points along its length. Such transshipments detract from the speed of the cargo's movement and also increase the logistic difficulties of arranging personnel and equipment to carry out the transfer from one mode of transport to another.

27. Su Huimin, "NATO a Dupe for Washington", at <http://www.network54.com/Forum/155335/thread/1088528573/last1088528573/NATO+a+dupe+for+Washington>. Accessed on June 30, 2016.

28. P.J. Bellaire, "Back to the Future: Thoughts on a Bipolar World Redux", *Aerospace Power Journal*, Spring 2002, at <http://www.au.af.mil/au/afri/aspj/airchronicles/apj/apj02/spr02/bellaire.html>. Accessed on June 30, 2016.

motive for obtaining an alternate access route to Afghanistan resulted in the US obtaining leases facilitating the use by Western forces of several air bases in the Central Asian region. Russia reacted through deploying its economic and political resources to ensure that the West was subsequently denied access to air bases in Central Asia, most notably in Kyrgyzstan, where the Manas air base had become a major logistics node for the US.

## CONCLUSION

It is quite clear that Russia remains the most powerful player in Central Asia. Moreover, Russia is determined to maintain its control over Central Asia for a variety of reasons. Hence, any attempts by India to enter into cooperative agreements with the CARs in high technology industries and natural resource exploitation deals would require Russian approval and understanding. For this, India would require keeping Russia in the loop to ensure that there is no apprehension of any aspect of the possible Indo-CARs cooperation impinging on Russian security or perception thereof.

Russia, after a short period of losing interest in the Central Asian region post the 1991 disintegration of the USSR, has reengaged with the CARs in a major way, especially after 2001. It has effectively denied the US and its allies major access to the CARs. Today, Russia is again a major power in control of Central Asia. Russia appears to be tolerant of activity that it perceives as non-threatening to Russian interests by outside powers in the CARs. Hence, if India desires to cooperate with the CARs for mutual benefit, it would require obtaining tacit or explicit Russian clearance to do so. This could involve keeping Russia fully in the loop in the process. Given the historical connect between India and Russia, including in the Soviet times, this appears to be a feasible option for India.



# THE CASPIAN REGION: REGIONAL COOPERATION TO ENSURE INDIA'S ENERGY SECURITY

NGANGOM DHRUBA TARA SINGH

Today, the Caspian region is one of the important centres of global realpolitik. It includes the Caspian Sea and the littoral states, and its importance is shaped by its energy reserves and geographical location. The Caspian Sea is landlocked among Russia, Kazakhstan, Azerbaijan, Turkmenistan and Iran. Since the Soviet disintegration, the sea and the region surrounding it enticed many international actors mainly because of the vast oil and gas reserves, and the geographical location. The sea is divided into four different basins: the Northern, Middle, South Caspian Basin and the North Ustyurt Basin.<sup>1</sup> Though the littoral countries are major energy producing countries, the sea and its surrounding areas need exploration. The region has proven reserves of 17 to 33 billion barrels of oil and possible oil reserves of 233 billion barrels; and proven natural gas reserves of 177 to 182 trillion cubic feet and possible natural gas reserves.<sup>2</sup> Limited exploration and

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1. "Caspian Sea", US Energy Information Administration, at <https://www.eia.gov/beta/international/regions-topics.cfm?RegionTopicID=CSR>. Accessed on July 27, 2016.
2. "Caspian Sea General Outlook", *Petroleum Iran*, at [http://www.petroleumiran.com/index.php?option=com\\_content&view=article&id=82:caspian-sea-general-outlook&catid=32:caspian-sea-region&Itemid=37](http://www.petroleumiran.com/index.php?option=com_content&view=article&id=82:caspian-sea-general-outlook&catid=32:caspian-sea-region&Itemid=37). Accessed on July 27, 2016.

territorial disputes are obstacles in determining the total amount of hydrocarbon resources of the region.

The significance of the Caspian region as a geographical entity is not new. The term 'Tournament of Shadows' was used to describe the rivalry between the Russian and British Empires over Central Asia in the 19th century. Likewise, the 'New Great Game' is used to describe the competition for the region's resources that began after the Soviet disintegration. As a consequence of rising economic development, the demand for various forms of energy has also increased, for example, it was coal in the 18th century, oil in the 19th century, and nuclear since the mid-19th century. As non-renewable forms of energy are not evenly distributed, the powerful countries struggle among themselves to gain control over them. Therefore, the same rationale holds good in the Caspian region. Besides oil and gas reserves, the physical location of the Caspian Sea and its littoral states further adds to the region's importance for the external powers. The position of some countries such as Russia and Azerbaijan permits them to play a dual role of producer and transit country. International energy agencies and importing countries would not like to see any sort of disruption in the energy flow in the region. Iran also has the potential to become a transit country for the Caspian resources along with its own resources, in the Persian Gulf region. In this regard, this paper makes an attempt to find ways for India to secure its energy needs in the Caspian region through regional cooperation. It attempts to explore how and what India should do to gain a stronger foothold in the area.

### **ENERGY PROFILE OF THE CASPIAN REGION**

The Caspian region has a long history of oil production in the world. Many travellers have reported the region's capability for oil production. The Caspian-Caucasus region shares a long tradition of oil development. There are travelogues available that testify to the presence and use of oil in the region, especially Baku. Oil extraction and its trade were carried out in the area and were used mainly for medicinal, cooking, heating, and lighting purposes in the past. Both oil and natural gas, in their crude form,

were referred to as ‘earth oil’ or ‘stone oil’. Because of its natural fires, Azerbaijan was known as the “land of fires,” fed by gas that burned on the Absheron peninsula.<sup>3</sup> During the Russian Imperial period, the European private investment played a major role in the development of the region’s oil industry. Investments by the Nobels and Rothschild are such examples.

During the Soviet era, the Caspian-Caucasus region flourished with an increase in oil output. Policies such as the New Economic Policy initiated by Lenin, and the industrialisation and planning system by Stalin’s administration facilitated the development of the oil industry in the region. In the post Soviet disintegration period, because of its vast resources, the Caspian-Caucasus region attracted many international players; for instance, various corporations together formed the Azerbaijan International Operating Company (AIOC) in 1995 and invested in the oil and gas sectors of Azerbaijan. The consortium’s contribution in the construction of the Baku-Tbilisi-Ceyhan Pipeline and the South Caucasus Gas Pipeline are some such examples.<sup>4</sup> It would be useful to have a look at the oil and gas reserves in the Caspian region countries (Table 1).

**Table1: Proven Caspian Oil and Gas Reserves, 2016**

<b>Caspian Region States</b>	<b>Oil (Thousand Million Barrels)</b>	<b>Natural Gas (Trillion Cubic Metres)</b>
Azerbaijan	7.0	1.1
Kazakhstan	30.0	0.9
Russia	102.4	32.3
Turkmenistan	0.6	17.5
Iran	157.8	34.0

Source: BP Statistical Review of World Energy, June 2016, at <http://www.bp.com/content/dam/bp/pdf/energy-economics/statistical-review-2016/bp-statistical-review-of-world-energy-2016-full-report.pdf>. Accessed on July 10, 2016.

3. Lutz Kleveman, *New Great Game: Blood and Oil in Central Asia* (London: Atlantic Books, 2004).
4. “Our History”, *British Petroleum Azerbaijan*, at [http://www.bp.com/en\\_az/caspian/aboutus/history.html](http://www.bp.com/en_az/caspian/aboutus/history.html). Accessed on June24, 2016.

## INDIA'S OIL AND GAS IMPORT PARTNERS

The geographical proximity and abundant energy resources of the Caucasus-Caspian region give India an opportunity to strengthen its engagements in the area further. At present, India is the fourth largest consumer of crude oil and petroleum products in the world.<sup>5</sup> India has become increasingly dependent on energy imports as it does not have enough oil and gas reserves. According to the British Petroleum (2016) report, India's primary energy consumption rose by 5.2 percent in 2015, taking its stake of worldwide primary energy consumption to 5.3 percent. This increase in consumption was simultaneous with the increase in imports. India's crude oil imports increased by 136 Kb/d to 3.9 Mb/d in 2015 and natural gas imports increased by 1.5 Bcm to 21.7 Bcm.<sup>6</sup>

The necessity to import crude oil has allowed Indian energy companies to diversify their supply sources. To fulfil their requirements, the oil companies have bought equity stakes in many overseas oil and natural gas fields, for example, in Africa, South America, Southeast Asia, and the Caspian region. The Middle East continues to be the main supplier of India's oil imports.<sup>7</sup> India's total net imports of oil rose from 42 percent of demand in 1990 to 75 percent of demand in 2015. The region supplies approximately 58 percent of the crude oil to India, especially Saudi Arabia and Iraq. Saudi Arabia was India's largest oil supplier with 20 percent of the share in crude oil imports. Recently, in July 2016, Iraq has become India's top crude oil supplier. Africa is the second largest source of oil, with approximately 19 percent oil supply. And the Western Hemisphere contributes around 18 percent to India's oil imports, with Venezuela supplying a major portion.<sup>8</sup> Fig 1. below shows India's crude oil imports in 2015.

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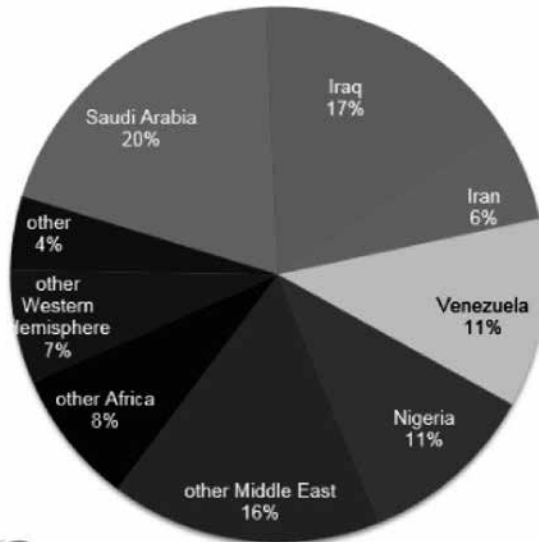
5. "Oil and Gas", Make In India, at <http://www.makeinindia.com/sector/oil-and-gas>. Accessed on July 24, 2016.

6. "India's Energy Market in 2015", *BP Statistical Review 2016*, at <http://www.bp.com/content/dam/bp/pdf/energy-economics/statistical-review-2016/bp-statistical-review-of-world-energy-2016-india-insights.pdf>. Accessed on July 25, 2016.

7. U.S. Energy Information Administration, "India Continues Developing its Strategic Petroleum Reserve as its oil Imports Grow", 2016, at <http://www.eia.gov/todayinenergy/detail.cfm?id=27132> Accessed on July 21, 2016.

8. "India", US Energy Information Administration, at <https://www.eia.gov/beta/international/analysis.cfm?iso=IND> Accessed on July 21, 2016.

**Fig 1: The Geographical Share of India’s Crude Oil Imports, 2015**



Source: US Energy Information Administration, “India”, at <https://www.eia.gov/beta/international/analysis.cfm?iso=IND>. Accessed on July 21, 2016.

In the natural gas sector, India occupied the fourth position in natural gas imports in 2014 and 2015, following the United States, China, and Japan, accordingly for 5.7 percent of global imports. In 2014, natural gas constituted approximately 7.1 percent of India’s energy basket.<sup>9</sup> Qatar’s RasGas Company Ltd is India’s major supplier of natural gas, and the country provided 62 percent of India’s total LNG (Liquefied Natural Gas) imports in 2015. India also has agreements with Australia’s Exxon Mobil Corporation for the supply of LNG from the Gorgon LNG Project, the United States’ Sabine Pass Liquefaction LLC from Sabine Pass and the Dominion Resources Inc from Cove Point. The Indian Oil Company has also invested in natural gas projects in Canada’s Pacific Northwest LNG.<sup>10</sup>

9. n. 5.

10. “Progress Energy Canada and Pacific North West LNG Welcome Third Partner to British Columbia LNG Export Project”, March 7, 2014, at <http://www.pacificnorthwestlng.com/media-center/news-releases/progress-energy-canada-and-pacific-northwest-lng-welcome-third-partner-to-british-columbia-lng-export-project>. Accessed on June 28, 2016.

## INDIA'S OIL AND GAS AGREEMENTS WITH THE CASPIAN REGION COUNTRIES

### *Russia*

According to the British Petroleum Report, Russia will remain the world's main fossil fuels producer and will contribute over 10 percent of global production. Its oil production will continue to be constant at 11Mb/d through 2035; on the other hand, its gas production will grow by 30 percent.<sup>11</sup> Amidst this prediction, India has significant stakes in the Russian oil and gas sector. In their recent endeavour, agreements between an Indian consortium comprising Oil India Limited (OIL), Indian Oil Corporation (IOC) and the Bharat Petro-Resources Limited (BPRL), was signed with Rosneft. These agreements included: first, purchase of 23.9 percent stake in Vankorneft (a Rosneft subsidiary that carries the project in the Vankor field); second, a deal to increase the stake of the Oil and Natural Gas Corporation (ONGC) Videsh Limited (OVL), from the present 15 percent to 26 percent in Vankorneft, and, finally, a deal with Rosneft to purchase a 29.9 percent stake in Taas-Yuryakh Neftegasodobycha.<sup>12</sup> This deal is evidence of India's developing cooperation in Russia's oil and gas sector. The Vankor field is located in the northern region of eastern Siberia; the recoverable reserves are estimated at 182 billion cubic metres of gas and 500 million tons of oil.<sup>13</sup> Another achievement in the past was OVL's acquisition of Imperial Energy, an independent upstream oil exploration and production company, whose main activities are in the Tomsk region of western Siberia. Likewise, Sakhalin-1 is an oil and gas field in the Far East offshore in Russia. OVL acquired a stake in the field in July 2001 and has 20 percent participating interest in the Sakhalin-1 project.<sup>14</sup>

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11. "Country and Regional Insights – Russia", *BP Energy Outlook*, at <http://www.bp.com/content/dam/bp/pdf/energy-economics/energy-outlook-2016/bp-energy-outlook-2016-country-insights-russia.pdf>. Accessed on June 28, 2016.

12. "Rosneft Strengthens its Positions at the Key Markets of the Asia-Pacific Region", at <http://www.rosneft.com/news/today/18032016.html>. Accessed on March 5, 2016

13. "Vankorneft", at [http://www.rosneft.com/Upstream/ProductionAndDevelopment/eastern\\_siberia/vankorneft/](http://www.rosneft.com/Upstream/ProductionAndDevelopment/eastern_siberia/vankorneft/). Accessed on March 5, 2016.

14. "Assets – Far East", at <http://www.ongcvidesh.com/assets/cis-far-east/> Accessed on June 28, 2016.

### *Kazakhstan*

In June 2010, KazMunayGas (KMG) and the Ministry of Oil and Gas of Kazakhstan signed a government contract for exploration and production in the Satpayev block. The block is situated in the northwest of the Kazakhstani sector of the Caspian Sea. In 2011, KazMunayGas and OVL signed an agreement to facilitate OVL to purchase a 25 percent stake in the Satpayev block. This agreement was the result of the fifth session of the Kazakh-Indian Intergovernmental Commission on Trade, Economic, Scientific, Technological, Industrial, and Cultural Cooperation, held on February 18, 2005. A Memorandum of Understanding (MoU) was signed in the area of offshore exploration and exploitation in the Caspian Sea, between KazMunayGas and OVL.<sup>15</sup>

### *Azerbaijan*

In the Azerbaijani oil and gas sector, OVL was able to acquire shares 2.72 percent in the Azeri-Chirag-Gunashli (ACG) oil field and 2.36 percent in the Baku-Tbilisi-Ceyhan Pipeline from the US energy firm Hess Corporation.<sup>16</sup> The ACG field was discovered in the 1970s during the Soviet period, and is the largest oil and gas field of Azerbaijan, located in the southern part of the Caspian Sea.<sup>17</sup>

### *Turkmenistan*

Last year, in Turkmenistan, in the presence of leaders from Turkmenistan, Afghanistan, Pakistan and India, the welding process of pipes for the Turkmenistan-Afghanistan-Pakistan-India Pipeline project (hereinafter TAPI) was started on December 15, 2015. The pipeline will have the capacity to transport 90 million standard cubic metres of gas a day for 30 years. It will transport gas from the Galkynysh field of Turkmenistan that holds gas reserves of 16 trillion cubic feet. The pipeline will pass through Herat and Kandahar provinces in Afghanistan, before entering Pakistan. It will reach Multan (Pakistan) through Quetta before ending at Fazilka

15. "International Cooperation: Exploration and Production Projects", at <http://www.kmg.kz/en/manufacturing/reports/international/>. Accessed on July 4, 2016.

16. "India-Azerbaijan Bilateral Relations", at [http://www.mea.gov.in/Portal/ForeignRelation/Azerbaijan\\_Feb\\_2016.pdf](http://www.mea.gov.in/Portal/ForeignRelation/Azerbaijan_Feb_2016.pdf) Accessed on July 4, 2016.

17. n. 13.

(Punjab) in India.<sup>18</sup> Despite the project's slow progress in the past, it has given an impetus for India to anticipate future cooperation in the development of the region's energy infrastructure.

### *Iran*

In January 2016, sanctions against Iran were lifted. Before the Western sanctions on Iran, the country used to be India's second largest oil supplier. In 2009-10, India's oil imports amounted to 21.2 million tonnes, which were later reduced to 11 million tonnes in 2013-14.<sup>19</sup> The lifting of sanctions made way for India to advance with new opportunities. In May 2016, India signed two key agreements with Iran and Afghanistan. The first agreement, a bilateral deal, was signed with Iran, which will give India the authority to develop and operate terminals and berths with multi-purpose cargo handling capacities in the Chabahar port for ten years. Second, a trilateral agreement among India, Iran, and Afghanistan was signed for the Trilateral Transport and Transit Corridor connecting Chabahar with Afghanistan's road and railways.<sup>20</sup> With this development, India will surely look forward to expanding its opportunities in the region's energy sector. India's endeavour in the development of the Farzad B gas fields is another significant achievement. India and Iran have agreed to seal the terms to develop the Farzad B fields, estimated to have over 350 billion cubic metres of natural gas and 212 million barrels of oil.<sup>21</sup> With these deals, India has not only cemented its role in the region's infrastructure development but also flagged its presence there. These deals also provide India an opportunity to connect with other Caspian region countries.

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18. "TAPI Gas Pipeline Project: Turkmenistan Starts Work on Gas Link to Afghanistan, Pak, India", *PTI*, at <http://indianexpress.com/article/world/world-news/tapi-gas-pipeline-project-turkmenistan-starts-work-on-gas-link-to-afghanistan-pak-india/>. Accessed on July 12, 2016.

19. "India Looks to Raise Oil Imports from Iran as Sanctions Lifted", *DNA India*, January 18, 2016, at <http://www.dnaindia.com/money/report-india-looks-to-raise-oil-imports-from-iran-as-sanctions-lifted-2167324>. Accessed on July 12, 2016.

20. "India to Develop Iran's Chabahar Port", *The Hindu*, May 24, 2016, at <http://www.thehindu.com/news/national/india-to-develop-irans-chahbahar-port/article8637558.ece>. Accessed on July 23, 2016.

21. "Iran Reaches Basic Agreements with India on Farzad B", *Iran Daily*, April 12, 2016, at <http://www.iran-daily.com/News/139416.html?catid=3&title=Iran-reaches-basic-agreements-with-India-on-Farzad-B>. Accessed on July 12, 2016.



## **FACILITATING INDIA'S ENERGY DEMAND THROUGH REGIONAL COOPERATION**

The rising economic stature of India and China will undoubtedly drag these two powers into the Caspian and Central Asian states. It is anticipated that by 2035, energy consumption globally would increase by 34 percent, with the aforementioned countries accounting for half of the growth.<sup>22</sup> The consumption demand will rise with the growth and expansion of the population and various sectors of the economy. It is further anticipated that India will continue to depend on imports because even if its energy production increases by 117 percent, consumption will also increase by 128 percent by 2035.<sup>23</sup> This means that energy demand will grow gradually in the next 20 years; therefore, this prediction provides a perfect rationale for India to get engaged in the region.

India's economic growth has necessitated the rise in its energy consumption. The 'Make in India' initiative started by the Indian government to encourage national and multinational companies to manufacture their goods in India is expected to lead to an increase in energy demand by different sectors. Hence, the sources for oil and gas imports need to be multiplied. In this regard, in view of the Caspian region's energy resources and geographical advantage, India should endeavour to gain access to the region.

India's requirement for oil and gas is simultaneous with the rise of the significance of the Caspian area. Given its increasing demand, it would be beneficial for India if it could deal with the Caspian states in a regional effort. The geographical position of the Caspian Sea and the energy resources shared by its littoral states would require India to enter into a regional dialogue. In this regard, the TAPI project can be seen as very close to a regional effort. Along with TAPI, India can look into other possible routes. The proposal for the construction of the undersea pipeline by the South Asia Gas Enterprises (SAGE) Pvt. Ltd also holds promise.

This paper theorises that India, along with the countries of the region, can initiate a unified energy strategy that would focus on

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22. "Outlook to 2035 – Energy Use to Rise by Third", at <http://www.bp.com/en/global/corporate/energyeconomics/energy-outlook-2035/energy-outlook-to-2035.html>. Accessed on July 23, 2016.

23. "Nuclear Power in India", at <http://world-nuclear.org/information-library/countryprofiles/countries-g-n/india.aspx>. Accessed on July 23, 2016.

the basic requirements to provide an affordable and uninterrupted flow of energy. It will permit the members to present a single voice on matters related to global energy and negotiations on regional energy issues. India can also use regional platforms to promote regional multilateralism through organisations such as the Shanghai Cooperation Organisation (SCO) and South Asian Association for Regional Cooperation (SAARC) so that the member countries can together evolve a common energy strategy.

Through regional cooperation, India can also request for bifurcation of existing energy export routes or propose new courses from the Caspian. The existing route in Central Asia can be bifurcated towards India. New energy routes from Russia to India (via the Caspian Sea and Iran) can be proposed. Iran's proximity to the Central Asian countries can be utilised for bridging the Iranian Caspian basin resources with the southern ports of Iran. A proposal can be made for using Iranian territory as an energy transit zone. In view of the share of Iranian oil (approximately 7.4 percent) in India's imports, the realisation of a trans-Iranian transit corridor will open the access gates for India as it would connect the Caspian Sea to the Persian Gulf. The South Caucasus Gas Pipeline (from Azerbaijan to Turkey) and the Baku-Tbilisi-Ceyhan Oil Pipeline (from Azerbaijan to Turkey via Georgia) can be viewed as successful evidence in this regard. Such plans would require strong political will and expenditure from the participating countries to be put into effect.

Indian energy companies, along with the oil and gas companies of the Caspian states, can form an energy consortium that would undertake joint upstream, midstream, and downstream development projects in the region. Multiple export routes for Caspian oil and gas would ensure energy security not only for the consumers, but also for the producers and transit states. The aim of the littoral states is to explore and develop the Caspian's hydrocarbon resources, which is simultaneous with India's demand. Hence, cooperation should be given preference over competition.

# THE EVOLVING FACE OF SUICIDE TERRORISM

**RADHIKA HALDER**

The terrorist attack in Nice on July 14, 2016, which was conducted in a unique manner by a truck driven through a crowd, exposed a new face of suicide terrorism. On the national day of France, Mohamed Lahouaiej Bouhlej drove through a celebratory crowd in the French city, killing 84, seemingly in a direct response to the calls of the Islamic State (IS) spokesman, Abu Muhammad Al-Adnani, to the followers of the terror outfit to attack Westerners. Although no direct link has been established between Bouhlej and the IS, these are opportunities for terrorist organisations like the IS to manipulate, which they do successfully, creating a fear psychosis worldwide. Such instances conveniently work in their favour.

Terrorism in today's world has manufactured itself into suicide terrorism wherein the perpetrator is so radicalised that he no longer fears death or expects to survive an attack. Suicide terrorism has changed in its nature, form and intensity from the time it was first conceptualised in Imperial Russia.<sup>1</sup> This paper is an attempt at understanding when and how this phenomenon originated, and has evolved over the years.

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1. The assassination of Tsar Alexander II in 1881 was the first recorded suicide attack (unplanned) by revolutionaries of People's Will (Narodnaya Volya).

## UNDERSTANDING SUICIDE TERRORISM: DEFINITIONS AND EVOLUTION

Suicide terrorism, like terrorism, pursues coercion at the cost of human loss and is more than often targeted at a particular audience. It refers to an attack which is politically motivated and perpetrated by an individual(s) who is self-aware and purposely causes his own death. This can be either by blowing himself up along with the chosen target or putting himself in a situation where death is more or less inevitable and chances of survival extremely slim. Thus, the perpetrator's ensured death is a precondition for the success of his mission.<sup>2</sup>

Although terrorism has long been part of international politics, there is yet to come about a convincing explanation for the growing phenomenon of suicide terrorism. Traditional studies of terrorism tend to treat a suicide attack as one of the many tactics that terrorists use and so do not shed much light on the recent rise of this type of attack.<sup>3</sup>

Extensive research has been carried out in the field of suicide terrorism by various scholars, proposing a more holistic picture of the phenomenon. It would be useful to analyse some of the scholarly works on the subject. According to Robert Pape, Professor of Political Science at the University of Chicago, and creator of a database of all suicide attacks from 1980-2003, suicide attacks have become the most deadly form of terrorism as they account for 73 per cent of all fatalities (including 9/11), making the average suicide terrorist attack twelve times deadlier than other forms of terrorism.<sup>4</sup> According to him, suicide terrorism is known to pursue coercion even at the expense of angering not only the audience or community targeted, but neutral ones as well and, therefore, is one of the most aggressive forms of terrorism.<sup>5</sup>

2. As mentioned by Yoram Schweitzer, a senior research fellow at Israel's Institute for National Security Studies; Nicholas W. Bakken, "The Anatomy of Suicide Terrorism: A Durkheimian Analysis", *International Foundation for Protection Officers*, p.1, at [http://www.ifpo.org/wp-content/uploads/2013/08/Bakken\\_Suicide\\_Terrorism.pdf](http://www.ifpo.org/wp-content/uploads/2013/08/Bakken_Suicide_Terrorism.pdf). Accessed on August 9, 2016.
3. Robert A. Pape, "The Strategic Logic of Suicide Terrorism", *American Political Science Review*, vol. 97, no. 3, August 2003, p. 343-361.
4. Robert A. Pape, *Dying to Win: The Strategic Logic of Suicide Terrorism* (Random House Publications, 2005), p. 6.
5. *Ibid.*, pp. 9-10.

Ami Pedahzur, Associate Professor at the University of Texas, Austin, and a Senior Research Fellow at the National Security Studies Centre, University of Haifa, Israel, explains suicide terrorism through the findings of Emile Durkheim's comprehensive study on the typology of suicide types: *egoistic/individualistic*, *fatalistic*, and *altruistic* suicide. *Egoistic suicide* is suicide wherein the motives are individual. *Fatalistic suicide* is associated with an environment in which the individual has been subject to persistent oppression and suicide is committed due to the lack of any hopeful future prospects. However, *altruistic suicide* intends to serve the collective will and is the product of situations in which a person undergoes a highly compelling process of integration into a social group which champions the act of suicide. This is seen today as radicalisation of prospective recruits to terror outfits to the point that they believe in the ideological cause of the group. Thus, the interest and motives of the individual become secondary to the group and the individual is prepared to take any step for the advancement of the group's goals. The principal difference between altruistic and fatalistic types of suicide lies in the social interpretation given to the act by the environment or community surrounding the individual.<sup>6</sup> This is because the act of suicide itself is interpreted in terms of "martyrdom", thereby politicising the act. According to K.M. Fierke, Professor of International Relations at the University of St. Andrews, in politicising the act, 'martyrdom' constitutes the human bomb as an agent in pursuit of justice, who is empowered vis-a-vis an earthly and divine community.<sup>7</sup>

Further, Mia Bloom, Professor of Communication, Georgia State University, and a significant contributor in this field, goes on to add that suicide bombing is not a uniform phenomenon but a subset of terrorism addressing issues relevant to the study of ethnic conflict and asymmetric warfare.<sup>8</sup> The basic relationship – the use of human beings by other human beings – is the defining characteristic of suicide bombing. Suicide bombers have typically been understood within their communities and their sponsoring organisations to be

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6. Ami Pedahzur, *Suicide Terrorism* (Cambridge, UK: Polity Press, 2005), pp. 6-7

7. K.M. Fierke, "Agents of Death: The Structural Logic of Suicide Terrorism and Martyrdom", March 2009, at <http://dx.doi.org/10.1017/S1752971909000049>, pp. 168 – 169

8. Mia Bloom, *Dying to Kill: The Allure of Suicide Terror* (New York: Columbia University Press, 2005), p. 113

martyrs in the traditional sense of the word – that is, individuals who willingly sacrifice their lives for a cause. The willingness of such individuals to give their lives, in turn, has the strategic effect of validating the cause and the organisations that fight for it.

This “martyrdom culture” attached to suicide terrorism was realised in the era of the Russian Revolution and tactfully used in World War II by the Japanese. It was then exploited by leaders in the Middle East in the 1980s which led to a universal recognition of suicide bombing as well as its rampant use among terror organisations the world over.

Suicide terrorism was a tactic that was stumbled upon by the revolutionary group, *Narodnaya Volya* or *People’s Will* in Imperial Russia. On March 1, 1881, the Tsar of Russia, Alexander II, was assassinated after the rebels had condemned him to death on August 25, 1879.

After several failed attempts of planting and replanting bombs near the tsar’s carriage in order to assassinate him, the People’s Will rebels were eventually driven to a point of desperation. One particular member, Ignaty Grinevitsky decided to move closer to the tsar, and ended up throwing the bomb at his feet, killing himself along with the tsar.

Thus, the perceived need and the possibility of the tactic influenced Grinevitsky’s state of mind and convinced him to commit the act. He had not planned on sacrificing his life for such a cause, but given his options, it seemed the most viable one. The dedication with which the People’s Will oppressed the tsarist regime was reinstilled after Grinevitsky’s action. His suicidal attack also reflected on the fundamental challenge that terrorist groups such as the People’s Will face even today – no matter how good your bomb makers are, how well you plan out your plots, there will always be far more ways for such plans to fail. This was mostly because of the lack of control such groups could exercise in order to improve the accuracy of the attack, and reduce the uncertainty. There are two ways to improve control over such aspects: first, use of the most reliable weapons to reduce uncertainty (which was the bomb in the 20th century); and, second, improving control, like the People’s Will demonstrated in order to enable the flexibility necessary to adjust the mission. As an

organisation, the People's Will never enforced suicide attacks and it was a decision made by the bomber at his own discretion. However, those terrorists who got close enough to risk their own lives were the most successful.

Thus, suicide bombing as a tactic, was created owing to the limitations of emplaced bombs which further led to the invention of portable bombs. This, in turn, "necessitated" a more accurate guidance and control system, which, given the technological capabilities of the time, was best achieved by exploiting the desire for martyrdom already present among some individuals.<sup>9</sup> The heroic essence and social connotation attached to martyrs has been considerably exaggerated for suicide bombing as the cult of martyrdom began to emerge in Russia in the 1860s. This was a time when any form of political protest, including peaceful expressions, were criminal offences, rendering the educated youth and the intelligentsia of Russia extremely helpless and frustrated. Opposing the state, thus, involved the risk of being caught and further executed, thereby enabling a polarising "kill or be killed" mindset to take root. There was a widespread fascination for suicide in educated Russian society which coincided with the dedication towards violent social revolution, with an impression that suicide was on the rise in Russia in the 1870s–1880s.

By the end of Alexander III's reign, a broader wave of terrorist violence gripped Russia, during which the use of suicide bombers became a recurring element of escalating violence between the revolutionaries and the state. The Party of Socialist Revolutionaries (PSR) was a political party in the early 20th century Russia and was responsible for a majority of the instances of dynamite attacks in Russia between 1902 and 1906, most of them suicide attacks by self-selected adherents of a culture of martyrdom which differed from the ideology of the group as a whole.

After the 19th century, it was during World War II, that Imperial Japan made the most thorough and systematic use of suicide bombers, deploying thousands of human bombs in the last year of the war. These attackers were known as *Kamikaze*, and consisted of aircraft laden with explosives piloted by humans on one-way missions to

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9. Jeffrey W. Lewis, *The Business of Martyrdom: A History of Suicide Bombing* (Maryland: Naval Institute Press, 2012), p. 49.

inflict as much damage as possible to US naval vessels. An estimated 3,000 pilots are known to have killed themselves in suicide missions during the war, thus, creating a powerful psychological impact on the US forces by the projecting an image of fanaticism and militarism. It is known, however, that the *Kamikaze* were not as successful as their inventors had envisioned them to be. The Japanese leadership had hoped that a relatively small number of *Kamikaze* would be able to combat the US forces effectively, given the disparity in forces on both sides.<sup>10</sup> The efficiency of such attacks was realised owing to the cheap aircraft and minimally trained pilots used for *Kamikaze*. Despite the Japanese government's portrayal of *Kamikaze* as a noble cause, the entire phenomenon was nowhere near successful as the attacks were not large enough to make any significant impact. *Kamikaze* pilots are remembered even today as brave soldiers or protectors of the nation but were essentially fatalistic young men who saw no other better alternative to their deaths and hoped that their sacrifice would ensure the safety of their loved ones.<sup>11</sup>

However, the Japanese use of suicide attackers was very different from that of the Russian revolutionaries. In the Japanese method of suicide attack, the individual's decision to die during an attack was subordinated to organisational decision-making, to make the creation of the human bombs more reliable. The bombers were also completely integrated to the bomb, with no chance of survival. Where death was anticipated and probable for the Russians, it was anticipated and necessary for the Japanese who, for the first time in the world, exhibited the mechanisation of human beings in this manner.

After the Japanese *Kamikaze* and the end of World War II, nothing significant happened in terms of suicide bombings for nearly four decades. In the 1980s, there was a lot happening in the Middle East, especially in revolutionary Iran and war-torn Lebanon. The Iran-Iraq War had transpired into an existential struggle for the Islamic Republic of Iran, and Ayatollah Ruhollah Khomeini, Iran's supreme leader, resorted to an instrument which would help him assert control and consolidation over the region. This instrument was the use of religion in order to articulate and interpret the crisis in religious

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10. *Ibid.*, p. 59.

11. *Ibid.*, p. 60.



terms, thereby mobilising the Iranian citizenry in the name of God. The Iraqi invasion of Iran was immediately declared as a *jihad* or holy war by Khomeini and other Iranian religious leaders, referring to Saddam Hussein, the leader of Iraq, as a tyrant whose threat to Iran and further to Islam, was impending and serious for the Shiite community.

In this holy war, there was a special place for martyrs and Khomeini gave them a distinct status from the rest. The population was incentivised by being made to believe that self-sacrifice was the noblest form of Islamic observance possible and would guarantee the prospective martyrs a place in paradise. The Iranian state struggled to organise a competent military force but a lot of the older men and fairly young boys took matters into their own hands and accompanied the Iranian regular forces in a defensive battle, forming the “Basij” or the “mobilised”.<sup>12</sup> The Basij did not necessarily kill themselves but death was an anticipated event that they were well prepared for. Further, their deployment by Khomeini was a landmark event in the field of suicide terrorism as it was a clear case of a leadership group using religious symbolism deliberately to prepare the followers for self-sacrifice. This had not been seen anywhere else in the world up till then.

In Lebanon, the Shiite Muslims had faced marginalisation ever since the drafting of their Constitution in 1946, despite being one of the larger groups of the country. This led to their political mobilisation in the 1970s wherein Lebanon’s Shiites had been encouraged by their leadership to adopt an attitude of political submissiveness. This was changed by the reformist scholar Musa Al-Sadr who took up various elements of Shiite history and tradition in order to mobilise the people and reinterpreted many concepts, thereby trying to seek a political identity for the Lebanese Shiites. As much as he tried to refrain from using violent methods, he realised in 1975, the need for a militia, which came to be known as the Amal, meaning “hope” and also an acronym for Battalions of the Lebanese Resistance.<sup>13</sup>

This was also the time that the Palestine Liberation Organisation (PLO) became a major actor in Lebanese politics, following a state-

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12. Ibid., p. 65.

13. Ibid., p. 68.

within-a-state approach and using Lebanon to secure its own interests with Israel. The PLO stood for the representation of the Palestinian people and has not officially been affiliated to any religious cause or purpose. In the summer of 1982, there was a siege in Beirut as Israel launched a full-scale attack in the southern part of Lebanon in order to wipe out the PLO. The Khomeini government began asserting itself aggressively in the region, encouraging radical Shiite militias to coalesce as an anti-Israel force. This aggregation of groups eventually led to the formation of numerous entities a few years down the line, such as Hezbollah, which formally announced its existence in 1985. The group served as an integrating force among local groups and leaders, proving to be an alternative for Shiites who were discontented with the Amal. The organisation was based on two-fold goals: *first*, to create a new authentic entity for Shiite identity within the context of Khomeini's Islamic revolution; and, *second*, to combat the Israeli occupation. Suicide bombing proved to be effective for promoting both agendas.<sup>14</sup> From 1980-83, there were six major suicide attacks against Israeli forces and establishments which were vehicle-borne suicide attacks, showing a shift from explosive-laden human beings (revolutionary Russia) or aircraft (Japanese *Kamikaze*), to vehicles now. Most of these attacks were carried out by Hezbollah.

### SUICIDE TERRORISM TODAY

Suicide terrorism, as we understand it today, took root in Hezbollah's use of the phenomenon in the 1980s in Lebanon after which it spread to various parts of the world, and has now become the rather popular face of terrorism today. The creation of Hezbollah brought about a culture of martyrdom and its members set themselves apart from other religious denominations as well as other sections of the Shiite community. *Jihad* and martyrdom became an integral part of these individuals' identity and further testified to the authenticity of their identity and faith. While the encouragement and establishment of such a culture of martyrdom was brought about by Iran, the Israeli invasion accelerated and helped provide a common enemy for the Shiite community to unite against, and feel strong enough to resort to self-sacrifice. Furthermore, the disparity in power between the

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14. Eugene Rogan, *The Arabs: A History* (New York: Basic Books, 2011), p. 415.

Iranians and Israelis, coupled with Israeli indifference towards mass civilian casualties only made suicide bombing all the more practical.

In the years following these major attacks, suicide bombings became a very common tactic and gained a lot of attention throughout the world. While most of the world was reeling under the brutality of the tactic and condemning it, terrorist organisations were gaining inspiration from the success story of Hezbollah and other groups in the Middle East. There is evidence to suggest that the leader of the Liberation of Tamil Tigers Eelam (LTTE), Vellupillai Prabhakaran, was directly influenced by Hezbollah's use of suicide bombing. The LTTE was a separatist group, religiously Hindu and ideologically Marxist, agitating for a homeland for ethnic Tamils who felt persecuted by the ethnic majority of Sri Lanka – the Sinhalese. The LTTE was the world's leading suicide terrorist organisation, responsible for 76 suicide attacks between 1987 and 2001, against a variety of political, economic and military targets in Sri Lanka.<sup>15</sup> The most prominent one of these was the assassination of Rajiv Gandhi, equalling the professionalism involved in the Beirut blasts of 1980s. LTTE Black Tigers (a special unit of suicide bombers within the group) were motivated by, and dedicated to, their homeland and ethnic identity, and further driven by their ideology of a separate Eelam to restore their identity, which drove them to the point of proactive suicide.

One of the most striking features of terror outfits today is the strong and influential ideological base upon which they lay their foundations, as can be seen in the terrorist incidents of recent times.

### *September 11, 2001: Air-borne Attacks*

The 9/11 attacks shook shocked the whole world and traumatised the Americans, leading to a change in their perceptions of terrorism. The explosions were carried out by Al Qaeda and the mastermind behind the entire plan was Osama Bin Laden, who laid the basic foundations of the group drawing on the perspective that the concept of God is synonymous with authority, and monotheism demands that Islam should, therefore, be the sole authority. Adherents of this concept

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15. Preeti Bhattacharji, "Liberation of Tamil Tigers Eelam (Aka Tamil Tigers) (Sri Lanka Separatists)", May 20, 2009, at <http://www.cfr.org/separatist-terrorism/liberation-tigers-tamil-eelam-aka-tamil-tigers-sri-lanka-separatists/p9242>. Accessed on August 9, 2016

reject governance systems based on democracy, socialism, or any ideology that is based on human-made laws and struggle against all such systems that are viewed as polytheistic.

### *26/11 Mumbai Attacks: A Prolonged Attack*

On November 26, 2008, ten Lashkar-e-Tayyeba (LeT) terrorists carried out a series of 12 coordinated shooting and bombing attacks across Mumbai which lasted four days. Terrorists wielding AK-47s in their hands openly fired at innocent civilians in Mumbai's most frequently visited and iconic spots. Given these circumstances, it was clear that the terrorists had very little hope of survival. The gunmen had used Google Earth imagery to mark targets, entrance and exit points of target locations and had programmed their Global Positioning System (GPS) devices for better infiltration through the sea. The attack was conducted with the help of handlers instructing the gunmen (on terrain details) through VOIP enabled phones and satellite phones.<sup>16</sup> Social media and TV news channels providing real-time coverage further helped and enabled the handlers to instruct the gunmen accordingly. Thus, with the help of modern communication technology and advanced information not only were foreign elements able to access the heart of Mumbai, but were able to carry out a massacre of enormous proportions with ease.

### *An Endless War by IS*

On Friday, November 13, 2015, gunmen and suicide bombers attacked multiple places in the city of Paris, followed by twin suicide blasts in Belgium's Zaventem Airport and the Maelbeek Metro Station several months later on March 22, 2016. The IS claimed responsibility for both these attacks. The perpetrators operated from within Europe and were European nationals, in most cases, who had grown up in ghetto colonies of cities like Paris and Brussels and either indulged in criminal activities or were targeted by complex networks of operatives who identify and motivate such marginalised and relatively aimless or unemployed youth to join organisations like the IS. The ideological base of the IS centres on the idea of a global

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16. E. Dilipraj, "Challenges of Terrorism in Cyber Space", *Defence and Diplomacy*, vol. 4, no. 3, April – June 2015, pp. 69 – 70.

caliphate, which is essentially the establishment of a single one-world government led by a *Caliph*. This ideology has gained widespread support throughout the world among many Muslims, and non-Muslims who have converted to the religion, to join the cause, being influenced by the social media and communication systems. Thus, the IS consists of an unusually large number of European fighters who are so inspired by what it has to offer that they leave the comfort of their homes and countries in Europe, and travel to war-torn and remote areas to join the “noble” cause.

As one can see, most of the ideologies that terrorist organisations profess today are based on extremist, radical interpretations of Islam which seem to have gained widespread support throughout the world. Many individuals have become victims of societal or familial complexities and possess negative anti-social tendencies which often act as a catalyst to drive them into “martyrdom” and ideological beliefs that seem sacred and meaningful, as apparent to them. There is a cross-section of people today who find it challenging and difficult to adjust to the complex and intricate societal structure of a modern society and this in-group socialisation on the basis of extreme ideological belief, gives them the recognition they have always been yearning for, besides a sense of achievement. The European fighters of the IS are a clear example of this.

Such influential ideologies are formed by leaders of various organisations who are constantly abreast with the strategic shifts and changes taking place across the world and are able to propagate their views through the use of technology and presence in cyber space. The internet has become one of the most widely used tools in the hands of terror groups who utilise the information and resources available online to not only enhance their publicity and propaganda efforts but also to conduct their missions. The recruitment of IS fighters from all around the world, for instance, has been possible only with the extensive use of social networking and video hosting sites which are useful online propaganda tools and have facilitated mobilisation and recruitment. Hence, technological advancement and social networking make it far more challenging to counter the new face of terrorism, making its campaign borderless and its indoctrination effortless. This becomes challenging to tackle because it goes against

the basic concept of self-preservation, rendering governments across the world in a state of helplessness and despair while tackling such individuals. A direct result of this has been the lone wolf attacks that have become a regular phenomenon.

Over the years, there has been a distinct shift in the nature and type of suicide terrorism. From the typically committed, highly motivated and ideologically influenced terrorists who replicated well trained soldiers, today, we find that those involved in suicide terrorism represent a cross-section of people who have found it difficult to integrate into the globalised world around them. At the same time, there is also the traditional diehard foot soldier who continues to fight in various zones across the world who remains dedicated to the cause, both ideologically and through commitment. Hence, it is the former category which will remain a cause for concern and pose a threat for years to come. A combination of easy availability of propaganda material as also access to sophisticated arms and explosives only further makes these people more potent. While large scale systematically planned attacks like 9/11 may be difficult to perceive today owing to the highly effective monitoring and surveillance mechanisms in place, one cannot nevertheless take away the unique advantage that a suicide attacker with an otherwise clean and unsuspecting background has. The recent incident of the Orlando shootings are an urgent reminder of the fact that today's terrorists are not your conventional radicalised foot soldiers, but the lone wolf who radicalises himself or is influenced by ideological propaganda and is ready to give up his life for the cause. Today's terrorists are ready to commit suicide almost instantly, changing the very meaning of the threat itself as well as its devastating consequences.

# AERIAL DELIVERY OF MEN AND MATERIAL: QUEST FOR ACCURACY

ASHOK K CHORDIA

For over a century, paradropping has been a much sought after means of delivering troops and supplies by air. The delivery systems have seen much refinement in the last eight decades. Today, High Altitude High Opening (HAHO)<sup>1</sup> parachute jumps offer the best and stealthiest way of infiltrating a target.<sup>2</sup> However, paradrop as a means of delivery of troops is constrained in a big way—paratroopers can carry only a limited amount of weapons, ammunition and rations on their person. The aspect of the dimension, shape and weight of anything they carry outweighs most other concerns when they bail out of an aircraft. This leads to a dilemma, which often forces a not-so-happy compromise. For example, in the 1980s, paratroopers jumping with the D-5 parachutes from an IL-76 aircraft could carry only the Sten Machine Carbine (Sten MC) and/or a pistol. They could not jump with their standard 7.62 mm Self-Loading Rifles (SLRs), as there was a perpetual risk of the metre-long weapon fouling with

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1. HAHO jumps entail exits at high altitudes—at times, in excess of 20,000 feet above ground level. A jumper bails out miles away from the designated target and travels long distances (40-50 km) under a parachute canopy. The delivery aircraft goes unnoticed.
2. Mark Owen, *No Easy Day* (London: Penguin Books, 2012), p. 85.

the suspension lines during the initial stages of deployment of the canopy.

This limitation associated with paratroops has existed for long. Between the two World Wars and in the later years, it was overcome by resorting to paratroop of platforms and containerised loads. Supply drops and resupply drops were popular ways of supporting boots on the ground. Air-borne forces and regular foot soldiers were supplied by paratroops until Operation Mercury (Crete, 1941) led to a rethought. In that air-borne operation, the Fallschirmjaegers<sup>3</sup> parachuted with small arms. Most of their heavy weapons and ammunition were dropped in containers, which lay strewn on the drop zones. The poorly armed German paratroopers were fired upon by the Allied troops as they ran helter-skelter, locating and collecting the containers to get hold of their arms and ammunition. That air-borne operation became spectacular for the wrong reasons. The German losses were heavy: of the nearly 13,000 paratroopers who landed on the island, 5,140 were either killed or wounded and 350 aircraft were shot down.<sup>4</sup> That German victory was *pyrrhic*; Hitler did not authorise another major paratroop throughout the rest of the war.

In the years following the German air-borne assault on Crete, the vulnerability of transport aircraft engaged in paratrooping, and the accuracy of the drop became primary concerns, which steered the development of the delivery systems and the tactics of paratrooping.

### **ADDRESSING VULNERABILITY AND ACCURACY: THE CLASSICAL APPROACH**

Several nuanced expressions—air dominance, air superiority, favourable air situation, safe corridor, window of opportunity, and the like—are used to define a condition in which a transport aircraft can venture into enemy air space to drop supplies. Paratroop in a *favourable air situation* in time and space—a difficult thing to achieve—is a way of addressing the vulnerability of transport aircraft in an otherwise hostile environment. Use of fighter escorts is another commonly employed tactic for protection of an air-borne platform.

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3. Fallschirmjaegers were the German paratroopers before and during World War II.

4. Lt. Gen. Edward M. Flanagan Jr. (Retd.), *AIRBORNE: A Combat History of American Airborne Forces* (New York: Ballantine Books, 2002), p. 18.



The AN-32 aircraft involved in the *bread bombing* of Jaffna (1987) were escorted by Mirage fighters. Secrecy and deception are other means of enhancing security. But all these tactics put together only mitigate the threat to an airborne platform; they do not eliminate it or diminish it to very high levels of confidence. Besides, the accuracy of a paradrop remains a concern. To address some of these issues, the Russians have experimented with dropping armoured personnel carriers with battle ready troops seated inside.<sup>5</sup> For accuracy, they have tried parachutes with higher rates of descent, which drift less as they descend. The drawback with such systems is the high landing impact, which can damage the paradropped equipment. Their two-pronged approach to minimise the impact has borne favourable results. Firstly, they have designed and developed platforms, which *absorb* much of the landing shock. And, secondly, they attach rockets to the platforms, which fire in the proximity of the ground (seconds before the impact) to cushion the load at the time of touchdown.

### **RAM AIR PARACHUTES: ADDRESSING VULNERABILITY AND REVOLUTIONISING ACCURACY**

Invented in the 1970s, ram air parachutes are self-inflatable aerofoil shaped canopies.<sup>6</sup> Unlike the conventional *solid round* dome-shaped parachutes, which descend vertically or drift with prevailing winds, the ram air parachutes *glide* down to the ground. They have glide ratios better than 3:1 and can attain ground speeds nearing 40-50 kmph in calm wind conditions.<sup>7</sup> Favoured by winds, the ground speeds could be much higher. Like gliders, the ram air parachutes can be flown, manoeuvred and even stalled. These parachutes can counter the effect of winds to a good extent. In the HAHO mode, if manoeuvred deftly, they can enable pinpoint landing on small targets from standoff distances of 40 to 50 km. HAHO jumps address the issue of vulnerability of the delivery platform adequately. With the cherished attributes of standoff distance, accuracy and stealth, ram air parachutes are best suited for special operations.

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5. "Russian Army Airborne Troops Parachuted BMD-2 Armoured with Crew Inside Ria Novosti," at <http://www.youtube.com/watch?v=TwizQffiBuQ>. Accessed on March 24, 2016.
  6. Jan Meyer, "An Introduction to Deployable Recovery Systems," A historical review excerpted from Sandia Report SAND85-1180 August 1985, at <http://www.parachutehistory.com/eng/drs.html>. Accessed on March 16, 2016.
  7. Ground speeds in excess of 90 kmph are attainable.

Although remarkable accuracy is possible with ram air canopies, they are just parachutes—the impartiality of the earth’s gravity, and the prevailing winds work against them. The density of air affects their performance as much as it does an aircraft’s. Besides, even if actual winds are known, they are subject to change even during the flight of the parachute which can be as much as 45 minutes from an altitude of 25,000 feet. Accurate and reliable weather forecast and the need to drop the jumper in a *wind cone*<sup>8</sup> are, therefore, the prerequisites for the success of HAHO jumps. Equally important is the need to *manoeuvre* (read “fly”) the canopy to the target. For that reason, such parachutes, in their basic forms, can be used only for manned flights. A load dropped using a ram air parachute—even after calculating the effect of the prevailing winds—can land miles away from the intended target due to changes in the weather or small tears/deformities that might be caused during deployment. Another serious issue with paradrop of supplies and/or equipment is the Radar Cross-Section (RCS) of the payload—a paradropped tank or an Armoured Personnel Carrier (APC) is sure to cause a big *blip* on the scope of a watchful radar and alert the enemy, thereby, jeopardising an operation. Thus, use of ram air parachutes can facilitate accuracy and standoff distance but cannot be a panacea for all existing problems.

### SENSING THE WAY TO THE TARGET

The Joint Precision Airdrop System (JPADS)<sup>9</sup> is all about permutation, combination and exploitation of the existing technologies for accurate delivery of paradropped supplies. The experiments, which commenced in the US in the last decade, have shown encouraging results. JPADS accounted for about 1 per cent of the total airdrops conducted by the US Air Force in Afghanistan.<sup>10</sup>

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8. The *wind cone* is an imaginary cone in the atmosphere whose vertex is at the landing target. It is defined by two elements: wind pattern and parachute performance. The probability of a jumper manoeuvring his parachute onto the target is high when his parachute deploys in the wind cone.
  9. Precision delivery systems using GPS are also called GPS Precision Airdrop Systems (GPADS).
  10. James Rogers, “Army Tests High-Tech Airdrop System that ‘Sees’ Its Target,” *Fox News*, March 09, 2016, at <http://www.foxnews.com/tech/2016/03/09/army-tests-high-tech-airdrop-system-that-sees-its-target.html>. Accessed on March 12, 2016.

It is believed that when fully developed, the system (designed in the US) might be capable of dropping cargo loads of up to 13.6 tonnes fairly accurately. The Firefly and Dragonfly parachute systems developed by Para-Flite Inc. are capable of precision delivery of payloads up to 4.5 tonnes from altitudes up to 25,000 feet. However, Rick Zaccari, vice president, Business Development, at Atair, forecasts that in the times to come, 100 to 500 lb precision airdrop systems will be a critical JPADS weight class, specifically for the resupply of small deployments of Special Forces (SF) and other advancing ground forces.<sup>11</sup> As per some reports, systems capable of delivering 500 and 20 lb payloads are already in use.

### **A PEEP INTO THE UNDERLYING TECHNOLOGY**

The delivery systems discussed in the previous section rely on three very basic technologies. The first one is that of the parachute design that can carry optimum load over a long distance. The second is the electro-mechanical system required to *fly* the parachute. The third is the remote guidance (including wireless communication) system between the parachute and the ground control or a satellite system. These technologies are literally available off the shelf. The right choices can produce efficient working models.

#### *The Parachute*

The earliest parachutes were made of canvas. Later, silk—which is strong, thin, lightweight, fire resistant, easier to pack and springy—became popular. Dearth of silk in World War II led to the use of nylon fabric, which is more elastic and less expensive. Lately, even better fabrics like dacron and kevlar have been used. Notwithstanding this, nylon remains the most popular material, even for other fabric components: tapes, straps, and suspension lines. Most of the metal components are cadmium-plated to avoid corrosion. All these materials and components are fairly well developed. Reliability, range, manoeuvrability, and other desirable characteristics are a given in today's parachutes—the discovery of new materials (light and strong), and revolutionary improvements in the design, can notch up the performance further.

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11. "Precision Aerial Delivery Systems - JPADS - The Way Ahead," at <http://defense-update.com/features/du-1-07/aerialdelivery5-future.htm>. Accessed on March 12, 2016.

### *The Control System*

A plethora of technologies has been in use for remote guidance and/or control of the unmanned machines—robots and Unmanned Aerial Vehicles (UAVs), etc. A ram air parachute has just one pair of control lines, with toggles to control the canopy. They serve the combined purpose of the joystick and rudder pedals of an aircraft. It is relatively simple to design a control mechanism to manoeuvre ram air parachutes to targets on the ground. Very few modifications are required in the available control systems to bring in compatibility with parachutes.

### *The Remote Guidance*

A reliable guidance system is essential for precision. The Global Positioning System (GPS) is commonly used for the purpose. The limitations of guidance by GPS are well known. The science of the system is sound, but not fool-proof—its effectiveness is adversely affected close to the ground, particularly in urban areas or in hilly terrain where the line of sight between the GPS set and the guiding satellites is obstructed by buildings/hills. Therefore, use of GPS can lead to inaccuracies of a few hundred metres, which can jeopardise an operation. A paradropped consignment, meant for delivery on to a small island<sup>12</sup> can land into the sea due to the inaccuracies inherent in the guidance by the GPS. A hypothetical example will illustrate this better: if a consignment meant for the commandos fighting the terrorists in Taj Mahal Hotel (Mumbai, 2008) had been paradropped with an aim to land it in the open area between the Gateway of India and the hotel, a GPS error could have landed the consignment into the Arabian Sea.

## **THE NEXT STEP TOWARDS GREATER ACCURACY**

The clamour for greater precision and the foregoing analysis suggests that the days of *sensing* the way to the target are numbered. Could *seeing* the way to the destination be an option? Use of *eyes* (read “cameras”) to home onto a target can enhance the accuracy of a paradrop considerably. The technology to *see*, and the software to

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12. The allusion is to a need that could have arisen during Operation Cactus (the Maldives, 1988) or a plausible aerial delivery requirement that might arise on any of India’s island territories.

compare the view with a given picture is in the advanced stages of development. Algorithms to *steer* an unmanned system to a point (read “pixel”) in a picture are also being refined—the world is on the threshold of the *pixel revolution*.<sup>13</sup> This system entails installation of a camera on to a parachute system that can *look* at the landing area from a distance. An on-board computer then compares the *view* with a pre-fed picture or a picture relayed by a satellite. Lastly, the control mechanism *steers* the parachute to the target, say, a building, a road crossing, a bridge, or a park. Part *sensing*, part *seeing* is the new approach to greater accuracy in supply drops.

Researchers at the US Army’s Natick Soldier Research, Development and Engineering Centre (NSRDEC) are testing an airdrop system that uses video navigation technology to locate its target. The system—considered to be an airdrop alternative to GPS—strives to achieve accurate airdrops in difficult terrain and the urban environment. According to Richard Benney, Director of the Aerial Delivery Directorate at NSRDEC: “Currently, it’s simply a camera that’s looking down and out towards the ground in the direction of flight.” The video navigation system *picks up* reference points or features in the local landscape. The effort is to feed the JPADS an image—which could come from a satellite, or an Unmanned Aerial System (UAS), or other sources—just before it is airdropped and then, to direct the system to land on a given *pixel*. The system is currently being tested in desert environment. There are plans to upgrade the JPADS fleet with the new technology over the next three to five years.<sup>14</sup>

### **COST-BENEFIT ANALYSIS**

The three technologies aimed at achieving precision paradrops—while also lowering the vulnerability of the airlift platform—are costly, individually. Actual figures for the complete system depend on the mass to be delivered and the achievable precision. Since it is still in the development stage, a price tag cannot yet be put on the system. Suffice it to say that it will cost millions in terms of dollars spent.

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13. Alex Gan (Rafael Industries, Israel) has spoken at length about the possibilities of video guidance at the 12th Subroto Mukherjee Seminar on “India’s Security Challenges: Role of Aerospace Power,” November 9-10, 2015.

14. Rogers, n.10.

A million plus dollars to deliver a few kilograms!

Meanwhile, the rarity of airborne operations in the last few decades has cast a doubt on the efficacy of paradrops and, as a corollary, on the need for investment in technology to improve precision. The fact is that paradrops are as relevant today as they ever were. As recently as in March 2003, American ground forces were held up in Turkish ports waiting to establish a northern front in support of Operation Iraqi Freedom—the Turkish government had denied them passage. On that occasion, 15 C-17 aircraft paradropped 20 heavy platforms and 959 paratroopers onto the Bashur Drop Zone in Iraq and established the coalition's northern front.<sup>15</sup> Since 2004, the US Marine Corps has been using Sherpa TM/MC GPS guided parachutes in Iraq. The accuracy for loads of up to one tonne has been 70 metres.<sup>16</sup>

### THE PATH AHEAD

NATO's Defence Against Terrorism (DAT) effort has identified precision airdrop for special operations as one of the ten highest priority areas. It will enhance their capability to deliver personnel or equipment stealthily and precisely wherever they may be needed. It will also support the frequent out-of-area contingency operations.<sup>17</sup> Precision airdrop will be the key enabling technology for rapid strategic and tactical deployment of forces supported 'just-in-time' with supplies delivered at any location; it will address the two most crucial requirements—accuracy of the drop and survivability of the airlift platform.

Although *visual* guidance promises riddance of some of the gaps left in the system guided by GPS, last minute changes in weather, particularly in ground proximity and irregular wind pattern in urban terrain will continue to jeopardise the accuracy of paradrops. Perhaps use of some type of propulsion system in the terminal stages would ratchet up the accuracy. Technologies available today can show the way. The accuracy of delivery can be propped up greatly

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15. "Moving the Herd," at <http://www.jamesdietz.com/gallery/merchant.ihml?pid=126&step=4>. Accessed on July 30, 2011.

16. "Precision Aerial Delivery Systems - GPS Guided Cargo Systems," at <http://defense-update.com/features/du-1-07/aerialdelivery3-gps.htm>. Accessed on March 26, 2016.

17. Rogers, n. 10.

if a consignment is divided into smaller packages and each of the small packages is delivered by (say) a quad-copter, which takes off from the bigger platform about 100 feet above the ground for the final destination.

### **INDIA'S OPTIONS**

For India, it is about time to appreciate the need and interpret the idea of precision delivery with renewed intent. Improved precision of aerial delivery will bolster other capabilities like special operations and humanitarian assistance and disaster relief operations. Savings that may accrue from precision drops in support of air maintenance in the east will offset the rupee cost of the system only marginally. But the intangible gains in terms of improved operational efficiency and boosted morale of the troops and the populace, would be immeasurable.

The author is a parachute jump instructor and has undertaken test jumps with indigenously developed parachutes. He has also been a part of teams of specialists constituted to evaluate new parachutes and aircraft for airborne operations.