

INDIAN AND CHINESE MILITARY MODERNIZATION – A MEANS TO POWER PROJECTION

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Introduction

India and China have seen a concurrent rise as two influential powers in Asia during the last three decades. The world has recognized the substantial economic growth of these two countries. This has encouraged both the states to go for modernization of their respective defence forces in order to ensure their security as well as to project their power in various regions. Both states have, during the last decade in particular, upgraded certain old weapon systems and extensively acquired or developed brand new ones.

Although India's early leaders such as Nehru and K M Pannikar¹ envisaged India as a maritime power, due to India's experience with the European naval powers in the 16th, 17th and 18th centuries. For many years, India's foreign policy and defence outlook remained land-centric. This was essentially because throughout history land-based threats remained India's major external security concern which is why it was vulnerable to European colonialism. Conversely, the role of Indian Navy largely remained limited due to delayed modernization and lack of doctrinal direction. However, certain recent developments in India's geo-strategic role in greater Asia have altered its position in the global strategic milieu. In contemporary times, India is perceived as an Asian power, if not a global one.²

For China, South Asia remained the least economically engaged region for many years. Nevertheless, with the expansion of India's security relations in Asia more recently, the region has gained significant strategic utility, due to which China has also intensified its efforts to expand its alliances and enhance its military power in the region. Simultaneously, both have shown cooperation

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as well, which has been reflected in an increased Indo-China bilateral trade (\$70 billion in 2014), India-China dialogue on Afghanistan³ and maritime cooperation in the Indian Ocean Region (IOR).⁴

With the Indian and Chinese attainment of sophisticated and modern weapons, there is a general perception that the two states are entering into an arms race. In the academic literature, “an arms race is defined as a competitive, reciprocal, peacetime increase or improvement in armaments by two states perceiving themselves to be in an adversarial relationship.”⁵ The interactive rivalry often results in erosion of confidence, diminution of cooperation and poses a greater danger of war between leading states. The general perception that India and China are engaged in an arms race is true to a certain extent. On the strategic chessboard the competition between them has persisted. Nevertheless, both China and India have cooperated on matters that are vital to their mutual interests and of international significance. The present Sino-Indian relationship is a combination of both balance of power and economic cooperation.

The on-going military modernization in India and China has been an expected development which has been a consequence of their mounting economic and political might aiming at power projection. Even though the present relationship between them has not been perfectly symmetrical or without mistrust, an outright war does not seem likely between them. If the political and military leadership of both states are able to continue basic cooperation, then the chance of an arms race will be considerably reduced.

This paper is divided into four major sections. 1) 1962 Sino-Indian War: Impact on Relationship; 2) India’s Military Modernization; 3) China’s Military Modernization, and 4) Sino-Indian Military Build-up: Power Projection or an Arms Race?

1962 Sino-Indian War: Impact on relationship

The creation of India in 1947 and the People’s Republic of China in 1949 brought to fore certain historical experiences which both countries shared. Both had been colonized by naval based western powers, both had mostly rural and agrarian economies and both had endured painful internal strife and political division.⁶

Given these similarities, India’s first Prime Minister Jawaharlal Nehru believed that the two countries could work together to form an ‘Asian Axis’.⁷ This belief was promoted throughout the 1950s. First, in 1954, India and China agreed to the Panchsheel Agreement, a joint declaration that advocated five principles of peaceful coexistence: mutual respect for territorial integrity, non-aggression, non-interference in each other’s internal affairs, equality and mutual benefit, and peaceful coexistence.⁸ Second, in 1955, Nehru and Chinese Premier Zhou Enlai attended the Bandung Conference in Indonesia. It was a milestone for beginning the Non-Aligned Movement that included representatives from 29 governments of Asian and African nations. At this forum, they sought solidarity for the Panchsheel Agreement from other countries as well.⁹

However, two incidents changed the scenario. In 1950, China reclaimed Tibet, due to which a large geographic and strategic buffer between India and China was removed. The second action on China's part was the construction of a network of roads, during the mid-1950s, along the Indian border. These roads, one of which went through the region of Aksai Chin, would allow the People's Liberation Army (PLA) forces to swiftly deploy and uphold operations against the Indian military.¹⁰ (See Appendix 1 for maps, showing the British lines which did not include Aksai Chin in Kashmir. India unilaterally altered the border in 1954).

The worsening relationship between China and India's colonial attitude culminated in the October 1962 War between them. China captured almost 15,000 square kilometres of the Indian territory. India suffered massive losses of life and territory besides indirect impact on its national psyche and attitude. The crushing defeat that India suffered at Chinese hands led India to change its military and foreign policy. First of all, India considerably enhanced its defence spending. Second, it began a nuclear programme capable of striking and forestalling any such attack from China. Thus, India tested its first nuclear device in 1974. From 1962-1975, there were no ambassadorial relations between India and China.¹¹ Despite the lingering mistrust, diplomatic contact was re-established in 1976. A visit by a Chinese delegation to India in 1978 and the then Indian Foreign Minister Atal Bihari Vajpayee's tour to China in 1979 were efforts to normalize relations between them. Rounds of talks held during the 1980s, did not bring about tangible changes in Sino-Indian relations. In 1986, India granted statehood status to the disputed Arunachal Pradesh. This led to mobilization of Chinese and Indian troops along the border while some skirmishes occurred too.¹² During the 1990s, there were some encouraging signs for holding mutual cooperation in economic relations between India and China. In 1992, Consulates in Mumbai and Shanghai were re-opened. In 1993, double taxation agreements in bilateral trade were signed; two-way trade surged to \$52 billion in 2008. China became India's largest trading partner by 2010, and at present, nearly 70 billion dollars annual bilateral trade is carried on.¹³

Despite economic and diplomatic advancements, the mistrust between India and China has persisted which has been mostly reflected through public and media outlets on both sides.¹⁴ Their mutual suspicion has been due to an amalgamation of historical experiences, unresolved border disputes, China's close ties with Pakistan, China and India's respective military build-ups and their efforts to maximize their respective influence in the region.

In short, the agreements have reached at the \$70 billion trade between the two countries including exchange of delegations. However, such steps have so far failed to remove the trust deficit between the two countries.

India's military modernization

It is the pursuit for regional dominance between China and India that has spawned a race for military supremacy and power projection in the recent years. India's increased defence budget and its orders for fighter jets, naval frigates and artillery have made New Delhi the world's largest importer of arms

since 2010.¹⁵ Against China's increasing military might, Indian armed forces are gradually improving inter-operability, upgrading indigenous potentials, developing their kinetic effectiveness and command and control as well.

According to Frost & Sullivan, India will spend \$100-150 billion on defence modernization programmes by 2022. It will also become the fourth biggest defence spender in the world by 2020, behind the US, China and Russia. Unlike the Chinese military, which has domestically produced most of its newest equipment, India imports approximately 70 per cent of its military hardware.¹⁶

Table 1

The 10 largest importers of major weapons and their main clients, 2010-14

Exporter	Share of international arms import (%)		Main clients (share of importer's total imports)		
	2010-14	2005-2009	1st	2 nd	3 rd
India	15	7	Russia (70%)	USA (12%)	Israel (7%)
Saudi Arabia	5	1	UK (36%)	USA (35%)	France (6%)
China	5	9	Russia (61%)	France (16%)	Ukraine (13%)
UAE	4	5	USA (58%)	France (9%)	Russia (9%)
Pakistan	4	3	China (51%)	USA (30%)	Sweden (5%)
Australia	4	3	USA (68%)	Spain (19%)	France (6%)
Turkey	3	3	USA (58%)	South Korea (13%)	Spain (8%)
USA	3	3	Germany (18%)	UK (15%)	Canada (13%)
South Korea	3	6	USA (89%)	Germany (5%)	Sweden (2%)
Singapore	3	3	USA (71%)	Germany (10%)	Sweden (6%)

Source: <<http://sputniknews.com/columnists/20150401/1020313631.html>>.

Table 1 illustrates that from 2010 to 2014, India accounted for 15 per cent of all international arms imports. India's weapons imports are almost three times larger than that of its neighbours, Pakistan and China.¹⁷

Since 2009, the Indian Navy (IN) has stood as the fifth largest in the world with 145 ships. This number is expected to rise to over 160 ships by 2022.¹⁸ The Indian Air Force (IAF) has been acquiring sophisticated fighter jets like the Dassault Rafale as well as support aircrafts like the C-17 heavy lift transport plane.¹⁹

Advancement in the Indian military: An overview of recent defence budgets

India has embarked upon modernization programmes like replacement and upgrading of its military equipment with an aim to further augment its power in the region.

Between 2005 and 2014, India's defence spending had increased by 39 per cent.²⁰ *SIPRI Fact Sheet 2015* shows that of the top 15 military spenders in 2014, India moved up from ninth to seventh position.²¹ Indian military's modernization project has come after years of under-investment. A look into the military budgets 2012–2013, 2013-2014, 2014-2015 and 2015-2016 reveals valuable information about the modernization processes. The capital outlay account of the budget is the most relevant segment of military modernization, showing the procurement of equipment for the Army, Navy and Air Force. The 2012–2013 defence budgets have indicated an increase of 17.63 per cent as against 11.59 in 2011-2012.²² Around 89 per cent of the total capital outlay was allocated for modernization. The capital outlay budget of the Indian military, with an approximately 72 per cent increase for the Air Force and Navy, showed a preference for the two wings most responsible for force projection abroad.²³

India's defence budget 2013-14 presented a five per cent increase,²⁴ while India's defence budget 2014-15 saw a 12 per cent increase in military spending and enhanced the foreign investment limit in the domestic defence industry from 26 per cent to 49 per cent to help rebuild the military.²⁵ The defence share accounts for almost eight per cent of the overall central government budget for the year 2015-16. With an approximate allocation of Rupees 1,30,874 crore, the Army accounted for 53 per cent of the total defence budget in 2015-16. The Air Force came a distant second with an allocation of Rupees 56,658 crore, [23 per cent] followed by the Navy with Rupees 40,529 crore [16 per cent]. *Defence Research and Development Organization (DRDO)* received six per cent and Ordnance Factories two per cent of the military budget. Defence-specific measures visible in the budget were the allocation for 'Make in India' initiative, for which Rupees 144.21 crore were allocated. The Indian government's initiative aimed at encouraging companies to manufacture their products in India. The allocation, by far the biggest under the 'Make head', would mostly be provided to two industry consortiums – one of TATA Power Strategic Engineering Division (SED) and Larsen & Toubro (L&T) and the other of Bharat Electronics Limited (BEL) and Rolta India Ltd. – each of which recently earned a contract from the Indian Ministry of Defence to develop a prototype under the Indian Army's Battlefield Management System (BMS) programme.²⁶

The analysis of India's last four years' defence budget has revealed that India focused more on the modernization of its Navy and Air Force. Lately, strong initiatives have been taken to enhance foreign investment limit in domestic defence industry.

Modernization of Indian armed forces

India is heavily investing on the modernization of its armed forces. The Indian Army with over 1.3 million soldiers and an additional one million in reserve is the third-largest in the world.²⁷ It is investing heavily in upgrading its missile defence system. The medium to inter-continental range ballistic missiles from the Agni family have already been operational. India has installed its, supersonic BrahMos cruise missiles in Arunachal Pradesh and the Su-30MKIs at its bases in Assam. The Army has deployed armoured brigades with Russian-origin tanks and Infantry Combat Vehicles in the Ladakh and north-eastern region, and has positioned an additional '10,000 troops in the Andaman and Nicobar Islands' with an already existing amphibious brigade.²⁸ However, in July 2015, People's Daily, the official newspaper, ran a report which quoted a senior military officer as saying the China did not own any military base abroad, nor did it seek military expansion.²⁹

In May 2015, Indian media reported that India was close to finalizing another 'mega military project with Israel for joint development of a medium-range surface-to-air missile system (MR-SAM) for the Indian Army.' Israel is amongst the leading defence suppliers to India, involved in already inked agreements and projects, "worth around \$10 billion over the last 15 years, which range from spy and armed drones to sophisticated missile and radar systems."³⁰ For artillery up-grading, India will be procuring, 145 ultra-light (155mm M777) howitzers manufactured by British Aerospace (BAE) Systems Inc for around \$660 million, which will be deployed in high altitude areas in Arunachal Pradesh and Ladakh against China's forward deployment in those areas. In May 2015, BAE announced that the ultra-light howitzers could be partly made locally and proposed to shift its production unit in India in a partnership with a private firm, which is still to be chosen.³¹ The Army has also planned to purchase the Bofors guns manufactured indigenously by the Ordnance Factory Board (OFB) and enhance its cyber warfare capabilities. In July 2015, India's Defence Acquisitions Council (DAC) approved Rupees 16,900 crore proposals to acquire an initial 428 air defence guns under a 'Buy and Make India' project.³² The Modi government has also nominated Russian company, Kamov, to manufacture 200 light choppers in India to meet a long-standing requirement of the Indian Army. The Russian company will now make the Ka226 choppers in India to replace the ageing Cheetah helicopters that are deployed on the Siachen glacier. Kamov has already established a company in Bangalore that will manufacture the choppers locally.³³

The above detail indicates that India has been spending huge funds while up-grading its army aviation and missile systems. 'Make in India' has now become a buzz-word in India.

Modernization in the Indian Navy

The Indian Ocean Region has become a crucial new area for Sino-Indian competition. The Indian Navy, the primary driver of the modernization process has focused on creating a larger fleet without sacrificing quality, while also purchasing support items such as maritime patrol and carrier-launched

fighter aircraft. An article in *Foreign Policy* observed that India is planning to spend almost \$45 billion over the next 20 years on 103 new warships, including destroyers and nuclear submarines. In contrast, China's investment over the same period has been projected to be around "\$25 billion for 135 vessels."³⁴

India currently has 9 Sindhughosh class (Soviet Kilo class) and 4 Shishumar class (German HDW Type 209) diesel electric submarines.³⁵ In September 2012, the procurement of Indian Navy Sponsored (INS) Chakra, a nuclear-powered submarine leased from Russia has placed India into an elite group of countries which operate underwater nuclear-powered vessels.³⁶ The INS Arihant, India's indigenously designed and developed nuclear-armed ballistic missile submarine would become fully operational by late 2016.³⁷ India has also begun to induct Russian Nerpa-class submarines, which would give its navy a much needed fillip to the submarine fleet while considerably enhancing its sea-denial capabilities. Three Stealth frigates, INS Shivalik (2010), INS Satpura (August 2011) and INS Sahyadri (July 2012) have become a permanent part of India's naval fleet. In 2013, the Navy inducted its latest guided-missile stealth frigate INS Trikand.³⁸ In order to augment naval surveillance outreach in the Indian Ocean Region, Indian Navy has been engaged in establishing 'operational turnaround bases, forward-operating bases and naval air enclaves'. The Indo-US nuclear deal and regular joint naval exercises have also aimed at containing China's rise in the region.³⁹ The INS Vikramaditya, a modified Kiev-class aircraft carrier which has been considered to be one of the most significant purchases from Russia, was formally inducted into the Navy in June 2014.⁴⁰

The Indian government has approved the funding for four additional nuclear submarines like the Arihant. An ensuing class of six Ship Submersible Ballistic Nuclear (SSBNs) code named S5, almost twice as big as the Arihant-class has also been approved for development. They would have the ability to carry up to 12 K5 Intercontinental Ballistic Missiles (ICBM) with Multiple Independently Targeted Re-entry Vehicle (MIRV) warheads. SSBNs have not been the only nuclear submarines that the Indian Navy would field. In early 2015, the Indian government has cleared a project to build six new hunter killer boats (SSN) for the Navy.⁴¹ India has also been building conventional submarine fleet as well. Under Project-75, six French-Spanish Scorpene submarines are under construction at Mazagon Dock Ltd. The first of these, named INS Kalvari, has recently been 'undocked' and would undergo sea trials in 2016 and would be commissioned into the Navy by September 2016.⁴² The Indian Navy has procured many ships in the recent years and that has continued to develop a larger and more modern fleet. However, this modernization process would only show substantial improvement if India's shipyards could increase the rate of production.

The above mentioned information has revealed that India has a plan to spend a substantial amount on the creation of a larger fleet of new ships, destroyers and submarines besides maritime patrol and carrier-launch fighter aircrafts. This would certainly enhance India's sea-denial capabilities.

Modernization in the Indian Air Force (IAF)

Ever since the 1990s, IAF has started acquiring and developing advanced aircraft, weapons, associated technologies and infrastructures. The IAF has consistently received the largest portion of growing capital outlays from 2002- 2012.⁴³ Despite the large share of the capital outlay budget that the IAF has received, its operational strength has remained limited. Currently, the Indo-Russian joint venture Su-30MKI has been the chief air superiority fighter of the IAF with the capability to carry nuclear weapons. Until August 2014, the IAF had 200 Su-30MKIs in service. Additional MKIs have been ordered to increase the total to 272 for Indo-Russian Fifth Generation Fighter Aircraft programme.⁴⁴ The Su-30MKI has been projected to form the backbone of the Indian Air Force's fighter fleet from 2020 onwards.⁴⁵

Since 2007, the IAF has been upgrading its MiG-29 fleet. In 2008, India awarded Russia a US\$865 million contract to upgrade its air superiority MiG-29 into multi role MiG-29UPG standard warplanes. According to the deal, Russia would re-arm the twin-engined MiG-29s with air-to-air missiles and the upgraded MiGs would feature increased fuel capacity and would include latest avionics.⁴⁶ In March 2010, India and France have finalized a deal to upgrade all of India's Mirage 2000H to Mirage 2000-5 Mk 2 variant with new radar systems, a new weapon suite, missiles and electronic warfare systems. Under the contract, the combat-proven aircraft would be upgraded to next-generation fighter level, which would extend their serviceability for almost 25 years.⁴⁷ With its expanding regional influence and power projection, the IAF has been setting up new airstrips and helipads in remote locations. In 2011, IAF has inducted indigenously developed "Light Combat Aircraft Tejas", which would replace out-dated Mig-21 in a few years⁴⁸. It has also signed a deal with Boeing Company for "10 C-17 Globemaster III tactical military transport aircraft worth \$4.1 billion". The C-17 would give the IAF the capability to airlift troops and supplies throughout the Indian Ocean region. In 2011, IAF has also acquired six C-130J Super Hercules from Lockheed Martin, modified for special mission roles for \$1.06 billion.⁴⁹

India has lined up several mega deals which only remain one step short of contract signing. These include two helicopter, contracts with Boeing and the 126 multi-role Rafale fighter deal with France's *Dassault* Aviation worth an estimated \$12 billion.⁵⁰ New Delhi would spend close to \$2.5 billion to equip its air force with Boeing's 22 AH-64D Apache Longbow attack helicopters and 15 CH-47F Chinook heavy-lift choppers.⁵¹ A partnership venture of the tanker aircraft deal between Airbus and Tata has been cleared to produce a new series of transport planes for the IAF. This deal, which mandates setting up of a production line in India, has worth \$2 billion. While the initial order has been for 56 aircraft, it would expand to at least 64 on the strength depending upon coast guard requirement.⁵² Other non-fighter aircraft sales to India include the American-made Boeing P-8I Orion, which has been utilized for coastal patrolling and anti-submarine warfare and the Israeli-made A-50 Phalcon Airborne Early Warning and Control (AEWC) aircraft.⁵³

Table 2
Military Balance of China, India and Pakistan (2015)

		China	India	Pakistan
Army				
	Tank	9,150	6,464	2,924
	Armoured Fighting Vehicles (AFVs)	4,788	6,704	2,828
	Self-Propelled Guns (SPGs)	1,710	290	465
	Towed-Artillery	6,246	7,414	3,278
	Multiple-Launch Rocket Systems (MLRSs)	1,770	292	134
Air Force				
	Total Aircraft	2,860	1,905	914
	Fighters/Interceptors	1,066	629	387
	Fixed-Wing Attack Aircraft	1,311	761	387
	Transport Aircraft	876	667	287
	Trainer Aircraft	352	263	170
	Helicopters	908	584	313
	Attack Helicopters	196	20	48
Navy				
	Total Naval Strength	673	202	74
	Aircraft Carriers	1	2	0
	Frigates	47	15	10
	Destroyers	25	9	0
	Corvettes	23	25	0
	Submarines	67	15	8
	Coastal Defense Craft	11	46	12
	Mine Warfare	6	7	3

Source: <www.globalfirepower.com>.

Table 2 manifests IAF's present position of military balance of China, India and Pakistan. India has just enough combat capable weaponry to maintain a defensive posture against China, which remains ahead of India in almost all categories. However, India has been spending tremendous funds on the acquisition and development of advanced arms build-up since 1990.

Modernization in nuclear field

India's military modernization of its nuclear forces, particularly the development of a "triad" of delivery capabilities, has been an achievement. Apart from land and air based nuclear systems, India's Navy the *Arihant*, with a second-strike capability to respond to a nuclear attack, would constitute Indian military's third leg of the triad once it would become fully operational by 2016. In 2013, K-15 Sagarika, a Nuclear-Capable Submarine-Launched Ballistic Missile (SLBM) with a range of 700 kilometres (435 miles) was successfully launched.⁵⁴ The new Su-30MKI fighter aircraft has the capability to be armed with nuclear weapons. The Indian Army has operated several classes of ballistic missiles with different ranges. The Agni series of missiles are capable of hitting major Chinese cities. The latest Agni missile, the Agni-V, had successfully test fired in April 2012. Agni-VI would be a four-stage ICBMs, which has been in the hardware development phase. Agni VI is expected to have Multiple

Independently Targetable Re-entry Warheads (MITRWs) as well as Manoeuvrable Re-entry Vehicle (MaRV). These manoeuvrable warheads would furnish Agni VI with an absolute range, the exact figure of which is currently classified. It would be flight tested by 2017.⁵⁵

India's success in the development of nuclear triad delivery capability would go a long way in providing India with an edge in projecting itself in the region.

The impact of India's military modernization on Indian foreign policy

A stronger military power carries weight in regional and international politics. The Indian defence strategy has almost been clustering around regional politics. The India's pursuit to modernize its defence forces has resulted in changes in Indian relations with other countries, especially the US. A modern Indian military would signify India's greater ability to play its role in maintaining international peace and security. A modernized military would enable India to patrol the Indian Ocean and help facilitate the opening of South Asia's sea-lanes for international trade.⁵⁶

India in Indian Ocean Region: India, the world's third-largest energy consumer since 2009, imports 26 per cent of the energy it consumes. Geopolitically, with 7,500 kilometres of coastline and about 1.63 million square kilometres of its Exclusive Economic Zone (EEZ), India is the only major power with direct access to the Indian Ocean.⁵⁷ An overt sense of 'encirclement' by China through increased presence of the Chinese Navy in the Indian Ocean is emerging in India. It has great concern over the (string of pearls) facilities being arranged for China in the Indian Ocean by allies like Pakistan (Gwadar Port refers), sympathetic states like Myanmar, Bangladesh and island states like the Seychelles — with re-supply port facilities.⁵⁸ India has therefore, started modernizing its Navy with an aim to develop its capability to ensure both qualitative and quantitative presence in the Indian Ocean.

India has been keeping an eye on the choke points in and out of the Indian Ocean; in part through its own unilateral deployments, and in part through cooperation with other relevant choke point countries such as Malaysia, Indonesia, Qatar and Singapore. India has employed a range of bilateral, trilateral and multilateral military drills that hold political and strategic magnitude. It has also entered into symbolic exercises with local minor states. In this category falls "the 'Ind-Indo Corpat' (India- Indonesia Coordinated Patrol) exercises between the Indian and Indonesian navies which have been taking place since 1994, the India-Thailand Coordinated Patrol ('Ind-Thai Corpat') exercise in the Andaman Sea set up in 2006, and the joint naval exercises carried out with the Malaysian Navy in 2008 and 2010. Additional substantive and strategically noteworthy exercises have been conducted with other countries. For instance, since 1993, "joint 'Simbex' exercises, of growing strength and substance with vital strategic implications for presence and choke point control, have been held between India and Singapore, with Singapore providing berthing facilities for the Indian Navy" for entrance and exit purposes from the Indian

Ocean.⁵⁹ India's "Look West" policy seeks to pro-actively engage western Indian Ocean littoral states through trade investment as well as through the expansion of security and maritime relations across the Indian Ocean.⁶⁰ Since October 2008, Indian Navy ships have been deployed to the Gulf of Aden and off the coast of Somalia against piracy issues. India has also signed security pacts with Qatar and Oman and has conducted joint naval exercises with Kenya, Tanzania and South Africa.⁶¹

Russia: After the end of the Cold War, Russia remained India's leading arms' supplier. They entered into many strategic partnerships, military, technical and economic cooperation agreements. Russia has supplied India the Su-30MKI and refitted aircraft carriers, which has given phenomenal advantage to the Indian military.⁶² Russia continues to dominate India's market for weapons sale. Moreover, nuclear cooperation between the two has increased during the recent years. Two vital Russian-India nuclear projects are underway. The Kudankulam nuclear power plant is the only nuclear power plant which meets all the "post-Fukushima" safety requirements. The second is awaiting a decision by the Indian government, wherein it has desired to build a new Russian-designed nuclear power plant.⁶³ Russia has also supported India's candidature as a permanent member of a reformed Security Council.⁶⁴

France: It has emerged as India's strongest defence partner in Europe. In 1998, despite condemnation by leading powers in the wake of India's nuclear tests, France refrained from implementing sanctions. In May 2011, the French government ceased all sales of heavy military equipment to Pakistan to ease Indian concerns and to secure military contracts with India.⁶⁵ France has supported India to become a permanent member of the UN Security Council.⁶⁶ France has also been one of India's leading trading partners in the field of technology transfers. The deal of Dassault Rafale fighter jets is a recent example of their increased strategic partnership.

The US: The 21st century opened up the portals for a stronger relationship between India and the US. In 2005, the US and India reached a civilian nuclear deal, which enabled India to have access to nuclear technology and keep its nuclear weapons.⁶⁷ Since 2002, the US has concluded 15 major arms deals with India worth approximately \$8.83 billion. This figure only accounts for major conventional hardware like transport aircraft, missiles and the like; without the inclusion of smaller sales like Special Forces equipment and small arms.⁶⁸ The US arms sales have accompanied more frequent contact between the US and Indian military personnel. The American and Indian navies have been especially dynamic in joint operations. The US Navy pilots have trained Indian pilots in carrier operations, which would be essential as the Indian Navy attains more aircraft carriers. The US has become India's closest partner in terms of joint military exercises.⁶⁹ There is a strategic convergence between the US and India. The US President Barak Obama's visit to New Delhi in January 2015 enhanced Indo-US cooperation in defence and nuclear areas.⁷⁰ In June 2015, Ash Carter, the US Secretary of Defence, officially visited India. Indian Defence Minister Manohar Parrikar and his US counterpart signed the 2015 Framework for India-US Defence Relationship, which builds upon the previous

framework and successes to guide the bilateral defence and strategic partnership for the next 10 years. The framework also recognized the transformative nature of the Defence Technology and Trade Initiative (DTTI). Both sides agreed to expedite discussions to take forward cooperation on jet engines, aircraft carrier design and construction, and other areas, such as maritime security. Both states have also agreed to pursue co-development and co-production projects that would offer tangible opportunities for American defence industries to build defence partnership with the Indian industries including in manufacturing under 'Make in India'.⁷¹

To maximize its influence, India has established relations with the choke-point states and carried out joint naval exercises in the Indian Ocean region. India has further fortified relations with Russia and also developed partnerships with France. However, the US strategic partnership with India has been the most significant development in the relationship between the two countries.

China's military modernization

The rise of China's military has been most remarkable in recent times. China is the second largest military spender in the world, having surpassed the United Kingdom in 2008. China's defence budget of 2015-2016 for the People's Liberation Army (PLA) has been more than three times that of other big spenders such as France, Japan the United Kingdom and nearly four times than that of India.⁷² According to data from SIPRI's military expenditure database of 2014, China has increased its military spending by 170 per cent in real terms since 2002.⁷³

Beginning in the 1980s, the PLA began to focus more on the role of technology. However, its preparation primarily aimed at local wars. Dean Cheng maintains:

With the rise of Deng Xiaoping...the People's Republic of China (PRC) was no longer compelled to devote its primary energies to preparing for imminent war. This strategic reassessment allowed the PRC to shift its focus to national economic modernization, marked by the Four Modernizations program, which remains in effect. In this revised environment, the main threat to the PRC would come from more limited conflicts, and the PLA therefore prepared for 'local wars,' that is, conflicts not involving the mass mobilization of the nation and the economy, involving lower levels of violence than nuclear exchanges, and which were more likely to occur on its periphery.⁷⁴

Under its ensuing military modernization process, China has been integrating a variety of Anti-Access/Area Denial (A2/AD) systems and capabilities. These include not only weapons, such as "anti-ship ballistic and cruise missiles (ASBMs), but also political warfare methods, including legal, public opinion, and psychological warfare techniques". These would complement a modernizing navy and air force⁷⁵. The enhancement of the concept of Command, Control, Communications, Computers, Intelligence,

Surveillance and Reconnaissance (C4ISR) are at the heart of China's military modernization strategy. China is installing "a new generation of C4ISR systems and networks including communications network, data links, intelligence collection systems, navigation satellites and information fusion systems."⁷⁶

China released its white paper on military strategy in May 2015, which underscores China's enthusiasm in the build-up and development of its Armed forces:

The implementation of the military strategic guideline in the new situation, China's armed forces must closely center around the [Communist Party of China] CPC's goal of building a strong military, respond to the state's core security needs, aimed at building an informationized military and winning informationized wars, deepen the reform of national defence and the armed forces in an all-round way, build a modern system of military forces with Chinese characteristics, and constantly enhance their capabilities for addressing various security threats and accomplishing diversified military tasks.....the PLA will continue to reorient from theatre defence to trans-theatre mobility. The PLA will elevate its capabilities for precise, multi-dimensional, trans-theatre, multi-functional and sustainable operations.⁷⁷

Advancements in China's missile arsenal

Missile arsenal is a key component of China's 'counter-intervention A2/AD strategy'. According to the US Department of Defence's (DoD) 2010 Report, 'China has the most active land-based ballistic and cruise missile program in the world.' In 2011, the Chinese military possessed 2000 non-nuclear ballistic and cruise missiles. Its indigenously developed missiles have highly advanced targeting systems.⁷⁸ The People's Liberation Army Second Artillery Force (PLASAF) has emerged as a centrepiece of Chinese military modernization plan along with the growth of its nuclear and conventional missile capabilities. China's defence white paper of May 2015 has highlighted PLASAF's role in the modernization process:

PLASAF will strive to transform itself in the direction of informationization, press forward with independent innovations in weaponry and equipment by reliance on science and technology, enhance the safety, reliability and effectiveness of missile systems and improve the force structure featuring a combination of both nuclear and conventional capabilities. The PLASAF will strengthen its capabilities for strategic deterrence and nuclear counterattack and medium- and long-range precision strikes.⁷⁹

China possesses 30 to 40 ICBMs that have the range to reach the US mainland.⁸⁰ Its missile arsenal includes silo-based DF-5s, some of which are equipped with MIRVs, DF-31 and DF-31A road mobile ICBMs and older and more limited range DF-4 ICBMs, as well as its theatre-range nuclear missile capabilities. The US DoD's Report of 2015 has noted that:

PLASAF has continued to modernize its nuclear forces through enhancing its silo-based ICBMs and accumulating more survivable, mobile delivery systems. Moreover, it has been advancing its nuclear command, control and communications (C3) capabilities and developing the DF-41, a road mobile ICBM possibly capable of carrying MIRVs.⁸¹

China established a “direct-ascent kinetic kill anti-satellite capability” to low earth orbit when it hit and destroyed its defunct FY-IC weather satellite in January 2007.⁸² China is advancing research and development on a missile defence shield program which constitutes “kinetic energy intercepts at exo-atmospheric altitudes (>80 km), as well as intercepts of ballistic missiles and other aerospace vehicles within the upper atmosphere”.⁸³ In December 2014, China conducted their third successful test of a new hypersonic missile.⁸⁴ Earlier test of hypersonic glide vehicle (HGV) were calculated to have estimated speed of mach—10 around 76800 miles per hour.⁸⁵ In addition China maintains a white category of cruise missiles for air, land or sea battle. It includes subsonic, supersonic and tactical cruise missile etc.⁸⁶

For its conventional missile force, Peoples Liberation Army Second Artillery Force (PLASAF) has at least 1,200 Short-Range Ballistic Missiles (SRBM).⁸⁷ In August 2013, high-precision Dong Feng-12 (DF-12) SRBM was made part of the Second Artillery. The DF-12 has a re-designation of the 2011 designed M20 tactical SRBM. The M20/DF-12 has ‘built-in counter-measures, including terminal manoeuvrability against theatre missile defence systems.’⁸⁸ China has developed the DF-21 Medium Range Ballistic Missile (MRBM) which can effectively target aircraft carriers. This capability has provided China the ability to prevent any naval force from coming closer to its coastline.⁸⁹ In an attempt to upgrade the SRBM, the PLA plans to acquire the A300 hybrid rocket system developed by its China Aerospace Science and Technology Corporation (CASC). It has a range greater than 300km and can engage eight targets in a 20 x 20km area. PLA is set up to acquire indigenously made ‘AR3 artillery rocket system, which uses the 370mm and 280km range Fire Dragon artillery rocket.’⁹⁰

In short, China has vigorously pursued the development of its nuclear and conventional missile capabilities to maximize its force projection and could match or even exceed the US cache of 5500 nukes in the coming decades⁹¹

Modernization of People’s Liberation Army Navy

In recent years, Beijing has increasingly asserted itself in the maritime realm. Massive modernization in the PLAN began in the mid-1990s and the fleet has gone through a period of rapid change from 1996 to 2006. The quantitative change of the fleet during this time period was modest. By 2006, the qualitative changes to the fleet have been significant. PLAN shifted away from building smaller ships in favour of fewer, bigger and more powerful ships. Between 1996 and 2006, ‘five entirely new classes, featuring displacements from 6,000 to nearly 8,000 tons, entered the fleet’.⁹² Since 2004, the PLAN’s surface combatant modernization accelerated immensely. The PLAN has commissioned

no less than 44 new surface naval combatants between 2004 and 2014. “The bulk of the PLAN’s modern surface combatants are composed of four classes: two related destroyer classes, one frigate class, and one corvette class. The PLAN’s main modern destroyers are the six 052C Luyang II-class. Six 052C destroyers have been produced with two commissioned in 2005 and the rest since 2013. These destroyers, the first advanced and indigenous air warfare destroyer China has produced, constitute the core of China’s destroyer fleet. China has evolved the 052C into the more advanced 052D air warfare destroyer.”⁹³

In China’s Military Strategy white paper of 2015, the following guideline was provided for PLAN:

In line with the strategic requirement of offshore waters defence and open seas protection, the PLAN will gradually shift its focus from ‘offshore waters defence’ to the combination of ‘offshore waters defence’ with ‘open seas protection,’ and build a combined, multi-functional and efficient marine combat force structure. The PLAN will enhance its capabilities for strategic deterrence and counterattack, maritime manoeuvres, joint operations at sea, comprehensive defence and comprehensive support.⁹⁴

Under its modernization process, the PLAN has amended its manpower policies. It now carries out exercises and deployments to increase skills which are essential for offshore defence and for gaining experience. These steps have amplified PLAN’s ability to commence Anti-Surface Warfare (ASuW), naval air defence and force projection missions. Nevertheless, PLAN’s Achilles heel is its anti-submarine warfare capability. The PLAN seems to be mindful of this failing and has increased the number of ASuW helicopters to allay this paucity.⁹⁵ China has also been increasing the geographic areas of operation for its submarines, along with their span of deployment. In its 2014 annual report to the Congress about China’s military and security developments, the Pentagon held that ‘China had 77 principal surface combatant ships, more than 60 submarines, 55 large and medium amphibious ships, and about 85 missile-equipped small combatants. The quality of China’s submarines was lower than those that the US built, but the size of China’s undersea fleet had now surpassed that of the US’ fleet.’⁹⁶ In September 2012, the *Liaoning* was commissioned into PLAN. By serving on the *Liaoning*, PLAN service members would gain valuable experience in aircraft carrier operations. In its 2013 Annual Report to the US Congress, The US-China Economic and Security Review Commission reported that:

China had planned to follow the *Liaoning* with at least two indigenously built aircraft carriers. The first likely will enter service by 2020 and the second by 2025. As China’s aircraft carrier force expands and matures, Beijing will improve its ability to project air power, particularly in the IOR and South China Sea and to perform a range of other missions, such as airborne early warning, anti-submarine warfare, helicopter support to ground forces, humanitarian assistance, search and rescue and naval presence operations.⁹⁷

Table 3

Future trends in PLAN

PLAN Submarine Orders-of-Battle 1990-2020, Total Numbers

Type	1990	1995	2000	2005	2010	2015	2020
Diesel Attack	88	43	60	51	54	57-62	59-64
Nuclear Attack	4	5	5	6	6	6-8	6-9
Nuclear Ballistic	1	1	1	2	3	33-5	4-5
Total	93	49	66	59	63	66-75	69-78

PLAN Submarine Orders-of-Battle 1990-2020, Approximate Percent Modern

Type	1990	1995	2000	2005	2010	2015	2020
Diesel Attack	0%	0%	7%	40%	50%	70%	75%
Nuclear Attack	0%	0%	0%	33%	33%	70%	100%

PLAN Surface-of-Battle 1990-2020, Total Numbers

Type	1990	1995	2000	2005	2010	2015	2020
Aircraft Carriers	0	0	0	0	0	1	1-2
Destroyers	19	18	21	21	25	28-32	30-34
Frigates	37	37	37	43	49	52-56	54-58
Corvetts	0	0	0	0	0	20-25	24-30
Amphibious Ships	58	50	60	43	55	53-55	50-55
Coastal Patrol (Missile)	215	217	100	51	85	85	85
Total	329	322	218	158	214	239-254	244-264

PLAN Surface Order-of-Battle 1990-2020, Approximate Percent Modern

Type	1990	1995	2000	2005	2010	2015	2020
Destroyers	0%	5%	20%	40%	50%	70%	85%
Frigates	0%	8%	25%	35%	45%	70%	85%

Source: U.S.-China Economic and Security Review Commission Staff Research Backgrounder, China's Naval Modernisation and Implications for the United States, August 26, 2013

Table 3 shows the future trends in the PLAN. China plans to have about six to nine nuclear-attack submarines and four to five nuclear-ballistic missile submarines, (China currently has only two Jin-class type 094 SSBNs), to be manufactured by 2020. Two of PLAN's conventional aircraft carrier would be operational by 2020. This may limit China's global power projection ambition. However, regionally, PLAN would be capable of achieving the required domination and force projection capabilities in the Western Pacific.⁹⁸ In Asia, in comparison to India's aircraft carrier INS-Vikrant, which has the capacity to carry 36 fighter planes, China's *Liaoning* is equipped to carry 50. During the last two decades, China has created a domestic defence industrial base after updating its bureaucracy, establishing quality control and bringing about improvements in business practices. The said arrangements coupled with the ability of Chinese arms manufacturers to integrate with civilian firms have substantially minimized the dependence of the armed forces on foreign

countries. The Song-class submarines and Luyang destroyers are the cases in point.⁹⁹

China has started focusing on the combination of offshore water defence and open seas protection in order to realise its power projection in the South and East China Seas and Indian Ocean region.

Beefing up People's Liberation Army Air Force

The People's Liberation Army Air Force (PLAAF) is the largest air force in Asia and the third largest in the world. Currently, it has been undergoing a transformation from a force structured for domestic defence to being able to operate further from China in both offensive and defence roles. China has religiously focused on the modernization of PLAAF, especially from airlift and aerial refuelling capabilities point of view, giving the force extensive reach along China's borders and into the East and South China Seas and other target zones and groups.¹⁰⁰

A 2010 Report by RAND Corporation noted:

In 2000, of the estimated 3,200 fighter aircraft operated by the PLAAF and PLAN, for example, all but approximately 75 "fourth-generation" Su-27s ("Flankers") imported from Russia and 20 domestically designed and built third-generation JH-7s, were based on the 1950s-era second-generation MiG-19 and MiG-21. China's fighters, moreover, were dependent on ground-based radar or their largely out-dated on-board sensors to locate and identify enemy aircraft, as China had only one operational AEW aircraft. In addition, except for the Flankers, they were limited to within visual-range engagements, as China's domestically-produced aircraft were not equipped with Beyond-Visual-Range (BVR) missiles. China's electronic warfare capabilities were minimal as well.¹⁰¹

However, the picture has different view today as PLAAF has fast tracked its modernization process during the last 10 years. In its 2014 Report, the Pentagon maintained that the PLAAF on-going "modernization is taking place at a rate unprecedented in history and is rapidly closing the gap with Western air forces across a broad spectrum of capabilities including aircraft, command and control (C2), jammers, Electronic Warfare (EW), and data links."¹⁰² PLAAF is made up of 'approximately 330,000 personnel and more than 2,800 total aircraft, not including unmanned aerial vehicles (UAVs).' Of these 2,800 total aircraft, about 1,900 are combat aircraft, 600 of which are up to date (generation 4 and 4.5 fighters). China is also trying to acquire Su-35 aircraft from Russia, along with its 'advanced IRBIS-E passive electronically scanned array radar system.' The Su-35 aircraft should considerably enhance China's air power projection in the South China Sea.¹⁰³ China has developed the H-6K variant with new turbo-fan engines for extended range. It is believed to be capable of carrying six land attack cruise missiles (LACMs). Modernizing the H-6 into a cruise missile carrier has given the PLAAF a long-range stand-off offensive capability with precision-guided munitions.¹⁰⁴ China is working on two

major new fighter projects, including the J-20 and J-31 stealth fighters.¹⁰⁵ While most of the PLAAF's newer planes like the J-10 and J-11 are technically domestically produced, the Chinese military industrial complex depends too much on the appropriation of foreign technology.¹⁰⁶ The PLAAF has been forced to retire much of its obsolete equipment, but has gained a significant qualitative improvement in its capabilities. The basic difference between China and India's military modernization processes is China's thriving domestic defence industry. As a result of the integration with its civilian firms, the defence firms have succeeded in making improvements in research and development and production areas. The positive effect of the increased domestic arms production has resulted in increased weapons exports.¹⁰⁷ Unlike India's military modernization process, which has heavily relied on foreign arms suppliers for the latest and greatest military hardware, China has domestically developed and produced many of their modern weapons systems. Defence exports have formed a core part of China's military modernization effort as it greatly facilitates the expansion of Chinese influence. Chinese exports of major arms have increased by 143 per cent between 2005–2009 and 2010–14. China's share of global arms exports increased from 3 to 5 per cent.¹⁰⁸ In March 2013, China surpassed the United Kingdom to become the world's fifth-largest arms exporter.¹⁰⁹ Chinese defence industries have come a long way in producing equipment and creating a strong base for domestic weapons manufacturing to build upon, but it still relies on foreign suppliers, especially Russia, for more advanced weapons technology.

In a nutshell, China has persistently focused on the modernization of PLAAF with the aim to give the force an extensive reach along Chinese borders into the East and South China Seas and other target regions and groups.

The effects of China's military modernization on its foreign policy

China's military modernization has produced two trends in Chinese foreign policy. First, its assertive military power projection has increased in both South and East China Seas to safeguard its own energy security and global trade interests. Second, in many areas Chinese foreign policy has become more moderate as its military has modernized. China's willingness to positively contribute to international peace and stability has maximized. For instance, China not only denounced North Korea's nuclear tests but played a significant role in building multilateral pressure against Pyongyang in 2006, 2009 and 2013 — despite the fact that China has had a long history of political, economic and military cooperation with North Korea. China has also become increasingly positive towards certain global requirements contributing to “naval escort, sea-lane protection, anti-terror cooperation, prevention of proliferation of weapons of mass destruction and nuclear security,” all of which have been hailed by the international community.¹¹⁰

China's power projection in the South China Sea: South China Sea (SCS) region has always held strategic importance for being resource rich and

for being a vital maritime route between the Indian Ocean and the Pacific Ocean. Recent developments in the SCS have established its importance for China's foreign policy, especially when it comes to achieving effective control over its claimed EEZs. The Strait of Malacca has been considered one of China's Sea-Lanes of Communication (SLOC) and has been a chief chokepoint for shipping into the SCS. The Chinese government is concerned over the increased presence of the Indian and American navies along this SLOC.¹¹¹

In 1992, the National People's Congress adopted the Law of the PRC concerning the Territorial Sea and the Contiguous Zone, successfully validating China's claim over the SCS into domestic law. The clashes between Chinese forces and other claimant states increased significantly following the passing of the law.¹¹² However, with China's escalating economic, military and political clout, other claimant countries viz, Vietnam, Philippines, Malaysia, Brunei, Indonesia and Taiwan have carefully balanced their competing relationship with Beijing. The acquisition of more attack submarines and larger surface combatants has given China a significant military edge over all other claimants, none of whom possess an aircraft carrier.¹¹³

Table 4**China's South Sea Fleet**

In addition to the maritime defence from Dongshan to the Vietnam border, this fleet will also be active in the Indian Ocean, a concern for Indian Security establishment. The area of responsibility of the South Sea Fleet corresponds to Cuangzhou MR, and to seaward (including Paracel and Spratly Islands). The HQs of the fleet are located at Zuanjiang, with support bases as Yulin and Guangzhou.

South Sea Fleet Details

Submarines	
Nuclear Powered Ballistic Missiles Submarines (SSBN)	1
Nuclear Powered Attack Submarine (SSN)	2
Attack Submarine with Anti-Submarine Warfare capability (hunter killer) (SSK)	18
Major Surface Combatants	
Destroyers with Anti-Ship Missile, hanger & SAM (DDHM)	5
Frigate with Anti-Ship Missile, hanger & SAM (FFGHM)	9
Frigate with Anti-Ship Missile (FFG)	12
Patrol Craft Fast with Guided Missile (PCFG/Patrol Craft with Guided Missile (PCG)	42
Patrol Craft Coastal with Anti-Ship Missile (PCC)	20
Landing Platform Dock (LPD)	2
Landing Ship (LS)	51
Mine Countermeasures Vessel (MCMV)	10

Source: Nagender SP Bisht, *PLA Modernisation and Likely Force Structure 2025*, (New Delhi: Vij Books, 2015)

Table 4 shows China's efforts to boost its presence and power projection in the SCS and Indian Ocean region.

The Pentagon's 2015 Report has noted that officially China, 'seeks to ensure basic stability along its periphery and avoid direct confrontation with the US in order to focus on domestic development and facilitate China's rise.' However, Chinese leaders in 2014 demonstrated "a willingness to tolerate a higher level of regional tension as China sought to advance its interests, such as in competing territorial claims in the East China Sea and South China Sea."¹¹⁴

China's enhanced involvement in the East China Sea: The Senkaku/Diaoyu issue has highlighted China's forceful stance which it has taken on its territorial claims in East China Sea, especially since 2012. At the heart of the dispute have lied eight uninhabited islands and rocks in the East China Sea. They have a total area of about 7 square kilometres and are located in the north-east of Taiwan, east of the Chinese mainland and south-west of Japan's southern-most prefecture, Okinawa. The islands are controlled by Japan.¹¹⁵ The islands hold significance, as they are adjacent to vital shipping lanes, bid rich fishing grounds and lie near potential oil and gas reserves. They have also been located in a strategically significant position, amid rising competition between the US and China for military primacy in the Asia-Pacific region.¹¹⁶ Within this context, PLAN's modernization process places an increased focus on East and South China Seas.

In short, China's military modernization has influenced its foreign policy in two ways. First, its increased power projection in both South and East China Seas with a view to safeguarding its energy, security and global trade interests. Second, China's active participation in maintaining international peace and stability.

Sino-Indian military build-up: Power projection or an arms race?

China and India do not appear to be engaged in an arms race. They have been instead going through a natural phase as they acquire military power and importance in the international arena.

Although India and China are modernizing their defence forces, yet their inclination in general is to avoid war and extend economic cooperation for the mutual benefit. Tanvi Madan of the *Brookings Institute* has observed the shifting trends in the Indo-China relationship in the following words:

Neither China nor India's relationship with China are what they used to be a decade and a half ago. For one, there is much more high-level engagement, with senior policymakers meeting in bilateral, regional, and multilateral gatherings. The two countries have a number of political dialogues in place, including on Afghanistan and counterterrorism, as well as a defence dialogue and a number of economic dialogues. The countries' border dispute remains unresolved, but mechanisms have been put in place to manage it. They have cooperated in multilateral settings, including on climate change, trade, and global economic governance. Indeed, bilateral

trade has gone from just over \$2 billion in 2000 to 2001 to \$65 billion in 2013 to 2014 and the investment relationship has also grown as well, albeit more slowly. There's also more people-to-people interaction, with close to 800,000 people traveling between the two countries in 2012 — four times the number a decade before.¹¹⁷

However, both India and China have been vocal about their sensitivities, recognizing the competitive elements in the relationship, while expressing concern about each other's behaviour in the region. India, on its part, has focused on building up internal strength and external partnerships. Beyond economic growth, India is profoundly modernizing Indian military capabilities. Increased budget has been allocated for improving the border infrastructure, particularly in India's troubling frontiers. Moreover, India has expanded high-level engagement with many of the countries engaged in China's periphery, like Australia, Japan, the US and Vietnam to exert its influence across the region.¹¹⁸ China has also been increasingly assertive in areas that concern India the most, particularly the Indian Ocean region. However, like India, China has also desired to engage its competitor economically. During Chinese President Xi Jinping's visit to India for the first time in September 2014, a border incident highlighted the potentially conflictual side of the relationship. However, the two countries did sign a number of agreements regarding cooperation in the railways sector, on smart cities, as well as did reach understanding on establishing special economic zones in the Indian states of Gujarat and Maharashtra.¹¹⁹

Business once again reached at a central stage during Indian Prime Minister Narendra Modi's visit to China in May 2015, where 24 agreements were related to trade, investment, and cooperation in the fields of maritime, railways, space and education were signed.¹²⁰ Despite the economic engagements, President Xi's visit to India was accompanied by visits to Sri Lanka and the Maldives (under the aegis of China's 'Maritime Silk Road' strategy) and preceded by Modi's visit to Japan and a visit by Indian President Pranab Mukherjee to Vietnam. Modi's visit to Mongolia and South Korea immediately after his visit to China has indicated the mounting presence of both the countries in each other's peripheries. It has also validated the potential for both countries to leverage relations with third parties to influence the bilateral relationship.¹²¹ The focus on economics and connectivity does not, however, connote that *Realpolitik* would be missing altogether from the future agendas of China and India. Nevertheless, it does not mean that an arms race, which may result in a potential conflict, is in the offing. While the rivalry persists, India-China's economic interdependence, their expanding military capability and a pragmatic approach to foreign policy on both sides would minimize their threat perceptions from each other.

Conclusion

The success achieved by India and China in showing substantive economic growth has encouraged both to go for military modernization in order to ensure their security as well as to project their power. India's land-centric

defence focus has gradually been shifting to maritime strategy. India has sought to become a power in the region in general and in the Indian Ocean region in particular. China has aimed at developing A2/AD capabilities to wield power over the seas and sky close to China. The increased presence of the US in Asia has given a new boost and dimension to the modernization policy which both India and China have been pursuing. Both India and China have been modernizing their missile capabilities and have also been acquiring Ballistic Missile Defence (BMD) system. India's main focus has been on the development of "nuclear triad". While it has already succeeded in equipping its army and air force with nuclear capability, the commissioning in 2016 of INS Arihant, India's indigenously designed and developed nuclear-armed ballistic missile submarine, would complete the nuclear triad. It would augment India's force projection in the maritime domain. C4ISR is at the heart of China's military modernization strategy. It has also developed a forceful nuclear triad, i.e. strategic bombers, land-based missiles and ballistic missile submarines. China has been advancing nuclear C3 capabilities in its missile defence system. PLAN has advanced its ability to initiate anti-surface warfare, naval air defence and force projection missions. The commissioning of naval aircraft carrier *Liaoning* would enhance its air power projection, particularly in the Indian Ocean region and South China Sea, while simultaneously performing a range of other naval missions. PLAAF has been enhancing its capabilities including airborne C2, jammers, EW and data links. China has been increasingly focusing on the development and acquisition of fifth generation stealth combat aircrafts like Chengdu- J 20.

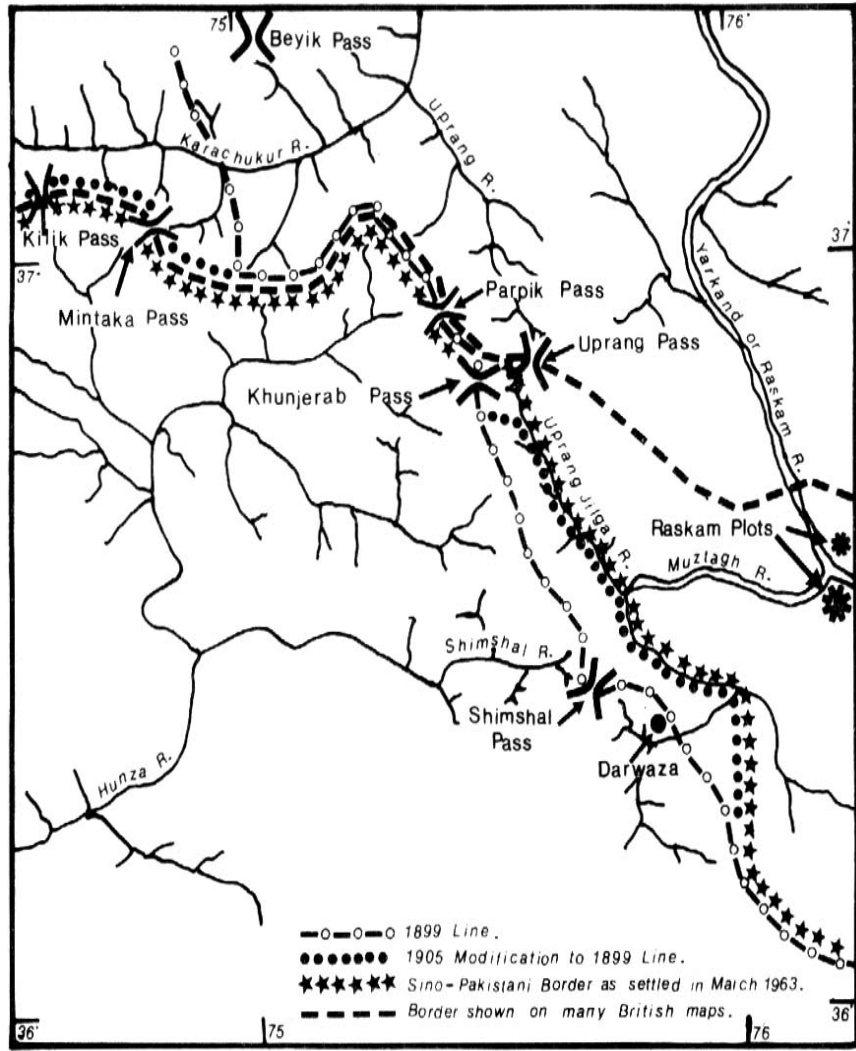
The historical legacy of mistrust between China and India still persists. Both have been engaged in modernizing their respective defence forces, yet the element of cooperation has gained a prominence in their relationship. Their investment on military modernization should not be seen alone in the light of on-going arms race between them. It can be taken as a projection of their growing economic and political power. Despite the fact that both of them have a history of mutual mistrust and suspicion, recent Indo-China bilateral trade pattern has indicated that economic cooperation will take precedence over the existing conflicts and perceived threats. Military modernization, however, would remain a perennial feature.

APPENDIX

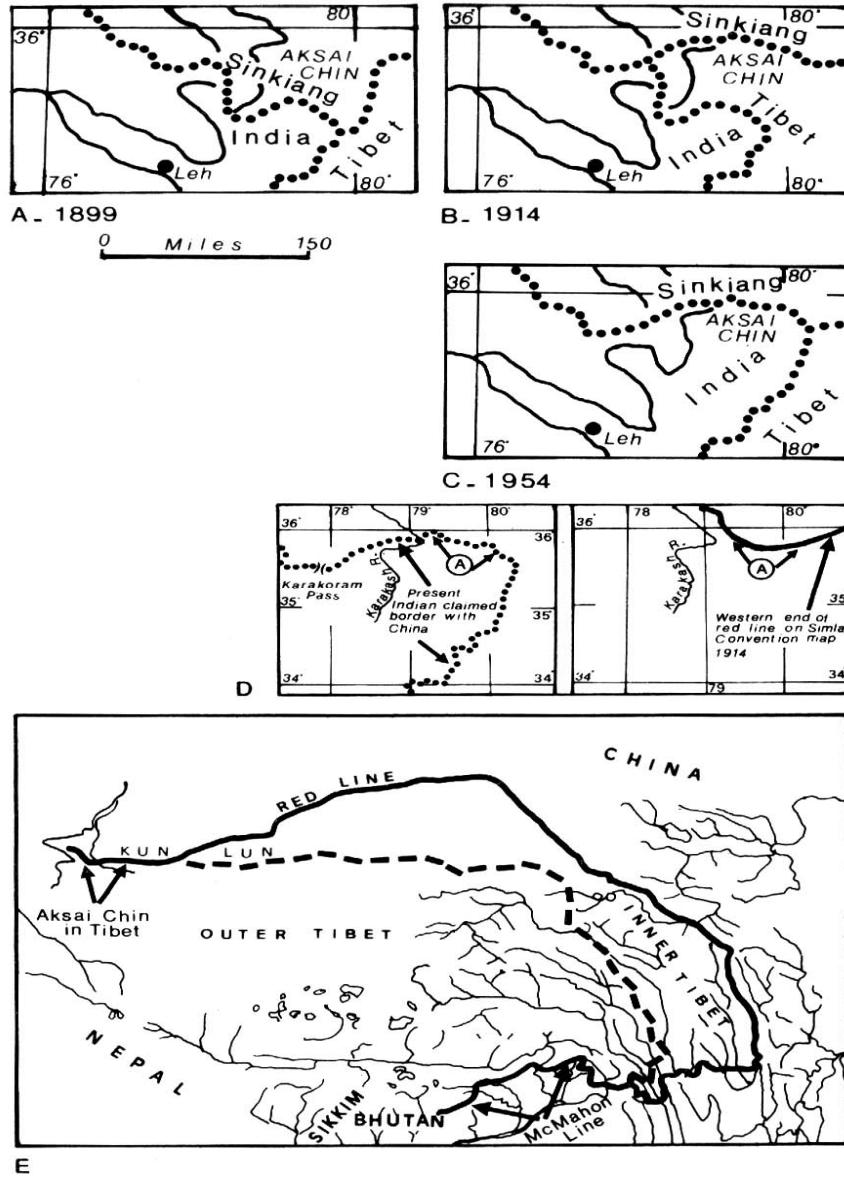
Appendix 1



Map 1 Aksai Chin, Source: Alastair Lamb, Kashmir



Map2. The Western Sector of the Northern Frontier, 1899, 1905 and 1963



Map 3 The Simla Convention Map and the altered status of Aksai China

A, B & C. Three stages in the evolution of British and Indian views toward the Aksai Chin. Accepted as the Sinkiang by the 1899 Note (and its 1905 modification), an attempt is made in 1914 by means of the Simla Convention Map to transfer it to Tibet. In 1954, after the Transfer of Power, the Government of India moves the Aksai Chin from Tibet to India, ignoring the fact that in the

years immediately preceding 1947, the British Government of India adhered (if to any line at all) to the 1899 Note boundary as modified in 1905.

D. The north-western end of Sino-Indian border in the Aksai Chin as claimed by India in 1954.

E. The Simla Convention Map. The Sino-Tibetan border ("Red Line") not only indicates the Aksai Chin border but also the "McMohan Line".

(Sources for maps 1, 2 and 3 are taken from: Alastair Lamb, *Kashmir- A disputed Legacy 1846-1990*, Oxford University Press, 1991)

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