As the cloud of fighting a two-front war is hanging over India, the diplomats are having a
tough time as they are busy buying time for New Delhi. Though, in the era of a nuclear
weapon, it seems far from the reality that both powerful nations will have full-blown
conventional war. However, the legacy which China own of being a non-reliable and
expansionist country, nothing can be neglected. On the other hand, Pakistan is continuously
lurking to find an opportunity to reinforce itself behind Chinese aggression. Thus, it became
very crucial to understand the preparedness of the Indian armed forces. Although India has
the fourth most powerful military power in the world still the armed forces are facing a huge
challenge of modernization. Looking at the threat perception of India it is important to
overcome those challenges. This article, explains why do Indian armed forces need to be
modernized? Why policymakers are having a tough time in doing so and at last, it will
highlight the key projects which are currently underway in the process of modernization.

Introduction

Modernization of armed forces is a complex process; it involves all the possible changes in
the material capacity to meet the strategic objective. Modernization is the expression of the
growth of national ambition. India is the responsible power in the multi-polar world.
Currently, a dominant power in the Indian Ocean, south Asian region and as envisaged by
Price Waterhouse Cooper, it is second-largest economy by 2050. There is the assigned role
for India based on these perceptions. To achieve this, India has to formulate certain policy
and shall contemplate on the military means to achieve it. This needs astute planning and
strategy in the constantly changing environment. Historically, Indian Military thinker is
more focused toward India’s land borders due to a long history of the border dispute.
However, in the changing circumstances variety of threat like territorial, environmental,
natural disaster, migration, drug trafficking, radicalization, terrorism, piracy and also threat
to cyber, nuclear and energy security. These all threat decides the requirement of the
military organization. In the current circumstances, India shall, while ensuring for
conventional warfare, be ready for non-conventional as technology has given equal
opportunity to weak to surprise strong. Whether in the Indian Ocean or Indo-Pacific region,
a strong navy is the Instrument of the safe and secure line of communication and energy
corridor. Guaranteed security in India’s maritime domain gave assurance to its neighbours.

Rising manpower cost and changing nature of modern warfare need prioritization and
restructuring of the armed forces. The defence budget of Indian armed forces has increased
by the factor of 2 from 2009-10 to 2018-19, but the pension budget for the same period of
time has increased by a factor of 15. In September 2019, the government finalizes to spend
$130 billion in 5 to 7 years to modernize the armed forces. The plan includes the acquisition
of a range of weapon includes warship, missile, drone, fighter jet, surveillance equipment, rifle and creating architecture for artificial intelligence. Highly effective weapon not only improve the capability of the force but multiple the morale of the soldiers to a towering height. A sophisticated protective gear assures the man in uniform that he can easily overcome small wear and tear and give his best to the role assigned with utmost confidence.

Unfortunately, what many ignore or do not able to grasp is that modernization of armed forces is the time-consuming process and requires a clear vision, strategy and national goal. It cannot be the one which changes with the change in the government. It is something like adding a block to an existing one. National security is not the scenario where one run for water after seeing the house on fire. It is the timely analysis of threat and building strategies to avert them. Both China and Pakistan are continued to orchestrate its destabilizing design against India. While Indian airpower has to defend multiple fronts. Pakistan has only one front and China without the engagement of any world power has only one front too. It is a common principle that it is not the machine but the man behind the machine that shifts the outcome of the war. However, undermining the enemy’s capability itself goes against the basic principle of war.

Image source: CNS via REUTERS
Modernization of Indian army

The process of modernizing the largest standing army in the world is an arduous task. The modernization of armed forces remains in the public domain because of the continuous tussle of the army with hostile neighbours. The process of restructuring the Indian army is taking place after necessary approval. The concept of IBG (Integrated battle group) introduced in the formation, they are light brigade-level organic group capable of taking swift action. The aim of the reform is to cut the overall strength of about 1,50,000 personnel in 5-7 year. This aims to make army leaner and finer. Cutting the personnel size will save adequate fund for equipping existing soldiers. A lot of programmes have been made to acquire a modern rifle, machine gun and protective gears. The army has already begun the process to acquire around 7,00,000 rifles, 44,000 LMGs 44,600 carbine. In a contract signed between the ministry of defence and the US firm Sig Sauer for procurement of 72,400 assault rifles. The army would receive 66,400 of those and rest will be given to navy and air force. The first batch of SIG 716 has already arrived in December 2019.

Apart from this, a joint collaboration between ordinance factory board and Russia will make AK 203 Kalashnikov rifle in Amethi, Uttar Pradesh, which will be mainstay weapon of Indian army. Another key development is in Bulletproof jacket developed by Major Anoop Mishra, which has been found successful and will be manufactured by the private sector. Apart from this, India is reorganizing its mechanized force to achieve strategic mobility for a quick thrust into enemy territory. Further, to add teeth to its firepower India has successfully ordered and inducted M777 155 mm howitzer from the USA and inducted new variant of DRDO developed Pinaka Multiple rocket launcher, which can fire a salvo of 12 HE rockets in just 44 seconds and has a range up to 90 km. The system mounted on TATRA truck adds a feather to its mobility. However, with all these inductions and many others in the pipeline, the major issue that Indian the army still faces is the availability of funds for future procurement. Since modernization is the continuous process and cannot be halted once new procurement is made.
Modernization of Indian Navy

With the emergence of China as the major world power by becoming the second-largest economy in the world, Indo-Pacific region, especially the Indian Ocean region has come into Sharpe geopolitical radar. Since, India being the natural guardian of the region, any intrusion can challenge the national security of India. By keeping this threat in mind Indian navy has already geared itself for any future skirmish in the region. Though keeping the threat perception in mind, India Navy has to walk a long distance before considering itself as the world-class navy. According to the former naval chief Admiral Sunil Lamba (Rtd), by 2050, India will have 200 ships, 500 aircraft and be a world-class navy. At present the Indian navy has around 130 vessels only. Indian Navy is the forerunner in India’s flagship Made in India programme and is inducting various indigenous ships and submarines under various projects. India’s procurement of naval aircraft P-8I Neptune anti-submarine
Modernization of Indian Armed Forces

aerospace from the USA, leasing submarine **INS Chakra** from Russia, a joint venture of **Barack-8 missile** with Israel, planning of equipping Talwar, Shivalik class frigate and Kolkata class destroyer with Brahmos cruise missile will enhance the capability to Indian Navy many folds. Although, converting the Indian Navy into a Blue Water Navy is far from reality. India needs to focus more on the surveillance and reconnaissance to check the Chinese incursion which frequently docks its nuclear power submarine in its port in Indian Ocean region developed under its string of pearl theory encircling India.

**Modernization of Indian Air Force**

With the improvement in technology and shifting nature of war, the role of the air force has increased a lot. As in the nuclear era, full-blown war seems far from reality. Less duration, high-intensity war is the order of the day. The Indian air force is one of the best-funded forces in the world. However, it’s the worst-funded for the assigned task. Any negligence in the modernization of air force had an impact on the overall performance of the armed forces. Indian air force which as the sanctioned strength of 42 squadrons is currently operating only 31 squadrons, however, out of these 31 squadrons 50% are obsolete aircraft of the ’70s and 80’s era and on the verge of decommissioning. To keep the integrity intact air force modernization shall be the utmost priority.

However, besides sealing the deal for buying 36 **Dassault Rafael** from France in fly-away
condition can provide little relief but seeing the threat perception is drop in the ocean. Indigenization of Indian air forces is at the worst phase. The light combat aircraft (LCA) Tejas is by no mean able to full fill the requirement of the Indian air force. Recent clearance by DAC (Defense acquisition council) to buy 33 fighter jet (upgraded 21 Mig-29 and 12 Sukhoi MKI) after a violent clash between India and China in Galwan valley in Ladak shows hollowness in the Indian strategy. You cannot dig well for water when the house is on fire. However, recent induction of CH-47 multi-mission Chinook helicopter and Boeing AH-64 Apache has enhanced many capabilities. Indian Air force also maintains UAV (Unmanned Aerial Vehicle) squadrons including searcher II, Heron from Israel and indigenous DRDO developed Rustom. The air force has successfully tested beyond visual range air to air missile named Astra and already deployed six surfaces to air missile squadron in the northeast to deter Chinese jet. Indian air force still needs edge during two front wars, where it’s Dassault Rafael, Sukhoi 30MKI, Mirage 2000, MIG-29 will be competing with primarily Pakistan F-16, JF-17 etc and Chinese Chengdu J-20, Shenyang FC-31 etc. IAF has undertaken a series of measure to face any unseen challenge. In April 2019, it held 13 days long pan-India Military exercise. Although, geography along Chinese border favours India still astute planning is needed by air forces to be a cut above.

**Conclusion**

It is undisputed fact that countries, which modernize its military ahead of time, deter the adversary from waging war. Today’s soldier needs to be technically savvy, physically and mentally robust. Indian armed forces also need a long term strategy which includes improving teeth to tail ratio, improving command, control, communication, intelligence and developing a large indigenous weapon. However, over the period of time, Indian armed forces decided to carry out extensive and far-reaching reform with the aim to enhance its warfighting capabilities. A lot is required to achieve the strategic objective and the military has the key role to play in attaining those objectives. Thus, it becomes crucial for the Indian Armed Force to look into the loophole in the limited time frame and work to overcome those loopholes in a time-bound manner.

*The views and opinions expressed in this article are those of the author and do not necessarily reflect the views of The Kootneeti Team*