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RESEARCH ARTICLE

**AN ANALYSIS ON INDIA'S MILITARY DEVELOPMENT AND SUCCESS OVER THE
YEARS**

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Abstract

India has signed agreement with Philippines BrahMos and now India is going to sign deal with Korean next Gen gunship. India is emerging as an alternative to China in export of defense items. India's Made in India programme has led to the development of indigenous products with both Public and Private sector involved and also start-ups and small enterprise have entered, Today, India has the largest ground force in the world and the 4th largest army, it has world's finest weapons, aircrafts and submarine. Since Independence India has advanced its defence sector with research and development, along with making India a nuclear state and production of dangerous weapons, along with that Indian has around 120-130 warheads and have exported artillery to UAE, missiles and aircrafts to Mauritius and Myanmar, in the upcoming years it is going to amplify its export market. With upcoming threats from China and Pakistan, India has also strengthened its nuclear weapons. India has signed agreement with 20 countries for the transfer of technology and use of dual use technology.

Keywords: Indian, defence, indigenous product, artillery export, China, Pakistan, nuclear weapons, ground force.

Introduction

India has emerged as the world's largest ground force. There are 1.4 million personnel in the Indian Army. The largest standing army with 1129900 Active personnel and 960,000 reserves in the

world. There are even recruiting Zones in the country for the purpose of recruitment in the Indian Army. With advancement in technology, India has deadly weapons. India is now emerging as a manufacturing for defence production and this step have been taken because of government defence policy scheme. In

2014 the government issued 217 defence licenses to boot manufacturing in defence and now the number has increased by 460 in the last 5 years. In India will not only make sufficient self-reliance in the defence sector and became maker player in the defence export. In 2020, the Indian government introduced a new draft policy that sets to make \$25 billion defence production target and includes making 5 billion dollar from aerospace and defence goods and services .Export Business contributed 1 billion in 2019 . Defence witnessed strong growth in the export business in the past two years. India target to export military hardware worth 5 billion dollar in the next 5 years. India exports defence to countries like US, Russia, Finland, Australia, Germany, Israel, South Africa and Sweden. The Minister of Defence will set up a technology assistant cell to assist to design, product, manufacture major armed vehicles, submarine, fighter aircrafts, and helicopters. India at present is manufacturing everything from guns to aircraft to submarines. India is developing many indigenous weapons and increasing its quality and benchmark to International standard .Countries like Myanmar, Indonesia, Philippines, Bangladesh, Vietnam are interested in Indian defence new weapons because of low cost compared to other countries , India will sale the swathi Radar at a cost of 40 billion dollars with Romania .In its strategic outreach the Modi government has decided to present itself as an alternative to China in providing quality defence items in the Indian Ocean region countries. India has come up with 152 defence items that are available to friendly items. Philippines have emerged as the first country for the export of missile. India is currently engaged in developing military base in the Agalega Island in Maurities and a navy base to boost its basis. These will facility both air and surface maritime patrols in the South West and Indian Ocean region .India and Maldives have signed an agreement for support and development a coastal guard harbour at sievaru. India is trying to increase its defence export business and expand it defence cooperation with maximum countries and initiating trade and defence ties with major Asia countries and starting as an alternative to China in providing defence items. India in the past very years has made its defence system extremely strong with manufacturing of

submarines, military weapons and aircrafts and with technological advancement.

Research Methodology

For the purpose of this exploration, I have used a amalgamation of two of the archetypical social sciences research tools application—as they are authentic and brilliant method to assemble statistics from multiple appellant in an methodical and convenient way. Questions were asked to the common youth, economist, business men survey, interviews – consisting of several interrogations which were dispersed among representative of each contender group.

Objective of the Research Paper

The main areas of exploration in this paper incorporates

1. India defence export market.
2. India's defence preparedness and development over the years.
3. India's defence advancement from 1947 to 2020.
4. The future of India defence.

Literature Review

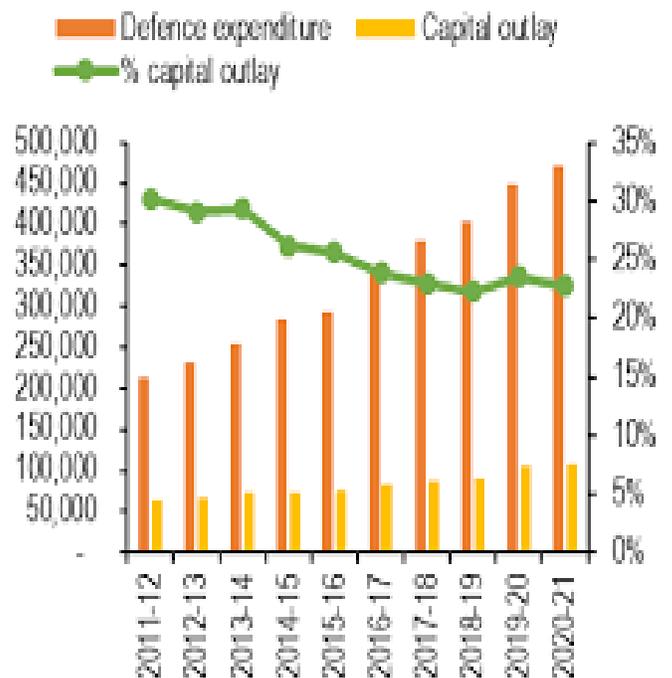
There has been an initiative by the government and private sector to encourage small scale industries and start up in defence research and development to reach India's goal of becoming self-sufficient .The Minister of Defence introduced a new version of development research and development organization procurement manual 2020. The government has also planned to build new infrastructure and also a defence park in Kerala to manufacture equipment's for armed forces with the objective of promoting small , micro and Medium enterprises and boosting Make in India manufacture and make India self-reliance .The FDI has also been limited to 74% and that is through government route . India plans to reach 70% in defence sector in becoming self-reliant. Indian Defence has boosted over the years, with defence preparedness with new missile being brought, made and being tested. India has also purchased Rafale Jets

from France and Mirage. From submarines to stealth destroyers the Indian Defence has developed significantly. INS Sardar Patel which is at Gujarat, the Indian Navy improved the infrastructure and effectiveness in Gujarat and which has further enhanced collaboration and synergy with other maritime agencies of the government. The Forward operating Base in Gujarat has intensified logistic support to the Indian Navy who are deployed in the Northern Arabian Sea which also includes the International Maritime Boundary line with Pakistan. The Akash weapon, upgraded Mirage -2000 aircraft, Agni V missile maiden canister based trail, INS Visakhapatnam, Kalvari: Scorpene class stealth submarine and Hercules C130J land on tiny runway. Under the Prime Minister Narendra Modi there has been massive developed in the defence system.

The government has spent rupees 2.37 Lakh crore on the modernization of armed forces in the past few years, for the year 2016 -17 it was 68,280.16 crore, for 2017-18 it was 72,732.28 crore and for 2018-19 it was 75,900.54 crore .India had signed 149 contracts with India vendors and foreign vendors for capital procurement of defence equipment for Armed Forces. In 2001 the defence Industry was only restricted to public sector. However with 100% access to private sector with Foreign Direct Investment up to 26% licensing both the subjects, However with the change in FDI policy, foreign investment is restricted to 49% through automatic and beyond 49% through government. From the time, the government has announced Made in India scheme, the government has taken measures to enhance indigenous designs, manufacturing of defence and technology equipment in the country, in fact India is emerging as a exporter in defence equipment to other countries, this developments happening through both public and private sectors. The strategic partnership model with the formation of a long term strategic partnership with Indian entities by a transparent and comparative process . Since Independence, India is strengthening its security forces, missile development with technology advancement and also increase the budget for Indian Defence.

Findings

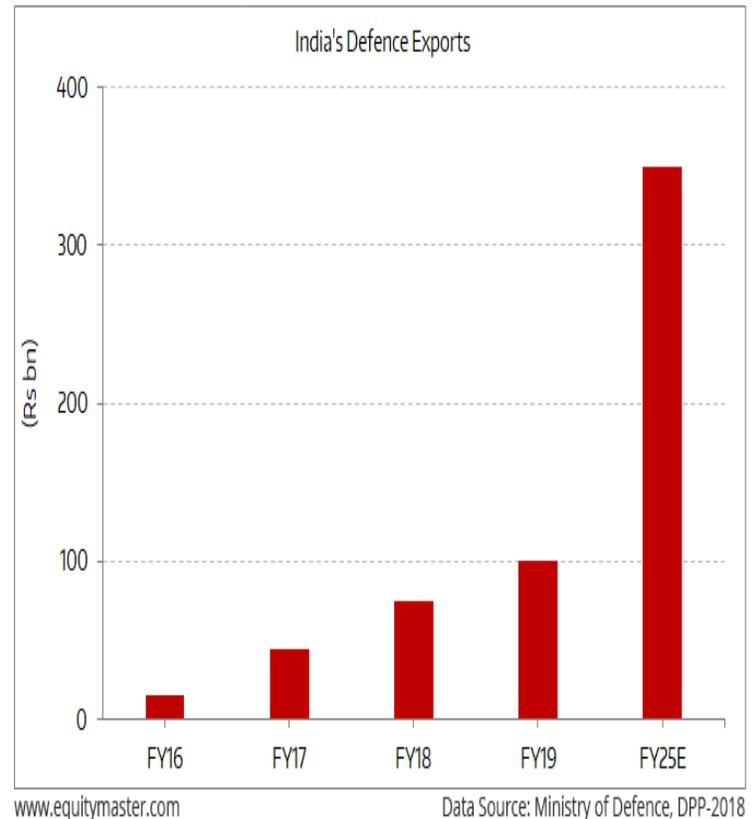
During the time of British Raj there was hardly any development in Military apart from the factories opened for manufacturing guns and ammunition. In 1947 after the Independence technical development happened which later came under the Defence Research and Development Organization. Till 1950 there existed only 19 ordinance factories. There has been humongous development in the defence sector in the late half of the 20th century .In the 1980s India began a renewed effort to escalate its domestic industry through research and development and indigenous missile systems such as Prithvi ,Nag , Akash, Agni. It has also developed supersonic cruise missiles like Brahmos .India from 2000 to 2020 has also increased its budget allocation from 58,587 crore to 471,378 crore. Today, India is the fourth largest spending country on military. Today India is the 2nd largest army in the world with 2140000 active and 11, 55,00 reserved and available for military is 31,91,29,420. Indian soldiers are famous for their war at high levels near the mountains. IAF has set a world record with Uttarakhand rescue that saved 20,000 civilians in an astonishing 2140 missions .In the global Fire power India stands are the fourth position and Indian defence budget is 63.9 billion dollar and ranked is 5th, In fact when it comes to Nuclear Weapons.



India has 120-130 warheads and stood 6th position in the world. If we talk about the land forces of India, it has tanks 4426, armoured fighting vehicles 5681, total artillery 5067, self-propelled artillery 290, rocket artillery is 292, coming to Air Forces of India, India has a total aircraft of 2216, fighter aircrafts 323, multirole aircraft 329, attack aircraft 220 and helicopters 725. Navy force of India has a total naval of 214, aircraft carriers 2, destroyers 11, Frigates 15, corvettes 24 and Submarine 16. Coming to the Conflict fought by Indian army over the years ,the first world war where 1.3 million Indian soldiers were there and 74000 lost their lives, in the second world war even there were around 2 lakh soldiers from India, now After Independence, India has fought many wars starting from Kashmir war of 1947, the fight between India and Kashmir, followed by the Annexation of Hyderabad in 1948, 5 days of fighting and India free Hyderabad from the Nawab rule and joined it with India ,even during the Korean war of 1950 -53, India provided medical assistance to South Korea, then comes to Sino-India war of 1962, and China took capture of some parts of Arunachal Pradesh , the war has just ended , the India Pakistan war of 1965 started , with the aim that India will loss the war as from the experience of Sino-India war, the main target was again Kashmir , India won the war followed by the Indo China (Chola) 1967 war , this took place in Sikkim, where China declared that Sikkim was part of China followed by both the Army fought the war and China has to fall back .In 1971 the Bangladesh Liberation war of 1971, East Pakistan started an Independence moment, where some of the Bengali refugee came to India for support, India gave total support to the East Pakistan people seeing this Pakistan strike a counter attack on India and Pakistan again lost the war against India and led to the formation of Bangladesh. The Kargil war of 1999, again Pakistan lost against India, since then India has not fought any official war .Weapons of Indian Army one of the strongest is Sukhoi Su 30 MKI engine

Since 2015 major companies like Airbus and Mahindra Defence systems, along with Safran has entered the Indian market to manufacture military helicopters, Fuselage of Apache helicopters, India has signed agreement with 20 countries to get free license access to a vast range of dual use technology, launch

of fast tracked projects like six scorpene diesel electronic attack submarines and indigenous produce like Tejas. India sale its multi-roe offshore patrol vessel(indigenous) to Maurities and lightweight torpedoesword US \$ 37.9 million to Myanmar. The Ordinance Factory Brand (OFB) has exported 40, 000 of 155mm artillery shells worth 322 crore to UAE.



DRDO has signed technology transfer contract with 16 Indian companies which also includes start-ups to produce high shells life , high nutrition , and foods to be consumed in any weather pattern and difficult terrain .India has also allowed Private sector into the defence production . For the year 2017-2018 the defence export of India was worth INR 4682 crore and for the years 2018 and 2019 it was INR 10,500 crore.

Way Forward

India in the next few years are going to come up with deadly weapons , like Durga –II , Aura, Surya, AMCA, TEDBF which will make India more powerful, Indian nuclear weapons have also advanced and it is strengthening its nuclear technology with

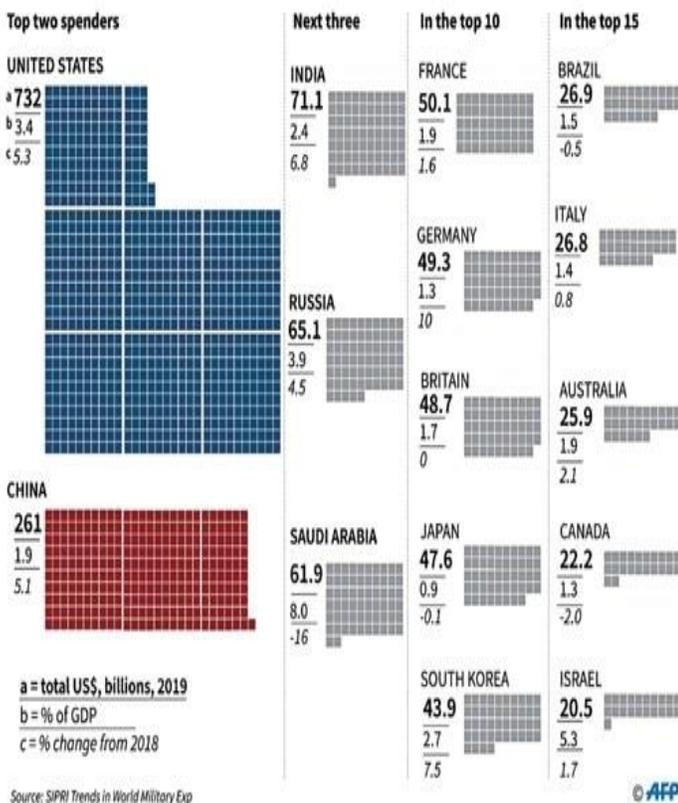
constant threat from China and Pakistan. India has the 4th largest army in the world and the biggest ground force. India will soon become a major export of defence items with its rapid growth in the indigenous production. India over the years have been fighting both direct and proxy wars and have send military assistance to many countries. The DRDO is working on developing ultra-modern weapons which can travel 6 time faster than the speed of sound. India export will increase in the next 5 years .India’s Made in India in the defence sector has also brought in more Foreign investors which will also enhance the defence economy of india.

India is one of the few nations in the world to have its own indigenous technological supremacy, it is also among the top seven nations with its own port generation combat aircraft and one of the 7 countries to have its own main battle tank , one of the 6 country in the world to developed its own nuclear powered submarine, one of the 5 countries to have its own ballistic missile programme , one of the 4 countries to have an air borne, early warning and control system and the only country along with Russia to have its own supersonic missile, India also has world class weapon systems , platforms and military equipment’s are based on cutting edge technology developed by the Defence research and development organization and has never started any war.

World military spending

Global military expenditure saw its biggest uptick in a decade in 2019, according to the Stockholm International Peace Research Institute

- ▶ Combined global total **\$1.9 trillion**, representing a 3.6% growth on 2018
- ▶ Five biggest spenders accounted for over **62%** of global military spending
- ▶ Top 15 account for **81%**



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Conclusion

India since the Independence of India has seen massive growth and development in the defence sector , from armed forces to aircraft to submarines.
