A STUDY ON INDIAN ARMED FORCES- INDIA'S SUPER POWER

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Abstract

A superpower is a country which has the capacity to project dominating power and influence anywhere in the world. Superpower status is achieved by combining means of technological, cultural, military and economic strength as well as diplomatic and soft power influence. When it comes to defence, Indian Air Force stands at number 4 in the list of strongest Air Force, India gets placed in 7th rank in the powerful navies' list and Indian Army again placed in 4th position at the best army rankings. Though, India is now the world's largest weapons importer it is slowly becoming self-reliant player. With sheer military size, India is now aggressively seeking a seat on the United Nations Security Council. It's also a nuclear power that has expanded its arsenal of warheads.

The **Indian Armed Forces** are the military forces of the Republic of India. It consists of three professional uniformed services: the Indian Army, Indian Navy, and Indian Air Force. Additionally, the Indian Armed Forces are supported by Indian Coast Guard & paramilitary organisations and various inter-service commands and institutions such as the Strategic Forces Command, the Andaman and Nicobar Command and the Integrated Defence Staff. With strength of over 1.4 million active personnel, it is the world's second-largest military force and has the world's largest volunteer army.

Objectives:-This study aims to gather information on how Indian Armed Forces are making India, a super power country. For this purpose, researcher has tried to find out the solutions for following questions:-

- What is the future of Indian Armed Forces towards development of India?
- What are the opportunities to serve in Indian Armed Forces?
- Impact of defence budget on Indian Economy.

Research Methodology

This research is purely a doctrinal research. This research is based on collection of data from secondary sources like journal, book, newspaper, magazines, websites and acts.

Major Results

In this study, a researcher is trying to get a result on implementation of strong policies by Indian Armed Forces towards economic, social and financial development of India. At the end researcher got strong results about adaptation of Innovative Science and Technology by Indian Armed Forces.

Keywords:- Indian Armed Forces, Indian Army, Indian Navy, Indian Air Force.

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INTRODUCTION- INDIAN ARMED FORCES

EMBLEM OF INDIAN ARMED FORCES

Service branches	Indian Army Indian Air Force Indian Navy

The **Indian Armed Forces** are the military forces of the Republic of India. It consists of three professional uniformed services: the **Indian Army, Indian Navy, and Indian Air Force.** Additionally, the Indian Armed Forces are supported by the Indian Coast Guard and the paramilitary organisations (Assam Rifles, and Special Frontier Force) and various inter-service commands and institutions such as the Strategic Forces Command, the Andaman and Nicobar Command and the Integrated Defence Staff. The President of India is the Supreme Commander of the Indian Armed Forces. The Indian Armed Forces are under the management of the Ministry of Defence (MoD) of the Government of India. With strength of over 1.4 million active personnel, it is the world's second-largest military force and has the world's largest volunteer army.

INDIAN ARMY

The **Indian Army** (Hindi: Bharatiya Thala Sena) is the land-based branch and the largest component of the Indian Armed Forces. The primary mission of the Indian Army is to

ensure national security and national unity, defending the nation from external aggression and internal threats, and maintaining peace and security within its borders. It conducts humanitarian rescue operations during natural calamities and other disturbances, like **Operation Surya Hope**, and can also be requisitioned by the government to cope with internal threats. It is a major component of national power alongside the Indian Navy and the Indian Air Force. The army has been involved in four wars with neighbouring Pakistan and one with China. Other major operations undertaken by the army include: **Operation Vijay**, **Operation Meghdoot** and **Operation Cactus**. Apart from conflicts, the army has conducted large peace time exercises like **Operation Brass tacks** and Exercise **Shoorveer**, and it has also been an active participant in numerous United Nations peacekeeping missions including those in: Cyprus, Lebanon, Congo, Angola, Cambodia, Vietnam, Namibia, El Salvador, Liberia, Mozambique, South Sudan and Somalia.

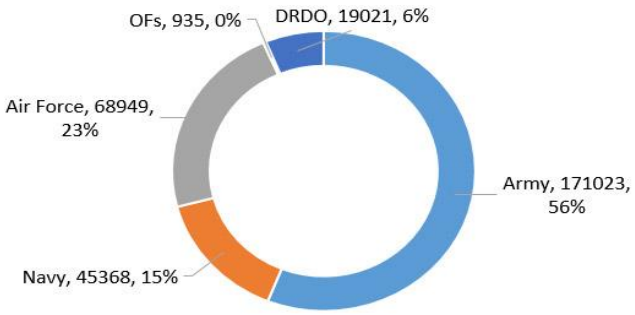
SOME RECENT DEVELOPMENTS AND BUDGET OF INDIAN ARMY

Apache AH 64D Longbow helicopters are one of the most advanced multi-role combat helicopters, featuring all-weather and night-fighting features.	
The **Arjun Tank** developed by India's Defence Research and Development Organisation (DRDO), for the Indian Army.	
TATA Kestrel -A modern armoured personnel carrier developed by Tata Motors and the Defence Research and Development Organisation (DRDO). It is developed with the intention to replace age old Soviet era BMPs and APCs in service with Indian army.	
In a major boost in fight against terrorism in Jammu and Kashmir and Pakistan Army on the Line of Control (LoC), the Indian Army has started inducting its newly acquired **American SiG Sauer assault rifles** in operations.	
The army recently announced its plan to procure 198 wheeled **Armoured Fighting Vehicles** (AFV) for reconnaissance & support to tank regiments in mechanised warfare.	
The **Barak-8 Air & Missile Defence System** provides 360 degree defence against various airborne threats.	

Pinaka is an indigenous Multi Barrel Rocket Launch (MBRL) system, which has been developed by Defence Research & Development Organization (DRDO) for Indian Army.	

Share of Defence Services

With the inclusion of Military Farms and ECHS in the Army's budget, the latter's allocation has increased by Rs 3,430 crore from the interim allocation. As in the past, the Indian Army with a budget of Rs 1,71,023 crore accounts for the biggest share in the defence budget, distantly followed by the other defence services. However, unlike its sister services, the Army's budget is largely revenue expenditure-driven.



As against a huge shortage on modernisation budget in the previous year, the latest budget has allocated an additional amount of Rs 6,893 crore, the same amount provided in the interim allocation. The additional amount is grossly inadequate, to say the least. However, partial relief is provided in the form of exemption of import of defence items not manufactured in India from the basic customs duty (CD). The MoD estimates the CD exemption will lead to a savings of Rs 25000 crore over the next five years.

Modernisation Budget of the Armed Forces (Rs. In Crores)

	2018-19 (Budgeted Expenditure)	**2019-20 (Budgeted Expenditure)**	**% Increase in 2019-20 (BE) over 2018-19 (BE)**
Army	21211	22951	8.2
Navy	19927	22106	10.9
Air Force	33085	36365	9.9
Total	74224	81422	9.7

Army's Modernisation Budget

Modernisation Head	2018-19 (Budgeted Expenditure)	2019-20 (Budgeted Expenditure)	% Increase in 2019-20 (BE) over 2018-19 (BE)
Aircraft & Aero-Engine	1813	2115	16.7
H&MV	1972	2128	7.9
Other Equipment	17198	18562	7.9
Rolling Stock	128	50	-61.0
Rashtriya Rifles	100	95	-4.7
Total	21211	22951	8.2

INDIAN NAVY

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The **Indian Navy** (Hindi:- Bharatiya Nausena) is the naval branch of the Indian Armed Forces. The President of India is the Supreme Commander of the Indian Navy. The Chief of Naval Staff, a four-star admiral, commands the navy. As of June 2019, Indian Navy has 67,252 personnel in service and has a fleet of 137 warships and 235 aircraft. As of March 2018, the operational fleet consists of one aircraft carrier, one amphibious transport dock, eight landing ship tanks, eleven destroyers, fourteen frigates, one nuclear-powered attack submarine, one ballistic missile submarine, fifteen conventionally-powered attack submarines, twenty-two corvettes, one mine countermeasure vessel, four fleet tankers and various other auxiliary vessels.

SOME RECENT DEVELOPMENTS AND BUDGET OF INDIAN NAVY

After INS Viraat was decommissioned on 6 March 2017, the Navy is left with only one aircraft carrier in active service, INS Vikramaditya, which serves as the flagship of the fleet. Vikramaditya. The Navy has an amphibious transport dock of the Austin class.	

The navy currently operates three Kolkata, three Delhi and four Rajput-class guided-missile destroyers. Replenishment tankers such as the Jyoti-class tanker, INS Aditya and the new Deepak-class fleet tanker INS Shakti- help improve the navy's endurance at sea.	
India also possesses a single Akula-class nuclear-powered attack submarine named **INS *Chakra***. She is under lease to India for a period of ten years. Three hundred Indian Navy personnel were trained in Russia for the operation of these submarines	

FUTURE OF INDIAN NAVY

By the end of the 14th Plan (2019), the Indian Navy expects to have over 150 ships and close to 500 aircraft. In addition to the existing mission of securing both sea flanks in the Bay of Bengal and the Arabian Sea, the navy would be able to respond to emergency situations far away from the main land. The Indian Navy has initiated Phase II expansion of INS Kadamba, the third largest naval base, near Karwar. Phase II will involve expansion of the berthing facilities to accommodate 40–45 more front-line warships, including the aircraft carrier INS Vikramaditya, raise manpower to 300 officers and around 2,500 sailors, and build a naval air station with a 6,000-foot runway. The Indian Navy is also in the process of constructing a new naval base, INS Varsha, at Rambilli for its Arihant Class submarines.

Revenue and Capital Expenditure of Indian Navy, 2019-20

	Indian Navy
Revenue Expenditure (Rs in Crore)	22212
Capital Expenditure (Rs in Crore)	23156
Total (Revenue and Capital) (Rs in Crore)	45368
Revenue Expenditure as % of Total	49
Capital Expenditure as % of Total	51

Navy's Modernisation Budget (Rs. In Crores)

Modernisation Head	2018-19 (Budgeted Expenditure)	2019-20 (Budgeted Expenditure)	% Increase in 2019-20 (BE) over 2018-19 (BE)
Aircraft & Aero-Engine	1900	2400	26.3
H&MV	20	45	125.0
Other Equipment	4863	3500	-28.0
Joint Staff	844	929	10.0
Naval Fleet	10300	12182	18.3
Naval Dockyard/Projects	2000	3050	52.5
Total	19927	22106	10.9

INDIAN AIRFORCE

The **Indian Air Force** (**IAF**) (Hindi- Bharatiya Vayu Sena) is the air arm of the Indian Armed Forces. Its complement of personnel and aircraft assets ranks fourth amongst the air forces of the world. Its primary mission is to secure Indian airspace and to conduct aerial warfare during armed conflict. The Indian Air Force, with highly trained crews, pilots, and access to modern military assets provides India with the capacity to provide rapid response evacuation, search-and-rescue (SAR) operations, and delivery of relief supplies to affected areas via cargo aircraft.

AIRCRAFT INVENTORY

Sukhoi Su-30MKI: The IAF's primary air superiority fighter with the additional capability to conduct air-ground (strike) missions is Sukhoi Su-30MKI. The IAF have placed an order for a total of 272 Su-30MKIs of which 242 are in service.	
The **Mikoyan MiG-29** is a twin-engine jet fighter aircraft designed in the Soviet Union. Developed by the Mikoyan design bureau as an air superiority fighter during the 1970s, the MiG-29, along with the larger Sukhoi Su-27, was developed to counter new U.S. fighters.	
The **Dassault Mirage 2000** is a French multirole, single-engine fourth-generation jet fighter manufactured by Dassault Aviation. Mirage 2000 evolved into a multirole aircraft with several variants developed, with sales to a number of nations. It was later developed into the Mirage 2000N and 2000D strike variants, the improved Mirage 2000-5 and several export variants.	
HAL Tejas is an Indian single-engine, delta wing, multirole light fighter designed by the Aeronautical Development Agency (ADA) and Hindustan Aeronautics Limited (HAL) for the Indian Air Force and Indian Navy. The Tejas is the second supersonic fighter developed by HAL after the HAL HF-24 Marut.	
The **SEPECAT Jaguar** is a British-French jet attack aircraft originally used by the British Royal Air Force and the French Air Force in the close air support and nuclear strike role. It is still in service in significantly upgraded form with the Indian Air Force.	

Recent Developments in Indian Air Force

The IAF has placed orders for 120 HAL Tejas fighters,36 Dassault Rafale multi-role fighters,112 Pilatus PC-7MkII basic trainers,72 HAL HJT-36 Sitara trainers,72 Pipistrel Virus SW 80 micro light aircraft, 65 HAL Light Combat Helicopters, 139 Mi-17V-5 helicopters,18 Israeli SPYDER Surface to Air Missile (SAM) units, 6 Airbus A330 MRTT 22 AH-64E Apache Longbow heavy attack helicopters 15 CH-47F medium lift helicopters and IAI Harop UCAVs.

India has requested for an early delivery of Meteor air-to-air missiles from France. These missiles will provide India the power to take on US supplied AMRAAM missiles possessed by the Pakistan Air Force.

Highlights

The Meteor missile has a delivery range to take over all the other air forces in the region including China. The missiles were to come by late 2020. However, India is insisting for delivery of at least 10 missiles in advance along with the first set of **Rafale fighter jets.** The first set of Rafale jets are to arrive in May 2020 after the completion of pilot training in France.

Meteor Missiles

The Meteor missiles are air-to-air missiles with a range of 150 km and no escape zone of 60 km. This no escape zone is the largest in the world according to its manufacturers. These missiles are to be attached to the Rafale jets. With increasing tensions between India and Pakistan, India is requesting for an early delivery.

Air Force's Modernisation Budget (Rs. In Crores)

Modernisation Head	2018-19 (Budgeted Expenditure)	2019-20 (Budgeted Expenditure)	% Increase in 2019-20 (BE) over 2018-19 (BE)
Aircraft & Aero-Engine	24709	24807	0.4
H&MV	202	110	-45.6
Other Equipment	8174	11448	40.1
Total	33085	36365	9.9

Recent reports suggested that the Air Force's Akash Missile squadrons reported frequent serviceability of mobile surface-to-air Akash Missile system and long duration downtime while alleging that several government agencies, including missile manufacturer Bharat Dynamics Limited. The Cabinet Committee on Security recently cleared seven squadrons of

the missile systems for Rs 5,500 crore for the Air Force. The force will deploy these missile systems on the borders along with Pakistan and China to maintain a strict vigil against enemy aircraft, drones, and surveillance aircraft. Akash is a medium-range mobile surface-to-air missile defence system developed by the Defence Research and Development Organisation and produced by Bharat Dynamics Limited. The Akash Missile systems also took part in the Vayushakti fire pier demonstration and also stood out as the best missile in Indian Air Force exercise "Crossbow-2018" held last year at the Surya Lanka firing range.

CONCLUSION

The Indian Army is currently involved in meeting challenges at the Line of Control (LoC) and Line of Actual Control. The Indian Army must prioritise its requirements and apply the Fast Track procedure for critical Arms and ammunition. The Government of India must ensure that timelines are sacred for operational preparedness.

The Indian armed forces rely on space systems both for strategic and tactical purposes. However, the current level of space instruments available for the armed forces are minimal; and, more importantly, they are not specifically designed and developed to satisfy their operational needs. India's space program is still evolving as far as its military requirements are concerned. The proposed launch of a satellite for the Navy in the near future would actually announce India's arrival in the military space territory.
Threats from China and Pakistan leave us with no option but to undertake modernisation at a fast pace.

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