



MINISTRY OF DEFENCE

YEARS OF

Reforms

June 2022
www.mod.gov.in

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The basic principle of security is that you should have your own customised and unique system, only then it will help you. If 10 countries have the same type of defence equipment, then your armies will have no uniqueness. There can be uniqueness and surprise elements only if the equipment is developed in your own country.

श्री नरेंद्र मोदी

Prime Minister Shri Narendra Modi

(Post-Budget webinar

'Aatmanirbharta in Defence - Call to Action')



Strong Defence, Confident Nation

- Eight years of unparalleled reforms & military modernisation
- World's second largest military armed with state-of-the-art weapons & platforms
- Rafale & LCA Tejas sharpen combat capabilities of Air Force
- Aatmanirbharta in Defence: Made in India ships & submarines add more depth to the Naval capabilities
- Army equipped with 'Make in India' tanks, missiles & hand grenades
- Security logistics bolstered by border infrastructure development
- Nari Shakti equally shouldering security responsibilities



AGNIPATH

- A transformative reform for recruitment of youth in the Armed Forces as **'Agniveers'** for tenure of 4 years
- Open to men and women between 17 1/2 - 21 years of age
(Two years age relaxation for 1st batch- 23 years)
- Designed to attain a youthful profile of the Armed Forces & Provide a fresh lease of **'Josh' and 'Jazba'**
- A shift towards a more tech savvy military
- Based on merit & organisational requirements, up to 25% 'Agniveers' to join regular cadre

**Recruitment notifications of
Army, Navy & Air Force are already out!**



Measures to support 'Agniveers'

After 4 years tenure

- **10% job vacancies reserved in Ministry of Defence**

Covers Indian Coast Guard, Defence civilian posts and all the 16 DPSUs

- **10% job vacancies reserved in Ministry of Home Affairs**

Applicable to CAPFs and Assam Rifles
Age Relaxation of 3 years; 5 years for batch

- **Recruitment in Merchant Navy from Indian Navy in 6 avenues**

- **Educational Upskilling, facilitated by NIOS**

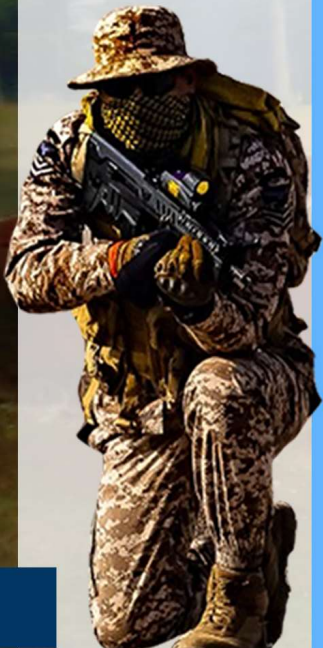
NIOS to institute customised course to enable those Agniveers who are 10th pass to further their education & obtain a 12th pass Certificate

- **Preferential recruitment in state police forces**

Agniveers to be given preference in state police

- **Skill development for entrepreneurship and jobs**

Agniveers will get Skill India certification while in service, enabling them to pursue diverse opportunities in entrepreneurship and job roles





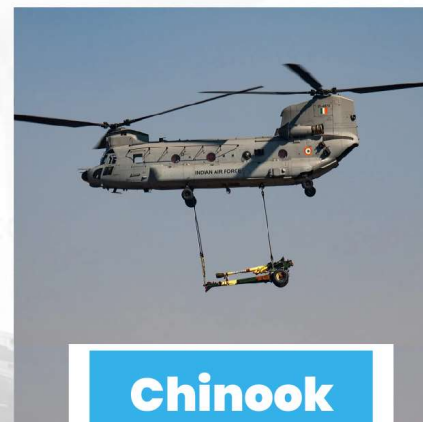
MAJOR PROCUREMENTS BY ARMED FORCES

SASHAKT BHARAT KI SASHAKT SENA

Indian Air Force:

Garuda Shakti

- 32 Rafale fighter aircraft, resurrecting two fighter Squadrons
- Two squadrons of indigenously-developed Light Combat Aircraft, Tejas
- Heavy lift Chinooks & attack helicopter Apaches, strengthening the rotary wing
- Integration of BrahMos, an Air Launched Air-Surface supersonic missile
- ASTRA, an Air-Air Radar Guided Missile, on Su-30MKI
MoD signed over Rs 2,900 crore contract with BDL for procurement of ASTRA Mk I Beyond Visual Range Air to Air Missile System & Associated Equipment for Indian Air Force & Indian Navy
- Raising of new Su-30MKI Squadron with BrahMos Air-to-Ground missile providing strategic capability in the Indian Ocean Region.
- Procurement of C-130J transport aircraft
- Contract with Airbus Defence and Space, Spain for acquisition of 56 C-295MW transport aircraft
- DRDO handed over Medium Range Surface to Air Missile (MRSAM) System to Indian Air Force
- Emergency Landing Facility for fighter aircraft on NH-925A near Barmer, Rajasthan



Indian Navy

Naval Firepower

- India's first indigenously-made aircraft carrier IAC Vikrant; Sea trials completed

- **Project 75**

Six Scorpene-Class Submarines

Four of the 6 submarines INS Kalavari, INS Khanderi, INS Kharanj, INS Vela commissioned

'Vagir' commenced sea trials in February 2022

'Vagsheer' launched in April 2022

- **Project 15B**

Series of indigenous guided-missile warships

INS Visakhapatnam

Lead ship of Project commissioned in November 2021

Mormugao

Completed maiden sea trial in December 2021

Surat

Launched in May 2022

- **Project 17A**

A series of indigenous stealth frigates

Nilgiri

Launched in September 2019

Himgiri

Launched in December 2020

Udaygiri

Launched in May 2022



IAC Vikrant



INS Visakhapatnam

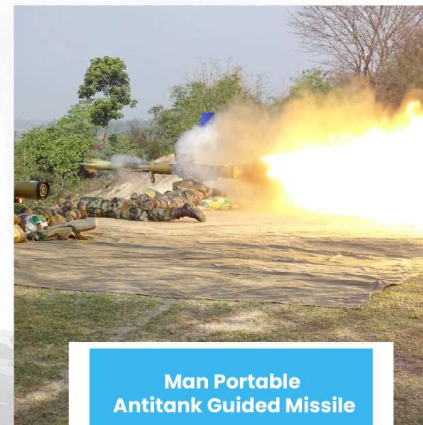
Indian Army

Adding more power to its fire

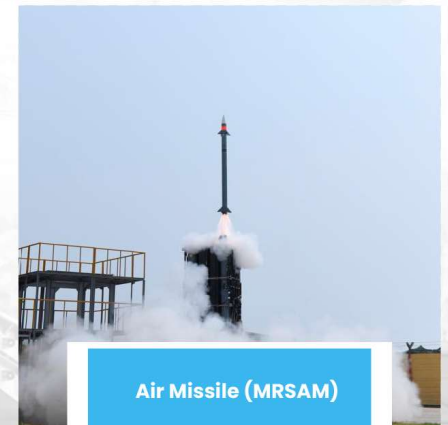
- **Home-made Main Battle Tank Arjun (MK-1A)**
Rs 7,523 crore order placed with Heavy Vehicles Factory, Chennai for supply of 118 units
- **Privately made Multi-Mode Hand Grenades with Transfer of Technology from DRDO**
- **Procurement of 1.86 lakh Bullet Proof Jackets**
- **Approval of Rs 5,100-crore project to jointly manufacture AK-203 assault rifles in Amethi**
- **Successful flight test of indigenously developed Man Portable Anti Tank Guided Missile**
- **Two successful trials of Medium Range Surface-to-Air Missile system completed**
- **Medium Range Surface to Air Missile (MRSAM) successfully flight-tested**
- **User validation trials of indigenously-developed Anti-Tank Guided Missile 'HELINA'**



Tank Arjun (MK-1A)



**Man Portable
Antitank Guided Missile**



Air Missile (MRSAM)



Indian Coast Guard

Sentinels of the Sea



ALH Mk-III

- Contract for supply of 16 Advanced Light Helicopter (ALH Mk-III) concluded with Hindustan Aeronautics Limited

Eight helicopters received till date

All 16 scheduled to operate from four Squadrons at Odisha, Gujrat, Kerala and Tamil Nadu

- Eight Offshore Patrol Vessels, four Interceptor Boats and two work boats constructed in FY 2020-21
- Approval to Academy for Indian Coast Guard at Kanjaru, Mangalore, Karnataka
- Approval to grant legal powers to undertake Visit, Board, Search & Seize (VBSS) in India's Exclusive Economic Zone (EEZ) accorded to ICG



- AoN for procurement of 14 TEHH (including Performance Based Logistics) accorded by DAC on 20 Jan 2022
- 2.6 tons narcotics worth Rs 5900 Cr seized in intelligence based operation bringing the total drug overhaul to Rs 11,925 cr

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Aatmanirbharta in Defence

When we import weapons, its process is so long that many of them become outdated by the time they reach our security forces. Its solution also lies in the 'Aatmanirbhar Bharat' campaign and 'Make in India'. The confidence and pride of our defence forces swell high when they have indigenous equipment.

नरेंद्र मोदी

Prime Minister Shri Narendra Modi

(Seminar on 'Aatmanirbhar Bharat
in Defence Manufacturing')



Aatmanirbharta in Defence – A dream taking shape

- 310 Defence items reserved for Domestic manufacturing
- Rs 84,598 crore earmarked for domestic capital procurement
Enhanced to 68% of Capital Acquisition Budget in 2022-23
- 25% of domestic capital procurement (Rs 21,149 crore) earmarked to promote private industry, MSMEs and start-ups
- Acquisition process fast tracked through new rules under DAP 2020
- Two Defence Industrial Corridors established in Uttar Pradesh & Tamil Nadu to boost defence manufacturing ecosystem
- Defence Innovation Start-up Challenges launched for innovators to create prototype solutions for the Armed Forces
- 25 percent of defence R&D budget earmarked for industry, start-ups & academia



- 334% increase in defence exports
 - (Rs 8,434 crore in 2020-21 from Rs 1,941 crore in 2014-15)
 - Defence equipment now exported to 84 countries
- To achieve 'Make in India, Make for the World', Foreign Direct Investment in defence enhanced up to 74% through Automatic Route for companies seeking new defence industrial license & 100% by Government Route
- 12.82% increase in capital allocations to Rs 1.52 lakh crore in Union Budget FY 2022-23
- Self-Reliant Indian Navy
 - 76% Acceptance of Necessity (AON), 66% cost-basis contracts to Indian vendors in 2014
 - 90% indigenisation in Naval ammunition
 - More than two-thirds of the Navy's Modernisation Budget spent on indigenous procurement in last five years
 - 39 of 41 ordered ships/submarines from Indian shipyards.



Armed Forces on the path of Reforms

- Chief of Defence post created
- Department of Military Affairs carved out to spearhead path-breaking reforms
- Aim is to promote inter-service integration & gain optimal utilisation of resources



Delegation of Financial Powers

- Powers delegated to Service Headquarters (SHQs) to augment operational capability

Emergency financial powers delegated to Armed Forces for procurement of ammunition & spares

Enhancement of Financial Powers of Vice Chiefs up to Rs 500 crore.

Special Emergency Powers to Service Headquarters

Increase in Financial Powers for Capital Procurement up to Rs 300 crore for SHQs and Rs 2,000 crore for MoD



Ordnance Factories Synergised and energised

- 41 Ordnance Factories regrouped and given greater autonomy under seven new DPSUs in October 2021

- Within 6 months of inception, Six out of seven report profits



S No.	New Defence Company	Provisional Profit (Oct 01, 2021 – Mar 31, 2022) (Rs in crore)
1.	Munitions India Limited	28
2.	Armoured Vehicles Nigam Limited	33.09
3.	India Optel Limited	60.44
4.	ADVANCED WEAPONS AND EQUIPMENT INDIA LIMITED	4.84
5.	GLIDERS INDIA LIMITED	1.32
6.	TROOP COMFORTS LIMITED	26
7.	Yantra India Limited	(111.49)

Innovations in Defence R&D

Rustom-II – Multi-mission Unmanned Aerial Vehicle

- 24 hours endurance for longer duration reconnaissance missions

Nirbhay

Long range subsonic cruise missile

- India's first indigenously designed and developed cruise missile
- 1,000 km range
- Capacity of carrying up to 300 kg warheads
- Can be deployed on multiple platforms



BrahMos

Air version of BrahMos supersonic cruise missile

- Successfully test fired from the supersonic fighter aircraft Sukhoi 30 MK-I Increased indigenous content and improved performance

Medium Range Surface-to-Air Missile

- Operational Flight Tests conducted from INS Kochi
- Successfully demonstrated weapon system capability including interception of a sea skimming missile in centralized mode of operation

First landing of LCA Navy onboard INS Vikramaditya

- After extensive trials, successfully arrested landing onboard INS Vikramaditya in January 2020

Agni-5

Long Range Surface-to-Surface Ballistic Missile

- Successfully flight-tested thrice in 2018
- Seven Successful flight trials concluded

NAG Missile

- Final user trial of 3rd generation Anti-Tank Guided Missile NAG carried out in October 2020 from Pokhran range
- The missile was integrated with the actual warhead and a tank target was kept at designated range

Astra

Beyond visual range air-to-air missile

- Possess high single shot kill probability
- Developed to engage and destroy highly maneuvering supersonic aerial targets

PINAKA rocket system

- Successfully flight tested off Odisha coast in November 2020



Quick Reaction Surface to Air Missile System

- Achieved major milestone by a direct hit onto a Banshee Pilotless target aircraft at medium range & medium altitude

Long Range Surface to Air Missile

- Jointly developed system by DRDO and Israel Aerospace Industries to strengthen air defence capabilities of Indian Navy

Helina (Army Version) and Dhruvastra (Air Force Version)

- Third generation, Lock On Before Launch (LOBL) fire and forget Anti-Tank Guided Missiles
- Can engage targets both in direct hit mode as well as top attack mode

Man Portable Anti-tank Guided Missile

- Successfully flight-tested, indigenously-developed low weight, fire and forget

Akash Prime Missile

- Equipped with indigenous active Radio Frequency seeker for improved accuracy

Man Portable Anti-Tank Guided Missile

- DRDO flight-tested Final Deliverable configuration of MPATGM in January 2022



Pralay

- Maiden flight test of home-made surface-to-surface missile conducted on December 22, 2021



Transfer of Technology

- Relevant 'know-how' provided to support the Indian industry in the form of Technology Transfer Documents
- Technology transferred to Development cum Production Partner/ Development Partner/ Production Agency without any ToT Fee and to other industries with a one-time ToT Fee @5% of total project sanction cost
- Royalty not charged on net sales to Armed Forces and other Govt Departments. 2% royalty applicable for sales in Indian commercial market and exports

Technology Development Fund

- Rs 100 crore corpus fund created to enable Indian industries, specially MSMEs, for indigenisation of defence products
- Fund may also be utilised for developing new technologies as required by DRDO, Services and DPSUs
- Cost of each project under TDF enhanced, can now be up to Rs 50 crore from Rs. 10 crore earlier

DRDO Patents for Indian Industry

- All patents and relevant intellectual publications available on DRDO website. These can be used by Indian industry free of cost.



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2016 surgical strike & 2019 Balakot airstrikes were not just military strikes, but a strong message to the adversary that terror infrastructure across the border cannot be used as safe haven to wage low-cost war against India



Raksha Mantri Shri Rajnath Singh
(Seminar on
'Air Power in 'No War No Peace' Scenario)



GOVERNANCE

Use of Force for peace

2016 Surgical Strikes

- After the Uri attack, Indian Army carried out Surgical Strikes in POK on the night of September 28-29, 2016, shifting India's image from a thinker to a doer.



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2019 Balakot Airstrikes

Intelligence led pre-emptive operation in the early hours of February 26, 2019 India struck the biggest training camp of Jaish-e-Mohammed in Balakot

- It was in retaliation to a suicide terror attack by JeM in Pulwama that led to loss of lives of 40 brave CRPF jawans on February 14, 2019



Armed Forces as a 'Savior'

Operation Ganga

- Indian Air Force evacuated 2,457 Indian nationals from conflict-hit Ukraine by carrying out 24 sorties of its C-17 aircraft

Afghanistan evacuation

- In 2021, the IAF successfully evacuated 579 Indian nationals in 21 sorties from war-ravaged Afghanistan

Operation Maitri

- The IAF mobilised its assets for relief and rescue efforts in Nepal in the aftermath of a major earthquake in 2015. Several aircraft/helicopters of IAF carried out 1,638 sorties and rescued 5,973 people



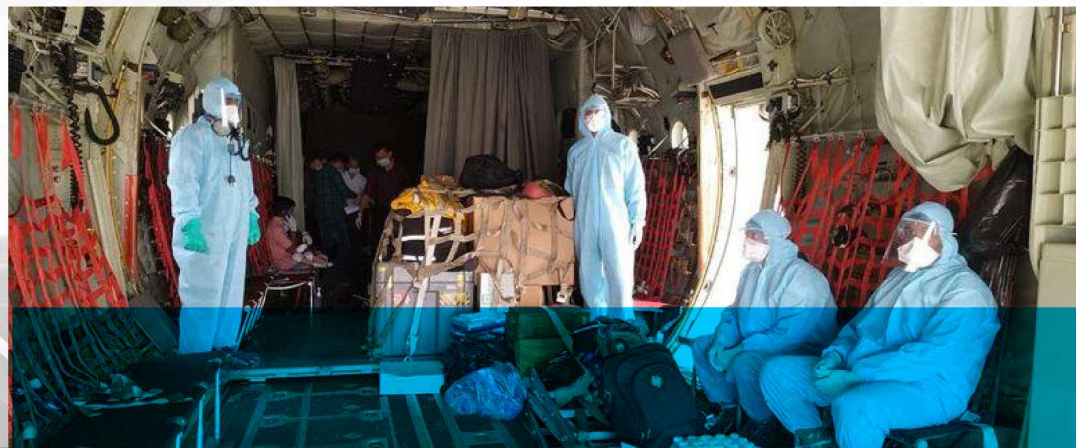


Second wave in 2021

- Indian Air Force and Indian Navy transported/ferried oxygen containers and other medical equipment within the country and abroad
*IAF airlifted 15,306 Tons load in 3757 flying hours covering an air distance of more than 1.4 million air nautical miles from 13 countries
 Op Samudra Setu-II
 Ten IN warships deployed for nearly two months and traversed more than 53000 nm (nearly 100,000 km)*
- DRDO, DPSUs & Cantonment Boards established COVID care facilities across the country
- DRDO set up 1,200 oxygen plants across the country on war footing
- DRDO developed adjunct COVID therapy anti-COVID drug, 2-deoxy-D-glucose (2-DG)
- NCC cadets deployed to provide support to civil administration
- Armed Forces effectively vaccinated all their personnel

First wave in 2020

- Indian Air Force & Indian Navy
*4,200 Indians evacuated from China and other countries
 IAF airlifted 862 Tons load in 584 Sorties, flown 780 Hrs towards International Medical Relief*
- Quarantine facilities, run by Armed Forces Medical Services personnel
- COVID care facilities & other personal protection equipment sanitizers, masks etc manufactured by DRDO & DPSUs



Humanitarian Assistance and Disaster Relief (HADR)

- Mission Based Deployments undertaken by Indian Navy in Indian Ocean Region to safeguard national maritime interests.
- Indian Navy 'Operation Sankalp' to ensure safety and security of Indian Merchant Vessels transiting through straits of Hormuz and Gulf Region.
- Operation Samudra Setu-II by the Indian Navy to augment medical oxygen supplies
Ten warships, deployed for nearly two months, traversed more than 53,000 nm.
- 'Oxygen Express'
INS Sharda and MPV Meghna from the Southern Naval Command deployed to maintain supply of oxygen cylinders to island territories of Lakshadweep & Minicoy islands during COVID-19
- Mission SAGAR
Indian Navy undertook transshipment of Liquid Medical Oxygen and other medical equipment to five nations in the Indian Ocean Region and South China Sea
- P-8I aircraft of Indian Navy were deployed to transport 1.5 lakh doses of COVID-19 vaccines to different countries





Wing Commander Anjali Singh

First woman to be posted
in any Indian mission abroad (Deputy Air
attaché at Indian embassy in Moscow).

Lieutenant Bhavana Kasturi

The first - ever women officer to lead
an all-male contingent (Army Service Corps)
in Republic Day parade 2019





Captain **Abhilasha Barak**

The first woman to join Army Aviation Corps as combat aviator, following her graduation from Combat Army Aviation Training School, Nashik.

Captain **Tania Shergill**

The first Indian Woman Parade Adjutant to lead an all-man contingent in 2020 Army Day function





Lieutenant Commander **Karabi Gogoi**

Appointed as Assistant Naval Attache in Indian Embassy in Moscow; the first Woman Naval Officer to be posted in an Indian mission abroad

Flight Lieutenant **Shivangi Singh**

India's first female pilot of Rafale fighter aircraft, reflected the growing women prowess while standing tall on the IAF tableau during 2022 Republic Day parade





Flying Officers Now Flight Lieutenants

Avani Chaturvedi, Bhawana Kanth and Mohana Singh commissioned as first three women fighter pilots.

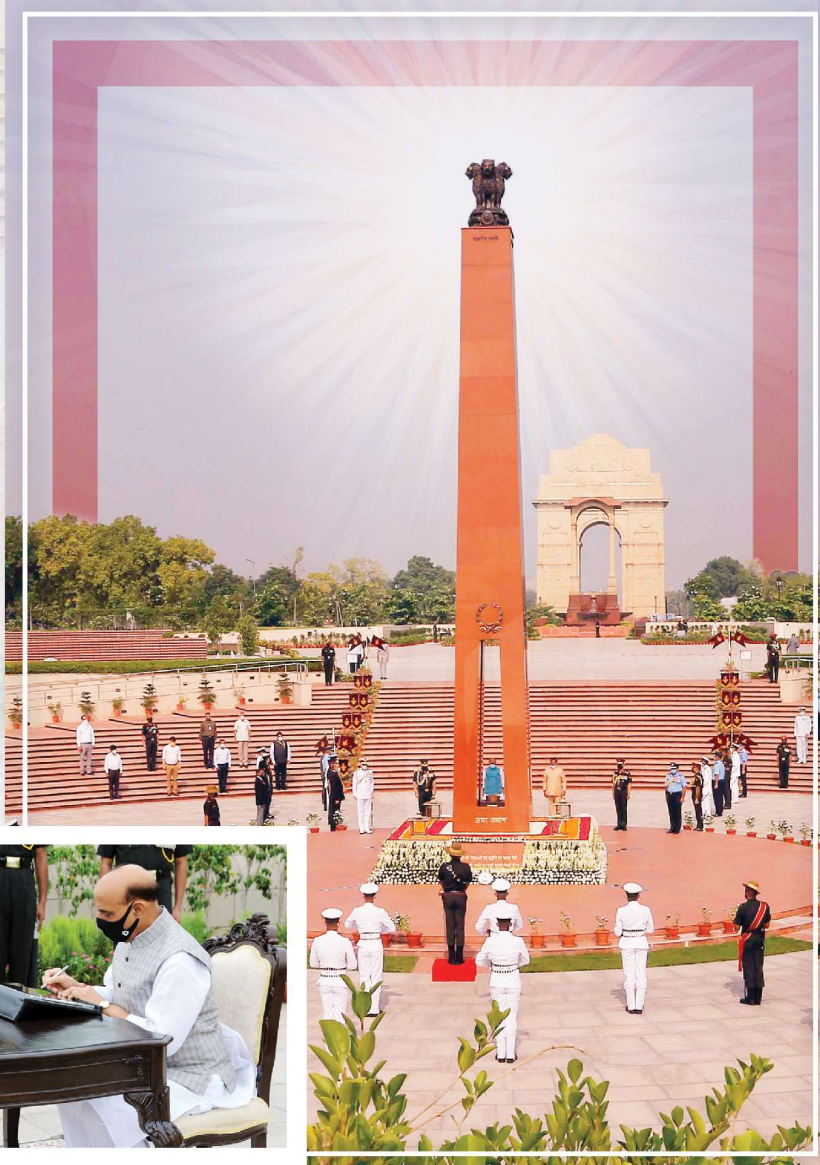
Flight Lieutenants
Bhawana Kanth Avani Chaturvedi Mohana Singh

National War Memorial

A befitting tribute to the Bravehearts

Genesis to completion

- Prime Minister Shri Narendra Modi dedicated National War Memorial to the Nation in New Delhi on February 25, 2019 to honour the sacrifices made by the Armed Forces
- The NWM honours more than 26,000 Battle Casualties of Independent India
- A Next of Kin ceremony is held every evening to honour one Battle Casualty, whose name has been inscribed at the Tyag Chakra. An NoK of the Battle Casualty is invited to pay homage at the Obelisk/ Immortal flame
- Amar Jawan Jyoti at India Gate merged with the eternal flame of NWM in January, 2022
- 'Swarnim Vijay Varsh' celebrations were conducted in a befitting manner.



Sainik Schools & National Cadet Corps

Youth-led Development

Sainik Schools & NCC

- 100 new Sainik Schools coming up across the country in partnership mode to provide quality education in tune with National Education Policy
 - At least one school is proposed to be set up in each State/UT
 - 21 such schools approved which began admitting students from academic year 2022-23 onwards
 - First provisional list of 485 shortlisted candidates in 10 newly approved Sainik Schools declared
- Scheme for expansion of NCC by one lakh cadets
 - 1,283 schools/colleges have been identified (896 in border areas; 255 in coastal areas and 132 in Air Force Talukas)
- Youth Exchange Programme expanded in NCC to develop greater national awareness and international understanding in cadets



One Rank One Pension scheme

- Uniform pension paid to defence forces personnel retiring in the same rank with the same length of service, regardless of their date of retirement
- Rs 10,795 crore disbursed to over 20.6 lakh pensioners/family pensioners as arrears on the implementation of OROP
- Yearly recurring expenditure on account of OROP is about Rs 7,123 crore

Launch of SPARSH

- An integrated system for automation of sanction and disbursement of defence pension
- Processes pension claims and credits pension directly into the bank accounts of defence pensioners without relying on any external intermediary
- SPARSH achieved major milestone by successfully on-boarding nearly five lakh defence pensioners onto the platform
 - Over Rs 11,600 crore disbursed in Financial Year 2021-22, from just about Rs 57 crore in FY 2020-21



Border Development for Safer India

- Border Roads Organisation has constructed 6,763-kilometre roads since April 2014, including 32 Indo-China Border roads of over 1,400 kilometres and other major critical/strategically important roads of more than 5,300 kilometres length.
- In 2021-22, a total of 102 infrastructure projects - 87 bridges and 15 roads - were completed by the BRO - the most in a single year.
- Atal Tunnel, the longest tunnel in the world above 10,000 feet, became functional in October 2020 at Rohtang to ensure all weather connectivity to Leh through alternate route via Nimu-Padam-Darcha road and Lahaul-Spiti.
- World's highest motorable road was constructed in Ladakh passing Umling La Top at the height of 19,300 feet. The strategically important 52-km road connects border villages.



Atal Tunnel



Umling La Top

- Construction of Sela tunnel has started on Balipara-Charduar-Tawang road to provide all weather connectivity to Tawang by passing Sela pass which has an altitude of 13,960 feet.
- Excavation work was successfully completed for Nechiphu Tunnel in Arunachal Pradesh in May 2022. At an altitude of 5,700 feet, the 500-metre long tunnel is on the Balipara-Charduar-Tawang Road in West Kameng District, it will be equipped with modern lighting and safety facilities.
- A 140-feet indigenous Class-70, double-lane first Modular Bridge on Flag Hill-Dokala Road at an altitude of 11,000 feet in Sikkim was opened to traffic.
- Centre of Excellence for Road Safety and Awareness & Centre of Excellence for Roads, Bridges, Air Fields & Tunnels were inaugurated at BRO headquarters in New Delhi.



Sela tunnel



Nechiphu Tunnel



MoD Goes Digital

Technology for Ease of living

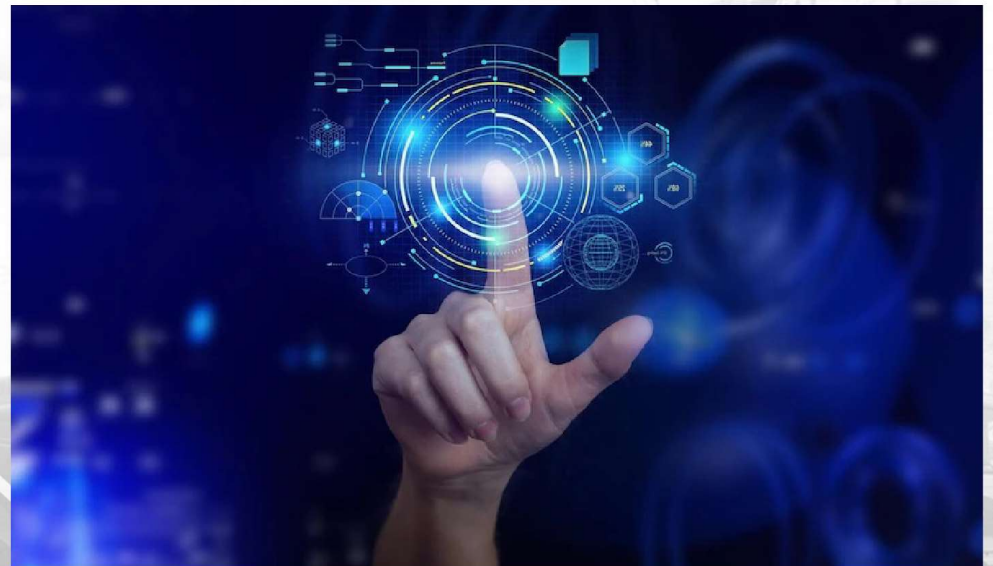
- Transparent procedures
- Faster Process
- No intermediaries
- e-Chhawani project

Launched to provide online citizen services to over 20 lakh residents of 62 Cantonment Boards

- LAN network

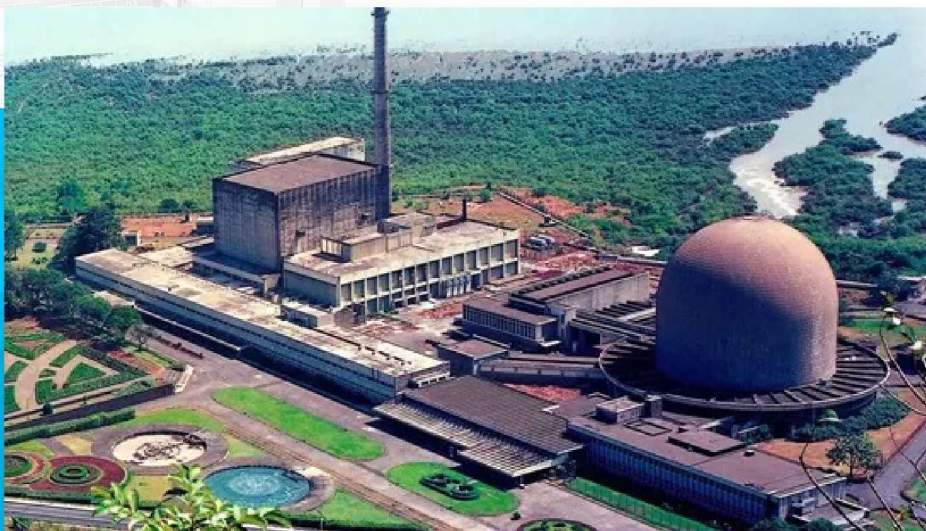
Including air-gapped Internet and Intranet networks, operationalised in the Department of Defence, Department of Ex-Servicemen Welfare and Department of Defence Finance

- Portal for online Geographical Information System-based application form for taking permission of MoD for aerial survey launched to streamline defence clearance for developmental projects requiring aerial survey
- All NOCs granted online including for aerial survey, power projects and Research Survey Exploration Exploitation activities
- Portal for purchase of Against Firm Demand (AFD-I) (like cars, motorcycles, etc.) items from the canteens launched
- 100% digital payment achieved for all major items in CSD i.e., \$AFD items; 99% for non-AFD items



Achievements in Defence Land & Estates sector

- Land Management System launched to capture textual details of all proposals relating to Defence management
- The entire Phase II survey of defence land completed on December 31, 2021 in record time
- Innovative method for identification of encroachments through "Change Detection software" based on Time Series satellite imagery developed in association with Bhabha Atomic Research Centre
- A Centre of Excellence on emerging land survey technologies proposed to commence shortly at the National Institute of Defence Estates Management, Delhi Cantt



Bhabha Atomic Research Centre



*National Institute of Defence
Estates Management, Delhi Cantt*



रक्षा मंत्रालय
MINISTRY OF
DEFENCE

75
Azadi Ka
Amrit Mahotsav



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When India speaks of becoming
self-reliant, it doesn't advocate
self-centred system.

In India's self-reliance, there
is concern for the whole world's
happiness, cooperation and
peace.

नरेंद्र मोदी

Prime Minister Shri Narendra Modi
(75 th Independence Day address)





रक्षा मंत्रालय
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DEFENCE



8 YEARS OF *Excellence*



@SpokespersonMoD



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