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DRONE SHAKTI SCHEME

“Promotion of drone technology is another medium of advancing our commitment to good governance and ease of living. In the form of drones, we have got a smart tool that is going to be part and parcel of common people’s lives”

— Shri Narendra Nath Modi, Prime Minister of India.

Drones are a marvel of technology and innovation. An unmanned aerial vehicle (UAV), commonly known as a drone, is an aircraft without any human pilot, crew, or passengers on board.¹

Drones offer tremendous benefits to almost all sectors of the economy like – agriculture, mining, infrastructure, surveillance, emergency response, transportation, geospatial mapping, defence and law enforcement etc. Drones can be significant creators of employment and economic growth due to their reach, versatility, and ease of use, especially in India’s remote and inaccessible areas.

- Drone technology is very important in the fields of defence, disaster management, agriculture, tourism, film and entertainment.
- Promotion of drone technology is the medium of advancing the commitment to good governance and ease of living
- Drone technology is going to play a major role in empowering farmers and modernizing their lives.
- As villages are witnessing the arrival of roads, electricity, optical fibre and digital technology. Still, agriculture work is being conducted in old ways, leading to hassles, low productivity and wastage.

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¹ <https://newsonair.com/2022/05/26/pm-modi-to-inaugurate-bharat-drone-mahotsav-2022-indias-biggest-drone-festival/>

In view of its traditional strengths in innovation, information technology, frugal engineering and huge domestic demand, India has the potential to be global drone hub by 2030.¹

Drone Shakti is the government perspective on consolidating the efforts in the drone ecosystem. It is basically institutionalizing and creating a framework where multiple stakeholders can work together. It also makes adoption (of drones) economical for customers and provides incentive to manufacturers and service providers to work together on a continuous cycle of innovation.²

Usage of Drone Technology:³

- The drone sector in recent years has unlocked great opportunities and is becoming a major sector for employment generation in India.
- Drone based surveillance system introduced for Railway Security.
- Drone technology has played a key role in PM Swamitva Yojana wherein every property in the villages of India is being digitally mapped for the first time and digital property cards are distributed.
- India deployed drones to deliver COVID-19 vaccines.
- Drone is used for surveillance of COVID-19 Hotspots and containment zones to ensure strict compliance of lockdown guidelines.
- Drone technology has already become an important part of sectors such as defence, disaster management, agriculture, tourism, and entertainment.
- Drone technology has revolutionized agriculture in terms of empowering farmers and modernizing agriculture as it has become an effective tool to address issues associated with land records, floods and drought.
- Ministry of Civil Aviation (MoCA) and Directorate General of Civil Aviation (DGCA) have granted conditional exemption to the Board of Control for Cricket in India (BCCI) for the deployment of drones for live aerial cinematography of the India Cricket Season in 2021⁴.
- Pragati meetings, with government officials, to review the development works in various parts of the country, are being organized on monthly basis, with the help of drones.

²<https://static.pib.gov.in/WriteReadData/specificdocs/documents/2022/jan/doc202212810701.pdf>

³<https://www.livemint.com/budget/news/budget-2022-govt-to-promote-use-of-drones-as-a-service-11643701673801.html>

⁴<https://static.pib.gov.in/WriteReadData/specificdocs/documents/2022/jan/doc202212810701.pdf>

- Helpful to police in managing crowd and traffic during festivals or mass gatherings like Kumbh mela ,etc.⁵

Drone Applications



The Production-Linked Incentive (PLI) Scheme:

The Production-Linked Incentive (PLI) Scheme for drones and drone components has been notified on 30 Sep 2021 to push the production of drones. The details of the scheme are as follows:

- An incentive of Rs. 120 crore has been provided for Indian manufacturers of drone and drone components on the basis of their value addition in India. The value addition by a manufacturer will be calculated as the annual sales revenue from drones and drone components (net of GST) minus the purchase cost (net of GST) of drone and drone components. The incentive shall be provided over three financial years commencing from 2021-22.
- The PLI that can be claimed by a manufacturer is 20% of the value addition by such manufacturer. The PLI rate is constant at 20% for all three years.
- Minimum value addition is specified as 40% of net sales

⁵http://timesofindia.indiatimes.com/articleshow/91828757.cms?utm_source=contentofinterest&utm_medium=text&utm_campaign=cppst

- Eligibility norm for Micro, Small and Medium Enterprises (MSME) and startups is specified as Rs. 2 crore of annual sales revenue for drone manufacturers and Rs. 50 lakhs of annual sales revenue for drone component manufacturers.
- PLI for a beneficiary is capped at 25% of the total annual outlay to allow widening of the number of beneficiaries.
- In case a manufacturer fails to meet the threshold for the eligible value addition for a particular financial year, the manufacturer will be allowed to claim the lost incentive in the subsequent year if the manufacturer makes up the shortfall in the subsequent year.⁶

Prime Minister Shri Narendra Modi inaugurated India's biggest Drone Festival - Bharat Drone Mahotsav 2022 on 27 May 2022.

It was a two-day event in which over 1600 delegates, consisting of government officials, armed forces, central armed police forces, Public Sector Units (PSUs), foreign diplomats, private companies, drone startups, etc., participated.

The PM interacted with Kisan drone pilots and startups in the drone exhibition centre. The presentation of virtual awards of drone pilot certificates, product launches, a display of a 'Made in India' Drone Taxi prototype were also demonstrated.

The Central Government has undertaken a series of reform measures to promote India's upcoming drone industry which are as follows:⁷

- Liberalised Drone Rules, 2021 notified on 25th August 2021.
- Zone Airspace Map published on 24th September 2021, opening up nearly 90% of Indian airspace as a green zone for drone flying up to 400 feet.
- Production-Linked Incentive (PLI) scheme for drones notified on 30th September 2021.
- UAS Traffic Management (UTM) Policy Framework published on 24th October 2021.
- Monetary grant program for purchase of agricultural drones was announced by the Union Agriculture Ministry on 22nd January 2022.
- All five application forms under Drone Rules, 2021 made online on the DigitalSky Platform on 26th January 2022
- Drone certification scheme notified on 26th January 2022, making it easier to obtain type certificate by drone manufacturers.

⁶<https://pqars.nic.in/annex/255/AU83.pdf>

⁷<https://pib.gov.in/PressReleasePage.aspx?PRID=1811884#:~:text=The%20Government%20is%20providing%20a,25%25%20of%20total%20annual%20outlay.>

- Drone import policy notified on 9th February 2022, banning import of foreign drones and freeing up import of drone components.
- Drone (Amendment) Rules, 2022 notified on 11th February 2022, abolishing the requirement of a drone pilot licence.

Way Forward:

Increasing work efficiency and productivity, decreasing workload and production costs, improving accuracy, refining service and customer relations, and resolving security issues on a vast scale are a few of the top uses drones offer industries globally. Adoption of drone technology across industries leapt from the fad stage to the mega-trend stage fairly quickly as more and more businesses started to realize its potential, scope, and scale of global reach.⁸

It is estimated that in India, the drone industry will be Rs 5,000-crore sector by 2026. Presently, there are 270 drones start-ups in India and the country will become a global drone hub by 2030.⁹

Defence Minister Rajnath Singh congratulated the DRDO and termed it a major achievement towards autonomous aircraft, adding that it will pave the way for 'Aatmanirbhar Bharat' in terms of critical military systems.¹⁰



⁸ <https://www.businessinsider.in/tech/news/drone-technology-uses-and-applications-for-commercial-industrial-and-military-drones-in-2020-and-the-future/articleshow/72874958.cms>

⁹ http://timesofindia.indiatimes.com/articleshow/91828757.cms?utm_source=contentofinterest&utm_medium=text&utm_campaign=cpst

¹⁰ <https://indianexpress.com/article/india/drdo-successfully-tests-precursor-to-future-combat-drones-in-karnatakas-chitradurga-8003664/>