

GOVERNMENT OF INDIA
MINISTRY OF AGRICULTURE AND FARMERS WELFARE
DEPARTMENT OF AGRICULTURAL RESEARCH & EDUCATION

LOK SABHA
UNSTARRED QUESTION NO. 2534
TO BE ANSWERED ON 5TH AUGUST, 2025

BUDGET ALLOCATION TO DARE

2534. SHRI MANISH TEWARI:

Will the Minister of AGRICULTURE AND FARMERS WELFARE कृषि और किसान कल्याण मंत्री be pleased to state:

- (a) the details of budget allocation and actual expenditure for the Department of Agricultural Research and Education (DARE) in the Union Budget over the past ten years, year-wise;
- (b) the reasons for the budget allocation for DARE remaining marginal, despite the critical need for research and development in the agricultural sector;
- (c) the reasons for the limited adoption of Artificial Intelligence (AI) and advanced technologies in agriculture, despite challenges such as unpredictable weather, labour shortages, and crop diseases;
- (d) whether the Government has conducted any independent assessments to measure the impact of AI and technological interventions on agricultural output and farmers' income, if so, the details thereof and if not, the reasons therefor; and
- (e) the details of measures implemented by the Government to ensure that technological advancements in agriculture are accessible and affordable to small and marginal farmers across the country?

ANSWER

THE MINISTER OF STATE FOR AGRICULTURE AND FARMERS WELFARE
कृषि और किसान कल्याण राज्य मंत्री (SHRI BHAGIRATH CHOUDHARY)

- (a) & (b): The budget allocation and expenditure of DARE is as under:
(Rs in crore)

Year	Budget Allocation	Actual Expenditure
2015-16	5586.00	5572.90
2016-17	6238.00	5995.21
2017-18	6992.00	6989.92
2018-19	7952.73	7943.59
2019-20	7846.17	7844.98

2020-21	7762.38	7685.52
2021-22	8513.62	8439.94
2022-23	8658.89	8578.17
2023-24	9876.60	9804.39
2024-25	10156.35	10091.23

The budget allocation of Department of Agricultural Research and Education (DARE) has increased during last 10 years (year to year basis) except during the period affected by COVID-19 Pandemic.

(c): Farmers in India are adopting advanced technologies such as drones, precision farming, and automated irrigation and fertigation systems. Both the public and private sectors along with AgriTech startups are playing a vital role in accelerating the adoption of Artificial Intelligence (AI) and other advanced technologies in agriculture. In this direction, some initiatives of government are given below:

- Kisan-e-Mitra and an AI-powered chatbot, to assist farmers with queries about PM Kisan Samman Nidhi (PMKISAN) and is evolving to assist with other government program.
- ICAR has established a Virtual Centre of Excellence on AI in Agriculture, and developing mobile applications such as AI-DISC (for crop disease identification) and AI-DISHA (for livestock disease diagnosis).
- National Pest Surveillance System for tracking the loss of produce due to climate change.
- AI based analytics using field photographs for crop health assessment and crop monitoring using satellite, weather & soil moisture datasets. This tool supports 61 crops and over 400 pests combinations, and currently used by over 10,000 extension workers.

(d): A study conducted by ICAR-NIAP, New Delhi, titled '*Harvesting Benefits of Drone Technology in Agriculture*' during Kharif 2024 in Uttar Pradesh, reported a yield increase of 4.1% in paddy and 1.6% in sugarcane. Additionally, the labour cost of spraying using drones was found to be 31.4% lower compared to conventional methods.

(e): The Government has launched key initiatives to ensure technology accessibility for small and marginal farmers. Some of the schemes/initiatives by Ministry of Agriculture and Farmers Welfare are:

(i) Digital Agriculture Mission, which deploys AI, big data, geospatial analytics, block chain and digital platforms for enhanced crop monitoring, soil profiling, real-time weather forecasts, and decision support.

(ii) Sub-Mission on Agricultural Mechanization (SMAM), provision of Custom Hiring Centres (CHCs) under SMAM, and support for the 'Drone Didi' and 'Kisan Drones'.

(iii) Promotion of Affordable Farm Machinery through various schemes, the Government promotes the manufacture and distribution of low-cost, efficient farm implements suitable for small land holdings. Subsidies are provided to farmers and entrepreneurs for purchasing such equipment.

(iv) Capacity buildings and human resource development through a network of 731 Krishi Vigyan Kendra (KVKs) under Indian Council of Agricultural Research and Agricultural Technology Management Agency (ATMA), wherein technology assessment, demonstration and capacity development are executed. The KVKs also provide inputs support of advanced technologies through production and supply of quality seeds, planting materials, fingerlings, improved animal and poultry germplasm.