

GOVERNMENT OF INDIA
MINISTRY OF AGRICULTURE AND FARMERS WELFARE
DEPARTMENT OF AGRICULTURE AND FARMERS WELFARE

RAJYA SABHA
UNSTARRED QUESTION NO. 3202
TO BE ANSWERED ON THE 20/03/2026

**ASSESSMENT OF CROP LOSS DUE TO CLIMATE CHANGE AND EXTREME
WEATHER EVENTS**

3202. SHRI RAJINDER GUPTA:

Will the Minister of AGRICULTURE AND FARMERS WELFARE be pleased to state:

- (a) whether the Government has assessed the impact of climate change and extreme weather events on agricultural land over the last ten years, and if so, the total area affected, State/UT and district-wise;
- (b) the quantity of crops lost due to such events during the said period, year-wise, crop-wise, and State/UT-wise, along with the estimated monetary value of such losses;
- (c) whether any districts or regions have been identified as highly vulnerable to climate-induced agricultural losses, and if so, the details along with mitigation measures undertaken; and
- (d) whether the Government proposes any new policy framework aimed at mitigating climate-related agricultural risks?

ANSWER

MINISTER OF STATE FOR AGRICULTURE AND FARMERS WELFARE
(SHRI RAMNATH THAKUR)

(a) to (d): ICAR is implementing a project- National Innovations in Climate Resilient Agriculture (NICRA), which studies the impact of climate change on agriculture. Under the project, risk and vulnerability assessment of agriculture to climate change has been carried out at district-level for 651 predominantly agricultural districts as per Intergovernmental Panel on Climate Change (IPCC) protocols. 310 districts were identified as vulnerable out of which 109 districts have been categorized as 'very high' and 201 districts as 'highly' vulnerable. The details of districts identified as climate-vulnerable under NICRA programme, are at Annexure I.

For enhancing the resilience and adaptive capacity of farmers to climate variability, location-specific climate resilient technologies such as system of rice intensification, aerobic rice, direct seeding of rice, zero till wheat sowing etc. have been demonstrated under the project through Krishi Vigyan Kendras in 448 Climate Resilient Villages. These are spread over 151 climatically vulnerable districts of 28 states / UTs. During the last ten years (2014–2024), ICAR has released 2,900 crop varieties, out of which 2,661 are tolerant to one or more biotic and/or abiotic stresses.

Primary responsibility for disaster management rests with the State Governments, which provide financial relief to the affected people in the wake of notified disasters, including drought from the State Disaster Response Fund (SDRF), already placed at their disposal. However, in the event of disaster of a severe nature, additional financial assistance is extended from the National Disaster Response Fund (NDRF), as per the laid down procedure, which includes an assessment

based on the visit of an Inter-Ministerial Central Team (IMCT). Further, Pradhan Mantri Fasal Bima Yojana along with weather index based Restructured Weather Based Crop Insurance Scheme provide a comprehensive insurance cover against failure of the crop by providing financial support to farmers suffering crop loss/damage arising out of unforeseen natural calamities and adverse weather incidence. As on 31.12.2025, since the inception of the scheme in 2016, total claims amounting to ₹1.92 lakh crore have been paid under PMFBY (2016–17 to 2024–25), and the State-wise details of claims paid and area insured are placed at Annexure II.

Further, Government is implementing Per Drop More Crop scheme to increase water use efficiency at the farm level through Micro Irrigation technologies i.e. drip and sprinkler irrigation systems. Rainfed Area Development scheme is being implemented to promote Integrated Farming System for enhancing productivity and minimizing risks associated with climatic variability. The Soil Health and Fertility scheme is implemented to assist states in promoting Integrated Nutrient Management through judicious use of fertilizers. The Government is also promoting organic farming through Paramparagat Krishi Vikas Yojana and natural farming through National Mission on Natural Farming scheme. “Mission for Aatmanirbharta in Pulses”, National Mission on Edible Oils – Oilseeds, and National Food Security & Nutrition Mission promotes crop diversification. Mission for Integrated Development of Horticulture, Agroforestry & National Bamboo Mission also promote climate resilience in agriculture. Further, Pradhan Mantri Fasal Bima Yojana along with weather index based Restructured Weather Based Crop Insurance Scheme provides a comprehensive insurance cover against failure of the crops, thereby helping compensate farmers for losses caused by natural calamities and climate-related risks.

List of districts with 'very high' climate change risk to agriculture

State	District	Risk	Hazard
Andhra Pradesh	Anantapur	Very High	Drought
Arunachal Pradesh	Upper Siang	Very High	Drought
Assam	Nalbari	Very High	-
Assam	Darrang	Very High	Drought
Bihar	Sitamarhi	Very High	Flood
Bihar	Madhubani	Very High	Flood
Bihar	Supaul	Very High	Flood
Bihar	Kishanganj	Very High	Flood
Bihar	Katihar	Very High	Flood
Bihar	Saharsa	Very High	Flood
Bihar	Darbhanga	Very High	Flood
Bihar	Lakhisarai	Very High	Flood
Bihar	Sheikhpura	Very High	Drought
Bihar	Nalanda	Very High	Flood
Gujarat	Panchmahal	Very High	Drought
Gujarat	Dahod	Very High	Drought
Haryana	Fatehabad	Very High	Drought
Haryana	Bhiwani	Very High	Drought
Haryana	Mahendragarh	Very High	Drought
Himachal Pradesh	Chamba	Very High	Drought
Himachal Pradesh	Mandi	Very High	-
Jammu & Kashmir	Leh(Ladakh)	Very High	Drought
Jammu & Kashmir	Poonch	Very High	Drought
Jammu & Kashmir	Kathua	Very High	Drought
Karnataka	Gadag	Very High	Drought
Karnataka	Haveri	Very High	Drought
Karnataka	Chitradurga	Very High	Drought
Kerala	Kasaragod	Very High	Cyclone
Kerala	Kozhikode	Very High	Cyclone
Kerala	Ernakulam	Very High	Cyclone
Kerala	Kottayam	Very High	Drought
Kerala	Alappuzha	Very High	Flood
Kerala	Pathanamthitta	Very High	Flood
Kerala	Kollam	Very High	Cyclone
Kerala	Thiruvananthapuram	Very High	Drought
Madhya Pradesh	Bhind	Very High	Drought
Madhya Pradesh	Jhabua	Very High	Drought
Maharashtra	Nanded	Very High	-
Maharashtra	Beed	Very High	Drought
Meghalaya	West Garo Hills	Very High	Drought
Meghalaya	East Garo Hills	Very High	Drought
Meghalaya	South Garo Hills	Very High	Drought

Meghalaya	West Khasi Hills	Very High	Drought
Meghalaya	East Khasi Hills	Very High	Drought
Meghalaya	Jaintia Hills	Very High	Drought
Mizoram	Lawngtlai	Very High	Drought
Mizoram	Saiha	Very High	Drought
Nagaland	Tuensang	Very High	Drought
Orissa	Keonjhar	Very High	Cyclone
Orissa	Balasore (Baleshwar)	Very High	Cyclone
Orissa	Kendrapara	Very High	Cyclone
Orissa	Jagatsingpur	Very High	Flood
Orissa	Jajpur	Very High	Cyclone
Orissa	Puri	Very High	Flood
Punjab	Gurdaspur	Very High	Drought
Punjab	Jalandhar	Very High	Drought
Punjab	Moga	Very High	Drought
Punjab	Faridkot	Very High	Drought
Punjab	Bathinda	Very High	Drought
Rajasthan	Ganganagar	Very High	Drought
Rajasthan	Hanumangarh	Very High	Drought
Rajasthan	Churu	Very High	Drought
Rajasthan	Jhunjhunu	Very High	Drought
Rajasthan	Alwar	Very High	Drought
Rajasthan	Karauli	Very High	Drought
Rajasthan	Dausa	Very High	Drought
Rajasthan	Sikar	Very High	Drought
Rajasthan	Nagaur	Very High	Drought
Rajasthan	Jodhpur	Very High	Drought
Rajasthan	Jaisalmer	Very High	Drought
Rajasthan	Barmer	Very High	Drought
Rajasthan	Jalore	Very High	Drought
Rajasthan	Pali	Very High	Drought
Rajasthan	Bhilwara	Very High	Drought
Rajasthan	Dungarpur	Very High	Drought
Rajasthan	Banswara	Very High	Drought
Sikkim	South	Very High	-
Uttar Pradesh	Bagpat	Very High	Drought
Uttar Pradesh	Unnao	Very High	Drought
Uttar Pradesh	Kannauj	Very High	Drought
Uttar Pradesh	Etawah	Very High	Drought
Uttar Pradesh	Auraiya	Very High	Drought
Uttar Pradesh	Kanpur (Dehat)	Very High	Drought
Uttar Pradesh	Jalaun	Very High	Drought
Uttar Pradesh	Jhansi	Very High	-
Uttar Pradesh	Hamirpur	Very High	Drought
Uttar Pradesh	Mahoba	Very High	Drought
Uttar Pradesh	Banda	Very High	Drought

Uttar Pradesh	Chitrakut	Very High	-
Uttar Pradesh	Fatehpur	Very High	Drought
Uttar Pradesh	Kaushambi	Very High	Drought
Uttar Pradesh	Allahabad	Very High	Drought
Uttar Pradesh	Bahraich	Very High	Flood
Uttar Pradesh	Shravasti	Very High	-
Uttar Pradesh	Balrampur	Very High	Flood
Uttar Pradesh	Gonda	Very High	Flood
Uttar Pradesh	Basti	Very High	Drought
Uttar Pradesh	Jaunpur	Very High	Flood
Uttar Pradesh	Sant Ravidas Nagar	Very High	Flood
Uttarakhand	Uttarkashi	Very High	-
Uttarakhand	Rudraprayag	Very High	-
Uttarakhand	Tehri Garwal	Very High	-
Uttarakhand	Pithoragarh	Very High	Drought
Uttarakhand	Bageshwar	Very High	Drought
Uttarakhand	Almora	Very High	Drought
Uttarakhand	Champawat	Very High	Drought
West Bengal	Malda	Very High	Flood
West Bengal	24-Paraganas (North)	Very High	Cyclone
West Bengal	24-Paraganas (South)	Very High	Cyclone

Annexure II

Details of Claims paid and area insured under PMFBY from 2016-17 to 2024-25 (as on 31.12.2025)		
State/UT Name	Area Insured (in Lakh Ha)	Paid Claims (in Rs. Crore)
A & N Islands	0.0	0.3
Andhra Pradesh	195.5	5,580.5
Assam	37.5	736.6
Bihar	48.3	811.1
Chhattisgarh	212.1	7,655.1
Goa	0.0	0.1
Gujarat	112.3	5,751.2
Haryana	151.9	9,015.2
Himachal Pradesh	356.5	609.4
Jammu & Kashmir	5.6	157.3
Jharkhand	33.0	857.3
Karnataka	194.0	18,654.5
Kerala	5.0	743.5
Madhya Pradesh	1,004.5	31,737.1
Maharashtra	806.4	45,449.2
Manipur	0.4	10.5
Meghalaya	0.4	24.5
Odisha	124.3	7,183.9
Puducherry	0.8	21.2
Rajasthan	914.7	31,554.5
Sikkim	0.0	0.2
Tamil Nadu	129.6	15,575.5
Telangana	40.1	1,906.4
Tripura	2.6	12.3
Uttar Pradesh	337.6	5,805.2
Uttarakhand	232.5	1,362.0
West Bengal	56.4	1,262.8
GRAND TOTAL	5,002.2	1,92,477.3
