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

LOK SABHA
UNSTARRED QUESTION NO. 1217
TO BE ANSWERED ON THE 11TH FEBRUARY, 2025

RAINFED DEPENDENCY AND CLIMATE ADAPTATION IN AGRICULTURE

1217. SHRI ASADUDDIN OWAISI:
Will the Minister of AGRICULTURE AND FARMERS WELFARE कृषि और किसान कल्याण मंत्री be pleased to state:

(a) the percentage of agricultural land currently dependent on rainfall for irrigation along with the details of its evolution during last twenty years;

(b) whether the Government has set specific targets to reduce rainfed dependency, particularly in regions vulnerable to irregular monsoons and if so, the details thereof;

(c) the measures being undertaken by the Government to decrease reliance on rainfall and promote alternative irrigation methods;

(d) whether the Government is actively promoting adaptation strategies to address the challenges posed by climate change in agriculture; and

(e) if so, the details thereof if not, the reasons therefor?

ANSWER

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

(a): As per the latest 'Land Use Statistics at a Glance: 2022-23' published on the basis of information furnished by States/UTs, the details of gross un-irrigated area from 2003-04 to 2022-23 at all India level is at Annexure.

As per the publication, gross un-irrigated area during 2003-04 was 111.619 million hectares which has been decreased to 97.063 million hectares. During the agriculture year 2022-23, percentage of gross un-irrigated area over the gross cropped area is 44.2%, thus remaining 55.8 % gross cropped area achieved under irrigation.

(b) to (e): The Government has implemented several initiatives to reduce dependency on rainfed, enhance irrigation infrastructure, promote sustainable water management practices, and develop climate-resilient agricultural systems to reduce dependence on rainfall and mitigate the impacts of irregular monsoons, particularly in regions vulnerable to irregular monsoons. Key measures include:

I. Pradhan Mantri Krishi Sinchayee Yojana (PMKSY): Launched in 2015, PMKSY aims to enhance irrigation coverage and water-use efficiency. It focuses on providing irrigation to

every field, promoting water conservation, and improving water-use efficiency. The scheme includes components like Accelerated Irrigation Benefit Programme (AIBP) and Har Khet Ko Pani, which work towards expanding irrigation infrastructure.

II. Atal Bhujal Yojana: This community-led groundwater management program seeks to improve groundwater management in seven Indian states with high rates of groundwater depletion. It focuses on sustainable water use practices and aims to build resilience against erratic monsoon patterns.

III. Rashtriya Krishi Vikas Yojana (RKVY): Under RKVY, state governments are advised to allocate 5 to 10% of the funds for interventions that minimize the adverse impact of aberrant monsoons on agriculture. This includes constructing water harvesting structures, promoting moisture conservation practices, and restoring irrigation infrastructure.

IV. Promotion of Climate-Resilient Crop Varieties: The government has been developing and promoting climate-resilient seed varieties to withstand erratic weather patterns. For instance, in February 2025, a six-year program was announced to enhance the production of pulse crops and cotton, focusing on reducing reliance on imports and improving resilience to climate variability.

V. Organic Farming Initiatives: Programs like the Paramparagat Krishi Vikas Yojana (PKVY) encourage organic farming practices, which often require less water and are more resilient to climate variability. This initiative supports farmers in adopting sustainable agricultural practices.

VI. Watershed Development Component of Pradhan Mantri Krishi Sinchai Yojana (WDC-PMKSY) is for the development of rainfed and degraded lands in the country. The activities undertaken, inter-alia, include ridge area treatment, drainage line treatment, soil and moisture conservation, rainwater harvesting, nursery raising, pasture development, livelihoods for asset-less persons etc. WDC-PMKSY, through these interventions, seeks to ensure sustainable development through improved natural resource management and better resilience of farmers to climate change. These initiatives collectively aim to enhance irrigation infrastructure, promote sustainable water management practices, and develop climate-resilient agricultural systems to reduce dependence on rainfall and mitigate the impacts of irregular monsoons.

Annexure

STATEMENT IN REPLY TO PART (a) OF LOK SABHA UNSTARRED QUESTION NO. 1217 TO BE ANSWERED ON 11/02/2025 REGARDING RAINFED DEPENDENCY AND CLIMATE ADAPTATION IN AGRICULTURE.

(Thousand Hectares)

Year	Gross Cropped Area	Gross Un-Irrigated Area
2003-04	189661	111619
2004-05	191103	110025
2005-06	192737	108458
2006-07	192381	105629
2007-08	195223	107165
2008-09	195328	106433
2009-10	189188	104101
2010-11	198128	108810
2011-12	195546	103614
2012-13	194455	101675
2013-14	201300	105030
2014-15	198285	100439
2015-16	198122	100368
2016-17	201158	101538
2017-18	200876	99409
2018-19	201179	96469
2019-20	211359	98916
2020-21	216107	97173
2021-22	219158	98778
2022-23	219357	97063

Source: Land Use Statistics at a Glance: 2022-23

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