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

# LOK SABHA UNSTARRED QUESTION NO. 4369 TO BE ANSWERED ON 29<sup>th</sup> MARCH, 2022

#### SURVEY ON SOIL EROSION

4369. SHRI RAJESHBHAI CHUDASAMA:

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

- (a) whether the Government has periodically conducted any scientific survey/study to identify the extent and nature of soil erosion and land degradation across the country;
- (b) if so, the findings thereof;
- (c) the details of the cultivable area affected by soil erosion in the country during the last three years and the current year, State-wise and year-wise;
- (d) whether the Government has chalked out any programme for reclamation and development of such land in the country; and
- (e) if so, the details thereof along with the success achieved thereunder during the said period?

#### **ANSWER**

THE MINISTER OF AGRICULTURE AND FARMERS WELFARE कृषि और किसान कल्याण मंत्री (SHRI NARENDRA SINGH TOMAR)

- (a) to (c): There is no periodical conduct of scientific survey / study specifically to identify the extent and nature of soil erosion and land degradation across the country. However, assessment has been made by different agencies/organizations using different methodologies/criteria from time to time. Details of assessments made are placed at **Annexure-I**. As per NAAS (2010), the extent of soil Erosion (soil loss more than 10 tonnes/ha/yr) in cultivable land of the country was 92.4 million hectares as assessed by the ICAR using the harmonized database. The State-wise details are given in **Annexure-II**.
- (d) & (e): The Government under Reclamation of Problem Soils (RPS), a sub-scheme of Rashtriya Krishi Vikas Yojana (RKVY), is providing assistance for reclamation of lands affected by alkalinity, salinity and acidity. During 2016-17 to 2020-21, an amount of Rs. 58.76 crore (central shares) was released to the States and an area of 0.24 lakh ha has been developed.

The Indian Council of Agricultural Research has developed location specific bioengineering soil & water conservation measures, watershed management interventions, soil reclamation measures for saline, alkali, waterlogged and acid soils, selection of suitable crops including agro-forestry interventions to prevent and manage land degradation.

The Department of Land Resources has sanctioned 8214 watershed development projects during 2009-10 to 2014-15 in 28 states (now 27 states and UTs of Jammu & Kashmir and Ladakh) under the erstwhile Integrated Watershed Management Programme (IWMP). IWMP was amalgamated as the Watershed Development Component of *Pradhan Mantri Krishi Sinchayee Yojana* (WDC-PMKSY) in 2015-16 for development of rainfed/ degraded Lands. During 2014-15 to 2021-22 (up to Q3), about 7.60 lakh water harvesting structures have been created/ rejuvenated, bringing additional area of 16.27 lakh ha under protective irrigation and benefitting 35.62 lakh farmers. The Government of India has also sanctioned financial outlay of Rs. 8,134 crore with a physical target of 49.50 lakh ha under 'WDC-PMKSY-2.0' for the period of 2021-2026. As on 20.03.2022, 1099 projects have been sanctioned to States/UTs covering an area of 49.21 lakh hectares.

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## Assessment of land degradation in India by different agencies/organizations

Agencies/Organizations	Year	Area
		(million
		hectares)
National Commission on Agriculture	1976	148.09
Ministry of Agriculture (Soil and Water Conservation	1978	175.00
Division)		
National Remote Sensing Agency (NRSA)	1985	53.28
Ministry of Agriculture	1985	173.64
Ministry of Agriculture	1994	107.43
ICAR-National Bureau of Soil Survey and Land Use	1994	187.70
Planning (NBSS&LUP)		
ICAR-NBSS&LUP (Revised)	2004	146.82
Indian Council of Agricultural Research, National Academy	2010	120.70
of Agricultural Sciences (NAAS) based on harmonized		
database		
Space Applications Centre (SAC), Indian Space Research	2016	96.40
Organization (ISRO), Ahmedabad (based on Indian Remote		
Sensing Satellite (IRS) Advanced Wide Field Sensor		
(AWiFS) data		
Department of Land Resources in collaboration with the	2019	55.77
National Remote Sensing Centre (Wastelands Atlas of		
India)		

## (Part (a) to (c) Unstarred Question No. 4369 to be Answered On 29th March, 2022)

## State-wise cultivable area affected by soil erosion in India

State	Area ('000 ha)
Andhra Pradesh (including Telangana)	8093
Arunachal Pradesh	666
Assam	3248
Bihar	851
Chhattisgarh	3733
Delhi	28
Goa	1
Gujarat	984
Haryana	306
Himachal Pradesh	982
Jammu & Kashmir	1369
Jharkhand	3219
Karnataka	7522
Kerala	490
Madhya Pradesh	12262
Maharashtra	8799
Manipur	122
Meghalaya	302
Mizoram	1
Nagaland	46
Orissa	2227
Punjab	229
Rajasthan	19029
Sikkim	45
Tamil Nadu	2308
Tripura	109
Uttar Pradesh	13075
Uttarakhand	1018
West Bengal	1332
Total	92400

Source: Degraded and Wastelands of India – Status and Spatial Distribution, NAAS, New Delhi Publication, June 2010.