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

RAJYA SABHA STARRED QUESTION NO. 268 TO BE ANSWERED ON THE 24/03/2023

DECLINE IN CULTIVABLE LAND AREA

*268. SMT. JEBI MATHER HISHAM:

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

- (a) whether there is a decline in the cultivable land area in the country;
- (b) if so, the reasons for the degradation of agricultural land;
- (c) whether the degradation of agricultural land has led to the reduction of crop yields;
- (d) whether Government has assessed the nutritive value of the agricultural produce

yielded from the degraded agricultural land; and

(e) the measures to be adopted in reclaiming the quality of agricultural land?

ANSWER

MINISTER OF AGRICULTURE & FARMERS WELFARE

(SHRI NARENDRA SINGH TOMAR)

(a) to (e): A statement is laid on the Table of the House.

STATEMENT REFERRED TO IN REPLY TO PART (a) to (e) OF RAJYA SABHA STARRED QUESTION NO. 268 DUE FOR ANSWER ON 24.03.2023 REGARDING DECLINE IN CULTIVABLE LAND AREA

(a) & (b): As per the latest Land Use Statistics-at a Glance 2010-11 to 2019-20, the details of cultivable land in the country for the year 2015-16 to 2019-20 are given below:

Year	Cultivable Land
	(in Thousand Hectare)
2015-16	1,81,371
2016-17	1,80,923
2017-18	1,80,817
2018-19	1,80,624
2019-20	1,79,993

The marginal decline in agricultural/cultivable land has been mainly due to diversion of land for non-agricultural purposes such as urbanization, creation of infrastructure viz. roads, airports, housing, etc. While there is shift in agricultural land for non agricultural purposes, non-agricultural land is also being brought under agricultural uses through various schemes implemented by the Government.

The cultivable land becomes degraded due to salinity, soil erosion, acidity, soil pollution of various kinds etc. The reasons for genesis of salt affected soils are poor water management in irrigation command, use of poor quality groundwater for irrigation, sea water intrusion in coastal plains, inadequate and poor drainage to dispose excess salt and water, etc. Some of the reasons for degradation of agricultural land are, excessive seepage from canal networks in areas underlain with saline or saline-sodic groundwater leading to shallow groundwater zone; inefficient and ineffective on-farm water and salt management. Similarly soil erosion is caused by water and wind over the unproductive land or faulty cultivation practices.

(c) & (d): The yield of a crop depends on various factors such as weather extremities, rainfall, soil type, agro-climatic condition, irrigation facilities, types of crops cultivated, use of fertilizers and pesticides, length of growing seasons, technology used etc. The yield of crops varies within the country across different agro-climatic regions. The Government of India has been implementing various schemes with the objective of increasing the productivity and production of various crops. This has led to increase in yield of foodgrains in the country from 2235 kg. / hectare during 2017-18 to 2448 kg. / hectare in 2022-23 (2nd Advance Estimates). The foodgrain production has increased from 285.01 million tonnes in 2017-18 to 315.61 million tonnes in 2021-22.

(e): As per the Seventh Schedule of the Constitution of India, 'Land' comes under the purview of State Governments. However, the Government supports and supplements the efforts of State Governments through its various programmes/schemes which help to reduce land degradation process and in turn increase agricultural production through sustainable means. In order to prevent and manage land degradation and improve productivity of degraded land, the Government has taken effective measures as below:

I. ICAR has developed several location specific bio-engineering measures to check soil erosion due to run-off of rain water, sand dune stabilization and shelter belt technology to check wind erosion and reclamation technology for problem soils in the country. Gypsum based technology package for reclamation of sodic soils, sub surface drainage (SSD) technology package for reclamation and management of waterlogged saline irrigated alluvial and black soils have been developed. Salt tolerant varieties of four major field crops (Rice, wheat, mustard and chick pea) have been developed and released for cultivation in the marginal and moderately salt-affected areas for sustaining high crop productivity. ICAR has developed Bio-drainage, land shaping and conjunctive use of water technology as a preventive option for management of waterlogged and marginal saline soils especially. It can easily be adopted by the farmers and generates good revenue from the sale of wood. ICAR is recommending soil test based balanced and integrated nutrient management through conjunctive use of both inorganic and organic sources (manure, biofertilizers etc.) of plant nutrients and location specific soil & water conservation measures for preventing deterioration of soil health and fertility.

II. National Mission on Sustainable Agriculture (NMSA) is one of the Missions within the National Action Plan on Climate Change (NAPCC) launched by Ministry of Agriculture and Farmers Welfare which aims to evolve and implement strategies to make Indian agriculture more resilient. NMSA also addresses the problem of land degradation. NMSA was approved for three major components namely Rainfed Area Development (RAD); On Farm Water Management (OFWM); and Soil Health Management (SHM). In addition to aforementioned programmes Sub Mission on Agroforestry (SMAF) and Restructured National Bamboo Mission (NBM) have been brought under NMSA. Also, under the Rashtriya Krishi Vikas Yojana (RKVY) a component on Reclamation of Problem Soil is operational from 2016-17 which is dedicated to restoration of land leading to livelihood security. Through Integrated Nutrient Management (INM) efforts have been made to restore the soil fertility of the degraded lands by balanced use of chemical fertilizers. Under Soil Health Card Scheme 10.74 crore grid based soil health cards have been distributed during cycle-I of the scheme (2015 to 2017). During Cycle-II (2017 to 2019), 11.97 crore grid based soil health cards have been distributed. Paramparagat

Krishi Vikas Yojana (PKVY) has been implemented since 2015-16 for the first time in the country to promote chemical free organic farming in cluster approach with Participatory Guarantee System (PGS) certification.

III. The Integrated Watershed Management Programme (IWMP) was amalgamated as one of the components of PMKSY in 2015-16 and named as the Watershed Development Component of the Pradhan Mantri Krishi Sinchayee Yojana (WDC-PMKSY). Under WDC-PMKSY 1.0, Department of Land Resources provided Central assistance for 6382 watershed development projects in 28 States and released Rs.19926.67 crore as Central share. The extended project period of WDCPMKSY 1.0 got over on 31.03.2022. 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. Under WDC-PMKSY 1.0, as per information received from the States/UTs, since 2014-15 to 2021-22, approximately 7.64 lakh water harvesting structures have been created / rejuvenated. An additional area of about 16.41 lakh ha has been brought under protective irrigation. The number of farmers benefited is about 36.34 lakh during this period. Further, during 2018-19 to 2021-22, 1.62 lakh ha. has been brought under plantation (Horticulture/Afforestation) and 3.36 lakh ha culturable wasteland treated in all completed projects. Government of India has also approved continuation of WDC-PMKSY 2.0 with a physical target of 49.50 lakh ha of rainfed/degraded areas in December, 2021. Under WDCPMKSY 2.0, Department has already sanctioned 1110 watershed projects to States/UTs covering an area of 49.43 lakh hectare with total project cost of Rs. 12109.96 crore (Central share Rs. 7864.25 crore).

IV. Further, Government supports construction of water harvesting and conservation works primarily through Mahatma Gandhi National Rural Employment Guarantee Scheme (MGNREGS). Mission Amrit Sarovar launched as a part of celebration of Azadi ka Amrit Mahotsav with an objective to conserve water for future. The Mission is aimed at developing and rejuvenating 75 water bodies in each district of the country. As on date, 93970 sites have been identified and work has commenced on 55660 sites. The work has been completed on 29520 sites. In addition, large number of water bodies such as farm ponds, dug wells, check dams and community ponds (water harvesting & Fishery) have been created under the MGNREGS Scheme. A total of 64,09,852 water harvesting structures have been created so far under the scheme.