

**GOVERNMENT OF INDIA
AGRICULTURE
LOK SABHA**

UNSTARRED QUESTION NO:812
ANSWERED ON:02.03.2010
SALINITY AND WATER LOGGING
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Will the Minister of AGRICULTURE be pleased to state:

- (a) whether the soil fertility is on the decline in the country;
- (b) if so, the reasons therefor;
- (c) whether salinity and water logging has adversely affected the soil health of the agricultural land particularly, the coastal areas of the country including Telangana region of Andhra Pradesh;
- (d) if so, the details thereof, State-wise and the regions affected;
- (e) whether the Indian Council of Agricultural Research (ICAR)/Agriculture Universities have developed crop varieties, suitable for water logging/saline soils;
- (f) if so, the details thereof; and
- (g) the remedial measures taken to improve soil health and productivity of agricultural land in the country?

Answer

MINISTER OF STATE IN THE MINISTRY OF AGRICULTURE AND MINISTER OF STATE IN THE MINISTRY OF CONSUMER AFFAIRS, FOOD AND PUBLIC DISTRIBUTION (PROF. K.V. THOMAS)

(a) & (b): There is no scientific evidence to suggest that soil fertility is on the decline in the country. However, there are studies which indicate that imbalanced use of chemical fertilizers without any application of organic manures has affected soil health and productivity in some parts of the country.

(c) & (d): As per the study conducted (2005) by National Bureau of Soil Survey and Land Use Planning - Indian Council of Agricultural Research-Regional Center, Nagpur, salinity and waterlogging adversely affect the soil fertility, plant nutrition and productivity including coastal areas of the country and also that of Telangana region of Andhra Pradesh. The ICAR has reported that an area of 29.57 lakh ha. is affected by the problems of salinity including coastal salinity and 142.92 lakh ha. by water logging in the country including Andhra Pradesh. The state-wise details of extent of area under salinity and waterlogging are at Annexure-I.

(e) & (f): ICAR has developed technologies for prevention and control of salinity ingress and waterlogging for improving productivity of agriculture based on research studies conducted by Central Research Institutes, State Agricultural Universities and other Departments. The details of such technologies are at Annexure-II.

(g): Ministry of Water Resources, Government of India introduced the component of Reclamation of Water logged areas in irrigated commands under Command Area Development & Water Management Programme (CADWM) being implemented across the country. Under this programme, both preventive as well as ameliorative measures are being taken to check waterlogging. The preventive measures include lining of canals in vulnerable reaches, on-farm development works such as construction of lined field channels and drains, rotational supply (warabandi) of irrigation water to farmers, conjunctive use of surface and ground water, propagation of improved methods of irrigation among farmers through training, adaptive trials and demonstrations. Ameliorative measures include construction of surface and sub-surface drains, vertical drainage and bio-drainage for disposal of excess water and leaching of soil to flush out excess salt from root zone of crops. All these measures put together in suitable combination at a particular site effectively address waterlogging problem.

With a view to prevent soil erosion, land degradation and increasing the productivity of the agriculture lands, Government of India, Ministry of Agriculture is implementing various schemes/programmes namely, National Watershed Development Project for Rainfed Areas (NWDPRA), Soil Conservation for Enhancing the Productivity of Degraded Lands in the Catchments of River Valley Project and Flood Prone River (RVP & FPR), Reclamation and Development of Alkali & Acid Soils (RADAS), Watershed Development Project in Shifting Cultivation Areas (WDPSCA), National Project on Management of Soil Health & Fertility etc. across the country. Three major Initiatives namely, National Food Security Mission (NFSM), National Horticulture Mission (NHM) and Rashtriya Krishi Vikas Yojana (RKVY) have been launched to enhance productivity of agricultural land and sustaining food security across the country.