

**GOVERNMENT OF INDIA  
AGRICULTURE  
LOK SABHA**

STARRED QUESTION NO:470  
ANSWERED ON:06.09.2011  
SOIL MOISTURE MANAGEMENT  
Shanavas Shri M. I.

**Will the Minister of AGRICULTURE be pleased to state:**

- (a) whether the Water Technology Centre, New Delhi, an institute of the Indian Agricultural Research Institute (IARI), the Indian Council of Agricultural Research (ICAR) Institutes and Agriculture Universities have conducted Crop Water Management works/studies for efficient use of water;
- (b) if so, the details and the outcome thereof;
- (c) the details of programmes/schemes undertaken for management of soil moisture in the country;
- (d) whether suggestions have been received from various quarters to popularize the use of crops requiring less quantum of water alongwith moisture saving devices/technique in the farm sector;
- (e) if so, the details thereof;
- (f) whether it is also proposed to promote innovation in this regard; and
- (g) if so, the details thereof alongwith the incentives proposed to be given for the innovation?

**Answer**

MINISTER OF THE STATE IN THE MINISTRY OF AGRICULTURE (SHRI SHARAD PAWAR)

(a) to (g): A Statement is laid on the Table of the House.

STATEMENT IN RESPECT OF PARTS (a) to (g) OF LOK SABHA STARRED QUESTION NO. 470 TO BE ANSWERED ON 06/09/2011 REGARDING "SOIL MOISTURE MANAGEMENT"

(a) & (b): Yes, Madam. The ICAR through Water Technology Centre (WTC), IARI, New Delhi, Central Soil Water Conservation Research & Training Institute (CSWCRTI), Dehradun, Directorate of Water Management Research (DWMR), Bhubaneswar, Central Soil Salinity Research Institute (CSSRI), Karnal, Central Research Institute for Dryland Agriculture (CRIDA), Hyderabad and Central Arid Zone Research Institute (CAZRI), Jodhpur are conducting research on different aspects of crop management envisaging judicious use of water. The centers of associated four All India Co-ordinated Research Projects on Water Management, Ground Water Utilization, Use of Saline Waters and Dryland Agriculture located at various State Agricultural Universities are also involved. These institutes are providing requisite technology support which include rationalizing cropping patterns towards lower water demanding crops, efficient crop diversification including multiple uses, agroforestry etc, enhancing irrigation efficiencies through laser levelling, optimal basin sizes and shift to micro-irrigation techniques, optimal irrigation scheduling especially for the most water profligate paddy crop, appropriate tillage systems including resource conservation technologies and surface retention of crop residues for mulching, augmenting water supplies through rain water harvesting for supplementary irrigation, integrated watershed management for soil moisture conservation and ground water recharge, promoting use of saline waters and domestic sewage, use of and short/ medium range weather forecasting for optimizing crop productivity in the country. Technologies for developing efficient rain water harvesting structures such as farm ponds, nalla bunds, check dams, percolation tanks, khadin, tanka, nadi, dugout and embankment type ponds etc. have also been developed. Several in-situ soil water conservations techniques like ridge-furrow/broad bed system, compartmental/contour bunding, etc. have also been put forth.

(c) The Government is promoting following programs/schemes namely, (i) National Watershed Development Project for Rainfed Areas;(ii) Soil Conservation in the Catchments of River Valley Project & Flood Prone River (RVP & FPR); (iii) Watershed Development Project in Shifting Cultivation Areas (WDPSCA); (iv) Integrated Watershed Management Programme (IWMP); (v) Farmers Participatory Action Research Programme; (vi) Artificial Recharge to Ground Water through Dugwell; (vii) National Project for Repair, Renovation & Restoration (RRR) of Water Bodies;(viii) National Mission on Micro Irrigation; (ix) Command Area Development & Water Management (CADWM) Programme; (x) National Horticulture Mission etc. for conservation and better utilization of water in agriculture.

(d) & (e): Yes, Madam. The suggestions are received from time to time from public representatives, eminent scientists, and scientists in National Agricultural Research System (NARS) and in workshops, seminars as also in inter-action with other stakeholders.

(f) & (g): Yes, Madam. Enhancing water use efficiency is a high priority area of research in the council. Promising scientists are encouraged to submit innovative proposals for competitive grants under projects like National Agricultural Innovative Project and National Fund for Basic, Strategic and Frontier Application Research in Agriculture (NFBSFARA). Innovations are also being acknowledged through awards (including cash award) like Vasantao Naik Award for Outstanding Research Application in Dry land farming systems, Ground Water Augmentation Award, National Water Award and The Jain – INCID Krishi Sinchai Vikas Puraskar, etc.