

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

**LOK SABHA**  
**UNSTARRED QUESTION NO.3268**  
TO BE ANSWERED ON THE 6<sup>TH</sup> DECEMBER, 2016

**USE OF EXCESSIVE WATER IN AGRICULTURE**

3268. SHRI NALIN KUMAR KATEEL:  
SHRI B.N. CHANDRAPPA:

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

- (a) whether agriculture sector in the country is using two to four times more water to produce a unit of major food crops than that of China or Brazil and if so, the details thereof;
- (b) whether there is an urgent need to conduct research and development to find out ways to change the agricultural practices to ensure minimal use of water in the country and if so, the details thereof; and
- (c) the measures taken by the Government in this regard?

**ANSWER**

MINISTER OF STATE IN THE MINISTRY OF AGRICULTURE AND FARMERS WELFARE

कृषि एवं किसान कल्याण मंत्रालय में राज्य मंत्री (SHRI PARSHOTTAM RUPALA)

(a): As per available information, the irrigated area in India is about 66 million hectare using 688 Billion Cubic Meter (BCM) of irrigation water. In respect of China and Brazil, the irrigation coverage is 62.9 and 4.45 million hectare respectively with withdrawal of irrigation water to the extent of 358 BCM and 31.7 BCM respectively. Use of irrigation water thus comes to about 7.12 BCM per million hectare, 5.69 BCM per million hectare and 10.42 BCM per million hectare in Brazil, China & India respectively. There are some research reports published during last decade stating that India uses two to four times more water to produce a unit of major food crop than China and Brazil due to low water productivity in India. However, with adoption of modern agronomic practices like raised bed sowing, alternate furrow irrigation, sprinkler irrigation, drip irrigation, direct seeding of rice(DSR), system of rice intensification (SRI) and newer practices of water usage by the Indian farmers, the water requirement for raising food crops in India is comparable with other countries.

(b): Indian Institute of Water Management (IIWM), Bhubaneswar, All India Co-ordinated Research Project (AICRP) on irrigation water management and Consortia Research Platform on Water is addressing issues related to judicious use of water ensuring higher crop productivity in the country. Indian Council of Agricultural Research (ICAR) has developed cost effective, location specific scientific technologies viz., rainwater harvesting and recycling, multiple use of water, conjunctive use of rain, surface and groundwater resources, smart and precision

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technologies for irrigation and farming practices, optimum irrigation scheduling, resource conservation technologies, development of land drainage and reclamation of problem soils to enhance irrigation water efficiency and water productivity in Indian agriculture.

(c): To improve the water use efficiency, a dedicated component namely Per Drop More Crop (PDMC) component is being implemented under Pradhan Mantri Krishi Sinchayee Yojana (PMKSY) to focus water use efficiency through adoption of precision irrigation technologies and better agronomic measures. During the year 2015-16, an area of about 5.7 lakh hectare has been brought under drip and sprinkler irrigation systems to improve water use efficiency. Besides, crop diversification, adoption of SRI, DSR, conservation agriculture practices etc. are being promoted to improve water use efficiency in agriculture sector.

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