

Efficient use of water in agriculture

1458. SHRI SANJAY RAUT: Will the Minister of AGRICULTURE AND FARMERS WELFARE be pleased to state:

(a) whether Government's attention has been drawn towards any research report that India uses two to four times more water to produce a unit of major food crops than China and Brazil, if so, the details thereof and Government's response thereto; and

(b) the steps taken or proposed to be taken by Government for the efficient use of water in agriculture sector, particularly in drought affected States?

THE MINISTER OF STATE IN THE MINISTRY OF AGRICULTURE AND FARMERS WELFARE (DR. SANJEEV KUMAR BALYAN): (a) Yes Sir, 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, system of rice intensification 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) The Government advocates drought affected States for crop diversification with low water consuming crops and use of drought tolerant cultivars along with efficient methods of irrigation and water-use efficient agronomic practices. The Government has recently launched Pradhan Mantri Krishi Sinchayee Yojana (PMKSY) by amalgamating ongoing schemes, viz. Accelerated Irrigation Benefit Programme, Integrated Watershed Management Programme and On Farm Water Management (including drip/sprinkler irrigation) of National Mission on Sustainable Agriculture (NMSA) aiming at 'more crop per drop' and '*Har Khet ko pani*' for benefit of the farming community.

Cultivation of new arhar variety

1459. SHRIMATI RENUKA CHOWDHURY: Will the Minister of AGRICULTURE AND FARMERS WELFARE be pleased to state:

(a) whether scientists of Indian Agricultural Research Institute have developed a new arhar variety —Pigeon pea that matures in 120 days;

(b) if so, the details thereof, along with its main features; and

(c) the time by which the new variety of arhar is likely to be made available to farmers for commercial cultivation?

THE MINISTER OF STATE IN THE MINISTRY OF AGRICULTURE AND FARMERS WELFARE (DR. SANJEEV KUMAR BALYAN): (a) and (b) Indian Agricultural Research Institute has developed early maturing (120 days) arhar genotype. This genotype is of determinate habit, short statured (<100 cm), suited for close planting (30x15 cm) and amenable to mechanical harvesting.

(c) This genotype is yet to be evaluated in different agro-ecologies in All India Coordinated Research Project (AICRP) on Pigeon pea.

Use of hybrid and GM seeds

1460. SHRI A.K. SELVARAJ: Will the Minister of AGRICULTURE AND FARMERS WELFARE be pleased to state:

(a) whether it is a fact that the Economic Survey has favoured use of hybrid and Genetically Modified (GM) seeds to increase agricultural productivity since there is limited scope for increasing acreage, if so, the views of Government in this regard; and

(b) whether it is also a fact that Government is considering to totally ban diversion of agricultural land for any other purposes, if so, the details thereof?

THE MINISTER OF STATE IN THE MINISTRY OF AGRICULTURE AND FARMERS WELFARE (DR. SANJEEV KUMAR BALYAN): (a) Economic Survey has strongly advocated for adopting high yielding technologies such as hybrid and GM technologies for rapid progress towards world's agro-technological frontiers to increase crop productivity per unit area. Hybrids of maize, cotton, pearl millet, sorghum, castor, rice and vegetables have considerably enhanced the yield per unit area and revolutionized Indian agriculture. Bt cotton is the only transgenic crop approved for cultivation in India subsequent to extensive evaluation and regulatory process. Yields prior to commercialization of Bt cotton in 2002 rose from 300 kg/ha. to 523 kg/ha. during 2014.

(b) The information is being collected and will be laid on the Table of the House.

Compensation to farmers for crop loss due to change in climatic conditions

1461. SHRI ANUBHAV MOHANTY: Will the Minister of AGRICULTURE AND FARMERS WELFARE be pleased to state:

(a) whether it is a fact that the sudden and severe change in the climatic conditions is causing intense damage to crops and is affecting productivity also;