GOVERNMENT OF INDIA
MINISTRY OF SCIENCE AND TECHNOLOGY
DEPARTMENT OF SCIENCE AND TECHNOLOGY
LOK SABHA
UNSTARRED QUESTION NO.176
TO BE ANSWERED ON 16/11/2016

DEVELOPMENT OF CROP IN DESERT AREA

176. COL. SONARAM CHOUDHARY:

Will the Minister of SCIENCE AND TECHNOLOGY विज्ञान और प्रौद्योगिकी मंत्री **be pleased to state:**

(a) whether steps have been taken for the application of Science and Technology for development of crops in desert and deficient rain fall areas particularly the desert of western Rajasthan and if so details thereof;
(b) whether the Government has taken any steps to reclaim the wasteland for cultivation; and
(c) if so, the details thereof and if not, reasons thereof?

ANSWER

MINISTER OF STATE IN THE MINISTRY OF SCIENCE AND TECHNOLOGY AND MINISTER OF STATE IN THE MINISTRY OF EARTH SCIENCES
(SHRI.Y. S. CHOWDARY)
विज्ञान और प्रौद्योगिकी मंत्रालय में राज्य मंत्री और पृथ्वी विज्ञान मंत्रालय में राज्य मंत्री
(श्री वाई. एस. चौधरी)

(a) Yes Madam. The Department of Science and Technology (DST), under its societal initiatives, is implementing a Science and Technology (S&T) driven programme to address issues/challenges of people living in the Arid and Semi-Arid Regions (ASAR), particularly in Rajasthan and Gujarat. The focus of the program is on S&T based interventions and includes adaptive R&D, field testing and demonstration of available technology and transfer of technology packages which can provide enhanced livelihood opportunities and drudgery reduction, leading to a better quality-of-life of people living in the Arid and Semi-Arid Regions. Under ASAR program, crops specific to the region such as *Capparis deciduas* (Kair), *Prosopis cineraria* (Khejri) are being worked upon for value addition leading to their effective utilization. Microbial consortium of *Pyriformospora indica* and *Azotobacter sp* is being used to enhance the growth, vigour and productivity of *Prosopis cineraria* (Khejri), *Azadirachta indica* (Neem), *Plantago ovata* (Isabgol) and *Cassia Angustifolia* (Senna). Research work is being carried out at ICAR-Central Arid Zone Research Institute (CAZRI), Jodpur, towards development of endemic crops *viz.* sorghum, pearl millet, cluster beans, mung bean and watermelon with a focus on enhanced productivity and less water utilization.

(b) Yes Madam.

(c) Government of India, through CSIR-National Botanical Research Institute (NBRI) has developed alternative cropping systems especially beyond food crops to reclaim the sodic wastelands through introduction of medicinal, aromatic, gum and dye yielding plants and their varieties. Agricultural package for intercropping with trees is also available with the institution for reclamation of wasteland. Further, Arid Forest Research Institute (AFRI), Jodhpur, under Indian Council of Forestry Research and Education (ICFRE), has also developed various technologies to address the challenges related to sand dunes, saline patches and waterlogged sites along the Indira Gandhi Nahar Project (IGNP) for arid regions. Cultivation of *C. angusifolia* (Arrowroot) is being recommended by AFRI as the surface vegetation to control sand drift effectively. A farmer can get more than Rs.10,000/ha from this highly stressed site of sand dunes in addition to product obtained from the trees through execution of the recommendations. Trials at Gangani salty area in Jodhpur were conducted to find out suitable plant species and best planting practices. Development of the best practice package is underway to make barren salt land productive. Bio-drainage with *Eucalyptus rudis* was found to be highly efficient in IGNP area. Challenges related to deficient rainfall areas, particularly the desert of Rajasthan, are being addressed through interventions of various scientific S&T organizations and agencies as well as R&D institutions.

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