

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

LOK SABHA
UNSTARRED QUESTION NO. 3534
TO BE ANSWERED ON 17TH DECEMBER, 2024

SUSTAINABLE AGRICULTURE PRACTICES IN PUNJAB

3534. SHRI GURJEET SINGH AUJLA:

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

- (a) whether there is an urgent need to address the ecological impact of the rice-wheat crop cycle, which is straining water resources in Punjab and shifting focus to alternative crops like oilseeds, pulses, millets and medicinal plants could offer more sustainable options suited to the region's conditions, if so, the details thereof;
- (b) whether investing in advanced agricultural technologies such as hydroponics, aquaponics, and organic cultivation could enhance productivity and sustainability, if so, the details thereof;
- (c) whether any initiatives proposed to promote these alternative crops and modern farming techniques, if so, the details thereof;
- (d) whether the Government is considering for establishing efficient export channels to deliver perishable produce within 24-48 hours overseas and increasing research in poultry, piggery, floriculture, and cattle farming, along with investments in food storage and processing, would be invaluable, if so, the details thereof; and
- (e) whether the Government is exploring the opportunities for ethanol production as a promising venture for regional farmers and special budget for technologies, if so, the details thereof and if not, the reasons therefor?

ANSWER

THE MINISTER OF STATE FOR AGRICULTURE AND FARMERS WELFARE

कृषि एवं किसान कल्याण राज्य मंत्री (SHRI RAMNATH THAKUR)

(a) to (d): Department of Agriculture & Farmers Welfare (DA&FW) is implementing Crop Diversification Programme (CDP) under Pradhan Mantri Rashtriya Krishi Vikas Yojana (PM-RKVY) in original Green Revolution States including Punjab to divert the area of water guzzling paddy to alternative crops viz; pulses, oilseed, coarse cereals, nutri cereals (Shree Anna), cotton etc. The aim of CDP is to demonstrate and promote improved production

technologies of alternate crops for paddy cultivation and to restore soil fertility through cultivation of leguminous crops. Further, Government of India is also supplementing the efforts of state governments to encourage farmers to grow low water intensive crops such as pulses, coarse cereals, nutri cereals (under National Food Security & Nutrition Mission (NFSNM), oilseeds under National Mission on Edible Oil (NMEO)-Oilseeds, horticultural crops under Mission for Integrated Development of Horticulture (MIDH).

The Indian Council of Agricultural Research (ICAR) conducts research on crop diversification for irrigated conditions with the participation of State Agricultural Universities(SAUs) in 21 States/ Union Territory. Alternate cropping systems with diversified crops have been identified for these states. Further, package of practices for organic production of crops have been developed for 72 cropping systems suitable for 16 states. Also, eight integrated organic farming system models for 7 states have been developed. Punjab Agriculture University(PAU), Ludhiana and ICAR-Central Institute of Post-Harvest Engineering and Technology (CIPHET), Regional Station, Abohar works on various aspects of hydroponics, aquaponics, and protected cultivation. Research on Poultry, Piggery (Meat) and Cattle (Milk) on value-added product development, increasing their shelf life, quality control and safety aspect is being conducted under Animal Science Division of ICAR. The Indian Council of Agricultural Research is implementing Krishi Vigyan Kendras (KVKs) scheme including in the State of Punjab for dissemination of latest agricultural technologies on crop diversification.

The Agricultural Infrastructure Fund (AIF) supports bank financing of key post-harvest infrastructures. It helps the integration of advanced technologies like precision farming, drones, IoT systems, smart irrigation, and modern machinery. AIF also supports agri-entrepreneurs and start-ups by providing bank loans, promoting innovative practices, and fostering collaboration between entrepreneurs and farmers. This initiative covers various advanced agricultural techniques, including hydroponic, vertical, and aeroponic farming, as well as the use of specialized sensors and remote sensing applications to increase productivity

(e): Government is implementing Ethanol Blended Petrol (EBP) Programme wherein Oil Marketing Companies (OMCs) sell petrol blended with ethanol. Under EBP Programme, Government fixed the target of 20% blending of ethanol with petrol by 2025-26. Under the National Policy on Biofuels-2018, Government has allowed the production of ethanol from a variety of feed-stocks like agricultural residues (rice straw, cotton stalk, corn cobs, saw dust, bagasse etc.); starch containing materials such as maize, cassava, rotten potatoes etc.; damaged food grains like wheat, rice etc. apart from sugarcane and other sugar containing crops like sugar beet, sweet sorghum etc. Further, production of ethanol has also been allowed from feed-stocks such as Residual Sugar/ Sugar Syrup/ Sweeteners/ Best Before Date (BBD) Products (beverages, juices etc.). Government is also promoting the use of maize as a feedstock for ethanol production.
