

GOVERNMENT OF INDIA
MINISTRY OF AGRICULTURE AND FARMERS WELFARE
DEPARTMENT OF AGRICULTURAL RESEARCH & EDUCATION

LOK SABHA
UNSTARRED QUESTION NO. 433
TO BE ANSWERED ON 20TH JULY, 2021

UPGRADATION OF AGRICULTURE TECHNOLOGY

433. SHRI G.M. SIDDESHWAR:
SHRIMATI POONAM MAHAJAN:

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

- (a) whether the Government has any major programme to upgrade agriculture technology, provide quality seeds and farm equipments involving some of the best available outside the country;
- (b) if so, the details thereof;
- (c) whether the Government intends to promote modified traditional agriculture technology which requires use of cattle, at least for farmers having small land holdings, if so, the details thereof; and
- (d) whether introduction of fuel-driven farm equipments and tractors, the menace of adverse effect of chemical fertilizers on soil, stray animals, shortage of organic manure, crop burning, unemployment in rural areas, etc., have caused greater damage than doing good, especially to the small farmers?

ANSWER

THE MINISTER OF AGRICULTURE AND FARMERS WELFARE
कृषि और किसान कल्याण मंत्री **(SHRI NARENDRA SINGH TOMAR)**

(a) & (b): Yes Sir, Indian Council of Agricultural Research (ICAR) is continuously working to upgrade technology and provide quality seeds to farmers. During this process the advancements made in the agricultural sciences both within India and outside are considered for their replication under the suitable farming situations. ICAR focuses on development/ adoption of new technologies such as- high yielding and multi-stress resistant/tolerant varieties/hybrids in major crops; multi-nutrients rich varieties of rice, wheat, maize, lentil and pearl millet and improved quality of mustard and soybean; blast resistant wheat varieties; transgenic varieties in cotton, pigeonpea and chickpea; exploitation of gene editing technology for improving desired traits in rice and wheat and development of extra-early/early maturing varieties of pulses especially mungbean and pigeonpea. During 2014 till January 2021, a total of 1575 varieties of 70 field crops have

been developed which include 770 of cereals, 235 of oilseeds, 236 of pulses, 170 of fibre crops, 104 of forage crops, 52 of sugarcane and 8 of other crops. In addition, 288 varieties of horticultural crops have also been released and notified. Besides, 150 seed hubs in pulses and oilseeds have also been established in the country to produce and distribute quality seed of pulses and oilseeds. ICAR has developed several locations specific, cost effective, eco-friendly, socially acceptable scientific farming practices in farmers' participatory mode addressing issues at ground level keeping in view the farmers' resource availability, traditional indigenous technology. ICAR has developed several improved farm implements/machines, process protocols and value-added products to reduce input costs, drudgery and post-harvest losses in production post production agriculture.

(c) For small holder farmers, ICAR has developed 60 Integrated Farming System (IFS) models including 8 Integrated Organic Farming System models for adoption in 22 states and 3 Union Territories. To promote organic farming in the country, 39 crops based 51 cropping systems have been developed, which are suitable for farming in 12 states. Government of India is promoting organic farming and zero budget natural farming under various schemes. These are traditional agricultural technologies which uses cattle and are beneficial for small farmers. *Pramaparagat Krishi Vikas Yojana* (PKVY) scheme provides an assistance of Rs. 50,000 per ha for three years to farmers to use organic inputs. Mission Organic Value Chain Development for North Eastern Region (MOVCDNER) provides Rs. 25,000 per ha for three years for farmers to use organic inputs. Also, this scheme has provision up to Rs. 2 crores for formation of FPOs, capacity building and post-harvest infrastructure.

(d) Introduction of fuel driven farm equipment and tractors have ensured completing different farm operations within their timeliness and saved a lot of cost of operation with reduced drudgery. In order to prevent adverse effect of chemical fertilizers, the Council is advocating judicious use of chemical fertilizers through soil test based balanced and integrated nutrient management encompassing conjunctive use of both inorganic and organic sources of nutrients viz. FYM/Compost, biofertilizers, green manures etc. to the farmers.
