

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

UNSTARRED QUESTION NO. 428
TO BE ANSWERED ON THE 19TH JULY, 2022

REDUCING THE USE OF FERTILIZERS AND PESTICIDES

428. SHRI CHANDRA SEKHAR SAHU:
SHRI GIRISH BHALCHANDRA BAPAT:
SHRI RAHUL RAMESH SHEWALE:
DR. PRITAM GOPINATHRAO MUNDE:

Will the Minister of AGRICULTURE AND FARMERS WELFARE कृषि एवं किसान कल्याण मंत्री

be please to state:

- (a) whether the Government has invited private sector participation in reducing the use of fertilizers and pesticides in farming in the country;
- (b) if so, the details thereof and the response of private sector thereof;
- (c) the details of the returns in the fields of agriculture and the post-harvest losses to the farmers during each of the last three years in the country particularly in Maharashtra;
- (d) whether the Government proposes to encourage farmers to use technology to shift towards remunerative crops; and
- (e) if so, the details in this regard?

ANSWER

MINISTER OF AGRICULTURE AND FARMERS WELFARE

कृषि एवं किसान कल्याण मंत्री (SHRI NARENDRA SINGH TOMAR)

(a) & (b): Government is promoting Integrated Nutrient Management (INM) i.e. soil test based balanced and judicious use of chemical fertilizers, bio-fertilizers and locally available organic manures to maintain soil health and its productivity. Government has involved private entrepreneurs in the testing of soil samples for providing the soil health cards to all the farmers in the country under Soil Health Card Scheme of National Project on Management of Soil Health & Fertility. 2395 private entrepreneurs are participating in the testing of soil samples through the State Governments/UTs. Soil health card provides the information to farmers on nutrient status of their soil along with recommendation on appropriate dosage of nutrients to be applied for improving soil health and its fertility.

Under Integrated Pest Management (IPM), Government has conducted various training programmes such as Farmers Field School (FFS), Kisan Gosthis, 2 days Human Resource Development (HRD) programmes, IPM Exhibitions and Seed Treatment Campaigns to farmers through its 36 Central IPM Centers (CIPMCs) across 28 States and 2 Union Territories. During the trainings, major emphasis is given on judicious use of chemical pesticides as a last resort, alternate tools for pest management viz; cultural, physical, mechanical methods of pest control as well as use of bio-pesticides and bio-control agents, safety in use of pesticides, effects of pesticides on natural enemies of pests, do's and don'ts of pesticide including proper application equipment and the technique.

(c): The return/yield of a crop depends on various factors such as weather extremities, rainfall, soil types, agro-climatic condition, irrigation facilities, types of crops cultivated, use of fertilizers and pesticides, length of growing seasons, technology used etc. Government of India under National Food Security Mission (NFSM), is increasing food grains production through area expansion and productivity enhancement in the identified districts of the country. Under NFSM, assistance is given through state governments to farmers for interventions like cluster demonstrations on improved package of practices, demonstrations on cropping system, distributions of seeds of high Yielding Varieties (HYCVs) hybrids, improved farm machineries/resources conservation machineries/tools, efficient water application tools, plant protection measures, nutrient management/soil ameliorants, processing & post-harvest equipments, cropping system bases trainings etc. Further, Indian Council of Agricultural Research (ICAR) is continuously working on development/ adoption of new technologies, upgradation of existing technologies and provides quality seeds of newly developed varieties of crops to farmers. During 2017 to 2021, a total of 1521 high yielding field crop varieties/hybrids have been released for various agro-climatic region of the country comprising of 691 of cereals, 222 of oilseeds, 247 of pulses, 91 of forage crops, 202 of fibre crops, 52 of sugar crops and 16 of other crops. Resultantly, the yield of foodgrains in the country has increased from 2042 kg./hectare during 2015-16 to 2394 kg. / hectare in 2020-21.

(d) & (e): Sub Mission on Agricultural Mechanization (SMAM) is being implemented in the country and scheme aims at 'reaching the unreached' by bringing to the small and marginal farmers in the core and giving the benefits of farm mechanization, by Promoting 'Custom Hiring Centers', creating hubs for hi-tech & high value farm equipment, distribution of various agricultural equipment, creating awareness among stakeholders through demonstration and capacity building activities, and ensuring performance testing and certification at designated testing centers located all over the country. In order to promote digital agriculture with a view to encourage farmers to use technology, leading Technology/Agri-tech/Start-ups companies were identified and invited to collaborate with the Government of India and develop Proof of Concepts (PoC) based on data of select Districts/Villages. Similarly, under National e-Governance Plan in Agriculture guideline,

funds are released to the States/Union Territories for the projects involving use of modern information technologies such as such as Artificial Intelligence & Machine Learning, Block Chain Technology, Internet of Things, Robotics etc., and for customization/shifting of web & mobile applications already developed by the States, to the platform to be developed using digital technologies. Various mobile applications including KisanSuvidha have also been developed to facilitate dissemination of information to farmers on the critical parameters viz., Weather, Market Prices, Plant Protection, Agro-advisory, Extreme Weather Alerts, Inputs Dealers (of seed, pesticide, Fertilizer, Farm Machinery), Soil Health Card, Cold Storage & Godowns, Soil Testing Laboratories and Veterinary Centre & Diagnostic labs, Crop Insurance Premium Calculator and the Government schemes.
