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

LOK SABHA UNSTARRED QUESTION NO. 3551 TO BE ANSWERED ON 08/08/2017

LOSSES OF CROPS DUE TO PESTS

3551. SHRI A. ARUNMOZHITHEVAN:

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

- (a) whether the scientists of the Indian Council of Agricultural Research (ICAR) have recently stated that about 35 percent of the annual crop yield in the country gets wasted due to pests and if so, the details thereof;
- (b) whether it is also true that nematodes, consisting of roundworms, threadworms and eelworms are causing loss of crops to the tune of almost 60 million tones or 10-12 per cent of crop production every year and if so, the details thereof;
- (c) whether the crop losses due to pests is having an adverse effect on the agricultural bio-safety which is paramount for food security; and
- (d) if so, the steps taken by the Government to assist the farmers from crop losses due to pests across the country?

ANSWER

MINISTER OF STATE IN THE MINISTRY OF AGRICULTURE AND FARMERS WELFARE कृषि और किसान कल्याण मंत्रालय में राज्य मंत्री

(SHRI SUDARSHAN BHAGAT)

(a) Scientists of National Agricultural Research System (NARS) have reported variable losses in yield due to pests and diseases of different crops.

Published reports showed that during 2010, 15-25 million tons of food grains were lost in India due to insect pests and diseases. During 2015-16 cotton crop was damaged extensively by whitefly to the extent of 60-70 per cent in Punjab. Similarly in other crops yield losses are reported depending upon the severity of stresses. However losses due to pest and diseases are not static and vary from year to year depending upon the prevailing agro-climatic conditions like temperature, humidity, rainfall, host-genotype and other predisposing factors.

- (b) Plant parasitic nematodes (also known as roundworms, thread worms or eelworms) cause 12.3 percent crop losses on a global level. In India annual crop losses due to nematodes alone have been estimated to Rs. 21068 million.
- (c) Crop losses due to pests and diseases may result in impairing product quality and pose a threat to agricultural biosecurity. Though pests and diseases may not affect agricultural biosafety per se, crop losses if not managed effectively may affect food security.
- (d) Crop losses due to pests and diseases are managed predominantly through exploitation of host - resistance and through deployment of integrated pest management strategies. Diseases like yellow rust of wheat, blast of rice etc., are managed through deployment of host resistance. Threats from invasive diseases like race UG99 of black rust or blast disease of wheat etc. that are not prevalent in the country, are managed by screening and breeding resistance against the disease outside the country in hot spots where they are prevalent. Recently losses due to whitefly in cotton in Punjab during 2016-17 was managed efficiently through adoption of integrated pest management approaches involving relatively tolerant genotypes, timely sowing, avoidance of chemical pesticides, use of botanicals, biocontrol agents, yellow sticky traps and environmentally safe insect growth regulators. For pests and diseases where the sources of resistance are not available, like in case of polyphagous lepidopteran insect pests of cotton, legume crops, vegetables and plant viruses, genetically modified crops are contemplated through NARS.
