

**GOVERNMENT OF INDIA  
AGRICULTURE AND FARMERS WELFARE  
LOK SABHA**

UNSTARRED QUESTION NO:1067

ANSWERED ON:22.11.2016

Use of Fertilizers and Pesticide in Farming

Adityanath Shri Yogi;Bhaleram Shri Dharambir;Kumar Shri Kaushalendra;Premachandran Shri N.K.;Vasava Shri Parbhubhai Nagarbhai

**Will the Minister of AGRICULTURE AND FARMERS WELFARE be pleased to state:**

- (a) whether the Government is aware that excess quantities of chemicals, fertilizers and pesticides are used in production of vegetables, fruits and other agricultural produce in the country;
- (b) if so, the details thereof indicating the percentage of use of pesticides in the production of foodgrains, oilseeds, fruits and vegetables etc.;
- (c) whether regular use of pesticides is hazardous to human health and causes many diseases like cancer if so, the details thereof;
- (d) whether it is a fact that spraying of certain pesticides causes swelling all over the body of the of the persons spraying it and 65 percent of the toxic residue enters the body;
- (e) if so, whether the Government has conducted any study in this regard, if so, the outcome thereof; and
- (f) the steps taken by the Government to protect the farmers/human beings from the adverse effects of these harmful pesticides/fertilizers and promote use of bio-fertilizers?

**Answer**

MINISTER OF STATE IN THE MINISTRY OF AGRICULTURE AND FARMERS WELFARE

???? ???? ????? ?????? ????????? ???? ?????? ?????? (SHRI PARSHOTTAM RUPALA)

(a): Pesticides are inherently toxic in nature and studies to assess the impact reveals that some chemical pesticides if used excessively at higher dosage persist in soil and water bodies (streams, rivers and ground water) and cause adverse effects. The Urea, Diammonium Phosphate (DAP), Muriate of Potash(MOP), Complexes are the major fertilizers used in the country. The overall per hectare nutrient consumption in kg are  
Contdâ€2/-

-2-

during the year 2014-15 and 2015-16 are 127.45 and 130.66 respectively.

(b): The percentage and dose of pesticides mentioned on the label & leaflets on each and every packets.

However, to reduce usage of chemical pesticides in agriculture, the Government has Launched a Scheme; "Strengthening and Modernization of Pest Management Approach in India" for disseminating information about good agricultural practices, promoting use of bio-pesticides & bio-control agents and judicious use of chemical pesticides as last resort. Under the ambit of IPM programme, the Government of India has established 35 Central Integrated Pest Management Centers in 29 States and one UT (Andaman & Nicobar). These Centres are educating the farmers about various Integrated Pest Management techniques through Farmers Field Schools. Besides, the Government has taken various steps as under;

(i) With the financial assistance of the Central Government, 38 State Bio-control Laboratories have been established across the country for production of Bio-control agents to promote the farmers for management of pests and diseases through bio-control measures.

(ii) 'Grow safe food' campaign is being run in all the States as one of the IPM programme.

(c): Insecticides are toxic substances and their injudicious use may pose health hazards. They are regulated under the Insecticides Act, 1968 and the rules framed thereunder. While registering the pesticides for use in the country under the said Act, the pesticides are evaluated for their safety – including carcinogenicity, i.e. potential to cause cancer and only when the pesticide is found safe in the doses and as per the practices recommended on label and leaflet, it is registered for use in the country.

(d): If pesticides approved under the Insecticides Act are used following the label directions and using proper personal protective equipment, then no such effects are observed.

(e): No study has been conducted by this Department so far in this regard.

(f): While registering pesticides for use in the country, the doses of pesticides and its precautions are mentioned in the label and leaflets for its use by the farmers/human beings.

As regards the bio-pesticides are concerned, the guidelines for their registration have been simplified to promote its uses in the country.

There is no harmful effect of chemical fertilizers on soil health and quality affecting crop productivity with recommended doses and judicious use. The Indian Council for Agricultural Research (ICAR) is recommending soil test based balanced and integrated nutrient management through conjunctive use of both inorganic and organic sources (Vermi compost, manure, biofertilizers etc.) of plant nutrients to ensure judicious use of chemical fertilizers preventing deterioration of soil health. The ICAR imparts training to educate farmers on these aspects.

The Council has developed improved and efficient strains of biofertilizers specific to different crops and soil types under Network project on Soil Biodiversity-Biofertilizers. Liquid Biofertilizer technology with higher shelf-life has also been developed. Besides, the Council has developed technology to prepare bio-enriched compost using various organic wastes fortified with biofertilizers. Biofertilizers can improve crop yields by 10-25% and supplement costly chemical fertilizers (N,P) by nearly 20-25% in most of the cases when used along with

Contd...2/-

-2-

chemical fertilizers. When bio-fertilizers are applied along with compost @ 5t/ha or vermin compost @ 2t/ha, fertilizer saving is almost 50%.

All these technologies are part of integrated nutrient management practices and being popularized among the farmers through Front Line Demonstrations (FLDs), farmers trainings, publishing extension materials in local languages.

The Government of India is implementing Soil Health Management Scheme under National Mission on Sustainable Agriculture (NMSA). SHM aims at promoting Integrated Nutrient Management through judicious use of chemical fertiliser including secondary and micro nutrient in consumption with organic manure for improving soil health and its productivity.

\*\*\*\*\*