

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

LOK SABHA
UNSTARRED QUESTION NO. 952
TO BE ANSWERED ON THE 22ND NOVEMBER, 2016

USE OF BIO FERTILIZERS

952. SHRI ALOK SANJAR:
SHRI RAM MOHAN NAIDU KINJARAPU:

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

- (a) the steps taken by the Government to promote the production and sale of organic fertilizers in the country;
- (b) the targets set by the Government for this purpose under various schemes during the 12th Five Year Plan period;
- (c) the percentage of organic fertilizers provided to farmers as compared to the total fertilizer used in the country;
- (d) whether the Government proposes to increase the production of organic fertilizers in the country and if so, the details of major crops produced by using bio fertilizer in comparison to chemical fertilizers in the country during the last one year; and
- (e) the steps taken/proposed to be taken by the Government to encourage/popularize production of organic fertilizers on small scales using organic waste generated on farms and in homes for use or sale?

ANSWER

MINISTER OF STATE IN THE MINISTRY OF AGRICULTURE AND FARMERS WELFARE

कृषि एवं किसान कल्याण मंत्रालय में राज्य मंत्री (SHRI PARSHOTTAM RUPALA)

(a) to (e): Government is encouraging the use of organic/bio fertilizer through various schemes/programmes viz: National Mission for Sustainable Agriculture (NMSA)/Paramparagat Krishi Vikas Yojana (PKVY), Rashtriya Krishi Vikas Yojana (RKVY), Mission for Integrated Development of Horticulture (MIDH), National Mission on Oilseeds & Oil Palm (NMOOP) and Network Project on Organic Farming of Indian Council of Agricultural Research (ICAR). The pattern of assistance provided to State governments through various schemes for promoting use of organic/bio fertilizer is given at **Annexure**.

The total consumption of organic fertilizer is 2548.80 lakh tons and that of chemical fertilizer is 557.88 lakh tons. If both are pooled the amount comes 3106.68 lakh tons, indicating that around 80.04% of the bulk is organic fertilizer. However, nutrient wise organic fertilizers are

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low nutrient containing material compared with fertilizers so that percentage contribution of organic fertilizer in terms of actual usage is substantially lower than fertilizers.

The Indian Council of Agricultural Research (ICAR) has developed improved and efficient strains of biofertilizers namely Rhizobium, Azotobacter, Azospirillum, Acetobacter, Phosphate Solubilizing Microorganism, Potash Solubilizing Bacteria, Zinc Solubilizing Bacteria specific to different crops (in leguminous and non-leguminous crops) and soil types under ICAR - 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 chemical fertilizers. When biofertilizers are applied along with compost @ 5t/ha or vermin-compost @ 2t/ha, fertilizer saving is almost 50%.

Ministry of New & Renewable Energy is implementing a scheme namely, National Biogas and Manure Management Programme (NBMMP) using cow dung, kitchen waste material etc., as mix feed to produce Biogas for cooking gas and organic enriched bio manure through the implementing Agencies such as State Nodal Departments/State Nodal Agencies and Khadi & Village Industries Commission and Biogas Development and Training Centers (BDTCs).

The National Centre of Organic Farming (NCOF), Ghaziabad, a unit under the department undertakes various extension and publicity activities like exhibitions, radio talks, TV programmes, distribution of literature on organic inputs/ organic farming etc. to educate the farmers. NCOF is also publishing biannual Newsletter "Biofertilizers" as well as quarterly Newsletter called Organic Farming. In addition, various books on production and use of bio-fertilizers have been published in various languages for distribution to the farming community. Radio jingles on organic agriculture are broadcasted on 4 different FM Radio Stations including Delhi, Bangalore, Nagpur and Lucknow. NCOF organizes 30 days certificate course on organic farming for skill development in organic agriculture sector for youth. It also conducts 10 days Refresher course for analysts under Fertilizer Control Order (FCO); 5 Days Trainers Training & 2 Days training for field functionaries and extension staff of the State Government. NCOF has also been organizing Farmers' Training and Field Demonstration (FTFD) programmes on organic farming since 2015-16 in various villages under "Sansad Aadarsh Gram Yojana" (SAGY), through its Regional Centres of Organic Farming (RCOFs). It has completed 300 no. of FTFD in 2015-16 and has targeted 296 no. in the year 2016-17.

A. National Mission of Sustainable Agriculture (NMSA)-Organic & INM Component of Soil Health Management (SHM):

- i) Setting up of State of art liquid/carrier based Biofertilizer/Biopesticide units, 100% Assistance to State Govt./ Govt. Agencies upto a maximum limit of Rs.160.00 lakh/unit and 25% of total financial outlay or limited to Rs.40 lakh/unit whichever is less for individuals/ private agencies through NABARD as back ended capital investment subsidy scheme of 200 Total Per Annum (TPA) production capacity.
- ii) Setting up of Bio-fertilizer and Organic fertilizer testing Quality Control Laboratory (BOQCL) or Strengthening of existing Laboratory under FCO, assistance upto maximum limit of Rs.85 lakh for new laboratory and upto a maximum limit of Rs.45 lakh for strengthening of existing infrastructure to State Government Laboratory under Agriculture or Horticulture Department.
- iii) Promotion of Organic Inputs on farmer's field (Manure, Vermi-compost, Bio-Fertilizers Liquid/solid, Waste compost, Herbal extracts etc.), 50% of cost subject to a limit of Rs.5000/-per ha. and Rs.10,000 per beneficiary.
- iv) Setting up of mechanized Fruit/ Vegetable market waste/ Agro waste compost production unit 100% financial assistance to State Government/ Government Agencies upto a maximum limit of Rs.190.00 lakh per unit and 33% of project cost or maximum limited to Rs.63 lakh per unit whichever is less for individuals/private agencies through NABARD as capital investment for establishment of agro/vegetable waste compost production units of 3000 Total Per Annum (TPA) production
- v) **Paramparagat Krishi Vikas Yojana (PKVY):** The scheme is implemented by the State Governments on a cluster basis of 20 hectare each. The farmer within the cluster is given following financial assistance for Integrated Manure Management.
 - a) Liquid Bio-fertilizer consortia (Nitrogen fixing/ Phosphate Solubilizing/ potassium mobilizing bio-fertilizer) @ Rs.500/acre x 50 of Rs.25000 per cluster in first year.
 - b) Liquid Biopesticides (Trichoderma viridae, Pseudomonas, fluorescens, Matarhizium, Beaviouriebassiana, Pacelomyces, verticillium) @ Rs.500/ acre x 50 of Rs.25000 per cluster in second year.
 - c) Phosphate Rich Organic Manure (PROM) as per specification given in FCO,1985 @ Rs1000/acre X 50 of Rs 50000 in first year for procuring and application of PROM.
 - d) Farmer can take up any pest control mechanism easily available in their local area @Rs 500/acreX50 of Rs.25000 in second year.
 - e) Vermicompost (size 7'x3'x1) @ Rs 5000/unit X50 of Rs 250000 will be assisted for procurement of earthworms, preparation of pits, etc for construction of vermi composting pits.

The detail guidelines are uploaded in web site www.agricoop.gov.in

A National Mission on Oilseeds and Oil Palm (NMOOP): Financial assistance is being provided for different type of components including bio-fertilisers, Supply of Rhizobium culture/Phosphate Solubilising Bacteria (PSB)/ Zinc Solubilising Bacteria (ZSB)/ Azatobacter/ Mycorrhiza and vermi compost.

B. National Food Security Mission (NFSM): Under NFSM, financial assistance is provided for promotion of Bio-Fertilizer (Rhizobium/PSB) @50% of the cost limited to Rs.300 per ha.

C. Rashtriya Krishi Vikas Yojana (RKVY): Organic Farming projects are considered by respective State Level Sanctioning committee

D. Indian Council of Agricultural Research (ICAR): The Indian Council of Agriculture Research (ICAR), Pusa under Network project on Soil Biodiversity-Biofertiliser has developed improved and efficient strains of biofertiliser specific to different crops and soil types. Liquid Biofertiliser technology with higher shelf life has also been developed. The ICAR also imparts training, organizes Front Line Demonstrations (FLDs) to educate farmers on all these aspect..
