

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

LOK SABHA
UNSTARRED QUESTION NO.2907
TO BE ANSWERED ON THE 15TH MARCH, 2016

PROMOTION OF BIO-FERTILIZERS

2907. SHRI ANIL SHIROLE:
SHRI JAGDAMBIKA PAL:

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

- (a) the percentage of organic fertilizer provided to farmers as compared to the total quantum of fertilizers consumed in the country;
- (b) whether the Government has launched certain schemes in the recent past to promote use of bio-fertilizers in the country;
- (c) if so, the details thereof along with the funds allocated during 11th and 12th Five Year Plans under various schemes for the purpose;
- (d) the details of production of major crops achieved during the last one year using bio-fertilizers vis-a-vis chemical fertilizers in the country;
- (e) the steps taken by the Government to popularise the use of bio-fertilizers amongst the farmers in the country; and
- (f) whether the Government has considered the feasibility of establishing community biogas plants so as to promote use of bio-fertilizers, if so, the details thereof?

ANSWER

MINISTER OF STATE IN THE MINISTRY OF AGRICULTURE AND FARMERS WELFARE

कृषि एवं किसान कल्याण मंत्रालय में राज्य मंत्री (SHRI MOHANBHAI KUNDARIYA)

- (a): The total consumption of organic fertilizer is 2298.62 MT whereas the consumption of chemical fertilizer in term of total N P K consumption of chemical fertilizer is 255.76 lakh MT during the year 2014-15.
- (b): Government is promoting bio-fertilizers through various schemes of National Mission for Sustainable Agriculture (NMSA)/ Paramparagat Krishi Vikas Yojana (PKVY), Rashtriya Krishi Vikas Yojana (RKVY) and National Mission on Oilseeds and Oil Palm (NMOOP), National Food Security Mission (NFSM) and Indian Council of Agricultural Sciences (ICAR). The pattern of assistance is given in **Annexure I**.

Contd...2/-

(c): The funds allocated during 11th and 12th Five Year Plans is given as:

Scheme	(in Rs. Lakhs)	
	11 th Five Year Plan (2007-12)	12 th Five Year Plan (2012-17)
National Project on Organic Farming(NPOF)	11838.00	5898.5
Paramparagat Krishi Vikas Yojana (PKVY)	-	300,0000
Net work Project on Soil Biodiversity Bio fertilizer- ICAR	776.52	1763.65(BE)
Micro-nutrient s and Soil ameliorates (Bio- fertilizers)- NFSM	833.02	1657.71

(d): Studies conducted by ICAR have shown that bio-fertilizers can improve yield in leguminous crops (i.e. pulses) by use of rhizobium and in cereals and oil seeds and horticulture crops by azotobacter. They indicate that bio-fertilizer can improve crop yield 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. Further, study show that when bio-fertilizers are applied with compost @5t/ha or vermicompost @2t/ha, fertilizer saving is almost 50%.

(e): Under National Mission for Sustainable Agriculture (NMSA), the National Centre of Organic Farming, Ghaziabad is conducting various extension and publicity activities like Exhibitions, Radio Talks, TV Programmes, and distribution of literature on Bio-fertilizers. NCOF publishes Bio-Fertilizer News letter bi-annually as well as Organic Farming News Letter Quarterly in Hindi and English languages. In addition, various books on production and use of biofertilizers have been published in various languages for distribution to the farming community. Radio jingle on promotion of organic agriculture was broadcasted on four different FM Radio Stations at Delhi, Bangalore, Nagpur and Lucknow. The ICAR also imparts training, organizes FLDs etc. to educate farmers on the use of biofertiliser.

(f): (i) Government is promoting soil test based integrated nutrient management through conjunctive use of both inorganic and organic sources of plant nutrients. Bio-fertilizers are promoted for mobilizing both macro and micro nutrients in soil in both organic agriculture as well as in conventional agriculture. Their main function is to fix the nitrogen in root nodules, for seed inoculation and to promote plant growth hormones.

ii) Biogas is methane (CH₄) produced from biomass through anaerobic process of decomposition.

Pattern of assistance for promotion of biofertiliser/organic Inputs

Component	Pattern of assistance
National Mission of Sustainable Agriculture (NMSA)-Organic & INM Component of Soil Health Management(SHM)	
1. 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 cost limited to Rs.40 lakh/unit for individuals/ private agencies through NABARD as capital investment of 200 TPA production capacity
2. Setting up of Bio-fertilizer and Organic fertilizer testing Quality Control Laboratory (BOQCL) or Strengthening of existing Laboratory under FCO.	Assistance up to maximum limit of Rs. 85 lakh for new laboratory and up to a maximum limit of Rs. 45 lakh for strengthening of existing infrastructure to State Government Laboratory under Agriculture or Horticulture Department.
3. 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. Propose to cover 1 million ha area.

Paramparagat Krishi Vikas Yojana- (PKVY) one of the sub scheme of NMSA- Adoption of organic farming through cluster approach under Participatory Guarantee System (PGS) certification.	Under PKVY scheme- Fifty or more farmers will form a cluster and their 50 acres of land will be brought under Organic Farming.				
(Component of Guidelines) 2.2	Integrated Manure Management				
	Component	Ist year	IInd year	IIIrd year	
		(amount in Rs.)			
2.21	Liquid Bio-fertilizer consortia (Nitrogen fixing/ Phosphate Solubilizing/ potassium mobilizing bio-fertilizer) @ Rs.500/acre x 50	25000	0	0	Each farmer member will be assisted for procuring liquid bi-fertilizer and its application to soil/seed to increase crop production.
2.2.2	Liquid Biopesticides (Trichoderma viridae, Pseudomonas, fluorescens, Matarhizium, Beaviourie bassiana, Pacelomyces, verticillium) 2 Rs.500/ acre x 50	0	25000	0	Each farmer member will be assisted for procuring and application of liquid bio pesticides for suppression of disease in crop plants

National Mission on Oilseeds and Oil Palm (NMOOP):

Has launched a scheme for increasing production and productivity of oilseed crops in the country. The expenditure on subsidies and pattern of financial assistance between the Centre and State Share in the ratio of 90:10 for North East and Hilly states and it is 60: 40 for other States. 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.

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.

Rashtriya Krishi Vikas Yojana (RKVY):

Under RKVY, State Governments have flexibility and autonomy in the process of selection, planning, approval and execution of schemes including Organic Farming, as per their priorities. Accordingly, cost of projects under Organic Farming are approved by respective State Level Sanctioning Committees.

Indian Council of Agricultural Sciences (ICAR):

Indian Council of Agricultural Research (ICAR), Pusa, under Network project on **Soil Biodiversity-Biofertiliser** being operated in 14 different states has developed improved and efficient strains of biofertiliser specific to different crops and soil types. Liquid Biofertiliser technology with high shelf life has also been developed.
