

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

LOK SABHA
STARRED QUESTION NO. 353
TO BE ANSWERED ON THE 20TH MARCH, 2018

PROMOTION OF BIO-FERTILIZERS

*353. SHRI KUNWAR PUSHPENDRA SINGH CHANDEL:

Will the Minister of AGRICULTURE AND FARMERS WELFARE कृषि एवं किसान कल्याण
½â"âè
be pleased to state:

- (a) the details of the steps taken by the Government to promote the production and use of bio-fertilizers in the country;
- (b) the details of the present production and distribution mechanism of bio-fertilizers in the country, State-wise; and
- (c) the details of the institutions which are involved in Research and Development related to bio fertilizers in the country?

ANSWER

MINISTER OF AGRICULTURE AND FARMERS WELFARE

कृषि एवं किसान कल्याण ½â"âè (SHRI RADHA MOHAN SINGH)

(a) to (c): A statement is laid on the Table of the House.

**STATEMENT REFERRED TO IN REPLY TO PARTS (a) TO (c) OF LOK SABHA
STARRED QUESTION NO. 353 DUE FOR REPLY ON 20TH MARCH, 2018.**

(a): Government is promoting bio-fertilizers through various schemes of National Mission of Sustainable Development (NMSA)/ Paramparagat Krishi Vikas Yojana and supported by Rashtriya Krishi Vikas Yojana (RKVY) and National Mission on Oilseeds and Oil Palm (NMOOP), National Food Security Mission (NFSM) and Indian Council of Agricultural Research (ICAR). The pattern of assistance is given in **Annexure- I**.

(b): The State-wise bio-fertilizer production in India (2014-15 to 2016-17) is given in **Annexure- II** and State wise distribution of Bio fertilizers under different components of Mini-Mission – I of NMOOP during 2017-18 is given in **Annexure -III**.

(c): The details of the institutions which are involved in Research and Development related to bio fertilizers in the country are given at **Annexure- IV**.

Annexure-I

A. National Mission of Sustainable Agriculture (NMSA)-Organic & INM Components 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.

B. Paramparagat Krishi Vikas Yojana (PKVY): It is the first comprehensive scheme launched by the Central Government as a centrally sponsored programme (CSP). The scheme is implemented by the State Governments on a cluster basis of 20 hectare each. The farmer within the cluster is given financial assistance upto a maximum of 1 ha and the limit of assistance is Rs.50,000 per ha during the conversion period of 3 years. The target is to promote 10,000 clusters covering 5 lakh acres over the period of 3 years, 2015-16 to 2017-18. Further, following assistance is given for procuring liquid bio-fertilizer and bio-pesticides:

1. 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.
2. Liquid Biopesticides (Trichoderma viridae, Pseudomonas, fluorescens, Matarhizium, Beaviourie bassiana, Pacelomyces, verticillium) @ Rs.500/ acre x 50 of Rs.25000 per cluster in second year.

Contd...2/-

- C. National Mission on Oilseeds and Oil Palm (NMOOP):** Financial assistance @ 50% subsidy to the tune of Rs. 300/- per ha. is being provided for different components including bio-fertilisers, Supply of Rhizobium culture/Phosphate Solubilising Bacteria (PSB)/ Zinc Solubilising Bacteria (ZSB)/ Azatobacter/ Mycorrhiza and vermi compost.
- D. National Food Security Mission (NFSM):** (i) Under NFSM- Pulses, financial assistance is being provided for promotion of Bio-Fertilizer (Rhizobium/PSB) @50% of the cost limited to Rs.300 per ha.
- (ii) Under Bringing Green Revolution to Eastern India(BGREI) ,a sub scheme of RKVY, also supplied bio-fertilizer @50 of the cost limited to Rs. 300 per ha for Rice and Wheat crops.
- E. Rashtriya Krishi Vikas Yojana (RKVY):** Organic Farming project components are considered by the respective State Level Sanctioning committee according to their priority choice.
- F. Indian Council of Agricultural Research (ICAR):** The Indian Council of Agricultural Research (ICAR), is implementing under Network project on “Soil Biodiversity-Biofertiliser” and 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 aspects.

Annexure- II

Zone- Wise Bio-Fertilizer Production in India (2014-15 to 2016-17)

SI N.	State	2014-15		2015-16		2016-17	
		Carrier based (MT)	Liquid based (KL)	Carrier based (MT)	Liquid based (KL)	Carrier based (MT)	Liquid based (KL)
South Zone							
1	A & N Islands	0.0000	0.0000	0	0	0	0
2	Andhra Pradesh	2668.8000	274.8560	3062.6	317.811	3375.91	365.24
3	Daman & Diu	0.0000	0.0000	0	0	0	0
4	Karnataka	16462.6200	23.0561	23042.91	488.142	31553.06	993.443
5	Kerala	4916.9700	10.5096	4926.045	56.5751	4993.8692	59.6143
6	Lakshadweep	0.0000	0.0000	0	0	0	0
7	Pondicherry	560.9500	1.4976	283.641	4.088	203.966	11.197
8	Tamil Nadu	15373.2900	11.3017	23721.2104	861.9535	27427.962	875.292
	Total	39982.6300	321.2210	55036.41	1728.57	67554.7672	2304.7863
West Zone							
1	Chhattisgarh	1024.680	9.620	954.371	9.38	955.074	10.23
2	Gujarat	3667.929	2800.500	3963.42	2873.317	3909.82	2857.77
3	Goa	802.520	0.000	820.52	0	822	0
4	Madhya Pradesh	2637.990	119.216	2741.30775	131.033	5609.006	238.103
5	Maharashtra	14847.397	324.767	7825.142	389.665	8323.616	398.33
6	Rajasthan	599.898	0.000	680	0	711	0
7	D & N Haveli	0.000	0.000	0	0	0	0
	Total	23580.414	3254.103	16984.76	3403.395	20330.516	3504.433
North Zone							
1	Delhi	104.500	0.000	106.2	0	116.2	0
2	Chandigarh	0.000	0.000	0	0	0	0
3	Haryana	872.955	46.489	1097.457	58.032	2360.644	70.148
4	H.P.	0.768	33.070	2.712	190.05	3.276	194.7
5	J & Kashmir	0.000	0.000	0	0	0	0
6	Punjab	6305.453	74.278	2197.197	149.581	5533.774	210.177
7	Uttar Pradesh	4099.068	98.036	3053.115	223.34	2835.79	461.19
8	Uttarakhand	2129.952	208.034	3549.39	428.22	3720.68	696.9
	Total	13512.696	459.907	10006.07	1049.223	14570.364	1633.115
East Zone							
1	Bihar	64.90	0.00	97	0	107	0
2	Jharkhand	9.08	0.00	9.172	0	18.552	0
3	Odisha	1074.46	4.70	467.634	13.701	516.281	31.79
4	West Bengal	2061.83	14.63	2826.27	23.537	3195.18	26.21
	Total	3210.27	19.33	3400.076	37.238	3837.013	58
North East Zone							
1	Arunachal Pradesh	59	0	3062.6	317.811	119.7	0
2	Assam	88.000	0.000	1315	22.5	1359.05	26
3	Manipur	0.000	0.000	0	0	25	0
4	Meghalaya	0.000	0.000	0	0	0	0
5	Mizoram	3.600	0.000	4.2	0	2.5	0
6	Nagaland	7.450	0.000	8.81	0	51.45	0
7	Sikkim	12.400	0.000	12.91	0	16.25	0
8	Tripura	240.000	0.000	1143.07	0	1153.5	0
	Total	410.450	0.000	5546.59	340.311	2727.45	26
Grand Total		80696.45595	4054.563711	88029.30415	6240.926	109020.1102	7526.3343

Source: NCOF, Ghaziabad

Annexure –III

State wise distribution of Bio fertilizers under different components of Mini Mission –I of NMOOP during 2017-18

Unit in ha.

Sl.No.	State	Component			
		Gypsum/ pyrite/lime/ SSP	Rhyzobium/PSB/ ASB/ Azatobactor/ Mycorrhiza culture	Nuclear Polyhydrosis Virus(NPV)	Micronutrients
1	Andhra Pradesh	0	0	0	2055
2.	Arunachal Pradesh	0	0	0	0
3.	Bihar	0	0	0	0
4.	Chhattisgarh	0	6020	0	850
5.	Gujarat	23404	1023	0	4547
6.	Haryana	0	0	0	0
7.	J&K	0	0	0	0
8.	Karnataka	7685	12204	0	63990
9.	Madhya Pradesh	700	1023	60	7992
10	Maharashtra	4234	14593	1176	24946
11.	Nagaland	900	450	450	1953
12.	Orissa	0	0	0	0
13.	Rajasthan	60000	1120	0	3500
14.	Sikkim	0	0	0	0
15.	Tamil Nadu	5000	0	0	5000
16.	Telangna	0	0	0	1000
17.	Uttar Pradesh	9	7950	0	1260
18.	West Bengal	0	0	0	0
	Total	101932	44383	1686	117093

Annexure- IV**State-wise details of Universities/Institutions doing research work to develop Effective strains of bio-fertilizers.****List of centres under Network project on Soil Biodiversity-Biofertilizers**

S.NO.	State	Name of the institution
1.	Assam	Assam Agricultural University, Jorhat
2.	Telengana	Acharya N.G. Ranga Agricultural University, Amaravathi, Hyderabad
3.	Haryana	CCS Haryana Agricultural University, Hisar
4.	Madhya Pradesh	Jawaharlal Nehru Krishi Vishwa Vidyalaya, Jabalpur Indian Institute of Soil Science, Bhopal.
5.	Maharashtra	Marathwada Agricultural University, Parbhani
6.	Orissa	Orissa University of Agriculture & Technology, Bhubaneswar.
7.	Bihar	Rajendra Agricultural University, Pusa
8.	Tamil Nadu	Tamil Nadu Agricultural University, Coimbatore.
9.	Himachal Pradesh	Dr. Y.S. Parmar University of Horticulture & Forestry, Solan
10.	Jharkhand	Birsa Agricultural University, Ranchi
11.	Rajasthan	Maharana Pratap University of Agriculture & Technology, Udaipur
12.	Delhi	Indian Agricultural Research Institute, New Delhi. University of Delhi, New Delhi
13.	Gujarat	Directorate of Groundnut Research, Junagarh
14.	Karnataka	University of Agricultural Sciences, Dharwad
