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

LOK SABHA UNSTARRED QUESTION NO. 325TO BE ANSWERED ON THE 26TH APRIL, 2016

PROMOTION OF BIO-FERTILIZERS

325. SHRI SHARAD TRIPATHI: SHRIMATI RITI PATHAK:

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

- (a) the total quantum of bio-fertilizers required and actually produced in the country;
- (b) the details of the steps being taken by the Government to increase the production and utilization of bio-fertilizers in various States of the country;
- (c) the details of the bio-fertilizers/ organic fertilizers produced and distributed during the last three years and the current year, State-wise; and
- (d) whether several organisations are involved in research and development of organic fertilizers/bio-fertilizers in the country, 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) to (c): The total requirement of various bio-fertilizers that are required for seed/root treatment and soil is estimated to be about 0.426 million ton, based on net cultivated area. 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.** The detailed state wise production of organic fertilizer in the country is at Annexure II.
- (d): The Indian Council of Agriculture Research (ICAR) under Network project on Organic Farming is undertaking research to develop location specific organic farming package of practices for crops and cropping systems. Presently, the project is being implemented in 20 centres located in state covering 16 States. Organic farming package of practices for 18 crops/cropping systems have been developed. Besides, under ICAR's 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 Council has developed technologies to prepare various types of organic manures such as phospho compost, vermi compost, municipal solid waste compost, bio-enriched compost etc. from various organic wastes. The ICAR also imparts training, organizes Front Line Demonstrations (FLDs) to educate farmers on all these aspects.

- A. National Mission of Sustainable Agriculture (NMSA)-Organic & INM Component of Soil Health Management (SHM):
- 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) 2 Rs.500/ acre x 50 of Rs.25000 per cluster in second year.

- C. 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.
- **D. 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.
- **E. Rashtriya Krishi Vikas Yojana (RKVY):** Organic Farming projects are considered by respective State Level Sanctioning committee
- F. Indian Council of Agricultural Sciences (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.

Zone- Wise Bio-Fertilizer Production in India (2010-15)

SI. No.	State	2010-11	2011-12	2012-13	2013-14	2014-15	
South	n Zone					Carrier based (MT)	Liquid (KL)
	A & N Islands	0	0	0	0	0.0000	0.0000
2	Andhra	999.6	1126.35	1335.74	2714.22	2668.8000	274.8560
3	Daman & Diu	0	0	0	0	0.0000	0.0000
4	Karnataka	6930	5760.32	7683.72	9907.33	16462.620	23.0561
5	Kerala	3257	904.17	1045.64	3520.66	4916.9700	10.5096
6	Lakshadwee	0	0	0	0	0.0000	0.0000
7	Pondicherry	783	509.45	621	516.98	560.9500	1.4976
8	Tamil Nadu	8691	3373.81	11575.7	14104.8	15373.290	11.3017
	Total	20660.6	11674.1	22261.8	30764.0	39982.630	321.2210
West						00002.000	<u> </u>
1	Chhattisgarh	0	276.34	501.63	712.07	1024.680	9.620
2	Gujarat	6318	2037.35	978.48	6411.43	3667.929	2800.500
3	Goa	443.4	0	370	66.26	802.520	0.000
4	Madhya	2455.57	2309.06	1408.08	4824.19	2637.990	119.216
5	Maharashtra	2924.00	8743.69	5897.91	6218.60	14847.397	324.767
6	Rajasthan	819.75	199.78	982	1315	599.898	0.000
7	D & N Haveli	0	0	0	0	0.000	0.000
•	Total	12960.7	13566.2	10138.1	19547.5	23580.414	3254.103
North	Zone	1200011	1000012	1010011		200001111	02000
1	Delhi	1205	1617	0	396	104.500	0.000
2	Chandigarh	0	0	0	0	0.000	0.000
3	Haryana	6.53	914.41	5832.61	1146.48	872.955	46.489
4	H.P.	9	1.29	0	26.147	0.768	33.070
5	J & Kashmir	0	0	0	45.26	0.000	0.000
6	Punjab	2.5	692.22	2311.33	2124.85	6305.453	74.278
7	Uttar	1217.45	8695.08	1310.02	2682.22	4099.068	98.036
8	Uttarakhand	45.00	263.01	2758.21	5493.85	2129.952	208.034
	Total	2485.48	12183.0	12212.1	11914.8	13512.696	459.907
East 2							
1	Bihar	136.26	75	52.4	52.4	64.90	0.00
2	Jharkhand	0	8.38	35.3	14.2	9.08	0.00
3	Odisha	357.66	590.12	407.1	1097.61	1074.46	4.70
4	West Bengal	393.39	603.2	1110	1682.70	2061.83	14.63
-	Total	887.31	1276.7	1604.8	2846.91	3210.27	19.33
North	East Zone						
1	Arunachal	0	0	0	59	59.000	0.000
2	Assam	130	68.33	89	149	88.000	0.000
3	Manipur	0	0	0	0	0.000	0.000
4	Meghalaya	0	0	0	0	0.000	0.000
5	Mizoram	2	0	0	4	3.600	0.000
6	Nagaland	21.5	13	7.45	7.45	7.450	0.000
7	Sikkim	0	0	9.5	10.1	12.400	0.000
8	Tripura	850	1542.85	514	225	240.000	0.000
	Total	1003.50	1624.18	619.95	454.55	410.450	0.000
	Grand Total	37997.6	40324.2	46836.8	65527.8	80696.455	4054.5637

Source: Compiled by NCOF (Data Provided by Production Units/State Government/ RCOFs MT= Metric Ton KL= Kilo litrer
