

GOVERNMENT OF INDIA
MINISTRY OF FISHERIES, ANIMAL HUSBANDRY AND DAIRYING
DEPARTMENT OF FISHERIES

RAJYA SABHA
STARRED QUESTION No. 30
TO BE ANSWERED ON 24TH JULY 2024

Seaweed Cultivation

***30. SHRI MILIND MURLI DEORA:**

Will the Minister of **Fisheries, Animal Husbandry and Dairying** be pleased to state:

- (a) the total amount of area utilized for the purposes of cultivation of seaweed over the last four years, State-wise, especially in Maharashtra;
- (b) the fund allocated and utilized under Pradhan Mantri Matsya Sampada Yojana (PMMSY) scheme for cultivation of seaweeds over the last four years across country, especially in Maharashtra;
- (c) whether Government has undertaken any promotional activities to increase seaweed cultivation in country, if so, details thereof and if not, reasons therefor; and
- (d) whether Government has undertaken any research to determine positive impact of mixing seaweed with livestock fodder as a means to reduce methane gas emissions, if so, details thereof?

ANSWER

MINISTER OF FISHERIES, ANIMAL HUSBANDRY AND DAIRYING
(SHRI RAJIV RANJAN SINGH ALIAS LALAN SINGH)

- (a) to (d): A Statement is placed on the Table of the House.

Statement referred to in reply to the Rajya Sabha Starred Question No. 30 put in by Shri Milind Murli Deora, Member of Parliament for answer on 24th July, 2024 regarding Seaweed Cultivation.

(a) & (b) Seaweed cultivation is currently undertaken in the States/Union Territories namely Tamil Nadu, Gujarat, Maharashtra, Andhra Pradesh and Union Territory of Lakshadweep covering an area of around 1354.79 hectare. The flagship scheme, Pradhan Mantri Matsya Sampada Yojana (PMMSY) implemented by the Department of Fisheries, Government of India *inter-alia* envisages promotion of seaweed cultivation in potential sites of coastal States/UTs. The scheme encourages participation of women and youth through Self Help Groups/cooperatives in seaweed cultivation to enhance the livelihood and family income in the coastal areas.

During the last four years (2020-21 to 2023-24), the Department under PMMSY has approved seaweed cultivation projects worth Rs.193.80 crore in the coastal States/UTs including Maharashtra. The approved projects consisted of installation of 46,095 rafts and 65,330 monoline including installation of 1000 rafts for seaweed cultivation in Maharashtra. The Government of Maharashtra has informed that out of 1000 rafts approved, 742 seaweed rafts have already been installed (covering 6,678 Sq.Mtr area) in Ratnagiri District.

The other approved projects under PMMSY include, establishment of a Multipurpose Seaweed Park in Tamil Nadu at a total cost of Rs.127.71 crore and a Seaweed Seed Bank in U.T. of Dadra Nagar Haveli and Daman & Diu at a total cost of Rs.1.20 crore.

In addition, to facilitate research and development (R&D) in seaweed cultivation, projects with total cost of Rs.465.07 lakh have been approved under Central Sector (CS) component of PMMSY with 100% financial assistance from central government to coastal States / R&D Institutes. These projects are related to pre-feasibility studies on seaweed cultivation, training and demonstration, pilot scale farming of commercially important seaweed species in different potential sites, capacity building and skill development, quality seed production etc. The details of projects approved under PMMSY towards promotion of seaweed cultivation activities during the last four years are at **Annexure**.

(c): Yes, the Department of Fisheries, Government of India has taken several initiatives for promotion of seaweed cultivation in the country. The interventions include various outreach and promotional activities/campaigns including 'Sagar Parikrama' programme. Digital campaigns, hoardings, celebration of World Environment Day while conducting awareness on seaweed cultivation etc. were other activities undertaken by the Department of Fisheries, Government of India. Additionally, a National Conference on Seaweed was organized by the Department on 27th January, 2024 at Kori Creek, Gujarat, which was attended by more than 400 stakeholders comprising of seaweed farmers, scientists, experts, entrepreneurs, representatives from the line Departments/Ministries, Government of Gujarat and other coastal States/UTs.

Training and skill development programmes on seaweed cultivation, Master Trainer development programme on Good Management Practices (GMPs) in seaweed farming, exposure visits to seaweed demonstration units are organized by the National Fisheries Development Board (NFDB) in association with the State Fisheries Departments and the research institutes such as Central Marine Fisheries Research Institute (CMFRI), Central Salt and Marine Chemicals Research Institute (CSMCRI), etc.

(d): The CMFRI under the Indian Council of Agricultural Research (ICAR) has informed that research to determine positive impact of mixing seaweed with livestock fodder as a means to reduce methane gas emissions was undertaken. The CMFRI has further informed that the results of the study indicated significant potential for seaweed varieties to be used as supplement in livestock feeding for methane reduction.

Statement referred to in reply to para (a) & (b) of the Rajya Sabha Starred Question No. 30 put in by Shri Milind Murlu Deora, Member of Parliament for answer on 24th July, 2024 regarding details of the total projects approved under PMMSY for seaweed cultivation during last four years.

1. Centrally Sponsored Projects (CSS) approved under PMMSY:

A. Seaweed culture rafts (Beneficiary Oriented)

(Rs. In lakhs)

Sl.N	Name of the States	Total of 2020-24 (till date)		
		Physical (No.)	Proj. Cost	GoI Share
1	Andhra Pradesh	26000	390	115
2	Karnataka	10000	150	45
3	Lakshadweep	500	9	5
4	Maharashtra	1000	15	5
5	Tamil Nadu	8595	129	46
Total (A)		46095	692.93	217.41

B. Seaweed culture with Monoline/Tubenet Method (Beneficiary Oriented)

(Rs. In lakh)

Sl.N	Name of the States	Total of 2020-24 (till date)		
		Physical (No.)	Proj. Cost	GoI Share
1	Andhra Pradesh	41200	3296	902.4
2	Gujarat	300	24	7.68
3	Karnataka	21000	1680	508.8
4	Lakshadweep	250	125	75
5	Tamil Nadu	2580	206.4	74.3
Total (B)		65330	5331.4	1568.18

C. Centrally Sponsored Non-beneficiary projects approved to States/UTs

(Rs. in lakhs)

Sl.No	State/UT	Name of the project	2020-24 (till date)		
			Physical (No.)	Proj. Cost	GoI Share
1	Daman & Diu	Seaweed Bank	1	120.00	120.00
2	Tamil Nadu	Establishment of Multipurpose Seaweed Park	1	12771.00	7516.00
Total (C)				12891.00	7636.00

2. Central Sector (CS) projects with 100% assistance approved to States/Institutes on seaweed under PMMSY

Rs.in lakh

Sl No.	Implementing agency/project proponent	Name of the projects	Project cost
(i)	(ii)	(iii)	(v)
1	CSIR-Central Salt & Marine Chemicals Research Institute (CSMCRI)	Seed plant production for promoting extensive cultivation of <i>Kappaphycus alvarezii</i> along Tamil Nadu coast	53.185
2	UT of Andaman and Nicobar	Pre-feasibility studies and establishment of pilot scale farming of commercially valuable seaweeds in Andaman Coast	82.74
3	1.NCSCM, MoEF, Gol. 2. CSMCRI, CSIR, GOI and 3.CMFRI, ICAR, GOI,	Joint study on seaweed cultivation potential and ecological safeguards in the Gulf of Mannar, Tamil Nadu	59.70
4	CSIR-Central Salt & Marine Chemicals Research Institute (CSMCRI)	Strategies to initiate seaweed cultivation along the coast of Maharashtra	121.31
5	ICAR – Central Marine Fisheries Research Institute (CMFRI) and FSI	Seaweed farming feasibility assessment and exploration of promotional activities along Kori, Padala and other selected locations along Kutch Coast, Gujarat	94.92
6	CSIR-Central Salt & Marine Chemicals Research Institute (CSMCRI)	Skilling, Capacity building, and Pre-feasibility Assessment of Seaweed Cultivation in and around Kori Creek, Gulf of Kachchh, Gujarat	53.22
	Total		465.07
