

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

**LOK SABHA
STARRED QUESTION NO. *111
TO BE ANSWERED ON 11TH FEBRUARY, 2025**

Seaweed Cultivation

***111. Shri Appalanaidu Kalisetti:**

Will the Minister of FISHERIES, ANIMAL HUSBANDRY AND DAIRYING be pleased to state:

- (a) the details of financial assistance provided for seaweed cultivation under the Pradhan Mantri Matsya Sampada Yojana (PMMSY), including the subsidy percentage for different beneficiary categories;
- (b) the number of beneficiaries who have availed support for seaweed cultivation under the scheme during the last three years, State-wise;
- (c) the details of infrastructure support provided under the scheme for establishment of seaweed nurseries, processing units and value addition facilities along with the funds allocated and utilized during such period, State-wise;
- (d) whether the Government has conducted any training programs or capacity building initiatives to promote seaweed cultivation and if so, the details thereof;
- (e) the steps taken by the Government to facilitate market linkages and export promotion for seaweed farmers in the country; and
- (f) the details of area under seaweed cultivation during the last five years, including Andhra Pradesh, district-wise?

ANSWER

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

(a) to (f): A statement is placed on the Table of the House.

Statement referred to in reply to the Lok Sabha Starred Question No.111 put in by Shri Appalanaidu Kaliseti, Member of Parliament for answer on 11-02-2025 regarding "Seaweed Cultivation"

In June' 2020, the Government of India launched a flagship scheme namely, Pradhan Mantri Matsya Sampada Yojana (PMMSY), with total investment of ₹ 20,050 crore towards promoting the fisheries sector in the country. Promotion of seaweed cultivation is one of the priority activity for promotion under PMMSY. The support is directed to improve the cultivation practices, infrastructure, awareness, training, research in this sector and to optimize the value chain in the Seaweed trade.

Under the PMMSY, the Department of Fisheries, Government of India (DoF, Gol) has approved the seaweed projects worth ₹194.09 crore, with a central share of ₹98.97 crore including support provided to beneficiaries for installation of 47,245 Rafts, 65,480 monolines/tubenets, establishment of a Multipurpose Seaweed Park, Seaweed Seedbank, Pre-feasibility Assessment study projects on seaweed farming, training and capacity building programs in various States and Union Territories.

The subsidy pattern under the beneficiaries oriented activities of the PMMSY for establishment of Seaweed culture includes support of ₹1,500 per Raft and ₹8,000 per Monoline/Tubenet. As per the PMMSY scheme, 60% subsidy on the project cost is provided for SC/ST/Women beneficiaries, whereas 40% subsidy is provided for General category beneficiaries. Projects are implemented for both beneficiaries activities and non-beneficiaries activities with the fund sharing between the Central and State at the ratio of 60:40. The State-wise details of the Beneficiary Oriented projects for seaweed cultivation approved under the PMMSY, indicating the subsidy pattern is provided at [Annexure-I](#).

Under Non-beneficiary component of PMMSY, a Seaweed Seedbank has been sanctioned for Daman & Diu with a project cost of ₹ 120 lakh. In addition, 6 projects at a total cost of ₹ 465.07 lakhs approved for various ICAR and CSIR institutes, wherein 100% financial support is provided by the DoF, Gol, under the Central Sector (CS) projects of the PMMSY, details are provided at [Annexure-II](#).

Currently, Tamil Nadu is leading seaweed producer in the country. Around 5,048 hectares of potential area has been identified for seaweed cultivation in Tamil Nadu, and given the strong demand for seaweed in various industries, the DoF, Gol has approved the project for Establishment of a Multipurpose Seaweed Park in Tamil Nadu at a total cost of ₹ 127.71 crore with Central financial assistant of ₹ 75.16 crore under the Centrally Sponsored Component and Central Sector Scheme Component of the PMMSY.

The Multipurpose Seaweed Park project in Tamil Nadu is implemented as 'Hub and Spoke model'. A total of 136 coastal villages have been identified in Six Coastal Districts of Tamil Nadu (Nagapattinam, Thanjavur, Tiruvarur, Pudukottai, Ramanathapuram and Thoothukudi) for seaweed cultivation under this project. Ramanathapuram and Pudukottai districts have been designated for the establishment of HUB I and HUB II facilities. At present, 50 percent construction work has been completed in HUB I and Spoke facilities.

Seaweed cultivation has been promoted in Lakshadweep Islands namely, Agatti, Kavaratti, Kadmat, Chetlat, and Kiltan islands with *Gracilaria edulis* and *Salicornia* species. Based on the consultation held with the UT Administration, the DoF, Gol on 11th September, 2024 has announced development of Seaweed Cluster in Lakshadweep.

Andaman & Nicobar Administration has identified 49.63 hectares of suitable area in South Andaman for seaweed cultivation. A five hectare "Seaweed Demonstration" project has been undertaken at Chidiyatapu to encourage locals in commercial seaweed cultivation.

With regard to training programs and capacity building initiatives to promote seaweed cultivation, the National Fisheries Development Board (NFDB) under the DoF, Gol, has supported 58 programs related to exposure visits, awareness, training and capacity building for 7,135 fishers, fish-farmers, coastal communities and 35 officials of fisheries departments of coastal States/UTs under trainers of trainee (ToT) programs through various research and development institutes during 2016-17 to 2024-25 period.

The CSIR-CSMCRI has trained 2529 stakeholders (fishermen, industry, and entrepreneur) in total 63 training programmes conducted on Seaweed Cultivation and Processing Technology during 2017-2025. Besides, ICAR-CMFRI has conducted 102 training programs involving 7490 beneficiaries for promotion of seaweed cultivation during the last 3 years (2022-2024).

The village-level awareness and training were conducted for around 2000 fishermen along the coast of Andhra Pradesh with the support of CSMCRI, Mandapam in 2019.

DoF, Gol on 03.09.2024 has declared the Mandapam Regional Centre of CMFRI as 'Centre of Excellence' for holistic development and support for seaweed in the country. NITI Aayog, has published a policy report titled 'Strategy for the Development of Seaweed Value Chain: Fostering Diversified Livelihood' in collaboration with DoF Gol and technical institutes such as CSIR-CMFRI, CSMCRI, NIOT and NCSCM.

The FFPOs are being formed under the Seaweed Park project in Tamil Nadu to facilitate market linkages and export promotion for seaweed farmers. The Government of Tamil Nadu has informed that 136 villages have been identified as potential seaweed cultivation areas and that Fishermen cooperative societies in these villages comprise 1,22,977 members, of whom 2,053 are actively engaged in seaweed farming activities. Further, the Government of Gujarat has issued an Expression of Interest (EOI) on 7th January, 2025, inviting private enterprises to explore opportunities in large-scale seaweed cultivation, seaweed banks, and processing units to strengthen market linkages. The details of area under seaweed cultivation during last five years, including Andhra Pradesh, District wise as reported by CSIR-CSMCRI is at [Annexure-III](#), whereas the area under demonstration of seaweed farming as reported by ICAR-CMFRI is at [Annexure-IV](#).

ANNEXURE I

(As referred to in reply to the Lok Sabha Starred Question No.111 put in by Shri Appalanaidu Kaliseti, Member of Parliament for answer on 11-02-2025 regarding "Seaweed Cultivation")

The State-wise details of the Beneficiary Oriented projects for seaweed cultivation approved under the PMMSY, indicating the subsidy pattern

(₹ in lakh)

Establishment of Seaweed culture Rafts including inputs (per raft)						
STATE/UT	Sanctioned Units	Total Project Cost	Central Share	State Share	Beneficiary Share	Anticipated Beneficiaries
Andhra Pradesh	26000	390	115.2	76.8	198	1513
Karnataka	10000	150	45	30	75	667
Lakshadweep	500	9	5.4	0	3.6	50
Maharashtra	1000	15	5.4	3.6	6	67
Tamil Nadu	9745	146.18	52.626	35.084	58.47	1000
Grand Total	47245	710.18	223.626	145.484	341.07	3297

(₹ in lakh)

Establishment of Seaweed culture with Monoline/Tubenet Method including inputs						
State/UT	Sanctioned Units	Total Project Cost	Central Share	State Share	Beneficiary Share	Anticipated Beneficiaries
Andhra Pradesh	41200	3296	902.4	601.6	1792	2847
Gujarat	400	32	10.55	7.04	14.4	80
Karnataka	21000	1680	508.8	339.2	832	1000
Lakshadweep	250	125	75		50	50
Tamil Nadu	2630	210.4	75.746	50.494	84.16	800
Grand Total	65480	5343.4	1572.496	998.334	2772.56	4777

(₹ in lakh)

Establishment of a Multipurpose Seaweed Park in Tamil Nadu						
State/UT	Financial Year	Total Project Cost	Central Share	State Share	Beneficiary Share	Anticipated Beneficiaries
Tamil Nadu	2022-23	12771	7516	4894	360	700

ANNEXURE II

(As referred to in reply to the Lok Sabha Starred Question No.111 put in by Shri Appalanaidu Kaliseti, Member of Parliament for answer on 11-02-2025 regarding "Seaweed Cultivation")

The details of Central Sector (CS) projects approved to various Institutes and States/UTs on Seaweed under PMMSY

SI No.	Implementing agency/project proponent	Name of the project	Project cost (₹ in lakh)
(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 Islands	Pre-feasibility studies and establishment of pilot scale farming of commercially valuable seaweeds in Andaman Coast	82.74
3	(i). NCSCM, MoEF&CC, Gol. (ii). CSIR-CSMCRI (iii). ICAR-CMFRI	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)	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 Kutch, Gujarat	53.22
		Total	465.07

ANNEXURE III

(As referred to in reply to the Lok Sabha Starred Question No.111 put in by Shri Appalanaidu Kaliseti, Member of Parliament for answer on 11-02-2025 regarding “Seaweed Cultivation”)

The details of area under seaweed cultivation during the last five years (2020-2025) reported by CSIR-CSMCRI

S. No	Location	District	Cultivation Area Utilized (in hectare)
Gujarat			
1.	Goji nes	Jamnagar	0.0035
2.	Navadra	Jamnagar	0.0035
3.	Pipar village	Kutch	0.1
4.	Nanicher	Kutch	0.1
5.	Narayan Sarovar	Kutch	0.1
6.	Kalaban	Jamnagar	0.0625
7.	Vavala	Jamnagar	0.0625
Total			0.432
Maharashtra			
8.	Burondi	Ratnagri	0.0035
9.	Kolthare	Ratnagri	0.0035
10.	Kalbadevi	Ratnagri	0.0035
11.	Mirya Bandar	Ratnagri	0.0035
12.	MalvanKolamb	Sindhudurg	0.0035
13.	VengurlaMuth	Sindhudurg	0.0035
14.	Mochemad	Sindhudurg	0.0035
15.	Shiroda	Sindhudurg	0.0035
16.	Bhiv Bandar	Ratnagiri	05
17.	Burondi	Ratnagri	10
18.	Kalbadevi	Ratnagiri	20
Total			35.028
Goa			
19.	Hawaii	South Goa	0.0035
20.	Bambolim	North Goa	0.0035
21.	Hollant	South Goa	0.0035
22.	Bogmalo	South Goa	0.0035
Total			0.014
Karnataka			
23.	Bawal	Uttara Kannada	0.0035
24.	Keni	Uttara Kannada	0.0035
25.	Maravanthe	Udupi	0.0035
26.	Benegere	Udupi	0.0035
27.	Pananmbur	Dakshina Kannada	0.0035
Total			0.0175
Kerala			
28.	Kodikkal	Kozhikode	0.0035
29.	Elathur	Kozhikode	0.0035
30.	Kadalundi	Kozhikode	0.0035
31.	Puthanthod	Thrissur	0.0035
32.	Thirumullavaram	Thrissur	0.0035
33.	Mayannad	Wayanad	0.0035
34.	Ettikulam	Kannur	0.0035
Total			0.0245

	Tamil Nadu		
35.	Sethubavachatram	Thanjavur	0.0035
36.	Manora	Thanjavur	0.0035
37.	Adaikkadevan	Thanjavur	0.0035
38.	Kovilpathu	Nagapattinam	0.0035
39.	Tharangampadi	Nagapattinam	0.0035
40.	Odavimadam	Puthukottai	1
41.	M.R.Pattinum	Ramanathapuram	0.5
42.	Nambuthalai	Ramanathapuram	1
43.	Soliyakudi	Ramanathapuram	2
44.	Pudupatinum	Ramanathapuram	1
45.	Thonithurai	Ramanathapuram	1
46.	Mangadu	Ramanathapuram	4
47.	Sambai	Ramanathapuram	8
48.	Umayalpuram	Ramanathapuram	6
49.	Pirappanvalasai	Ramanathapuram	0.0035
50.	Kottaikadu	Chengalpattu	0.0035
51.	Panjal	Tirunelveli	0.0035
52.	Uvari	Tirunelveli	0.0035
53.	Mullukambi	Tuticorin	0.0035
Total			24.535
Andaman islands			
54.	Aves Island	North & Middle Andaman	0.0035
55.	Sound Island	North & Middle Andaman	0.0035
56.	Durgapur	North & Middle Andaman	0.0035
57.	Ariel Bay light house	North & Middle Andaman	0.0035
58.	Mayabunder	Mayabunder, South Andaman	1.0
59.	Diglipur	Diglipur, North Andaman	0.5
60.	German Jetty	Mayabunder, South Andaman	1.0
61.	Aves Island	Mayabunder, South Andaman	5.0
62.	Sound island	Mayabunder, South Andaman	5.0
63.	Ariel Bay lighthouse	Diglipur, North Andaman	1.0
64.	Durgapur	Diglipur, North Andaman	3.0
Total			16.514
Andhra Pradesh			
65.	Chepalapada	Visakhapatnam	0.0035
66.	Mangamaripeta	Visakhapatnam	0.0035
67.	Thimmapuram	Visakhapatnam	0.0035
68.	Konada	Visakhapatnam	0.0035
69.	B.G. Petta	Visakhapatnam	0.0035
70.	Karedu	Ongole	0.0035
71.	Kondurupalem	Tirupathi	0.0035
72.	Anajalipuram	Tirupathi	0.0035
73.	Venkateswarpuram	Nellore	0.0035
74.	Ponnapudivenkatanarayanapuram	Nellore	0.0035
Total			0.035

Odisha			
75.	Markandi	Ganjam	0.0035
76.	NoliaNuagaon	Ganjam	0.0035
77.	Ramachandi	Puri	0.0035
78.	Daluakani	Puri	0.0035
79.	Nuagan	Jagatsinghpur	0.0035
80.	Abhyachandapur	Balasore	0.0035
Total			0.021
West Bengal			
81.	Deul Bari	South 24 Parganas	0.0035
82.	Mandarmoni	East Midnapore	0.0035
Total			0.007
Lakshadweep islands			
83.	Agatti	Agatti	0.0035
84.	Kavaratti	Kavaratti	0.0035
Total			0.007

ANNEXURE IV

(As referred to in reply to the Lok Sabha Starred Question No.111 put in by Shri Appalanaidu Kaliseti, Member of Parliament for answer on 11-02-2025 regarding "Seaweed Cultivation")

Demonstration of seaweed farming by ICAR-CMFRI

Year	2020-2021	2021-2022	2022-2023	2023-2024	2024-2025
Tamil Nadu	7.9 acre (Ramanathapuram, Tuticorin & Pudukkottai districts)	9.75 acre (Ramanathapuram, Tuticorin & Pudukkottai districts)	11.1 acre (Ramanathapuram, Tuticorin & Pudukkottai districts)	14.1 acre (Ramanathapuram, Tuticorin & Pudukkottai districts)	17.5 acre (Ramanathapuram, Tuticorin, Pudukkottai & Thanjavur districts)
Maharashtra	-	0.3 acre (Ratnagiri district)	0.54 acre (Ratnagiri district)	0.3 acre (Ratnagiri district)	-
Gujarat	2.5 acre (Gir Somnath district)	3.5 acre (Gir Somnath and Kutch districts)	5.75 acre (Gir Somnath and Kutch districts)	9.75 acre (Gir Somnath and Kutch districts)	9.90 acre (Gir Somnath and Kutch districts)
Odisha	1 acre (Balasore, Jagatsingpur, Puri & Ganjam districts)	0.5 acre (Jagatsingpur & Puri districts)	-	-	-
Andhra Pradesh	-	2.5 acre (Visakhapatnam, Guntur & Srikakulam districts)	2.5 acre (Visakhapatnam, Guntur & Srikakulam districts)	2.5 acre (Visakhapatnam, Guntur & Srikakulam districts)	5.0 acre (Visakhapatnam, Guntur & Srikakulam districts)
Karnataka	0.1 acre (Uttara Kannada district)	0.1 acre (Uttara Kannada district)	0.1 acre (Uttara Kannada district)	-	0.02 acre (Dakshina Kannada & Udupi district)
Lakshadweep Islands	0.004 acre	0.05 acre	0.07 acre	0.02 acre	0.02 acre