

Quote by Ramakrishnan M, Managing Director, Primus Partners

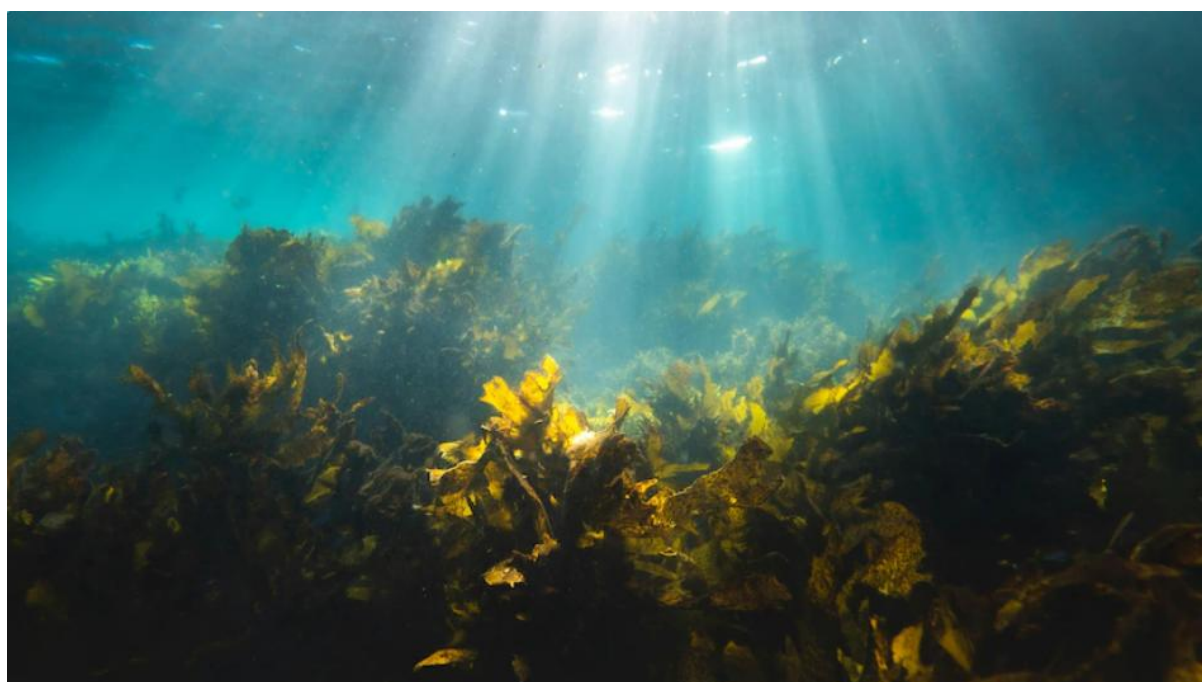
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India's seaweed industry to hit Rs 3,277 cr in 10 years, needs policy push

Seaweed farming also presents a lucrative opportunity for farmers, with potential earnings of up to Rs 13.28 lakh per hectare annually, a new report has said

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Read on: https://www.business-standard.com/industry/news/india-seaweed-farming-growth-challenges-2025-125031300725_1.html

India's seaweed farming sector, currently valued at Rs 200 crore, is projected to expand to Rs 3,277 crore over the next decade, with the potential to positively impact 1.6 million people, according to a new report by Primus Partners. The number of families engaged in seaweed farming could grow tenfold from 40,000 to 4,00,000 if the right support mechanisms are put in place. Seaweed farming also presents a lucrative opportunity for farmers, with potential earnings of up to Rs 13.28 lakh per hectare annually, it added.

The report attributed this exponential growth to increasing demand from multiple industries, including food, pharmaceuticals, cosmetics, biomaterials, and agriculture. Major companies such as Britannia, Nestle, Amul, Cipla, Zydus Cadila, Hindustan Unilever, Tata Chemicals, and BASF India are already integrating seaweed into their products and supply chains.

What are the uses of seaweed?

Seaweed is used as a natural bio-stimulant in agriculture to enhance plant growth and reduce reliance on chemical fertilisers. In the food industry, it serves as a rich source of nutrients, commonly found in soups, salads, dietary supplements, and low-calorie foods. In pharmaceuticals, alginates and carrageenan derived from seaweed are used in medicines for gastric reflux and as stabilizers in vaccines.

The cosmetics industry relies on seaweed as a moisturising and anti-aging agent in skincare and haircare products. Industrial applications include its use in the textile and food processing industries for thickening and stabilising processes. Additionally, seaweed has potential as a source for bioethanol and biogas, offering an alternative to fossil fuels.

Lakshadweep emerging as a key hub for seaweed farming

The report highlighted that Lakshadweep has emerged as a prime location for seaweed cultivation. The final dry seaweed yield per unit of seeds in most regions is around 5X, but some areas in Lakshadweep have demonstrated exceptional productivity of up to 15X. The region benefits from favourable environmental conditions for at least seven months a year, positioning it as a potential global leader in sustainable seaweed production.

What are the challenges facing the seaweed industry?

The report mentioned that Indian seaweed lacks uniform quality, leading buyers to prefer imports from the Philippines and Indonesia. Poor road connectivity, particularly between coastal areas and mainland markets, increases transportation costs, making logistics a significant hurdle.

The industry is currently reliant on a few species such as Kappaphycus, Sargassum, and Gracilaria, restricting its full commercial potential. Buyers seeking long-term investments face legal uncertainties due to the absence of clear policies on land leasing and contract farming. Additionally, the Forest Department has raised concerns over the environmental impact of Kappaphycus cultivation, despite studies refuting its negative effects.

Meanwhile, uncertainty about buyers leads to price volatility and discourages new entrants into the sector. Increased populations of green turtles in Lakshadweep have led to overgrazing, damaging seaweed farms. Many farmers remain unaware of best practices and government schemes, leading to inefficient farming techniques and lower profits.

How is the Centre looking to boost the sector?

The Indian government has allocated Rs 640 crore under the Pradhan Mantri Matsya Sampada Yojana (PMMSY) to promote seaweed farming. Additionally, Kisan Credit Cards (KCC) and Mudra Loans aim to provide financial assistance to small and medium-scale seaweed farmers.

Skill development initiatives such as the CSIR Integrated Skill Initiative are training coastal communities, entrepreneurs, and researchers in seaweed cultivation and value-added processing. The National Fisheries Development Board (NFDB) Seaweed Cultivation Scheme supports the cultivation of high-value species such as Kappaphycus and Gracilaria.

The ICAR-CMFRI and CSIR-CSMCRI have identified 24,707 hectares across 333 sites as suitable for seaweed farming. Micropropagation facilities are recommended to ensure higher survival rates and consistent yield quality, while seed banks and hatcheries are essential to mitigate seasonal losses and expand cultivation.

How can seaweed farming see a growth-filled future?

The report outlined a structured strategy to develop India's seaweed industry, emphasising infrastructure expansion, policy frameworks, market development, buyer engagement, and export potential. Establishing onshore and offshore seed banks will prevent supply disruptions, while implementing contract farming laws will ensure stability for farmers and buyers.

Encouraging private investment and Public-Private Partnerships (PPPs) will strengthen processing and logistics. Bringing corporate buyers into early discussions will help ensure quality control and consistent procurement agreements. Additionally, setting up quality standards and certification mechanisms will position India as a global seaweed industry leader. The urgent development of seed banks, processing units, and streamlined policies is recommended to accelerate industry growth and ensure long-term sustainability, the report noted.

“Seaweed farming represents a tidal shift in sustainable agriculture, promising not only to bolster India's blue economy but to fundamentally transform coastal livelihoods. By embracing this

untapped resource, we are paving a path towards economic resilience and environmental stewardship for millions,” Ramakrishnan M of Primus Partners said.