

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

LOK SABHA

UNSTARRED QUESTION No. 515
TO BE ANSWERED ON 3rd February 2026

Aquaculture Species

515. Shri Asaduddin Owaisi :

Will the **MINISTER OF FISHERIES, ANIMAL HUSBANDRY AND DAIRYING** be pleased to state:

- (a) whether the Government is aware of reports indicating that certain aquaculture species like red algae promoted under the Pradhan Mantri Matsya Sampada Yojana (PMMSY) are invasive, and their proliferation threatens marine ecosystems, including coral reefs;
- (b) if so, the details of such invasive species, their impact on coral reefs and local marine biodiversity;
- (c) whether any study or evidence the Government has considered before promoting these species;
- (d) the steps being taken by the Government to mitigate the environmental impact of such invasive species and ensure that aquaculture under the PMMSY is sustainable; and
- (e) whether the Government has any proposals to issue revised guidelines or fixed strict criteria for species selection under PMMSY and if so, the details thereof?

ANSWER

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

(a) to (c) The Department of Fisheries, Ministry of Fisheries, Animal Husbandry and Dairying Government of India in the year 2020-21 has rolled out a flagship scheme the *Pradhan Mantri Matsya Sampada Yojana* (PMMSY) with highest ever investment of Rs. 20,050 crores in the fisheries sector for implementation during a period of five years i.e., 2020-21 to 2024-25, in all States/Union Territories. Under PMMSY, seaweed cultivation is promoted as an income-generating economic activity. 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. Department of Fisheries, Government of India, under PMMSY has approved the seaweed projects worth ₹198.17 crore for installation Rafts, monolines/ tubenets, establishment of a Multipurpose Seaweed Park, Seaweed Seed bank, Seaweed Hatchery, Pre-feasibility Assessment study projects on seaweed farming, training and capacity building programs in various States and Union Territories. Besides, Mandapam Regional Centre of ICAR-Central Marine Fisheries Research Institute (CMFRI) has been designated as a Centre of Excellence for seaweed development and Lakshadweep Islands has been designated as a Seaweed Cluster.

As per the National Institution for Transforming India (NITI) Aayog report on *Strategy for the Development of Seaweed Value Chain*, Institutes such as National Centre for Sustainable Coastal Management (NCSCM), Central Salt and Marine Chemical Research Institute (CSMCRI) and Central Marine Fisheries Research Institute (CMFRI) have studied and documented impact of seaweed cultivation on biodiversity including coral reefs. Their findings indicate no negative impact on marine biodiversity and no invasive characteristics reported for red algae species such as *Gracilaria edulis* and *Kappaphycus alvarezii*. in the marine ecosystem. The Government of Tamil Nadu has also *inter alia* reported that commercial cultivation of *Kappaphycus* was started from 2005, and there was no invasiveness seen as apprehended. However, as a precautionary measure, vide G.O. (MS) No.229, Environment and Forests (EC-3) Department, dated 20.12.2005 the *Kappaphycus* has not allowed for cultivation in Gulf of Mannar region.

(d) and (e) To regulate introduction of non-native species, Government of India have constituted the National Committee on Introduction of Exotic Aquatic Species into Indian waters that *inter alia* review and assess the pros and cons of introduction of exotic aquatic species including seaweeds into the Country and also develop guidelines/code of ethics for future introductions. The committee is also responsible for approving the introduction of new species and developing import protocols based on comprehensive risk assessments to minimize potential ecological and economic impacts. The Department of Fisheries, Government of India, under PMMSY promotes species diversification including seaweed through new candidate species having high production and market potential. Further, to promote sustainable seaweed cultivation under PMMSY, the Department of Fisheries, Government of India, has notified the 'Guidelines for Import of Live Seaweeds into India' allowing the import of high-quality seed materials. The guidelines outline a process for importing live seaweed, ensuring transparency and accountability, strict quarantine procedures to prevent introduction of pests and diseases, risk assessment to identify potential biosecurity concerns and post-import monitoring for strengthening ongoing monitoring and risk assessment.
