

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

LOK SABHA

**UNSTARRED QUESTION No. 5057
TO BE ANSWERED ON 1st April 2025**

Aquaculture under PMMSY

**5057. Shri Asaduddin Owaisi :
Shri Pradyut Bordoloi :**

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

- (a) whether there are reports indicating that certain aquaculture species like *Kappaphycus alvarezii* (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, and studies or evidence the ministry has considered before promoting these species;
- (c) the steps being taken to mitigate the environment impact of such invasive species and ensure that aquaculture under the PMMSY is sustainable; and
- (d) whether the Ministry plans to issue revised guidelines or stricter criteria for species selection under PMMSY, if so the details thereof ?

ANSWER

**MINISTER OF STATE FOR FISHERIES, ANIMAL HUSBANDRY AND DAIRYING
(SHRI GEORGE KURIAN)**

(a) to (b) The Department of Fisheries, Ministry of Fisheries, Animal Husbandry and Dairying 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 ₹196.92 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.

ICAR-CMFRI under the *Pradhan Mantri Matsya Sampada Yojana* (PMMSY) has promoted seaweed (red algae) species viz., *Gracilaria edulis* and *Kappaphycus alvarezii*. The Institutes like 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 *Kappaphycus* spp. in the marine ecosystem.

(c) and (d) 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.
