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

RAJYA SABHA

UNSTARRED QUESTION No. 380
TO BE ANSWERED ON 23rd July, 2025

Drone technology in shrimp culture and monitoring

380 Shri Masthan Rao Yadav Beedha:

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

(a) the details of pilot drone-based shrimp transport systems, including the development of drones with higher payload capacities suitable for aquaculture hubs in coastal regions such as Andhra Pradesh;
(b) the steps taken to formulate standard operating procedures (sops) for the safe and efficient use of drones in aquaculture logistics;

(c) the details of any subsidy or incentive structures being considered to promote drone. adoption among shrimp farmers and cooperatives; and
(d) the measures being taken to integrate drone-based environmental monitoring for shrimp ponds to enhance yield, reduce disease outbreaks, and improve traceability in exports?

ANSWER

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

(a): Fisheries Research Institutes under Indian Council of Agricultural Research (ICAR) have initiated research programmes on Drones and expanding its uses to collect water samples for analysis from open-water bodies and difficult terrains; distribution of feed and medicines into culture systems; biomass estimation; health monitoring, etc. Further, a prototype drone is being developed by ICAR-Central Inland Fisheries Research Institute (ICAR-CIFRI) for transportation of fish and shrimp from production centre to market with a capacity of 70kg payload under Pradhan Mantri Matsya Sampada (PMMSY).

(b): The Department of Fisheries has constituted a Technical Committee to formulate the Standard Operating Procedure (SoP) on application of Drone technology in fisheries and Aquaculture.

(c) and (d): Innovations and innovative projects/activities, technology demonstration including startups, incubators and pilot projects is one of the activity under central sector scheme component of PMMSY which also cover extending financial support for promotion of drone technology in fisheries and aquaculture. Key activities such as surveillance, stock assessment, environmental monitoring, disease detection, automated feeding in aquaculture including shrimp farm, water sampling, and precision fishing represent significant technological advancements in the fisheries sector which can cover under central sector scheme component of PMMSY.

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