

GOVERNMENT OF INDIA
MINISTRY OF AGRICULTURE AND FARMERS WELFARE
DEPARTMENT OF AGRICULTURAL RESEARCH & EDUCATION

RAJYA SABHA
UNSTARRED QUESTION NO-2264
ANSWERED ON- 07/08/2026

MEASURES TO BOOST MAKHANA EXPORTS FROM BIHAR

2264. DR. BHIM SINGH:

Will the Minister of AGRICULTURE AND FARMERS WELFARE be pleased to state:

- (a) the new technologies developed through the National Research Centre for Makhana located in Darbhanga to increase the income of Makhana growers; and
- (b) Government's proposal to boost Makhana exports from Bihar and to set up cluster-based processing units?

ANSWER

THE MINISTER OF STATE FOR AGRICULTURE AND FARMERS WELFARE
(SHRI BHAGIRATH CHOUDHARY)

(a): Technologies and Interventions developed by ICAR–National Research Centre for Makhana, Darbhanga to increase the income of Makhana growers include high-yielding Makhana variety Swarna Vaidehi, thorn-less water chestnut varieties, Swarna Harit and Swarna Lohit and Makhana-cum-Fish Farming System. The details of these are given in **Annexure-I (A)**.

(b): Agricultural and Processed Food Products Export Development Authority (APEDA) took export promotion initiatives in collaboration with the Government of Bihar and other stakeholders while ICAR–National Research Centre for Makhana, Darbhanga, supports the promotion of Makhana exports through technical interventions. The details of these are given in **Annexure-I (B)**.

[Part (a) & (b) of Rajya Sabha USQ No. 2264 dated 07/08/2026]

(A) Technologies and Interventions developed by ICAR–National Research Centre for Makhana, Darbhanga

The development of high-yielding Makhana variety *Swarna Vaidehi* with an average yield potential of 28–30 q/ha, nearly double that of conventional cultivation (14–16 q/ha), accompanied by a complete package of improved practices, marks a significant advancement in aquatic crop production. Complementing this, two thorn-less water chestnut varieties, *Swarna Harit* and *Swarna Lohit*, have been developed which can be cultivated after Makhana harvest, thereby enhancing cropping intensity, optimizing land use and boosting farmers' income. Additionally, the innovation of Makhana-cum-Fish Farming System has proven effective particularly in Chaur land, offering 40–50% higher income compared to solo Makhana farming.

(B) The initiatives taken by APEDA and ICAR–National Research Centre for Makhana, Darbhanga to promote export of Makhana and major achievements are: -

Key efforts of APEDA include the development of the Mithila Multi-Commodity Horticulture Cluster under National Horticulture Board (NHB)'s Cluster Development Programme, participation in international trade fairs, organizing buyer-seller meets, and other such export promotion activities. A Memorandum of Understanding with Bihar's Directorate of Horticulture specifically targets the export of GI-tagged Mithila Makhana. APEDA has organized exporter-producer meetings, over 100 capacity-building and sensitization programmes and joint sessions with Farmer Producer Organizations (FPOs) and Credit Rating Information Services of India Limited (CRISIL) to provide market intelligence. Infrastructure support has been strengthened through the Integrated Pack House and Common Facility Centre in Patna, equipped with irradiation facilities to improve quality, shelf life and safety. Additionally, nine virtual and one physical International Buyer-Seller Meets have been conducted between 2021–22 and 2025–26 to boost Makhana exports from Bihar.

ICAR–National Research Centre for Makhana, Darbhanga interventions include the development and dissemination of improved production, post-harvest management, processing and value-addition technologies to enhance product quality, nutritional value, shelf life and export competitiveness. It also prioritizes capacity building of farmers, entrepreneurs, processors and stakeholders through regular training on scientific cultivation, hygienic processing, grading, packaging, quality standards and export-oriented practices. A total of 46 such trainings were organized over the past 03 years benefitting over 2500 farmers/ entrepreneurs/ exporters and other stakeholders. In collaboration with organizations such as APEDA, EXIM Bank and Quality Council of India (QCI), stakeholder consultations, workshops and awareness programmes are organized to strengthen quality production, value addition, market linkages and export promotion. Two programmes have been organized this year (2026) with the help of APEDA, QCI and EXIM Bank.
