BIOFLOC ADVANCES SUSTAINABLE AQUACULTURE, BOOSTS FOOD SECURITY — DOF

BERNAMA News | General News | 30/04/2026 | Author: MOHD KHAIRI IDHAM AMRAN | Others

KUALA LUMPUR, April 30 (Bernama) — The Department of Fisheries Malaysia (DOF) is stepping up efforts to strengthen the aquaculture sector by adopting biofloc technology to boost food security and sustainable productivity.

In a statement today, DOF said the environmentally friendly system uses a 'recycling' concept to convert aquaculture waste, including ammonia from fish excrement and excess feed, into microbial protein or flocs.

"These flocs serve as a natural food source for species such as tilapia, white shrimp (vannamei) and catfish, reducing reliance on commercial feed by 20 to 30 per cent," it said.

As of 2025, production reached 1,500 metric tonnes, estimated at RM15 million based on an average market price of RM10 per kilogram.

More than 80 biofloc operators have been recorded nationwide, with Kedah registering the highest number.

Fisheries director-general Datuk Adnan Hussain said the system has strong potential to boost national food security while generating economic value.

"It enables high-density farming in limited space, making it suitable for urban agriculture," he said, adding that wastewater discharge is minimal, helping to protect river ecosystems.

Adnan also stressed on the need for sound technical management, including hybrid solar energy systems and Internet of Things (IoT) applications for real-time water quality monitoring to ensure operational sustainability.

To support industry growth, the government provides initiatives such as the Agropreneur Muda Grant of up to RM20,000, the Food Security Fund via Agrobank, and the Aquaculture Delivery and Support Services Scheme (SPEKS).

Those interested can seek advisory services at the Aquaculture Extension Centre (PPA) in Jitra, Kedah, the main reference centre for biofloc technology, or visit www.dof.gov.my

-- BERNAMA

TAGS: Department of Fisheries Malaysia, DOF, aquaculture, biofloc, food security, productivity, sustainability

KAI SS3 UHS