HACKATHON

SMART PISCICULTURE

PROBLEM DESCRIPTION

Fisheries contribute to 1.07% of the total GDP of India. It is an important sector contributing to agricultural exports and the food sector in a major way.
In aquaculture farming, fish yield is highly dependent on two factors:
1. Feeding time and 2. The amount of feed.
So, the farmers need to be highly attentive all the time. Most of the time the farmer's residence place will be far away from the fish cultivation pond & so feeding fish on time and in the correct quantity is the biggest challenge for the farmer

Expected output:

Working prototype of a Fish Feeder which should be able to, 1. Feed on time & predefined quantity and monitor pond water quality & temperature. 2. Should be able to send alerts to the farmers if the water quality & food in the feeder goes below the predefined range. 3. Should operate using solar power & battery to use 24 X 7. 4. Electronics & Electrical Components in the fish feeder should be placed in such a way that it should not be affected by water and rain.

Problem that is being addressed by the prototype:

Automatic fish feeder with water quality, temperature and food container monitoring & alert system using IoT & Solar power

Output Criteria:

Final product should be: 1. In affordable price to the farmers 2. Easy to operate (Changing the feeding time, amount of feed, alerts etc.) 3. Easy to do maintenance & repair.