



ORL-F&PI-02**Smart Fish Pond Management Approach: Integrating Automated Feeding and Aeration Systems for Enhanced Aquaculture Productivity**

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Aquaculture is a rapidly growing sector of food production, where efficient management of feeding and water aeration plays a critical role in ensuring healthy fish growth and optimizing production. The fish feeding machine is equipped with programmable schedules and quantity controls to deliver precise feed amounts, reducing overfeeding, waste, and labor requirements. In parallel, the aerator system ensures adequate oxygen levels in the water. By using a timer, it can automate the aeration process improving the overall health of the pond ecosystem. The integration of these automated systems not only improves aquaculture efficiency but also contributes to sustainable practices by optimizing resource usage and ensuring better water quality management.

Specification of feeder and aerator

| <u>ITEMS</u> | <u>SPECIFICATION</u> |
|--|---|
|  <p><u>Automatic fountain aerator with timer controller</u></p> | <p>Motor - 2hp or 1.5Kw Head - 9m Size - 3inch Current max - 9.6A Coverage Area - (5-7 Kattha) RPM - 3000 Remote control and Wi-Fi operated Timer - Functions automatically based on time setting</p> |
|  <p><u>Automatic fish feeding machine (Solar power timer based)</u></p> | <p>Solar - 20 watt Battery - 12v, 9A Coverage Area of feed - 40 ft radius Feed capacity on 500 Litre tank - 200kg Motor - 150 watt DC Motor Remote control and Wi-Fi operated Timer - Functions automatically based on time setting</p> |