# ABSTRACT

*Fish farming is one of the fish feeding activities carried out by fish farmers. the current feeding system still uses human resources for feeding, which is still manual. Therefore, a tool called the APIOFISH robot was designed to provide fish feed that can work automatically based on the feeding schedule and the amount of feed distributed to the pond. The APIOFISH robot requires an alternative power supply to help energize the device. The alternative power supply is implemented using solar panels connected to a solar charge controller. Because if you use gasoline or diesel, it can cause pollution in the pond and cause the fish in the pond to get sick and even cause death. The power supply on the APIOFISH robot is regulated using a relay that automatically changes according to the voltage value obtained by the voltage sensor. With this APIOFISH robot can operate more optimally. APIOFISH robot users can find out the battery capacity 1 or 2 by knowing the battery voltage value on the LCD or other measuring device. When the battery is > 12 volts, then battery 1 or 2 is fully charged. Then if the battery is < 12 volts, then battery 1 or 2 is charging the battery. To charge the battery from 12 volts to 12.60 volts, it takes 4 hours to charge the battery with an estimated time of every 20 minutes at a speed of 0.355.*

*Keywords: power supply, solar panels, relay, voltage and currents, APIOFISH robot.*

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