



EGG INCUBATOR

INNOVATOR

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PROBLEM ADDRESSED

Poultry farming is quite popular among rural youth and one of their sources of employment and income. They often buy young chicks and feed them till they grow to a certain age for resale. However, if they install an egg incubator, they can produce the chicks in their farm itself. This will work out very economical for them. The incubators available in the market are very expensive and run on electricity. But in rural areas, there are frequent power cuts. The egg incubator developed by Milan Jyoti Das solves these problems. It is cheaper in comparison with the ones available in the market and its power source is both electricity and kerosene lamp.



PRODUCT

The incubator is made up of plywood in the exterior and plain sheet in the interior. Its wall is about 10 cm thick and thermocole is used to insulate it. The whole device is divided into two chambers, upper and lower. The upper chamber houses the main component of the incubator i.e. the egg tray and source of humidity, while the lower chamber houses the thermal source, a speaker for alarm in case of abrupt change and switches. Innovator uses electric lamp as the source of heat when current is available and in case of power failure a kerosene lamp. Both the light and the lamp heat up the floor of the upper chamber (ceiling of the lower chamber). There is a regulator (same as one used for fan) by which the intensity of light can be altered. This chamber partition is made up of two plain sheets, so the heat can easily be transferred. For warming, a plate is placed below the egg tray. From the tray water gets evaporated due to heat and makes the chamber warm. In this incubator air is fed by tubes from four holes from the bottom to the upper chamber.

TECHNICAL DETAILS

- Weight: The weight of the incubator is about 125 kg.
- Dimension: Length is 1.5 m, breadth 0.80m and height 1m
- Source of temperature: Electric bulb and kerosene lamp.
- Capacity: Regular model - 500 eggs.
- Success rate: 85%.

SALIENT FEATURES

- It produces alarm in various emergency situations like opening of door, current failure, high / low temperature, high / low humidity.
- Can be operated by using kerosene oil lamp in case of power failure so it saves the cost of running a dynamo.

