

Semi-Automatic Incubator for artificial hatching

Hatching Success, One Chick at a Time

This technology reproduces the natural incubation process on a larger scale. They are designed to accommodate 50 to 150 eggs at a time. They can be heated using kerosene or a battery-powered light bulb, offering an alternative to mains electricity.



ILRI
INTERNATIONAL
LIVESTOCK RESEARCH
INSTITUTE

International Livestock Research Institute (ILRI)
Adeniyi Adedirian

✓ This technology is **TAAT1 validated**.

8-8



Scaling readiness: idea maturity 8/9; level of use 8/9

Gender assessment

4

Climate impact

7

Technology from

ProPAS

Commodities

Poultry

Sustainable Development Goals



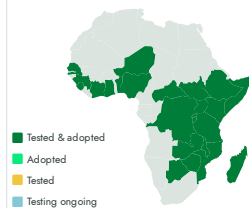
Categories

Production, Equipment

Best used with

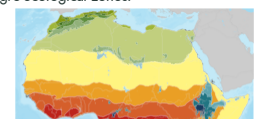
- [Genetically Improved Poultry Breeds for Optimized Meat and Egg Production >](#)
- [Dual-Purpose Chicken for Small-Scale Producers >](#)

Tested/adopted in



Where it can be used

This technology can be used in the colored agro-ecological zones.



Problem

- Limitation of natural incubation in producing chicks, with a capacity of only 10-12 chicks per hatch.
- Difficulty in responding quickly to the market demand for chicks.
- Risk of the spread of parasites and diseases in the natural incubation process.

Solution

- This technology has the ability to hatch day-old chicks in just 21 days, increasing the capacity to produce a large number of chicks in a short time in response to market demand.
- High success rate of 85-90% in artificial incubation, increasing production efficiency.
- Reduced risk of the spread of parasites and diseases in the artificial incubation process.

Key points to design your program

The semi-automatic incubator technology revolutionizes poultry farming in Sub-Saharan Africa by addressing key challenges such as limited chick production, high costs, and disease risks. Supporting SDGs 2, 3, 8, 9, and 12, it enhances food security, fosters economic growth, and promotes sustainable farming practices.

As part of the Poultry Technology Toolkit, it complements other innovations to improve farming efficiency and sustainability. Successfully introduced in East Africa through the ENSURE project, this technology strengthens rural livelihoods. Partnerships with ILRI and local cooperatives ensure effective adoption and capacity building, making it a vital tool for development programs.

Cost: \$\$\$ **100—200 USD**

Incubators

ROI: \$\$\$ **20 %**

per cycle

150 USD

200 USD

500 USD



IP

64-egg manual solar unit

fully automated 96 egg unit

Hatchery start up requirement

Open source / open access



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<https://taat.africa/sxf>

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Enquiries e.catalogs@taat.africa