

# 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 Adediran

✓ 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



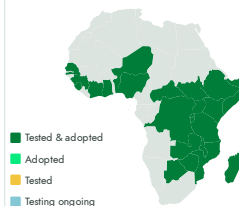
Categories

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 project

The Artificial Hatching in Semi-Automatic Incubators technology transforms poultry farming by accelerating chick production and ensuring a reliable supply. To integrate it in your project:

- Conduct awareness campaigns, assist in selecting incubators, and develop marketing strategies.
- Evaluate quantity, consider delivery costs, and collaborate with institutes for implementation.
- Training and communication support are vital, and association with other poultry farming practices enhances sustainability.

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



Semi-Automatic Incubator for artificial hatching

<https://taat.africa/cck>

Last updated on 11 December 2024, printed on 15 May 2025

Enquiries [e.catalogs@taat.africa](mailto:e.catalogs@taat.africa)