

Rearing of pullets in Sierra Leone



Arie Bijl

Associate expert for SOBA project

Poultry arming expert



Rearing period is most important

- Building the body
- Building immunity
- Do not compromise on feed composition: follow breeders or concentrate manufacturer recommendations

Rearing management

- 1) preparing the house for chickens
- 2) Hygiene and biosecurity
- 2) receiving the chicks
- 3) house climate
- 4) bodyweight
- 5) light
- 5) feed
- 6) beak trimming
- 7) administration



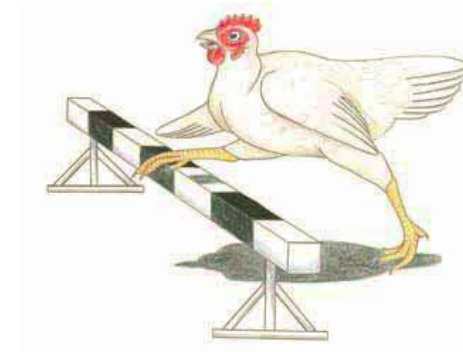
Preparation of house

Cleaning

- water
- dry

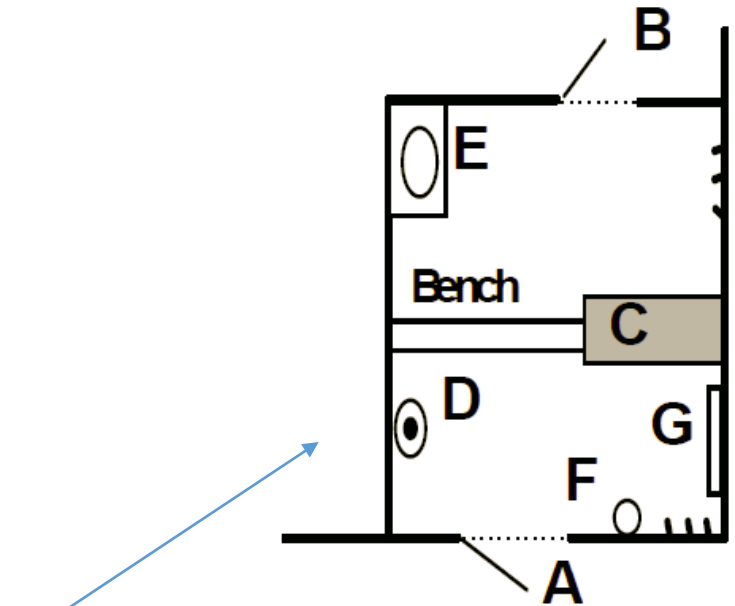
Disinfection

- clean surfaces
- right disinfectant
- right temperature (period)
- right RH



Hygiene and biosecurity

- Fence around farm
- No backyard fowl near the houses
- No entry of wild bird into the houses
- Vermin control
- Hygiene lock for entering the poultry house
- Disinfect equipment
- Workers and visitors disinfect at entrance
- Visitors only when necessary
-



- A Entrance / exit
- B Exit to clean area
- C Storage cupboard
- D Hand basin
- E Boot rinse
- F Laundry basket

Receiving day old chicks

Start heating in time

Floor rearing -> floor temperature 26 °C

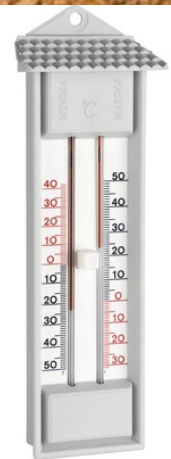
Free of odours of disinfection

Temperature 36 °C

Relative Humidity above 60 %



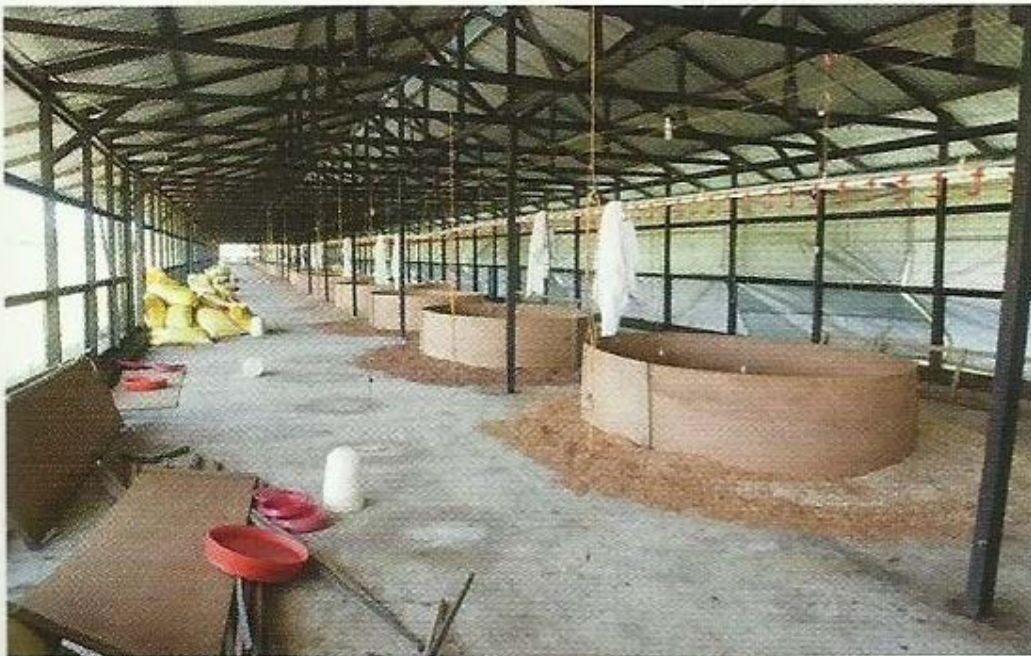
Thermometer
Hygrometer



Climate control

- Temperature
- Relative Humidity
- Minimum ventilation
- Air composition
- Air movement

Alternative brooding



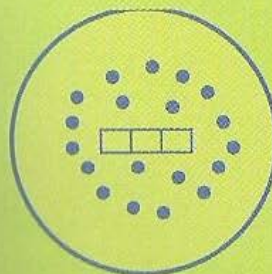
For each heat source serving 500 chicks, fit barriers in a circle approximately 6 metres in diameter. Enlarge these brooding rings regularly after a week, and remove them after three weeks, so that the chicks have enough space.



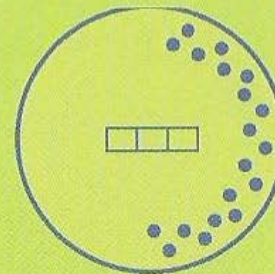
US \$ 70
each

Fuel: butane
or propane
gas

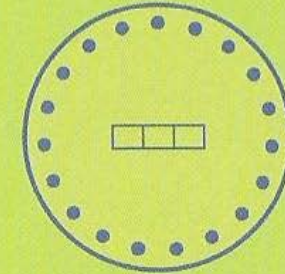
Chick distribution inside brooding rings



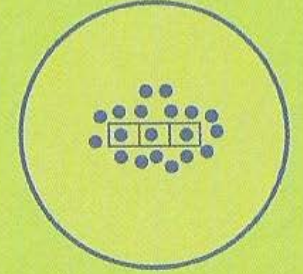
Good climate:
*well spread out,
active birds*



Too draughty: *certain
parts of the ring being
avoided, cheeping sound*



Too hot: *fleeing to the
edge of the ring*



Too cold: *crowding
together under the heater*

Minimum ventilation

Calculated

- 15-20 % of maximum ventilation = $3.6 \text{ m}^3 / \text{kilogram bodyweight} / \text{hour}$
- $\Rightarrow 0.6-0.7 \text{ m}^3 / \text{kilogram per hour}$
- + correction for fuel when direct heating

Measured

- gasses at a low level CO_2 ;
- maintain temperature

Air velocity

Small chicks 0.1 m/s

Later (normal temperature) 0.25 m/s

Light

Normal program as management guide

Gradually decrease light to only daylight at 15 weeks

When 1st egg: increase 2 hours

At 35 % lay: 2 hours more

At 60 % lay: 2 hours more (total 18 hours)

(source ISA Brown management guide)



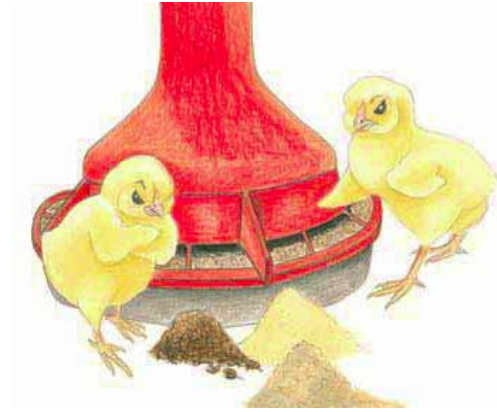
Normal fluorescent tubes not suitable because of interaction with sight of chickens.

Feed

Feeder space correct.

(round feeders 1 per 30 birds; 10 centimetres per bird; laying period)

Feed on paper on floor first days



Water

- number or space sufficient
- water quality/ hygiene



Beak trimming

Shortening beaks to prevent damage of feather and damage by cannibalism.

Age:

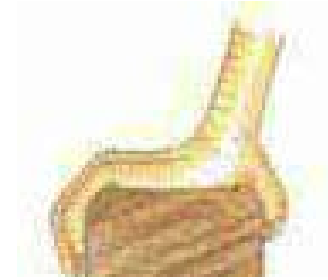
- At the hatchery (laser technique)
- before 10 days
- 6 weeks

Type

- trimming
- burning

Do it well or don't do it !!!!

Perches



- Exercise
- Natural behaviour
- Cooling

Body weight

Average bodyweight

Uniformity

Why monitoring bodyweight

- Feed management
- Managing start of production

Administration

Standard system

- room temperatures
- mortality
- feed consumption
- bodyweight development

