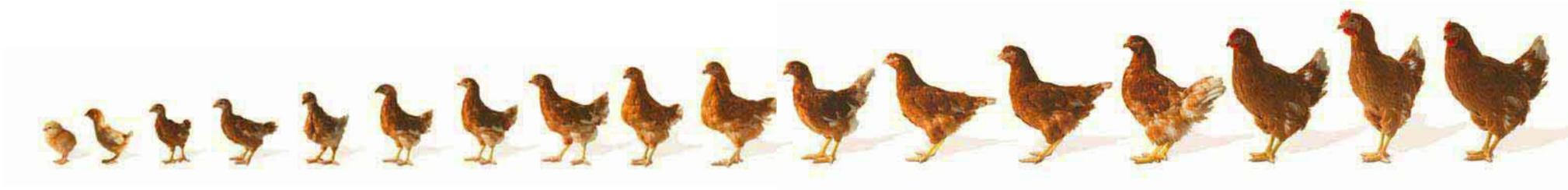


# Rearing of pullets in Sierra Leone



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



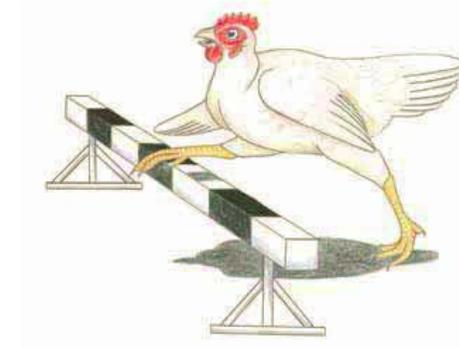
# Preparation of house

## Cleaning

- water
- dry

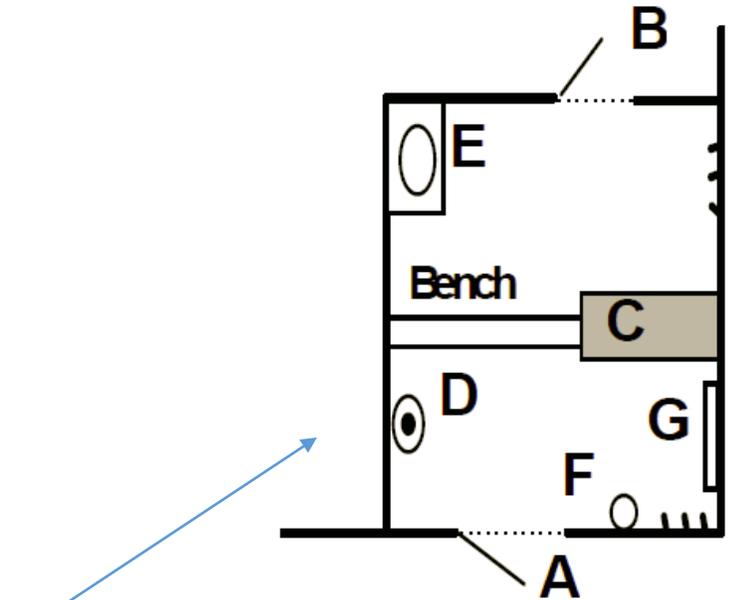
## Disinfection

- 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

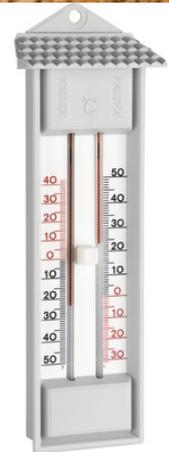
Free of odours of disinfection

Temperature 36 °C

Relative Humidity above 60 %



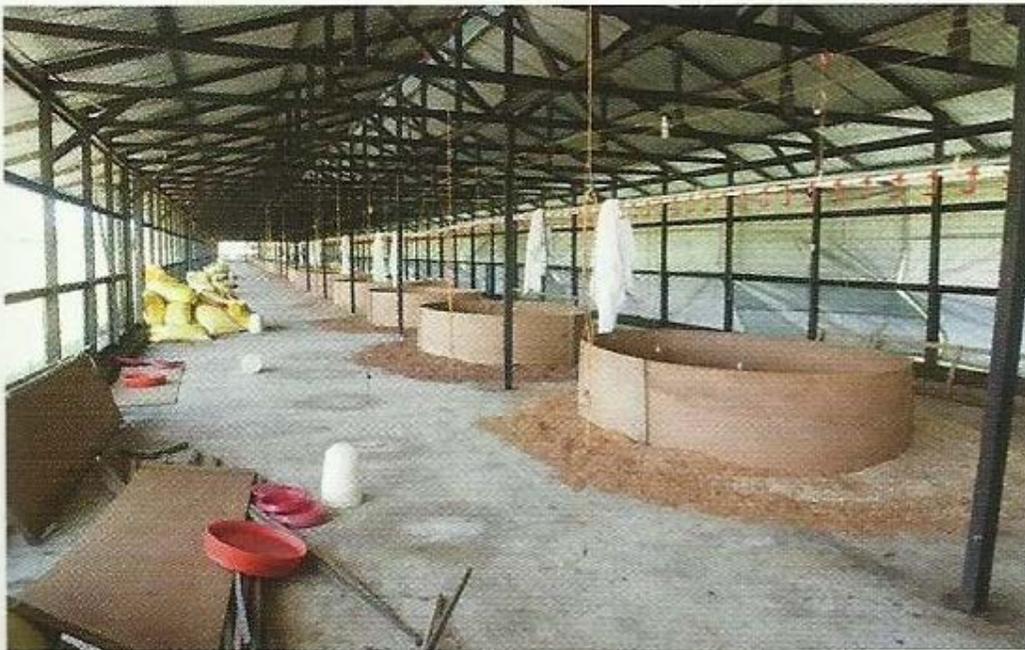
Thermometer  
Hygrometer



# Climate control

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

# Alternative brooding



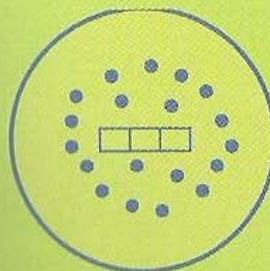
*For each heat source serving 500 chicks, fit barriers in a circle approximately 6 metres in diameter. Enlarge these brooding rings regularly after a week, and remove them after three weeks, so that the chicks have enough space.*



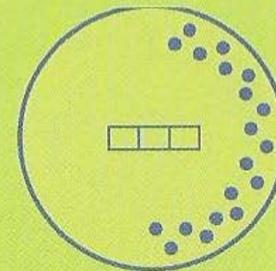
US \$ 70 each

Fuel: butane or propane gas

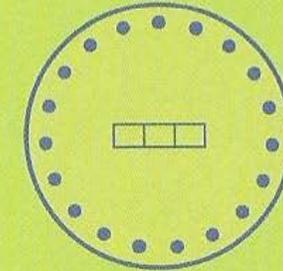
## Chick distribution inside brooding rings



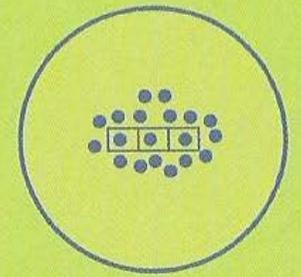
**Good climate:**  
*well spread out, active birds*



**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= $3.6 \text{ m}^3$ / kilogram bodyweight/ hour
- =>  $0.6\text{-}0.7 \text{ m}^3$ / kilogram per hour
- + correction for fuel when direct heating

## Measured

- gasses at a low level  $\text{CO}_2$ ;
- 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 1<sup>st</sup> egg: increase 2 hours

At 35 % lay: 2 hours more

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

(source ISA Brown management guide)



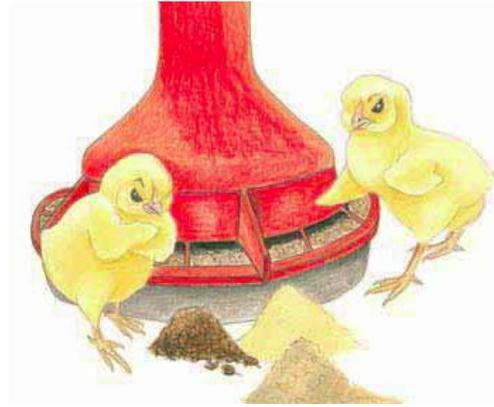
Normal fluorescent tubes not suitable because of interaction with sight of chickens.

# 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

