

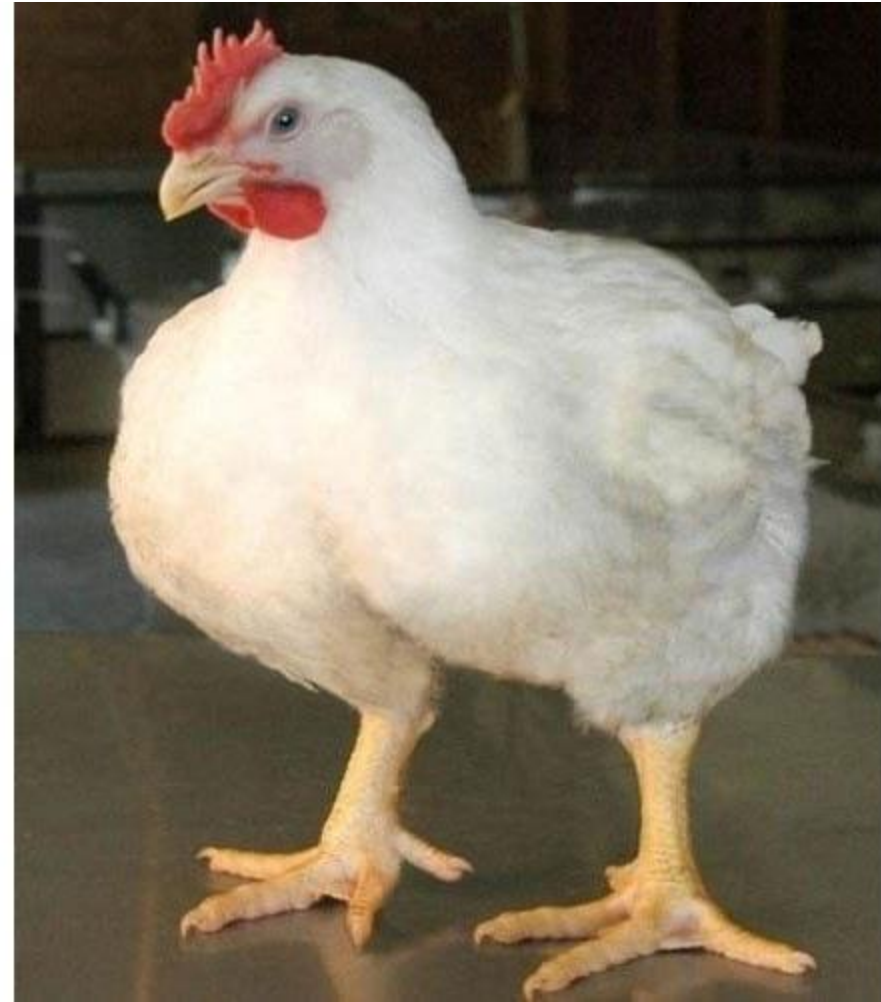
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AGM – Technical

Venkateshwara B V Bio Corp Private Limited,
Pune



BROILER MANAGEMENT IN HUMID CLIMATE



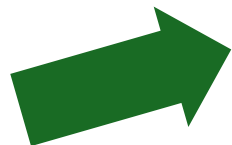
GENETICS



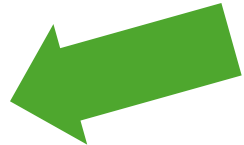
ECONOMICS



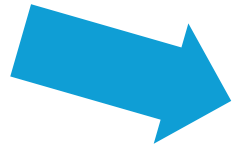
NUTRITION



VACCINATION



MANAGEMENT



BIOSECURITY



SEASONAL THREATS

- WINTER SEASON ---- FIRST TWO WEEKS
- RAINY SEASON -----MID TWO WEEKS
- SUMMER SEASON -- LAST TWO WEEKS





Challenges In Humid Climate

- Absence of Sweat gland – Susceptible to high temperature
- Sweating is not possible, to compensate this try to evaporate heat such as panting
- Panting – Cooling insufficient – Heat stroke mortality
- Cope with heat stress challenge – Use reserve energy
- Vitamin C, Vitamin E with Selenium



Challenges In Humid Climate

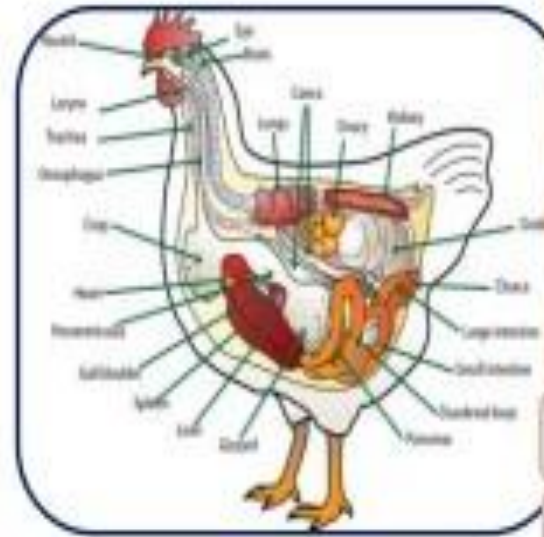
- High ambient temp – Thermal stress on birds
- Temperature associated with relative humidity
- High temp in short period – High mortality due to suffocation.
- Prolonged high temp – Increase FCR
- Thermal Stress – Birds shows behavioural changes

Challenges In Humid Climate

- Fast growth is linked with increased appetite
- Fast growth – More heat generate – Keep low ambient temp
- Thermoregulation – balance between heat production and heat loss
- Early morning and late evening feeding
- Lifting of feeders during noon time
- Ventilation ! Ventilation !! Ventilation !!!



Chick Stage



Digestive System

Immune System

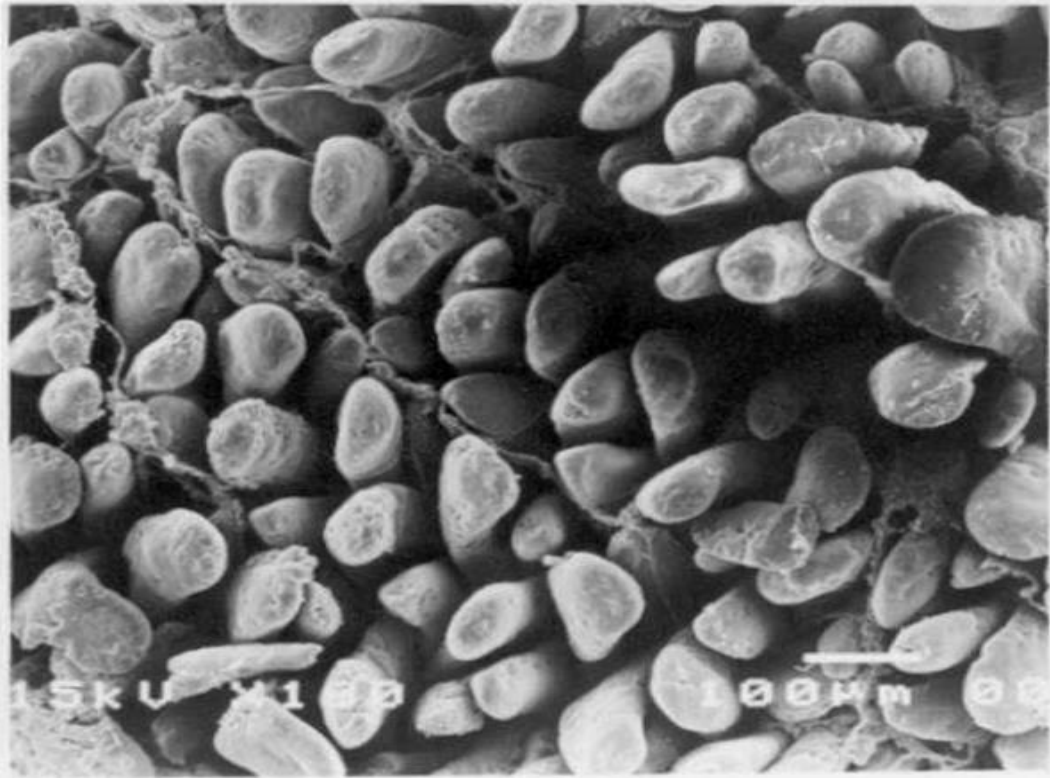
Circulatory System

Organ

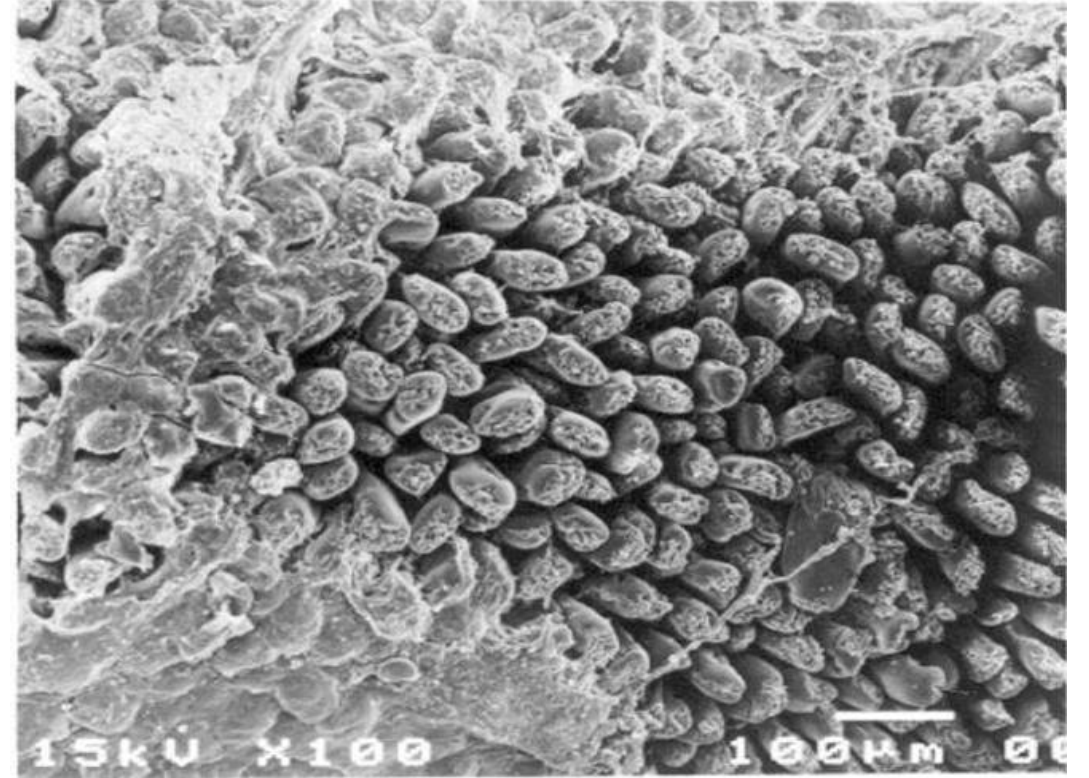
Skeletal System

Feathers

Growth of Intestinal villi- after 24hrs post hatch

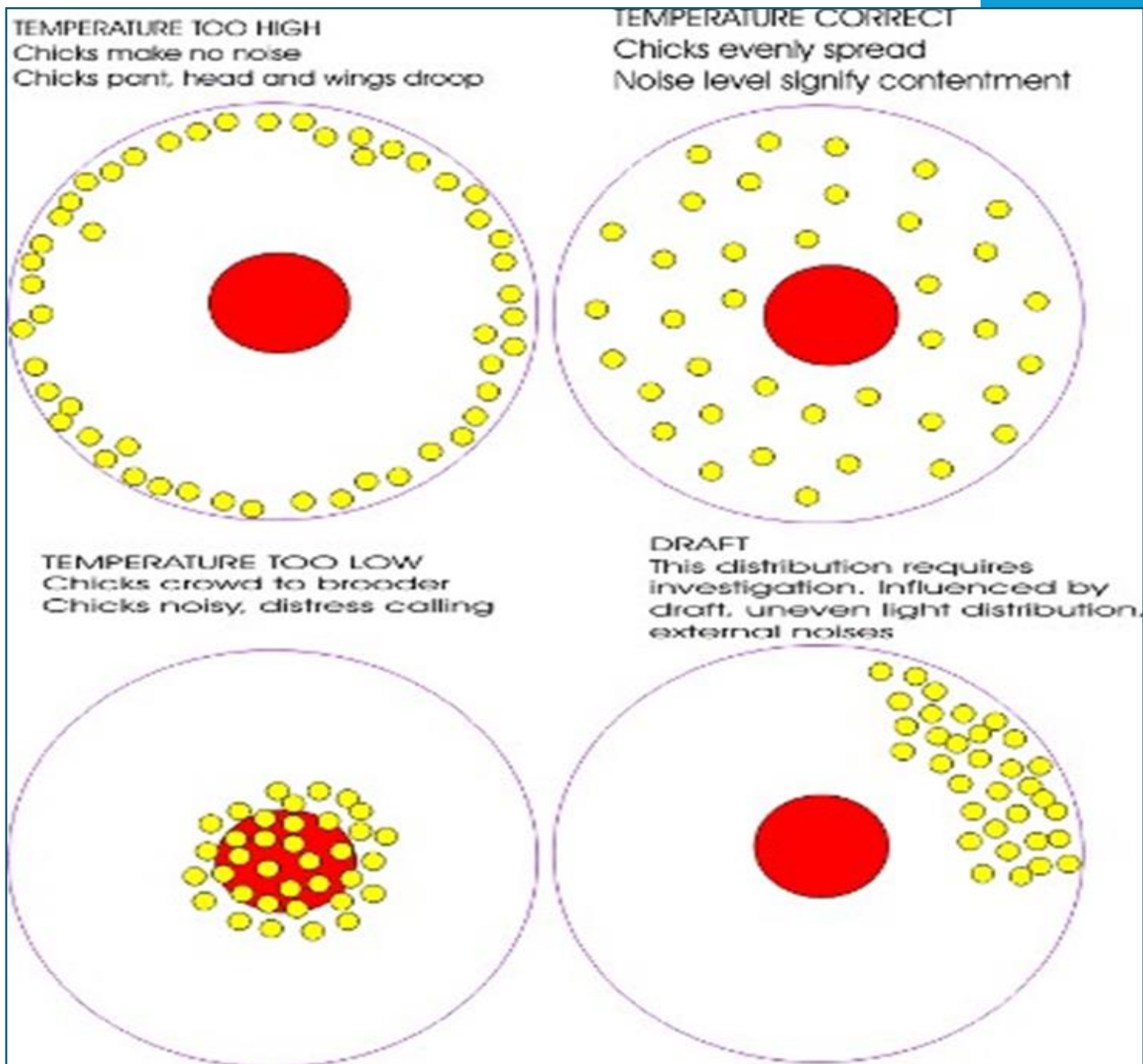


**Villi with feed and water,
24 hours post hatch**



**Villi with NO feed and water,
24 hours post hatch**

Brooding Parameters





Brooding



IMPROPER BROODING EFFECTS



**Improper
Utilization Of
Energy.**



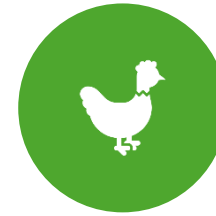
**Improper
Absorption Of
Yolk.**



**Less Feed
Consumption.**



**Less Growth
Rate.**



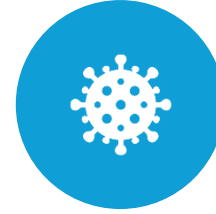
High FCR.



**Less Flock
Uniformity.**



High Mortality.



**More Stress – More Disease
Problem – More Medicine Cost –
More Cost Of Production.**





Feeding Management

Most important factor



75 % Expenditure on feed



F C R



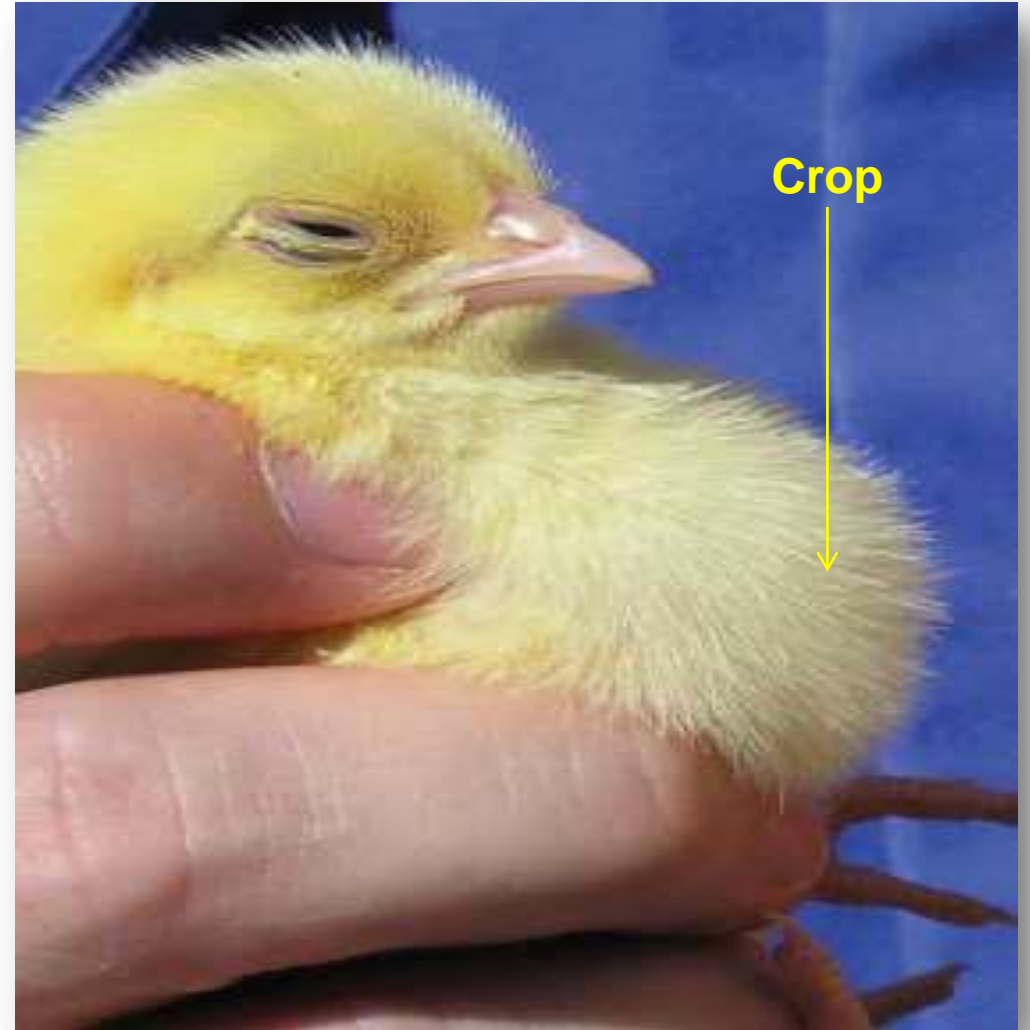
Proper Utilization of Nutrients



Feed Wastage key role

Feeding Management

Target for crop filling Assessment	
Time for after chick placement	% Crop full
2hrs	75
4 hrs	80
8 hrs	85
12hrs	More than 90
24hrs	100





Feed Wastage





Feed wastage





Feed Availability



FEEDER HEIGHT



DRINKER HEIGHT



Feed Stand in Centre ..

Store feed in center of shed.(not near to wall of shed)

Cover the feed bags by curtain.

Use old feed first then new. First in first out basis.

Transport vehicle must be properly closed with leakage proof curtains



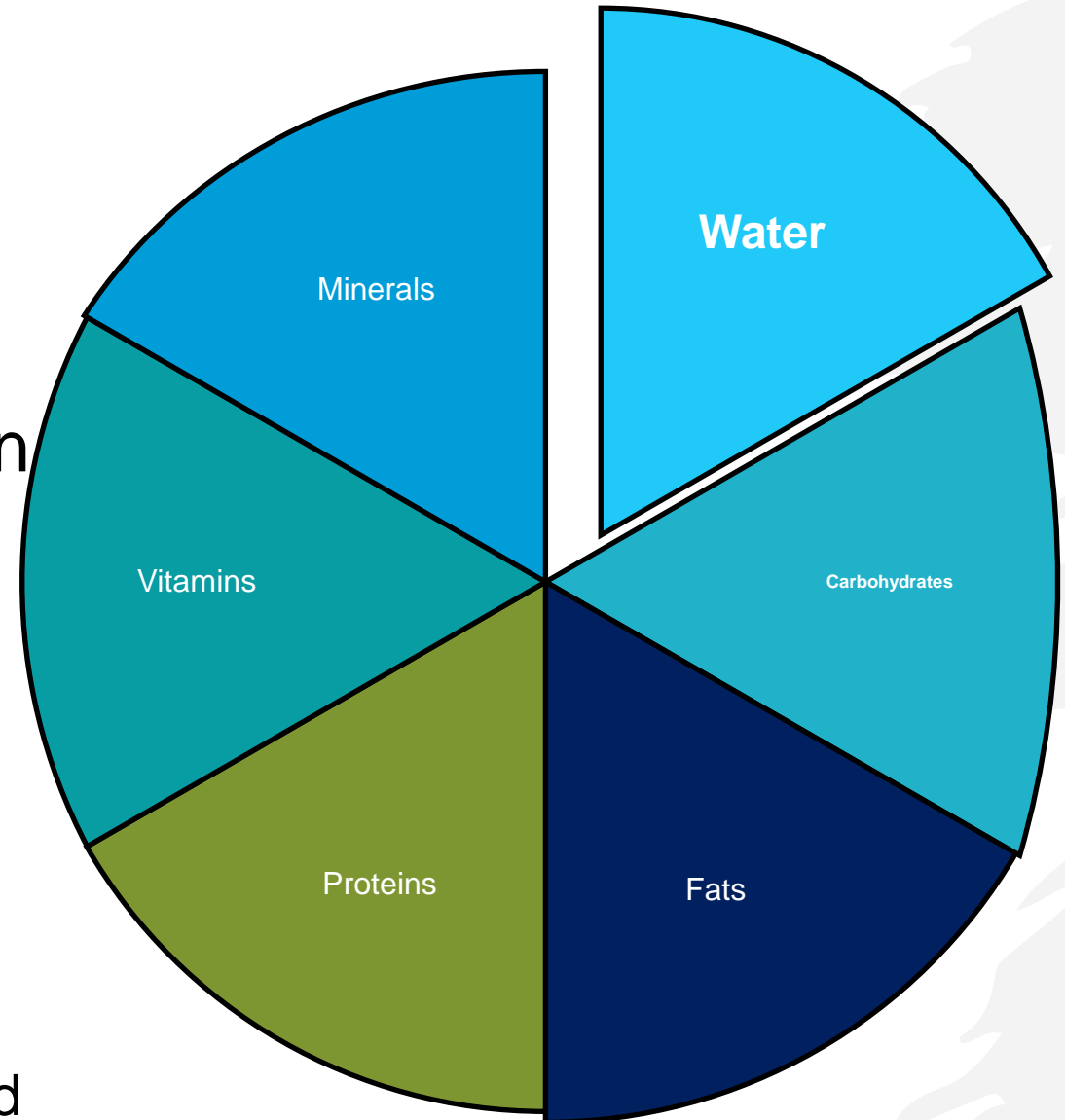
Water Management



- Cleaning of drinkers twice daily
- Waterers should be refilled before feeding.
- Level of drinkers
- Height of drinkers
- Sanitization and Acidification of water.

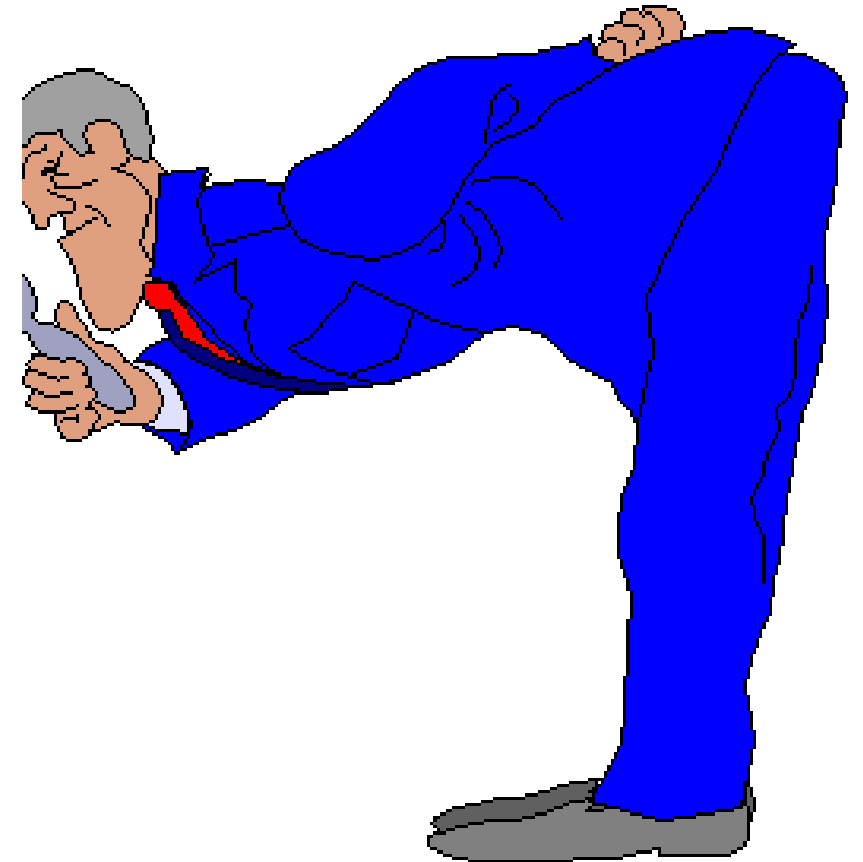
Water...

- o A chicken body has 60 - 70 % water.
- o Longer survival without food than without water.
- o **Important role in :**
 - o Regulating body temperature,
 - o Digesting food & Eliminating wastes
 - o Main source of disease contamination
 - o The fastest way a pathogen can spread disease in a farm.

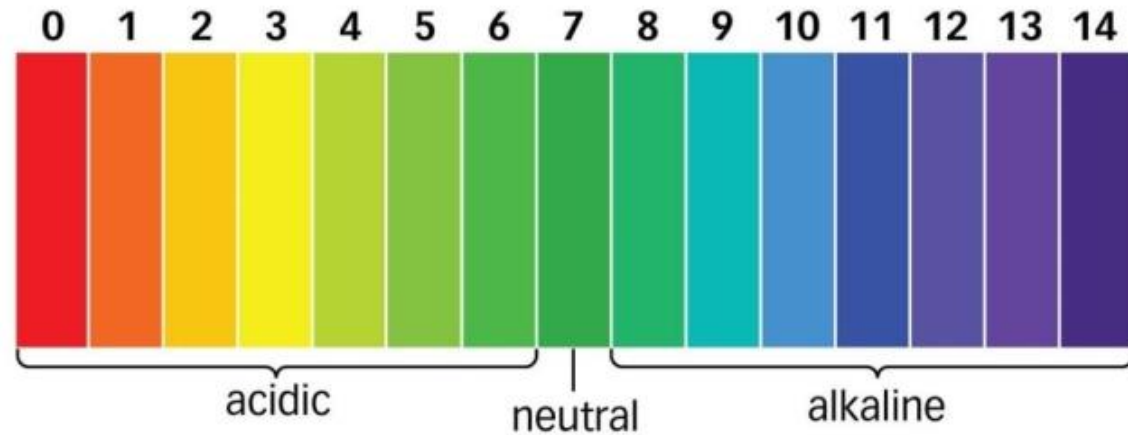


Poultry Diseases Potentially Transmitted By Water...

- Chronic Respiratory Disease (CRD)
- Colibacillosis (E.Coli)
- LPAI
- HPAI
- Newcastle Disease (N.D.)
- Infectious bronchitis (I.B.)
- Infectious Body Hepatitis (I.B.H)
- Gumboro disease (I.B.D.)



Water Quality



- **Water PH (6.5-7.0)**
- **TDS – (Upto 500)**



Sanitization & Acidification

Chlorine Dioxide
Clo2 Tablet

```
graph TD; A[Chlorine Dioxide  
Clo2 Tablet] --> B[Iodine Compound]; B --> C[Quat Ammonium  
Compound];
```

Iodine Compound

**Quat Ammonium
Compound**

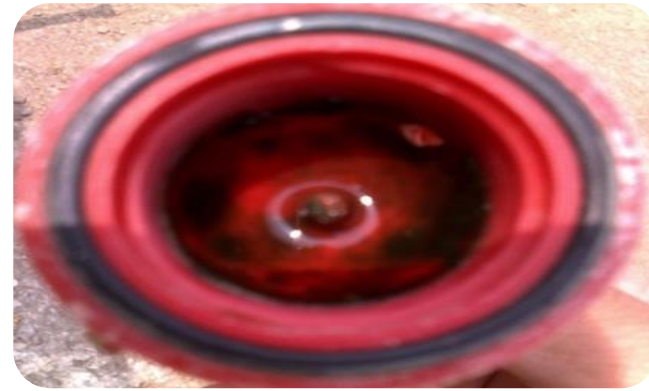
Feed Acidifier



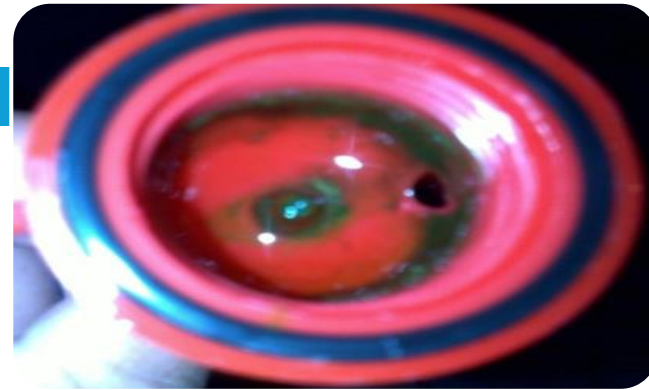
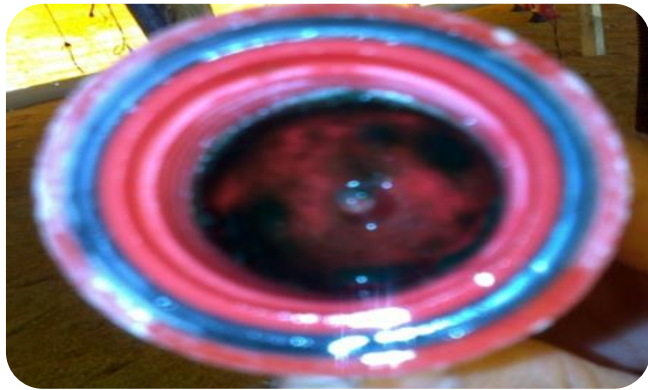
Water
Acidification



Acidic pH



BIOFILM





Pipe Line Flushing

Pipeline Cleaning



Pipe Line Flushing

Remove all water from pipe line

Take required quantity of water and Medicine
in tanks then start cock

Hold this medicated water for at least 12 hrs

Flush all pipe line with pressure pump

Do this procedure after every batch

Water
requirement
for 100 RFT

PIPE LINE SIZE	WATER REQUIREMENT
1/2 inch Pipe Line	5 Litres
3/4 inch Pipe Line	11 Litres
1 inch Pipe Line	20 Litres

Tank water contains algae & soil

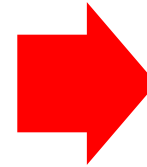


COLIBACILLOSIS

Disease is water borne.

Concomitant infection with
LPAI/CRD/IB

Gram Negative bacteria–
Escherichia coli



Treatment –

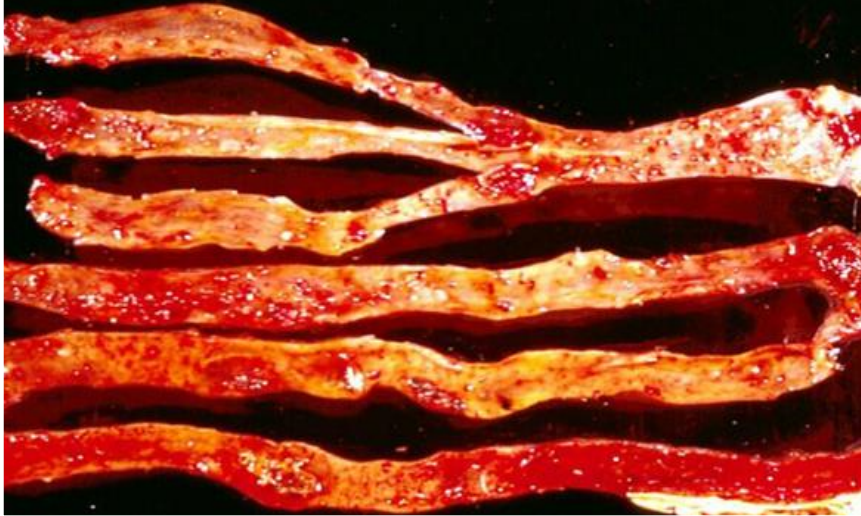
Levofloxacin, Enrofloxacin,
Neomycin, Sulpha-
Trimethoprim

Water sanitization –

CLO₂ / Iodine.
Water Acidifier

Water sanitization is the first line of prevention

Necrotic Enteritis





Litter Management

- Maintain a moisture content of 20 to 30 per cent.
 - Wet litter leads to excessive ammonia gas. (CRD)
 - Racking of litter everyday prevents cake formation.
 - The litter gets moist due to high humidity so litter condition is very important
-

Mud Floor

- Cleaning of the floor is not proper
- Difficult to eradicate the infection
- Managing litter condition is a big task during rainy season

Pacca Floor

- Cleaning of the floor is easy and effective
- Easy to eradicate the infection from shed
- Managing litter condition during rainy season is easy



Wet Litter



Coccidiosis



Space Management



- No of Chicks placement as per seasons
- More Ventilation
- Space as per climatic condition – Summer, Rainy, Winter.
- More Space – More Growth - Good uniformity,



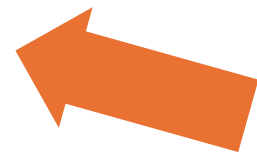
VENTILATION



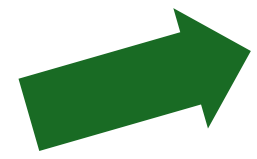
Ration balanced
& diet
formulation



Manure Raking

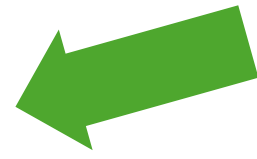


Stocking
density

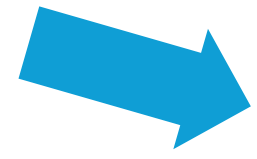


Reduce
Ammonia

Improving
digestibility



Ventilation rate



Temperature
Adjustment

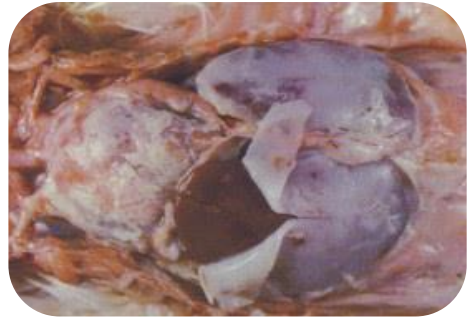
CRD – MYCOPLASMA



COMMON DISEASES



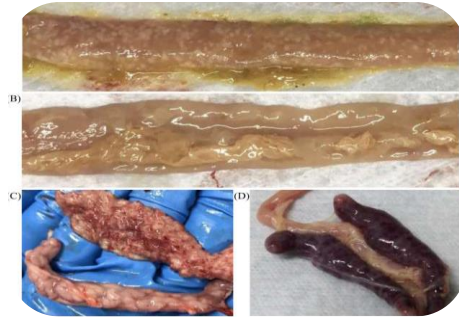
Enteritis



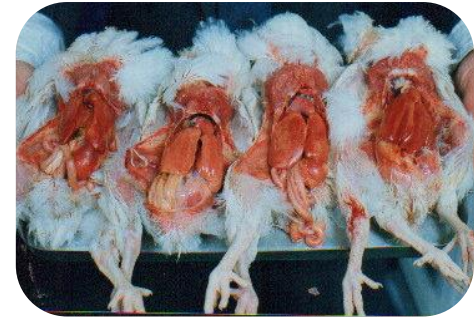
E Coli



Coccidiosis



CRD Infection



ND / LPAI

PARTITION



SUMMMER PLANNNING





SUMMER MANAGEMENT

Thaching of shed roof

Water tank – Cover with gunny cloth

Feeding - Early morning and late evening

If water is available then installed sprinklers on roof and fogger inside shed



SUMMER MANAGEMENT

Lifting of feeder during afternoon time

No disturbance during noon hours

Add electrolyte powder and Vitamin C in day time

Vaccination – At night cool time only







BIRDS REACTION TOWARDS WATER TEMPERATURE

Water temperature

Birds Reaction

10 – 15 C

Comfortable

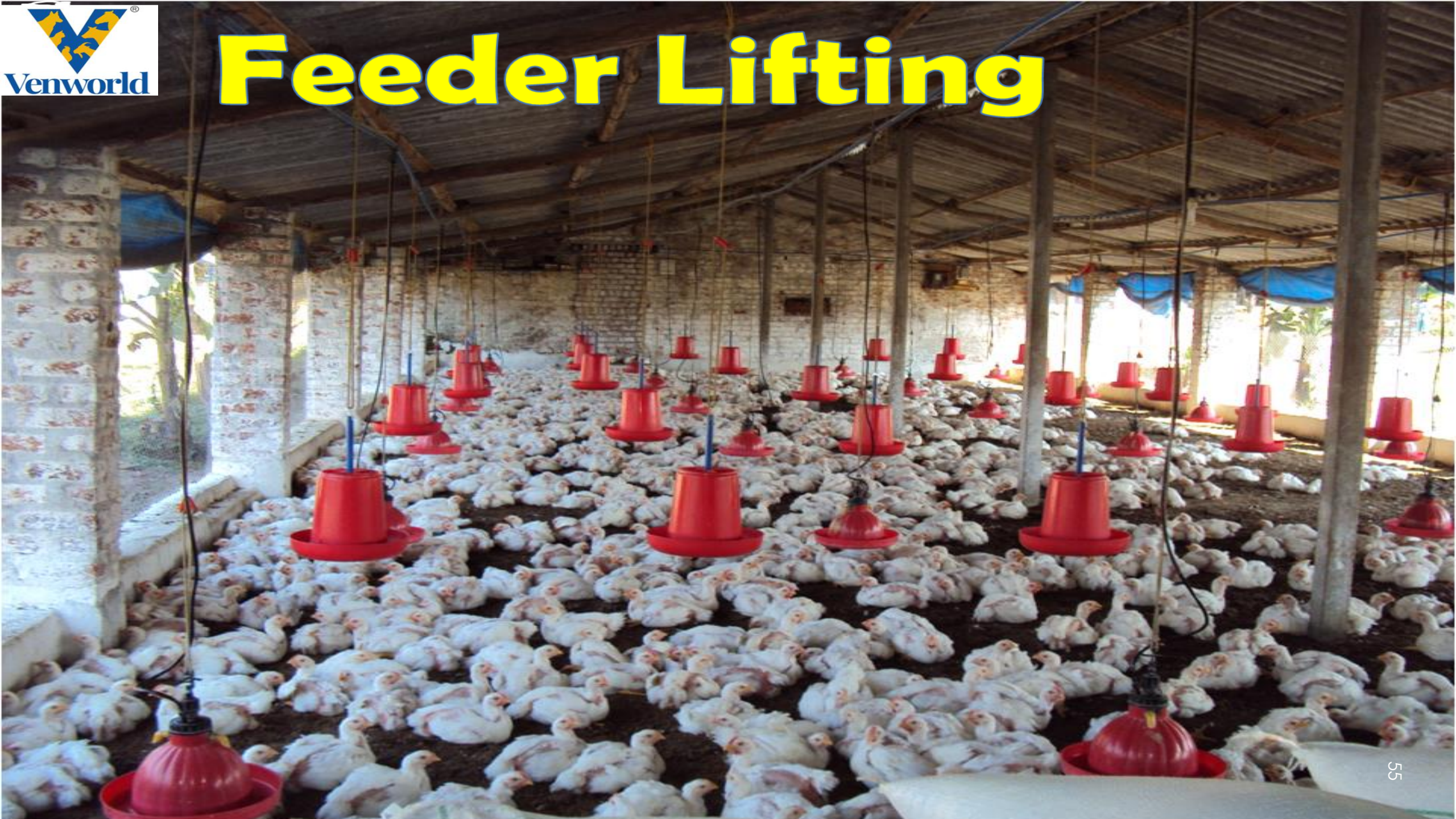
Above 30 C

Reduction

Above 44 C

Refusal

Feeder Lifting











HANG OVER



VACCINATIONS



Cold Chain



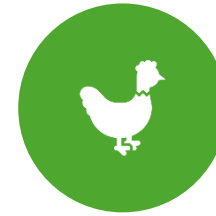
**Time Of
Vaccination**



**Eye Drop
Vaccination**



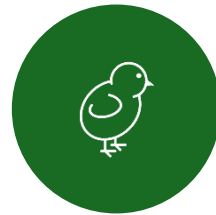
**Drinking Water
Vaccination**



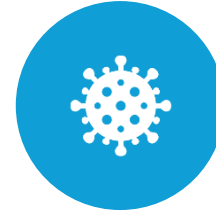
**Vaccination
Procedure**



**No Of
Vaccinators**



**DOC Hatchery
Vaccination**



Summer Vaccination

Spectrum of activity

**Blue Dye
Indicator**

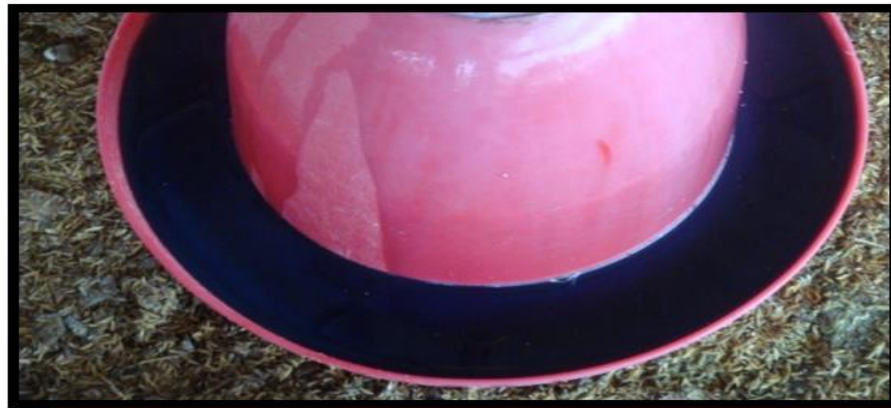
**Chlorine
neutralizer**

VACC-SURE

pH stabilizer

**Hard water
softener**

**Heavy Metal
Remover**



Proper Disposal



Effect of Heat Stress

Low Feed
Consumption

Increase FCR

Heavy Mortality

Low Body Weight

LPAI HPAI ND
problem

Immuno supression

Burning with flame gun



- **Power sprayer:**
UBC @ 20ml/ 1
litre of water

Washing the shed



FOGGING OF EMPTY SHED



RESTRICT ORGANISM



CONTAMINATION



DISPOSAL PIT



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