



## Practical Management of Chicken

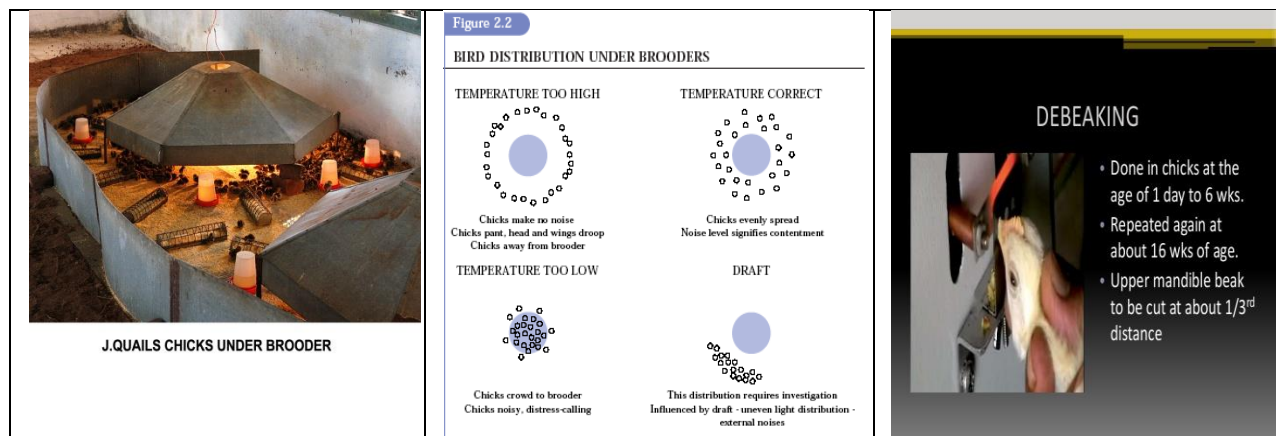
### Brooding of Chicks (Up To 8 Weeks)

#### Before Arrival of Chicks:-

- Sheds should be kept vacant for at least three weeks for dry & wet cleaning before arrival of chicks.
- Thoroughly wash and disinfect all the walls, ceilings, floors and equipments
- Equipments should be washed with Phenyl, rinsed in Potassium Permanganate solution and expose to sun light at least for 5 days earlier.
- Flush out and clean all water lines / channels before and after disinfection.
- Spray roof and floor with 10% Formalin and close the sheds for at least 24 hours.
- **White wash the walls with Malathion powder at the rate of 1 kg: 50 kg of lime.**
- Provide 30cm height brooder guard in a circular fashion. Cornering causes hurdling/pilling of chicks resulting in high chick mortality.
- Provide clean litter material (paddy husk / saw dust) inside the brooder guard and spread corrugated paper / old news paper on litter so that chicks do not eat litter. Spread suji / grinded maize on the paper few hours before arrival of day old chicks. Gradually use proper number of chick feeder.
- Bring temperature to brooding level (95<sup>0</sup>F) 24 hours before arrival of chicks.
- Provide feed and water at room temperature. As a thumb rule water intake should be @ agex6ml of water under normal condition.

#### After Arrival of Chicks:-

- Release the chicks gently into the brooder guard close to drinking water and grinded maize / suji/ broken rice.
- Provide 6 sq. inches space per chick in the brooder period.
- Brooding should be started at 95<sup>0</sup> F temperature and be reduced by 5<sup>0</sup> F every week depending upon season & bring it to normal room temperature. To record the accurate temperature thermometer should be placed at a point 6 inch outside the canopy & 2 inch above the top of litter.
- Provide 4% sugar solution for few hrs to **loosen up the impacted intestine and prepare the gut linings for the incoming feed.**
- Provide chick feeders within 5–7 days.
- Replace new papers every day till the chick guards are removed.
- Remove the chick guard after 7–10 days and spread out the chicks into the entire brooding pens. Add some more litter material before spreading of chicks.
- Height of the feeder should be adjusted to just back of the bird to provide the convenience of birds.
- De-beaking may be done at 3rd or 4th week of age. Hail of the upper beak is removed and tip of the lower beak is just touched in the hot blade as shown in the photo.



## Management of Growers (9 – 16 Weeks):-

The main objective of grower period is to achieve the target live body weight, ASM and flock uniformity for better laying period.

- Birds at the age of 9 weeks should be transferred to growers / rearing house.
- Provide proper cross ventilation. Provide grower ration with required space for feeder and waterer in the grower house.
- Do not forget the vaccination program during growing period & follow the vaccination schedule.
- Waterers and feeders should be adjusted as per the need of the birds, avoiding feed wastage and water spilling.
- Dubbing of males if required may be done at 8–10 weeks. De-beaking may be followed if necessary before 16 weeks.
- Second de-beaking may be completed between 12-14 wk of age and toe clipping of males may be completed in due course.

## Prelay management:-

Prelaying management is also vital period in their life. It ensures the optimum musculo-skeletal development which support future reproductive ability and fitness characters through laying period. All types of technical jobs should be completed before onset of laying. Mineral like calcium & prosperous must be added with ration and nest habit should be practiced to prevent floor laying.

## Rearing of Layers-

During laying period the following factors are of prime importance.

- Feed formulations of the flock should be according to the season and age of the flock and climate.
- Ventilation of the layer house should be adequate without drafts.
- Birds should be comfortable even in extreme hot and cold climate.
- Provide one laying nest for 5 layers to lay eggs. Use clean paddy husk/saw dust as bedding material in the laying nest and replace nesting material at regular interval. Otherwise floor laying will be induced.
- Egg should be collected at least 4-6 times in a day in deep litter house.
- Treatment may be made against external parasites like ticks, lice, and mites periodically.
- Remove dead birds daily and dispose them properly. Culling of non-layer birds should be carried out regularly.

## Lighting Programme

### (1) Chicks (0-8 weeks)

- Provide continuous light, 35 lux(3.5FC) , 3.5 watt bulb for each 4sqft (above the ground) for first 48 hrs during the brooding period. Then light after first 48 hrs; 10lux (1 FC), 1 watt for each 4 sqft (8 ft above the ground. Use of aluminum reflector and routine cleaning of the same is essential.

### (2) Growers – (9-16 weeks)

- Grower should be reared in natural light (12 hrs) only. Do not provide any artificial light for them.

### (3) Layer (17-72 weeks)

- The light should be 12 hours at 20th week. If the natural light is less than twelve hours then it should be compensated by artificial light.
- Thereafter, half an hour of artificial light should be added in every week, so that there will be total 14 hours light in 24th week and 15 hours in 26th week and 16 hours from 29th week.
- Any sudden change or break in lighting will cause sharp decline in egg production.
- Keep bulbs and reflectors wiped free from dust. Defective bulbs may be replaced immediately.
- Deep litter house –Intensity should be 1 watt for 3.5 sq. ft. of floor space. So a 40 watt bulb is sufficient for 120 sq. ft.

## Preventive medication for chicks:-

- Electrolyte powders (one small spoon per litre of drinking water) in winter.
- Glucose (Sucrose) in summer 36 g/litre of water for 3-5 days.
- Multivitamins for 5-7 days as per recommended dose to boost the chick vitality.
- Vitamin B Complex in drinking water for 1st 5 days.
- On 9th to 13th days give liver tonic.
- 4th week–liquid vitamin-A for 5-7 days in drinking water.

## Do's and Don'ts in Vaccination:-

- Purchase vaccine only from genuine firm.
- Store the vaccine in the refrigerator until use.
- Administer only proper dose as recommended by the manufacturer.
- Do not use the left over vaccine.
- Do not use vaccine after its expiry date.
- Vaccinate the birds during the cooler part of the day.
- Vaccinate only the healthy flock at the recommended doses.
- Vaccination to be done preferably by a veterinarian or qualified person.

## Suggested Vaccination Schedule:-

### For layers:-

Age of chicks	Nam of disease	Name of Vaccine	Route of administration	Dose /bird
1 day	Marek's Disease	HVT	Subcutaneous(S/C)	0.2 ml
5-7 days	RD/ND	(F1 or Lasota)	Intranasal (I/N)or Intraocular (I/O)or both	1-2 drop
21st days	RD/ND	-do-	-DO-	-DO-
6th week	Fowl Pox	Fowl Pox	Wing–web puncture by stick method or Feather follicle method	Two pricks

8th week	RD/ND	(R2B)	Subcutaneous (S/C) in wing	0.5 ml
16th week	RD/ND	Booster (R2B)	Subcutaneous (S/C) in wing -do-	0.5 ml

**Note:-** vaccination program under rural backyard poultry farming is same as above.

### For Broilers:-

Age of chicks (wk)	Name of Disease	Name of Vaccine	Route of administration	Dose/bird
5-7 day	RD/ND	F1 or Lasota	Intranasal (I/N)or Intraocular (I/O)or both	1-2 drop
21 <sup>st</sup> day	RD/ND	Lasota Booster	-DO-	-DO-

**Note:-** Booster doses may be given for both layer and broiler where required (depending on previous flock history). If necessary, I.B., Gumboro (I.B.D) in addition to above vaccination can also be given. Estimation of antibody titer should be made to decide further strategy of vaccination.

### Preventive Measures for Disease Control in rural backyard:-

#### Care and Management of Layer in Backyard Rearing:-

- De – worming of birds once in 4 weeks. (For Round Worm)
- Avoid over eating & fattening of birds.
- Feed the birds @ 50 gm. of balanced layer ration / bird / day.
- Allow shell grit in separate feeders. (For Calcium Supplement).
- Allow birds to eat kitchen waste and other feed materials.
- Encourage the birds to feed on white ants. Wet Gunny bag spread on ground favors growth of white ants.
- Earth worm may be fed by using vermiculture at village level.

### Litter Management:-

Poultry under deep litter system of management, due attention should be given for placement of waterer and keet it dry. The litter should be stirred at regular intervals depending on the environmental temperature, humidity, ventilation etc. A total litter height of 5 cm is sufficient. The litter should be maintained practically dry. In humid coastal areas, damp litter can be treated with hydrated lime @ 0.5-1.0 kg for each 12 to 16 sq.ft floor area.

### Floor Space Requirement:-

Types of house	Deep Litter System	Cage System
Brooder House	0.7 sq.ft / bird	0.5 sq.ft/ bird
Grower House	1 sq.ft / bird	0.6 sq.ft/ bird
Brooder-Cum- Rearing House	1 sq.ft / bird	0.6 sq.ft/ bird
Layer House	2 sq.ft / bird	0.7 – 0.9 sq.ft / bird

## Ideal Feed Formulae for Poultry:-

Name of the feed ingredients	Layer chick mash (0-8 wks)	Layer grower mash (9-16 wks)	Layer/ Breeder Mash (17th onward)	Broiler/ Starter Mash (0-6wks)	Broiler/ Finisher Mash (7-8 wks)
Crushed Yellow Maize(kg)	45	45	45	49	60
Rice Polish(kg)	22	25	15	10	7
Soya bean Meal(kg)	30	19	27	38	30
De-oiled rice bran(kg)	-	8	6	-	-
Mineral Mixture(kg)	3	3	3	3	3
Shell grit(kg)	-	-	4	-	-
<b>Total(kg)</b>	<b>100</b>	<b>100</b>	<b>100</b>	<b>100</b>	<b>100</b>

## Feed Additives (To be Mixed per Quintal of Feed Mash):-

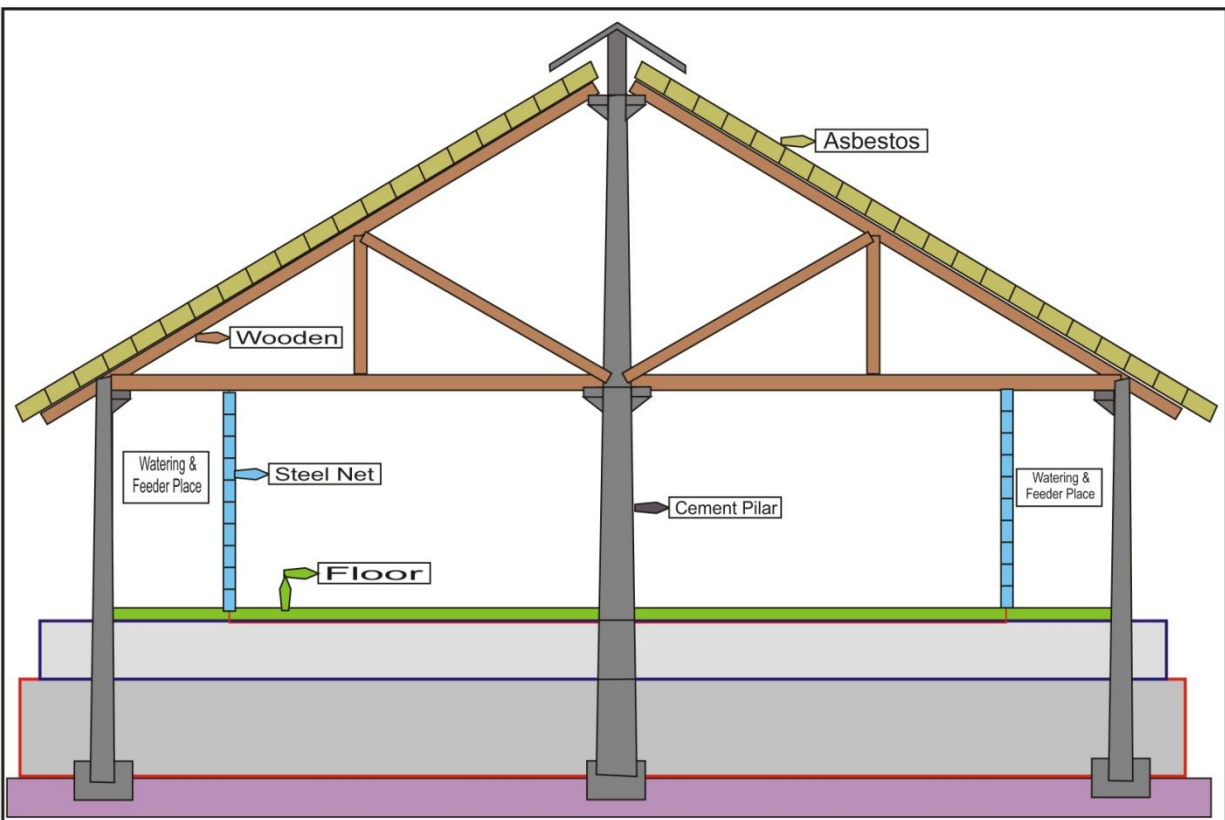
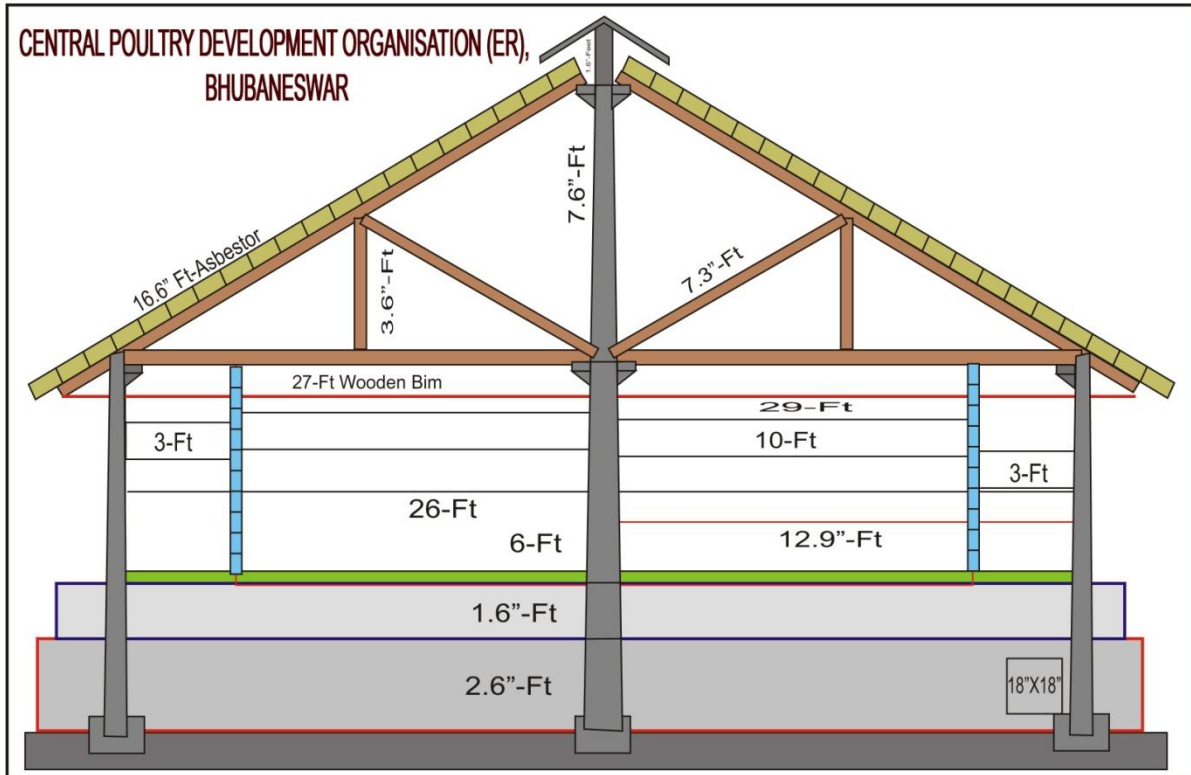
Name of feed additives	Layer chick mash	Layer grower mash	Layer/ Breeder Mash	Broiler/ Starter Mash	Broiler/ Finisher Mash
Vitamin Mix (A+B2+D3+K) DS (g)	10	10	10	10	10
Vitamin B Complex with E (g)	25	25	25	25	25
Neftin – 200 (g)	50	50	50	50	50
Merivite – 100 (g)	22	22	10	22	22
Cocciostat (g)	100	100	-	100	100
Vitamin. + Min. Mix (g)	250	250	250	500	500
DL-Lysine (g)	100	100	50	100	100
DL – Methionine (g)	100	75	50	100	50
Salt (g)	500	500	500	500	500

## BIS Requirements:-

Parameters	Chick mash	Grower mash	Layer/ Breeder Mash	Broiler/ Starter Mash	Broiler/ Finisher Mash
Crude Protein (N x 6.25) min %	20	16	18	23	20
Crude Fiber Max%	7	8	8	6	6
Salt Max%	0.6	0.6	0.6	0.6	0.6
Calcium (Min %)	1.0	1.0	3.0	1.2	1.2
Available phosphorous (Min %)	0.5	0.5	0.5	0.5	0.5
Metabolizable Energy (Kcal /kg)	2600	2500	2600	2800	2900

**Note:** - Feed formulae can be modified with reference to availability of feed ingredients / additives at these prices keeping the chemical values as per standards for different mashes.

## Design of a Poultry House



### **Culling of birds:-**

Culling means removal of uneconomical birds from the flock to improve the economy. The layer and non-layer are distinguished as below:-

Body part of the bird	Laying birds	Not laying birds
Pubic Bone	Thin, spread apart (takes 3 to 4 fingers)	Blunt, rigid & close together (takes 2 or less fingers)
Vent	Large, smooth, moist	Small, shrunken & dry
Abdomen	Full, soft, pliable	Contracted, hard, fleshy
Comb	Large, smooth, bright red, glossy & soft	Shrivelled, dry, dull and scaly
Ear lobes and wattles	Smooth, soft	Rough, dry

### **Record Keeping:-**

Record keeping is a vital part of any farm. Good record will automatically tell you about the position of your farm. On the basis of the record a farmer can take the decision / mode of future planning for his farm. Actually, record is the eye of his farm as a whole.