

Free-range system for raising chickens

THIS SYSTEM is best adapted to small-scale farmers who raise chickens for sale. This low-cost free-range system increases the commercial value of poultry products.

Chicken breeds suitable for a free-range system

- ❑ Local chickens or crossbreeds of Rhode Island x local chickens (Fig. 1).
- ❑ Chinese chickens such as Tam Hoang or Luong Phuong
- ❑ The Israeli Kabir chicken

Construction of the chicken house

A chicken house is needed, surrounded by a fence.

- ❑ Local materials such as bamboo or palm leaves can be used for construction. Purchased materials such as bricks, tiles for the roof, and cement for a concrete floor can also be used.

- ❑ If bamboo is used for the floor, the floor should be 40-50 cm above the ground.
- ❑ Nestboxes for laying hens should be installed inside the chicken house.
- ❑ The chicken house should face southeast. It should thus be built on the northwest corner of the backyard.

Feeding technique

For chicks 1-4 weeks old

• Feeding method

Cage feeding: Use a feeding cage 1m wide, 2m in length and 0.4m high.

Floor feeding: The feeding plot is enclosed with a bamboo lattice (0.8m H). The size of the plot depends on the weather and the age of the chicks. The floor should be covered to a depth of 7-10 cm with rice husk or clean wood shavings. Sawdust is not recommended. These litter materials should be sterilized in 2% Formol.



Fig. 1. Free-range chickens in Thanh Hoa province, Vietnam

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• Heating and lighting:: The optimum temperature depends on the age of the chicks

- 1st week chicks: 31-34°C
- 2nd week: 29-31°C,
- 3rd week: 26-29°C, 4th week: 22-26°C.

Heat source: electric lamp, coal stove or heater.
For the first 2-3 weeks, chicks should be lit throughout the day.

• Feed: The following feed should be given several times a day.

- One-day chicks: Broken rice, finely ground corn.
- From the 2nd day: Ready-made feed for chicks, or a mixture of concentrated feed with added ingredients (19-20 % crude protein, 2,800-2,900 KCal).

• Drinking water: After the chicks are brought to their new home, they should be allowed to rest for 10-15 minutes. Then they should be given drinking water containing 50g sugar/dL and 1g Vitamin-C/dL. The drinking water should be clean and warm (16-20°C).

For chicks older than 4 weeks

Beside free ranging to feed, chickens should be

supplied with feed (corn, rice, cassava, compound feed etc) twice a day. For the 10-15 days before they are marketed, they should be allowed to eat as much broken rice and yellow corn as they want.

Feeding rate (g/head/day)

For broilers

- 1-6 weeks : No limitation
- 7-10 weeks : 45-55 g/head/day
- 11-16 weeks : 55-65 g/head/day
- 17-20 weeks : 70-80 g/head/day

For laying hens

- 1-6 weeks : No limitation
- 7 weeks and over : 115-125 g/head/day

Laying hens should not be given too much feed, or laying will be delayed.

The content of crude protein should be 16-18%.
ME level: 2,750 KCal. Minerals should be added in the form of bone meal, stone meal or oyster shell.

Vaccination schedule

The vaccination schedule is shown in Table 1.

Table 1. Vaccination schedule for free-range chickens

Disease	Age (days)	Measures
Gumboro		
1st time	5-7	Eyedrops + Nasal drops
2nd	20-21	Eyedrops + Nasal drops
3rd	33-35	Eyedrops + Nasal drops
Fowl plague (Lasota)		
1st time	5-7	Eyedrops + Nasal drops
2nd	18	Eyedrops + Nasal drops
Fowl pox	7	Vaccinated under wings