

Backyard Poultry

Concept of Backyard Poultry

The typical backyard poultry farmer is anyone who has a small flock – urban, semi-urban and rural persons with a little or no farming/agriculture experience or individuals who are thinking about getting a small flock.

Generally, homestead poultry rearing is called backyard poultry production. This is a traditional system of poultry keeping. In this system poultry collect their feed materials by scavenging or free-range system. This is popular to produce organic egg and meat. Generally, it is not practiced to produce commercial chicken. At rural area people all over the world are raising poultry in their backyard. Some raise birds to satisfy family nutrition by eating meat and eggs, some as part of their commitment to sell eggs to their friends and neighbors, some to sell eggs at the local farmers market. Recent past years in USA, the Animal and Plant Health Inspection Service (APHIS) provides tips and advice on how to prevent diseases of backyard poultry birds. APHIS is the arm of USDA responsible for protecting U.S. agriculture from pests and diseases that can harm livestock and crops. The objective of this challenge is for a poultry management system designed to assist the backyard farmer in enhancing their knowledge in raising poultry; record keeping for expenses, breeding results and profits; and community building to promote sustainable agriculture objectives.

Problems of Backyard Poultry

1. Non-commercial business
2. Small flock size
3. Difficult to produce hybrid chicken
4. Less care and attention to poultry

5. Little or no management knowledge of new growers
6. Lack of nutritional knowledge of farmer on poultry
7. Scarcity of scavenging poultry feeds
8. Less feed intake than requirement
9. Malnutrition problem of birds
10. Less housing spaces
11. Attack of predators
12. No or less use of vaccine
13. Treatment of birds
14. Spread of disease
15. Low production

Prospects of Backyard Poultry

Bangladesh gets only 50% animal protein. We have to produce 50% more protein to fulfill national demand. Backyard poultry supplies about 30-35% protein in present supply chain. To address this challenge, we should involve every household to keep indigenous poultry in their homestead area. Backyard poultry has a bright future prospect due to lot of advantages.

1. This is a sustainable technology for indigenous poultry
2. Suitable for family nutrition
3. Management is easy
4. No elaborate housing
5. Initial cost is very low
6. Production cost is low
7. Need no additional labor
8. Organic meat & eggs can produce
9. Production of safe meat and eggs

10. Less homemade feed is required
11. Less housing cost
12. Less or no management cost
13. Additional income is possible
14. High demand of native chicken in the market
15. Indigenous poultry is very palatable to eat
16. Backyard poultry has high market price
17. Suitable for marginal, landless and ultra poor peoples

Generally, the backyard system of poultry production is not practiced for commercial purpose. But now it is the demand of time to update the system technologically to produce more organic safe food. Rural people are very much accustomed and adaptable with this system. For commercial purpose rural peoples keep small flock of broiler and layer. The market price of one kilo live native chicken meat is 300-400 Taka, but one kilo broiler meat is less than that. The price of indigenous egg is also higher than commercial egg. Another thing is one can additionally rear native birds by less investment and labor with his/her other business.

So now, we have to encourage rural people to take backyard poultry production commercially with some technological improvement. Improvement area should be focused on housing, breeding, incubation, brooding, feeding, bio-security, vaccination, preventive medicine and public health also. Improved backyard poultry will create employment opportunities. It will provide a continuous source of income like another broiler and layer farming. Backyard poultry farming could be used as a tool of socio-economic transformation of rural people of Bangladesh.

Natural incubation under village condition

This is called natural incubation of egg by hen. The incubation period of chicken is 21 and 28 days for duck. This primitive but most effective method is popular to get a high percentage of hatches. For this reason, still a broody hen is more trusted to the poultry breeders to sit on eggs for future stock cockerels. This is popular with small poultry keepers in remote rural areas in many tropical countries.

Best time to start hatching

- This depends upon the climate in which the newly hatched chicks are to be raised
- Avoid very hot, moistly air and severe cold weather
- Low rainfall and medium room temperature are suitable to sit hen on eggs
- Best time should be selected as farmers convenient within October to March in Bangladesh

Selection of hatching eggs

- Standard size, neither small nor large sized egg
- Oval shape eggs
- Cleaned eggs
- Desired egg shell color
- Not cracked or leaked eggs
- Avoid newly pullet hen eggs
- Strong and thick egg shell
- Age of eggs, Hot weather: 3-4 days and in winter: 7 days or more

Selection of hatching hen

- Must broody
- Good sitter on eggs
- Indigenous chicken is the best
- Avoid new pullet hen
- Medium / Large body size
- Healthy hen
- Have all her feathers-Compact feathered
- Molt hen should be rejected
- She should be free from lice and ticks

Best time to set hen on eggs

The best time to set a hen is at night, as at this time she is more likely to settle down to her job. Besides, when eggs are put under the hen at night the chicks are more

likely to appear on the night of the 21 day, and will have the whole night to dry, rest and gain strength.

Hatching Nest

An earthen pot or bowl-shaped nest or box made of bamboo or wood is suitable for this purpose. The nest should be 15-inch diameter and 8-inch depth. The nest should be filled with bedding materials like clean cut dry grasses or chopped dry straws which would be safe and comfortable to the hen. Some ashes should be used on the nest. A hollow should be made on the middle of the nest by pressing to keep hatching eggs and finally the hen is allowed to sit in the nest. The nest should be placed in the undisturbed corner of the house. A sitting nest must not be kept in a damp, dirty and badly ventilated place.

Care of sitting hen

- At first, Keep some dummy eggs in the nest
- Allow the broody hen to sit on dummy eggs for 2 days
- After 2 days remove dummy eggs and keep 8-12 hatching eggs at night
- Keep food grains and water within the eye sight of the broody hen
- Allow the hen to eat, drink, exercise and discharge of droppings outside the nest twice daily for 20 minutes
- Hen have to come off its eggs at least once daily
- At last week if she does not want to leave the nest, then she has to be lifted off the eggs
- During hot summer some water should be sprinkled on eggs to maintain humidity
- Eggs should be turned twice daily
- By testing, at 7th day infertile eggs and at 14th day dead embryo eggs should be removed
- At 21 days hatching egg shell should be removed from the nest
- Put new bedding materials
- Allow the hen again to sit on newly hatched chicks at night to dry and warm

Natural brooding under village condition

Brooding is the process of providing heat and other management care to the newly hatched chicks up to certain early weeks. Naturally broody mother looks after her chicks for first few weeks. At cold weather this period may be prolonged up to 8 weeks. Here broody hen broods her chicks by keeping them under the body and wings. Backyard chicks are brooded by mother in natural brooding.

The natural method is used under village condition where only few chicks are raised each year. The indigenous broody hen that incubates eggs is generally used for

brooding. But another broody hen also can be used. The indigenous hens as a class are ideal mothers as they possess a strongly developed maternal instinct; moreover, because of their small structure they rarely injure the young chicks.

Healthy broody hen: It should be free from lice, ticks etc.

Brooding capacity: Depending on the size a hen will brood 10-15 chicks. The broody hen will provide all the warmth required by the chicks.

Brooding coop: Broody hen brood and feed her chicks simultaneously. The mother attention her chicks to pick up feeds. The mother also runs with chicks in the homestead area and teaches more. But in this step the farmer can help the mother and chicks for better result. A dry ventilated broody coop can made for them. An enclosed sunny runway should be connected with the coop.

Feed for chicks and mother: For the first 2 weeks it is advisable to supply small quantity of feed frequently. Mash or crumble feed should be supplied. Fresh water drinker should be kept on the runway. After 2 weeks the hen can be allowed to run free with her chicks. The mother saves the chicks from the predator. In this case the farmers also have to watch chicks and predator. A vaccination program must be followed.

Housing system of rural poultry

There are several systems of housing such as, shed type, gable type, monitor type, semi-monitor type etc practicing in the world. For backyard poultry mini shed type house is practiced in Bangladesh. The farmers keep all her backyard poultry such as chicken, duck and goose in the same house for night shelter only. Here no scientific floor space/bird is not maintained. Now this system has to improve. Separate house should be constructed for individual species of poultry with proper ventilation facilities. For chicken and duck at least 0.75 sq ft floor space and 1.0 sq ft for goose should be allocated for night shelter. Any low cost construction materials can be used to make poultry house to save birds from rain, cold and storm. Litter materials such as rice husk, sawdust and ash should be used in the floor of the house and it should be cleaned after certain interval

Rearing system of rural poultry

Three rearing systems such as, scavenging, intensive and semi-intensive are practicing in the world. Only scavenging system is followed for indigenous poultry. The system is characterized to give shelter the birds at night and in the morning birds become free to collect their feed materials from the home stead area, garden, crop field and water bodies also. In this system, production cost of backyard poultry is very low, but more probability of spread of diseases. In some cases farmer used

semi-intensive system. In this system production cost would be high than free range system, but much probability of spread of diseases.

Feeding of rural poultry

Rural or backyard poultry are very much habituated with natural feeds. Basically, poultry have simple stomach. They have no teeth. Feed materials are crushed in the gizzard of the digestive system. They eat concentrate feeds with grit and leafy grasses. The leafy roughage is digested in caeca of the digestive system. The rural poultry eat wastage grain, such as rice, wheat, maize, barley, mustard, pulse seeds and kitchen wastage. They also eat insects, aquatic fish and weeds. Here most of the farmers supply no feeds. Rich farmers supplied additional food grain from the house. But nobody supplies homemade balance ration. But to increase production of meat and eggs farmers have to supply additional feeds and balance homemade ration. It is remembered that an adult chicken can eat 110g and duck can eat 140g per day.

Marketing of backyard poultry and eggs

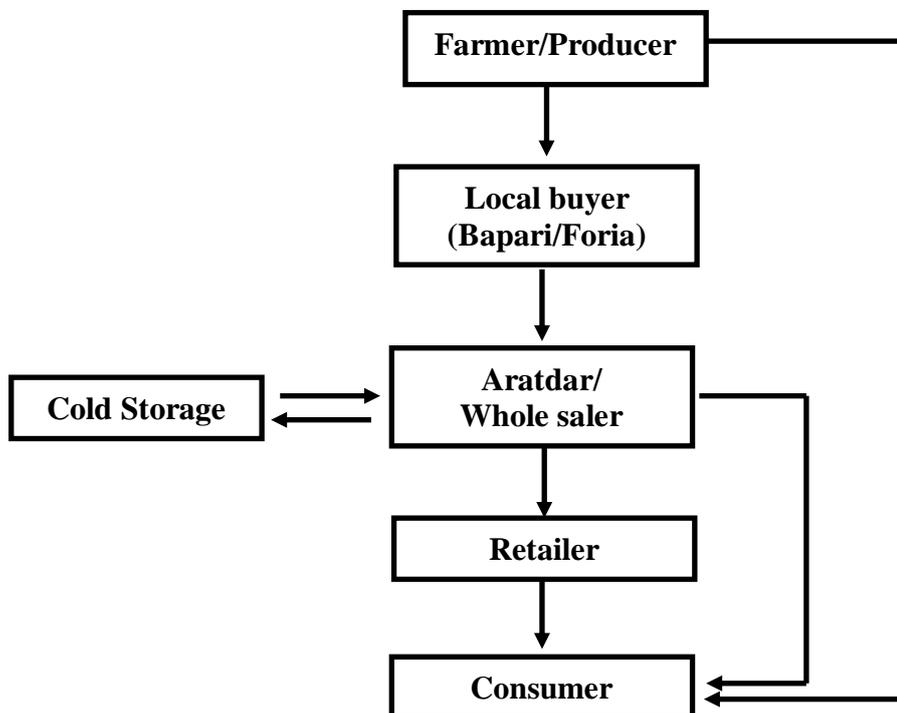
Transportation is the key step of marketing. There are two types of transportation system exist in Bangladesh:

1. Traditional or backyard type system, this includes-
 - Hand carrying or head carrying
 - Cycling
 - Rickshaw or rickshaw van
 - Bus or Truck
 - Train
 - Country boat
 - Launch
2. Modern transportation system
 - Motor van
 - Pick-up van

Marketing channel of backyard poultry and eggs

Marketing channel of poultry meat and egg in Bangladesh is not so improved like developed country, however our entire marketing channel comprises partly traditional and partly improved. Middlemen are unfairly benefited from this type of mixed marketing channel. Improved types of marketing channel allow gaining marginal profit uniformly in each step.

Marketing channel of backyard poultry



Marketing Channel of Egg

