CHAPTER – IV

REQUISITIES OF SCIENTIFIC PIG FARMING AND ITS MANAGEMENT
4.0 Introduction:

Climatic condition of the place, social acceptance of the pig products in the area, scientific knowledge of the farmer influence pig farming to a great extent. So, in designing a farm, these practical and important factors should be kept in mind. It is observed that pig farming is found to be more suitable in Assam. Here, both scientific and traditional pig farming are practised.

4.1 Model Farming:

Considering the nature of farming the following types of model farming may be designed:

a. only Pig farming
b. Fish cum pig farming
c. Duck cum Fish cum pig farming

However, we have concentrated our study only on pig farming. In a scientific intensive system, necessary guidance viz. selection of the site for the farm, construction of pigsty, selection of piglets, feeding of the pigs must be followed to earn high profit.

4.1.1 Selection of Site:

The site for a pig unit should be chosen with care as it plays an important role in determining the success of the project. The construction
should be made at the higher part of the site and it should be at a fair distance from the residential area so as to avoid the nuisance of odour and flies. The construction should provide necessary protection from the sun and exposure to wind and so an east-west orientation is usually preferred. There should be supply of electricity. Supply of clean water, a good road communication along with a good transporting system is also necessary. (Piggery Year Book 1989, p81)

4.1.2 Selection Of Breed:

Usually Hampshire breed of pig is recommended for rearing and to improve the local pigs in Assam. However, Landrace breed can also be used in commercial farming. In choosing exotic breeds two factors that need to be considered are (i) adaptability to the environment and (ii) resistance to diseases. Although, selection of a particular breed is often a matter of personal preference, yet the farmers should know the characteristics of different breeds commonly available, their adaptability to the local conditions, methods of rearing them, their market demand and lastly, the economy of production. A Hampshire (pure breed), under farm condition of Assam, attains at least 70 kg within 6-7 months, but recruiting the piglets from a disease free pig breeding farm is very much important. (Package of practices of livestock 1989-90, p65, AAU, Khanapara, Guwahati-22)
4.1.3 Construction of the Pigsty:

Pig farming can be practiced in three different systems, viz. a) Intensive system, b) Semi-intensive system and c) Open range system. In Assam and in the adjoining states of the N.E. Region, owing to heavy rainfall and high humidity, the semi-Intensive system is suitable. As an open area is attached to each pen so cleaning and disinfection can be done easily in semi-intensive system. The open yard also provides some sort of a play ground where the pigs can exercise to some extent. Open range system is suitable for indigenous stock, to raise them on scavenging.

Pigs are devoid of sweet glands. So, considerable attention is necessary in the construction of the sty. The temperature inside the pig house should be maintained carefully so that extreme climatic condition does not have an ill effect. Assam and the adjoining states of the N.E. Region have high rainfall and high humidity and so proper drainage and ventilation is necessary. The cost of house construction can also be reduced if locally available materials like bamboo, timber, thatch etc are used. The pigs have digging and dashing tendencies and so concrete floor and walls are advisable. (Package of practices on livestock production 1989-90, AAU, Guwahati 22, p62)

Each pig pen should be provided with an open area called ‘run’. This open space provides additional space for the animals where they can exercise, urinate and defecate. At the end of the open area a drain should be
made so as to carry away the dung, urine and dirt.

4.1.4 Feeding of Pigs:

Feeding of pigs requires extra attention as the pig, unlike cattle, sheep and goat, depends mainly on cereal grains in the ration. There are different types of rations for different categories of pigs.

<table>
<thead>
<tr>
<th>Ration</th>
<th>Protein %</th>
<th>To be fed</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Starter Ration</td>
<td>20-22</td>
<td>From 15(th) day till weaning (8 weeks)</td>
</tr>
<tr>
<td>2. Grower Ration</td>
<td>17-18</td>
<td>From weaning to 5 months of age or 35 kg body weight, whichever is earlier</td>
</tr>
<tr>
<td>3. Finisher Ration</td>
<td>14-16</td>
<td>From 5 months of age up to 8 months Or from 35 kg to 70 kg body weight and thereafter also.</td>
</tr>
</tbody>
</table>
Table 4.1

FEED REQUIREMENT OF PIG PER DAY

<table>
<thead>
<tr>
<th>Age of pig</th>
<th>Approximate body weight (kg)</th>
<th>Quantity of feed</th>
</tr>
</thead>
<tbody>
<tr>
<td>15 days – 1 months</td>
<td>2.5-5</td>
<td>100-200</td>
</tr>
<tr>
<td>1 month – 2 months</td>
<td>5-12</td>
<td>200-500</td>
</tr>
<tr>
<td>2 months – 3 months</td>
<td>12-18</td>
<td>500-750</td>
</tr>
<tr>
<td>3 months – 4 months</td>
<td>18-25</td>
<td>750-1000</td>
</tr>
<tr>
<td>4 months – 5 months</td>
<td>25-35</td>
<td>1000-1250</td>
</tr>
<tr>
<td>5 months – 6 months</td>
<td>35-55</td>
<td>1250-1500</td>
</tr>
<tr>
<td>6 months – 7 months</td>
<td>55-70</td>
<td>1500-2000</td>
</tr>
</tbody>
</table>

Pigs are fed as per the above mentioned quantity of ration in 2 parts; in the morning and in the evening. (Package of Practices on Livestock Production 1989-90, AAU Khanapara : Guwahati-22, p65)

4.2 Requistes of a Commercial Farm:

A commercial pig enterprise is a business enterprise that produces pig products viz. meat, manure etc. To produce the output, an enterprise should have the following basic inputs or productive resources:
1. Natural resources, i.e. Land and Climate
2. Capital
3. Labour

**Natural and Entrepreneurial:**

Piggery can be reared in extensive, semi-intensive and intensive system. Range system is an extensive system which requires an adequate area of land along with plenty of grasses. The run system of semi-intensive system also requires a certain amount of grassland.

**Capital:**

In commercial piggery enterprise, the word capital has two meanings 1) fixed capital and 2) working capital.

1. Fixed capital includes the investment in housing equipment etc. that provide productive services over a period of time. Some enterprises require a large investment in capital goods in relation to other expenses. In Assam piggery sheds are usually constructed with locally available materials at a relatively cheaper cost, which reduces the investment in capital goods to a great extent.

2. Working capital is the money that is needed to buy piglets, feed, medicines and for the payment of laborers for day to day operations. It has
already been mentioned in the previous chapter that getting finance in Assam for piggery entrepreneur is not a major problem. There are Government and private organizations/agencies and banks to help entrepreneurs in establishing piggery farms against viable projects.

**Labour:**

A good organization having a good management always tries to reduce the labour cost. The quantity of labour available to an enterprise depends on several factors, viz. size of the population engaged in work or seeking work and the hours each person works. Assam is endowed with a huge working force including a good number of educated, unemployed youths. But the state does not have enough technical or trained hands in readiness for engaging in piggery enterprise. Appropriate education and training in pig farming can increase their skills which will be beneficial for the production of pig and pig products.

In our study area, we found that both man and woman labourers are engaged in pig farming. Besides the members of the farmer’s family, full time labourers are also engaged in the commercial pig farms. Thus pig farming generates substantial employment avenues for family members and others.
Management:

The management system plays an important role in pig farming as it can provide an environment conducive to the animals where they can function to the maximum of their capacity. For proper handling of the animals within the limitations of the farm, planning and modification is necessary which can be done by only an efficient management.

For obtaining high growth rate of pig production, the following points should be considered for overall management of a piggery farm:

A. HOUSING

Piggery sheds should be built with locally available low cost materials. Pigs need protection from direct sunlight, rain and extreme air flow. Shed should have ample light and ventilation. Stagnation of water should be avoided in the sheds. A small wallowing tank with clean water should be provided during summer season.

B. EQUIPMENT

The equipment plays an important role in pig farming as the farmer has to protect the animals from the inclement weather, make arrangement to save the feed, save the cost of labour and to derive satisfaction from the enterprise. On an average, the building and equipment cost amounts to 5 to 10 per cent of the total cost of pork production. The function of equipment
is to protect the animals, preserve the feed and to expedite the work of taking proper care. To achieve high success, it is essential to equip the farm with necessary equipments and skilled hands to use the equipments properly.

C. FEEDING

Pigs can be fed with rice polish, wheat bran, crushed maize, cakes, kitchen waste, vegetable waste, fish meal, bone meal, hotel or hostel waste or skimmed milk. They can also be fed with green grasses, sweet potato, or any other creepers or sericulture waste. Pigs require plenty of fresh air and water. Overfeeding is not only wasteful but also causes digestive disorders. The young stock should be given oats, barley or maize in skimmed milk. About 500 gm feed is required daily for a one month old piglet. Piglets above 6 months of age should be given two kg feed every day. The breeding stock requires green feed throughout the year. Exercise plays a vital role in keeping the pigs in good health.

D. DISEASE

Pigs are also prone to disease like other domestic animals. The common bacterial diseases of pigs are swine plague, swine erysipelas anthrax and infections abortions and the diseases of viral origin are swine fever, rinderpest and swine pox. They also suffer from internal and external
parasitism. Therefore proper care, proper sheds, preventative vaccinations against anthrax, rinderpist, and foot and mouth disease are essential. Regular deworming prevents endoparasitism and regular washing and cleaning prevent skin infection. Pigs need to be examined quite frequently by local veterinarians.

E. MARKETING

A good market is essential for satisfactory marketing of the pork and pork products. Now a days, the demand for pork and pork products is increasing. The establishment of Government Bacon Factories and private pork processing plants has contributed to the availability of the market for farmers. Prices of Pigs are also influenced by seasons. In some season prices are high. Buyers pay higher prices for cross bred hogs of high quality. The grading standards used by various buyers are not the same. Through careful planning it is possible to prepare the kind and weight of hogs that will top in the market. Efficient marketing of the products is essential for higher returns.

F. MAINTENANCE OF THE FARM RECORDS

Record keeping is absolutely essential for the successful operation of a pig farm. Proper maintenance of records will reveal the weakness and strength of the operation, and it indicates the course of action to be taken to
develop the enterprise in the direction of profit. In recent times, record keeping has become simple as records can be prepared or purchased. Maintenance of adequate records is also essential to get financial assistance from banks or other financial institutes. (Piggery Year Book-1989 pp53to55)

An attempt is made to comprehend the idea of progress and economics of pig rearing with the help of statistical analysis in the next Chapter.

REFERENCES
