Techno Economic Feasibility Report for setting a Poultry Development Project in Assam



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# EXECUTIVE SUMMARY TITLE OF THE STUDY

# PREPARATION OF DPR FOR ESTABLISHING ACENTRAL HATCHERY UNIT IN ASSAM ALONG WITH SETTING UP OF SATELLITE HATCHERIES IN STRATEGICLOCATIONS BY BENEFICIARY FARMERS

The Poultry Development Project in Assam is being prepared with the sole aim to provide employment opportunities to the people of Assam and also to make available chicken at a reasonable price to the consumers.

Under the present system of working the farmers / poultry producers are dependent on agents to supply chicks, feed and medication and also for lifting of the ready birds. There is no calculation of Cost of production. The agent based on the demand fixes the lifting price.

The cost of production of chicken is higher in India because of the following:

- a. Higher margins by chick producer
- b. High cost of quality ingredients
- c. Higher labor cost
- d. Commissions charges by agents t all points
- e. Cost of Transportation

It is envisaged that making available the chicks at the clusters in Blocks can bring down the cost of chick. Satellite hatcheries can be set up in areas where farm development can take place. The satellite hatcheries will act as agencies for feed also and will be able to provide all possible help to the poultry farmers of the area.

In order to make the project feasible, it is necessary that the poultry be made a business of choice. Training be provided to new entrants and loan facility be guaranteed through a system of co-operative / cluster approach towards the development of poultry in backward areas.

The Project envisages training 120 people every year to start poultry operations of which one set of 20 women will be trained every year. A family of five persons will be able to get an additional income of Rs.2500.00 to Rs.3000.00 per month on an average after the project is set up. In a span of 10 years 1000 males and 200 women entrepreneurs will be trained which would mean employment / work opportunities for over 6000 persons directly. The training can be under the collaboration with Faculty of Veterinary Science, Assam Agricultural University, Khanpara, Guwahati.

Apart from the employment generation, the project will make available chicken at Rs.45.00 per kg (live) to the consumer, which at present ranges from Rs50 - 60.00 per kg.

In order to fulfill the social obligations, the Assam Livestock & Poultry Corporations plans to tie up with a private poultry company who are already in business in Assam and will be able to take care of the farm and the marketing aspect of the project.

The corporation also has a Poultry Processing plant, which can be used effectively to make available safe processed chicken to the consumers in Guwahati at least.

# **Project Cost**

Asset Value: Rs.649.99 lakhs

Revolving Fund: Rs. 159.49 lakhs

Total Fund Requirement: Rs.809.48 lakh

The project envisages to introduce the concept of 'Pakshi Mitra' and train about 120 persons / annum of which (in 6 batches of 20 persons each). This would mean a direct employment opportunity for 120 people -600 family members. It is envisages that of the 6 batches one batch will of 20 will be of women entrepreneurs. This will ensure strengthening the hand of women folk in the state of Assam. Each trained person will be provided with a Certificate after 6-8 weeks of training.

The criterion for the training will be fixed as those having land, engaged in agricultural activities, having a desired literacy level and attitude to grow and work in system will be provided the training. The set criterion will make is possible for those with land to diversify into allied activity like poultry. Those though literate, not ready to work in agriculture will also come forward to start a business enterprise.

With the rise in unemployment, the project will provide self-employment opportunities to the educated youth. The change in work culture will help in improving quality of life of the people of Assam and will also improve the law and order situation in the state.

The project will also generate direct and indirect employment for over 100 persons. On completion of the project, the indirect allied services that will be needed will be able to generate provide employment opportunities for more people in the state, e.g., by way of franchisees for sale of chicken in the district HQ.

# 02.04 Environmental impact of the Project

The project as envisaged will have a positive impact on the environment and the people of Assam. Without work, there are many people in the area who have taken to poaching and cutting wood from the forests. If these people can be brought to the main stream, it will benefit the country. The project will not be producing any chemicals, gases etc that can have a negative impact on the environment.

In order to use all the facilities, it is recommended to use the chicken processing plant and the rendering facility attached to produce meat cum bone meal from the viscera of the birds slaughtered.

The project envisages providing safe and healthy animal protein to the population of Assam.

#### Assam

In ancient times Assam constituted a part of the land known successively as Pragjyotisha or Pragjyotishpura, and Kamarupa. Asom (Axom) or its anglicized version Assam is a comparatively modern name. Opinions on the root of the name vary with one view ascribing its origin to the Bodo word Ha-Cham which means "low or level country" and a second view ascribing it to the word Asama, meaning "unequalled" or "peerless", and used to denote the Ahoms, a Shan tribe which ruled the land for six centuries from the 13th Century A.D.

Assam, located in the tropical latitudes (24.3° N and 28° N) and eastern longitudes (89.5° E and 96.1° E), is the most populous state in North-East India. It is surrounded on three sides by hills and mountains. The rivers Brahamputra and Barak, in the north and south respectively, carve out deep valleys that represent the major part of the state. Between the two valleys there lies a strip of highland made up by hills and plateaus. The two plains from the easternmost parts of the north Indian plain, which are apparently shut to the South-East Asia by the Patkai Range and its southward extensions. In the north, the Brahamputra plain rises steeply to the Himalayas, while to the east, the parallel hill ranges of Arunachal, Nagaland and Manipur attain height as one moves eastward, culminating at the Patkai-Manipur-Arakan Yoma hills. Although the hills and mountains mentioned above appear to provide physical blockade, they are not inaccessible. There are a large number of mountain passes across both the Himalayas and the eastern hills. Situated as such, it is transitional territory between South Asia and South-East Asia. The transition is reflected not only in the region's flora and fauna, but also in human types, languages and cultures.

# **Assam & North East**

State	Populations in million
Assam	26.63
Arunachal Pradesh	1.09
Nagaland	1.98
Meghalaya	2.3
Manipur	2.38
Tripura	3.19
Mizoram	0.89

Seven Indian states and two foreign countries surround Assam. There are only few Indian states, which have such a strategic location. The state has an area of 78,438 km<sup>2</sup> representing 2.39 per cent of the Indian landmass and a population of 22,414,322 (1991) accounting for 2.64 per cent of the total population of the country.

#### The Vision

Assam 2025 envisages a partnership with the private sector to tap their resources and technology, particularly in the areas of power, communication, transport and industry. Existing resources available with the Government are far from adequate to establish the infrastructure for rapid industrial growth. Therefore, the sect oral strategy is specially designed to dovetail the private Sector capabilities into the economic growth process. The Government will play the role of a facilitator for augmenting private sector participation.

- Production of Milk would be increased to 3000 Million Ltrs. By 2025.
- Production of Meat would be increased to 2.5 lakh M.T. by 2025.
- Production of Eggs would be increased to 3500 Millions by 2025.

Poultry farming in Assam started in early 1970's, when the farmers started small farms and were buying chicks from Calcutta, Patna other areas. Soon hatcheries sprung up in West Bengal to supply chicks to Assam and other North Eastern States.

Breeding farms, established by in the governments and private sectors make a significant contribution to the poultry development of the state.

There are only two broiler hatcheries in Assam

- a. Manas Proteins
- b. Arambagh Hatcheries

There is a relatively larger demand that cannot be met by the two companies.

# **Broiler Farming**

Broiler farming in the state started around Guwahati, Siliguri, Tinsukhia which were major towns and from where people could supply to the army which was based along the international border with Bangladesh. There is lot of border trade between Assam, Nagaland, Arunachal Pradesh etc.

The salient features of broiler farming in the state are:

- a. The location of the farms is determined by the proximity to the market for final product
- b. Accordingly the broiler farms are located on the peripheries of the populous cities like Guwahati, Tinsukhia,

# Production parameters

\* Mortality upto market \* Weight at Slaughter 3 - 8 % 1.6 - 2.0 kg \* Age at Slaughter 37 - 40 days

- \* Production cost of broiler Rs.35 38 per kg (farmers)
- \* Average Live broiler price Rs.45 60 per kg

Over the last two years the farmer has made lost in the poultry business. It is the middleman / agents who buy the broilers from the farmers have made money. It is they who control the market and not the farmers / producer.

#### **Constraints**

The major constraints adversely effecting the development of the poultry sector in Assam are High input costs (chicks, feed, medicines), Low quality inputs (feed) incidence of natural calamities in some areas (flood etc), lack of focused govt. policy and restricted financial help from the banks.

# **High Input Costs**

Feed constitutes nearly 70 percent of the total costs of operations. Over the last few years (2-3 years) the feed prices have been increasing at 10-15 percent per annum.

## **Natural Calamities**

Unfavorable weather conditions, especially in the form of floods and high rainfall across the state result in high mortality and low production and limit expansion of activities.

# **Government Policy**

There is no straightforward policy of the state govt. The poultry operations are not recognized in agriculture, or under the industry.

### Restricted Finances

The financial assistance offered by the commercial banks is too restrictive and does not permit expansion. The banks are selective in giving loans and also there is a high incidence of over dues.

Other constraints are related to marketing and infrastructure.

# **Marketing of Broilers in Assam**

The major poultry products consumed in the state are the eggs and chicken meat, predominantly broiler meat and mutton. The pattern of consumption varies across the state and depends of various factors like population, food habits, availability and price of the products against that of the substitutes.

From the point of consumption of broilers, the Assam market can be grouped broadly under four categories, based on perceived levels of consumption

very high level of consumption Guwahati, high level of consumption in Cachar, Karbi Analang, Bogaigaon moderate level of consumption in other towns Jorhat, Sibsagar, Tinsukhia Low level of consumption in Morigaon Darang etc

# **Consumption and Market Size**

# Consumption of Broilers

Consumption of chicken meat, especially the broilers in concentrated heavily in the urban markets due to ready availability of broilers.

Consumption of broilers is low in the rural areas, which is characterized by small and scattered populations and availability of alternative sources of avimeat. Most rural customers prefer 'desi' poultry meat to broilers.

The consumption of broilers shows a seasonal trend and is high in monsoon and winter, but is somewhat low in summer months. Also the consumption tends to decline during Hindu festivities.

An important feature of the broiler consumption in the state is a strong consumer preference for 'live' and 'fresh dressed' birds. Consumers do not prefer frozen processed birds on grounds of being "tasteless", "too rigid" and "non tender" and "could be of dead birds". As such the market for frozen chicken meat is low. All chicken though is purchased without skin.