



सत्यमेव जयते

GOVERNMENT OF ASSAM

STRATEGY PAPER

ON PIGGERY SECTOR, ASSAM

TARGETS AND GOAL FOR 2019-2024

(ANNEXED DRAFT STATE PIG BREEDING POLICY ASSAM 2018)



ANIMAL HUSBANDRY
& VETERINARY DEPARTMENT
Government of Assam

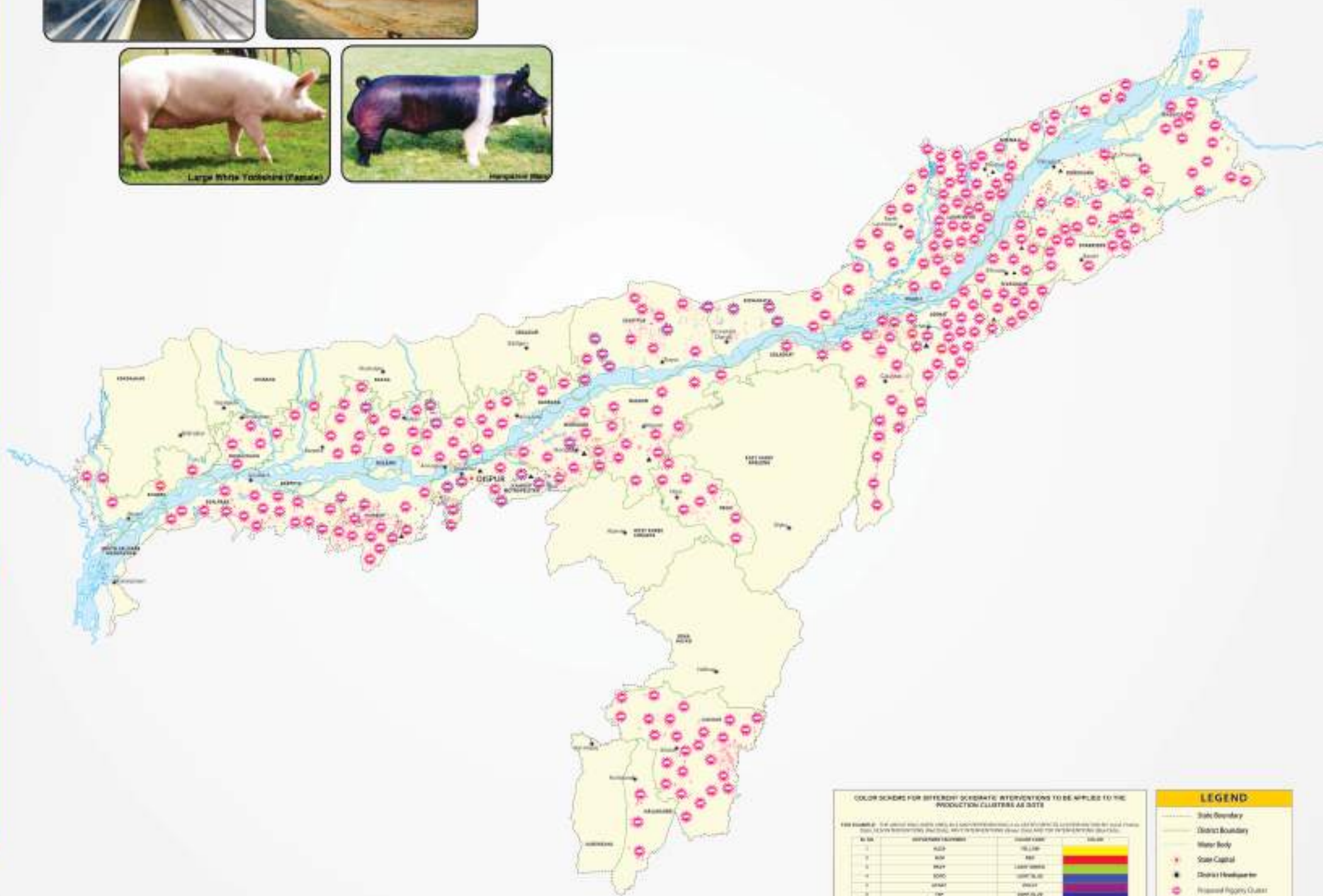
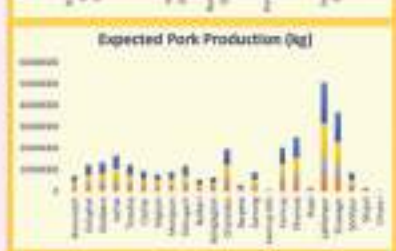
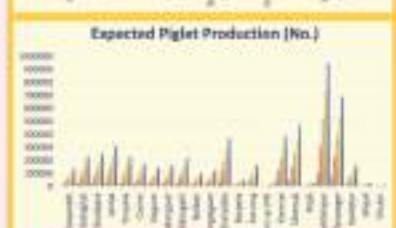
ANIMAL HUSBANDRY AND VETERINARY DEPARTMENT

ASSAM::GUWAHATI-781003

PIG SECTOR

ANALYSIS OF DATA ON PROPOSED PIG DEVELOPMENT PROJECT FOR ASSAM 2019-24

Sl. No.	Name of District	Area (Sq. Km)	Population (Lacs)	Area (Sq. Km)	Population (Lacs)	Area (Sq. Km)	Population (Lacs)	Area (Sq. Km)	Population (Lacs)	Area (Sq. Km)	Population (Lacs)	Area (Sq. Km)	Population (Lacs)
1	Assam	78,131	25.4	78,131	25.4	78,131	25.4	78,131	25.4	78,131	25.4	78,131	25.4
2	Barpeta	1,243	1.8	1,243	1.8	1,243	1.8	1,243	1.8	1,243	1.8	1,243	1.8
3	Bongaigaon	1,305	1.8	1,305	1.8	1,305	1.8	1,305	1.8	1,305	1.8	1,305	1.8
4	Bongaigaon	1,305	1.8	1,305	1.8	1,305	1.8	1,305	1.8	1,305	1.8	1,305	1.8
5	Bongaigaon	1,305	1.8	1,305	1.8	1,305	1.8	1,305	1.8	1,305	1.8	1,305	1.8
6	Bongaigaon	1,305	1.8	1,305	1.8	1,305	1.8	1,305	1.8	1,305	1.8	1,305	1.8
7	Bongaigaon	1,305	1.8	1,305	1.8	1,305	1.8	1,305	1.8	1,305	1.8	1,305	1.8
8	Bongaigaon	1,305	1.8	1,305	1.8	1,305	1.8	1,305	1.8	1,305	1.8	1,305	1.8
9	Bongaigaon	1,305	1.8	1,305	1.8	1,305	1.8	1,305	1.8	1,305	1.8	1,305	1.8
10	Bongaigaon	1,305	1.8	1,305	1.8	1,305	1.8	1,305	1.8	1,305	1.8	1,305	1.8
11	Bongaigaon	1,305	1.8	1,305	1.8	1,305	1.8	1,305	1.8	1,305	1.8	1,305	1.8
12	Bongaigaon	1,305	1.8	1,305	1.8	1,305	1.8	1,305	1.8	1,305	1.8	1,305	1.8
13	Bongaigaon	1,305	1.8	1,305	1.8	1,305	1.8	1,305	1.8	1,305	1.8	1,305	1.8
14	Bongaigaon	1,305	1.8	1,305	1.8	1,305	1.8	1,305	1.8	1,305	1.8	1,305	1.8
15	Bongaigaon	1,305	1.8	1,305	1.8	1,305	1.8	1,305	1.8	1,305	1.8	1,305	1.8
16	Bongaigaon	1,305	1.8	1,305	1.8	1,305	1.8	1,305	1.8	1,305	1.8	1,305	1.8
17	Bongaigaon	1,305	1.8	1,305	1.8	1,305	1.8	1,305	1.8	1,305	1.8	1,305	1.8
18	Bongaigaon	1,305	1.8	1,305	1.8	1,305	1.8	1,305	1.8	1,305	1.8	1,305	1.8
19	Bongaigaon	1,305	1.8	1,305	1.8	1,305	1.8	1,305	1.8	1,305	1.8	1,305	1.8
20	Bongaigaon	1,305	1.8	1,305	1.8	1,305	1.8	1,305	1.8	1,305	1.8	1,305	1.8
21	Bongaigaon	1,305	1.8	1,305	1.8	1,305	1.8	1,305	1.8	1,305	1.8	1,305	1.8
22	Bongaigaon	1,305	1.8	1,305	1.8	1,305	1.8	1,305	1.8	1,305	1.8	1,305	1.8
23	Bongaigaon	1,305	1.8	1,305	1.8	1,305	1.8	1,305	1.8	1,305	1.8	1,305	1.8
24	Bongaigaon	1,305	1.8	1,305	1.8	1,305	1.8	1,305	1.8	1,305	1.8	1,305	1.8
25	Bongaigaon	1,305	1.8	1,305	1.8	1,305	1.8	1,305	1.8	1,305	1.8	1,305	1.8
26	Bongaigaon	1,305	1.8	1,305	1.8	1,305	1.8	1,305	1.8	1,305	1.8	1,305	1.8
27	Bongaigaon	1,305	1.8	1,305	1.8	1,305	1.8	1,305	1.8	1,305	1.8	1,305	1.8
28	Bongaigaon	1,305	1.8	1,305	1.8	1,305	1.8	1,305	1.8	1,305	1.8	1,305	1.8
29	Bongaigaon	1,305	1.8	1,305	1.8	1,305	1.8	1,305	1.8	1,305	1.8	1,305	1.8
30	Bongaigaon	1,305	1.8	1,305	1.8	1,305	1.8	1,305	1.8	1,305	1.8	1,305	1.8
31	Bongaigaon	1,305	1.8	1,305	1.8	1,305	1.8	1,305	1.8	1,305	1.8	1,305	1.8
32	Bongaigaon	1,305	1.8	1,305	1.8	1,305	1.8	1,305	1.8	1,305	1.8	1,305	1.8
33	Bongaigaon	1,305	1.8	1,305	1.8	1,305	1.8	1,305	1.8	1,305	1.8	1,305	1.8
34	Bongaigaon	1,305	1.8	1,305	1.8	1,305	1.8	1,305	1.8	1,305	1.8	1,305	1.8
35	Bongaigaon	1,305	1.8	1,305	1.8	1,305	1.8	1,305	1.8	1,305	1.8	1,305	1.8
36	Bongaigaon	1,305	1.8	1,305	1.8	1,305	1.8	1,305	1.8	1,305	1.8	1,305	1.8
37	Bongaigaon	1,305	1.8	1,305	1.8	1,305	1.8	1,305	1.8	1,305	1.8	1,305	1.8
38	Bongaigaon	1,305	1.8	1,305	1.8	1,305	1.8	1,305	1.8	1,305	1.8	1,305	1.8
39	Bongaigaon	1,305	1.8	1,305	1.8	1,305	1.8	1,305	1.8	1,305	1.8	1,305	1.8
40	Bongaigaon	1,305	1.8	1,305	1.8	1,305	1.8	1,305	1.8	1,305	1.8	1,305	1.8
41	Bongaigaon	1,305	1.8	1,305	1.8	1,305	1.8	1,305	1.8	1,305	1.8	1,305	1.8
42	Bongaigaon	1,305	1.8	1,305	1.8	1,305	1.8	1,305	1.8	1,305	1.8	1,305	1.8
43	Bongaigaon	1,305	1.8	1,305	1.8	1,305	1.8	1,305	1.8	1,305	1.8	1,305	1.8
44	Bongaigaon	1,305	1.8	1,305	1.8	1,305	1.8	1,305	1.8	1,305	1.8	1,305	1.8
45	Bongaigaon	1,305	1.8	1,305	1.8	1,305	1.8	1,305	1.8	1,305	1.8	1,305	1.8
46	Bongaigaon	1,305	1.8	1,305	1.8	1,305	1.8	1,305	1.8	1,305	1.8	1,305	1.8
47	Bongaigaon	1,305	1.8	1,305	1.8	1,305	1.8	1,305	1.8	1,305	1.8	1,305	1.8
48	Bongaigaon	1,305	1.8	1,305	1.8	1,305	1.8	1,305	1.8	1,305	1.8	1,305	1.8
49	Bongaigaon	1,305	1.8	1,305	1.8	1,305	1.8	1,305	1.8	1,305	1.8	1,305	1.8
50	Bongaigaon	1,305	1.8	1,305	1.8	1,305	1.8	1,305	1.8	1,305	1.8	1,305	1.8



ASSAM MAP



COLOR SCHEME FOR DIFFERENT CLUSTERIC INTERVENTIONS TO BE APPLIED TO THE PRODUCTION CLUSTERS AS SETS

No.	Cluster	Color	Color	Color
1	Cluster 1	Red	Green	Blue
2	Cluster 2	Yellow	Orange	Purple
3	Cluster 3	Pink	Light Blue	Light Green
4	Cluster 4	Light Yellow	Light Orange	Light Purple
5	Cluster 5	Light Red	Light Green	Light Blue
6	Cluster 6	Light Yellow	Light Orange	Light Purple
7	Cluster 7	Light Red	Light Green	Light Blue
8	Cluster 8	Light Yellow	Light Orange	Light Purple
9	Cluster 9	Light Red	Light Green	Light Blue
10	Cluster 10	Light Yellow	Light Orange	Light Purple
11	Cluster 11	Light Red	Light Green	Light Blue
12	Cluster 12	Light Yellow	Light Orange	Light Purple
13	Cluster 13	Light Red	Light Green	Light Blue
14	Cluster 14	Light Yellow	Light Orange	Light Purple
15	Cluster 15	Light Red	Light Green	Light Blue
16	Cluster 16	Light Yellow	Light Orange	Light Purple
17	Cluster 17	Light Red	Light Green	Light Blue
18	Cluster 18	Light Yellow	Light Orange	Light Purple
19	Cluster 19	Light Red	Light Green	Light Blue
20	Cluster 20	Light Yellow	Light Orange	Light Purple

LEGEND

- State Boundary
- District Boundary
- Water Body
- State Capital
- District Headquarters
- Proposed Pigging Cluster
- Proposed Private Pig Farm
- Existing Private Pig Farm
- Existing State Pig Farm

Note: Map does not include sixth schedule areas of the state (only general areas)

PIG DEVELOPMENT PROJECT FOR ASSAM (2019-2024)



ACTION PLAN FOR GOVERNMENT AND PRIVATE SECTOR

**ANIMAL HUSBANDRY AND VETERINARY DEPARTMENT
ASSAM::GUWAHATI-781003**

PERFORMANCE OF DIFFERENT EXOTIC AND INDIGENOUS BREEDS OF PIG:

1. **Hampshire:** A breed from U.K, which is black in colour with a white belt across the shoulder extending up to the forelimbs. Ears are erect. This breed has been reared over decades in Assam and has been very popular among the farmers in this region and may therefore be suggested for economic upliftment. The American National Swine Registry notes this as the fourth “most recorded breed” of pigs in the United States, and probably the oldest American breed of hogs. Hampshire hogs are noted for being well-muscled and rapid



growers, and for exhibiting good carcass quality when used as meat animals. When used as breeding stock, the sows of this breed have been praised for their capacity as mothers, having “extra longevity in the sow”. Hampshire are good tempered; they do not grow as fast as many cross-breeds, but they do grow faster than Yorkshires.



2. **Large White Yorkshire:** A breed of U.K. with a white body coat and erect ears. It is a large sized and most extensively used exotic pig breed in India. Their body is solid white coloured with erect ears, dished face and snout of medium lengths. An adult boar (male pig) weights around 300 to 400 kg and an adult



sow weights around 230 to 320 kg. Large White Yorkshire is an excellent pig breed for the purpose of cross breeding. Its neck is fine, long and evenly full to shoulders with deep and wide chests. Additionally, they have long, level and wide back. Large White pigs possess good carcass quality. The breed is highly prolific and an efficient feed utilizer.



3. **Large Black:** With its lop ears and long, deep body, the Large Black is Britain’s only all-black pig. Extremely docile, and very hardy, it is ideally suited to simple outdoor systems. These characteristics, coupled with its black skin, make the Large Black ideal for a wide range of climatic conditions. In fact, by 1935, pigs of this breed had been exported to well over 30 countries.



4. **Duroc:** North-Eastern United States gave rise to one of the most popular U.S. breeds-the Duroc, which is the outcome of blending of two breeds, Jersey Red and Duroc of New York. The breed is moderately red coloured with shades varying from a golden to cherry red colour. Duroc pig is well-known to have excellent weight gain rate and a high feed converter. The sow matures early, produces large



litter (up to 15 piglets) and fair mothering ability. Have good carcass quality and body weights of about 400 kg and 350 kg for mature boar and mature sow respectively. The breed is now popular both in South East Asia and in the American tropics mostly due to its colour, hardiness and fast growth.

- 5. Ghungroo:** Ghungroo an indigenous strain of pig first reported from North Bengal is popular among the local people because of high prolificacy and ability to sustain in low input system. This breed/strain produces high quality pork utilizing agricultural by-products and kitchen wastes. Ghungroo are mostly black coloured with typical Bull dog face appearance, with a litter size of 6-12



piglets, individually weigh about 1.0 kg at birth and 7.0 – 10.0 kg at weaning.

Both sexes are very much docile and easy to handle. In the breeding tract they are maintained under scavenging system and mainly act as insurance to the rain-fed agriculture. Some of the selected sows have delivered litter size of 17 piglets at birth as compared to the other indigenous strains of pig.



- 6. Doom:** Doom pigs are found in Dhubri, Bongaigaon and Kokrajhar districts of Assam. These are black in colour and have a short, concave snout. The adult pigs weight between 36kg and 50kg. Their estimated population is about 3,000.



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PIG DEVELOPMENT PROJECT FOR ASSAM (2019-2024)

BASIC APPROACH AND STRATEGIES

PRESENT SITUATION

As per Livestock Census 2012, total pig population of the state of Assam is 1636022 which is about 15.89% of total pig population of our country. The share of meat production from pig is 18730 tones against state's total meat production of 46870 tones during 2016-17 while total requirement is 363000 tones (Integrated Sample Survey Report 2016-17).

There are 19 Pig Breeding Farms under A. H. & Veterinary Department, Assam out of which 16 farms are functional. The 3 non-functional farms are:

1. Dirpai Pig Breeding Farm, Gogamukh, Dhemaji (Campus have been taken over by ICAR)
2. Kapahtoli Pig Fam, Halowating, Sivasagar (Occupied by CRPF and the stock of the farm have been shifted to Pig Farm, Khelua)
3. Govt. Pig Farm, Gargaon, Sivasagar (Damaged)

Analyzed from the point of required nutrition, as per WHO standards, the daily requirement of protein is 63 gm per day. In average Indian diet conditions, 50.75 gm per day per person (approx.) for the vegetarian population, and about 55.25 gm per day per person (approx.) for the non-vegetarian population is available. Notwithstanding this, the average deficit of protein requirement is approximately 12.25 gm for vegetarian and 7.75 gm for non-vegetarian

STRATEGY TO FULFILL DEMAND

By 2050, it is expected that the population in India would increase by 34% and to fulfill the dietary recommended levels of the livestock products by Indian Council for Medical Research (ICMR) for a population of 1.7 billion people, the livestock sector should produce 186.2 million tons of milk, 18.7 million tons of meat and 306 billion eggs per annum. This means that the current level of production, the milk, meat and eggs would have to increase by 1.5, 3 and 4.7 times respectively. Fulfilling the feed demand of this huge livestock from same resource base of land and water is going to be a huge challenge. Therefore, rather than increasing the number of animals, improving the genetics through breed improvement programme might be a better strategy to address the required demand for animal protein.

This becomes a greater challenge, as there exists a low productivity index among Indian pig breeds with respect to potential growth rates and mature weight which may be considered as a gap to fulfill the meat demand.

The objective of the "Pig Development Project for the state of Assam" is to increase the income of the Pig rearing farmer / entrepreneur/ NGO / Cooperative Society, etc so as to achieve the Honourable Prime Minister's plan for doubling the farmer's income. This is envisaged to be done by incorporation of superior germplasm of high genetic merit through import and then crossing them with the low productive indigenous breeds to eventually result in cross breeds which would perform and yield better harvest to the pig rearers.

The breeds to be imported and breeding plan will be strictly as per guidelines/ protocols of State Pig Breeding Policy, Assam 2018 and the breeds to be considered for import are Hampshire or Large Black or Large White Yorkshire.

Breeding units of pure indigenous registered breeds will be set up at the multiplier farms so that cross-bred pigs or pure indigenous breeds can be made available to farmers/ entrepreneurs/ SHGs/Co-operative societies/Farmers Producer Organisations, etc. The non-descript breedable females available @ 5% shall be considered for breed improvement through this project. A breeding unit of Doom will be set up as Nucleus Farm in its



breeding tract at Dhubri/Bongaigaon/Kokrajhar for its conservation and genetic improvement.

Setting up of 5 numbers of Nucleus Farms in 5 different climatic zones of the state are proposed. As a total of 109 exotic breeding pigs (27 boars and 82 sows) have been proposed under Innovative Pig Development Project for North East (IPDPNE), therefore, initially, only 3 numbers of Nucleus Farms in 3 different climatic zones of the state will be set up as “30 sow unit” under the project.

In addition to the proposed upgradation through cross-breeding by natural service, the component of Artificial Insemination by liquid semen in areas which are feasible and accessible is also being envisaged in the project and will be carried out as per proposed plan of IPDPNE.

Besides Government Sector, steps will also be taken for productivity enhancement through Private Sector. For productivity enhancement, supports are being made from the schemes like Assam Agri-Business and Rural Transformation Project (APART), Area Development Scheme – NABARD (ADS-NABARD), National Livestock Mission (NLM), Rastriya Krishi Vikash Yojana (RKVY), State Owned Priority Development – General (SOPD-G) etc. The pig rearing families not covered under the above schemes, will be supported under Private Sector Intervention. For the purpose, 188278 pig rearing families all over the state have been identified and will be organized in groups. To cover all these groups, Farmer Producer Organization/Farmer Producer Company (FPO/FPC) have been proposed under Assam Milk, Meat and Egg Mission Society (AMMEMS) during next 5 years.

Considering the probable support to private investors in the form of incentives and subsidies under pig sector, a Five Year Action Plan have been developed to boost the pig scenario of the state.

Accordingly, support to establish pig farms of small, medium, large, state-of-the-Art pig farms, pig farms of indigenous breed, pork processing units and feed production units have been proposed for interested farmers/entrepreneurs of the state.

PROFITABILITY ANALYSIS

The progenies gaining higher body weight is the outcome of the project. The concept of the project is the enhancement of a traditional activity in quantity and quality.

The income of the pig rearing families covered under the project will be enhanced to more than double, as the breedable animals will be doubled and weight gain of the progenies will be more in shorter span of time.

A pig rearing family with a support of 1 boar and 2 sows will earn about Rs. 50000.00 per year and with a unit size of 1 boar and 4 sows (2 sows of their own) will earn more than 1 lakh per year, which will support in their livelihood sustainability with piggery intervention.

TOTAL PROJECT COST OUTLAY FOR PIG DEVELOPMENT PROJECT (ABSTRACT) OF BOTH GOVERNMENT SECTOR AND PRIVATE SECTOR:

Sl. No.	Name of the Sub-Component	Total Fund Requirement (Rs. in lakh)	Year-1 (Rs. in lakh)	Year-2 (Rs. in lakh)	Year-3 (Rs. in lakh)	Year-4 (Rs. in lakh)	Year-5 (Rs. in lakh)	Percentage of Investment
1.	Breed Improvement	500.00	272.00	199.50	9.50	9.50	9.50	
2.	Training Programme for Implementation of Pig Development Project	1415.70	283.20	283.20	283.20	283.05	283.05	
3.	Introduction of Local Service Provider (Borah Mitra) in to the Clusters	19.50	----	----	19.50	----	----	
4.	Administrative Cost including Health Coverage @ 5% of Project Cost of both Government and Private Sector	1415.00	283.00	283.00	283.00	283.00	283.00	
A.	Total under Government Sector	3350.20	838.20	765.70	595.20	575.55	575.55	12.53%
1.	Pig Development through Cluster Approach for all proposed Districts of Assam under Private Sector	19746.80	4097.8	4087.60	4011.40	3775.00	3775.00	
2.	Pig Development Activities Under Private Sector	3650.25	1348.50	769.00	546.00	509.00	477.75	
B.	Total under Private Sector	23397.05	5446.30	4856.60	4557.40	4284.00	4252.75	87.47%
Grand Total (A+B)		26747.25	6284.50	5622.30	5152.60	4859.55	4828.30	100.00%

**ACTION PLAN
FOR
PIG DEVELOPMENT ACTIVITIES
UNDER
GOVERNMENT SECTOR
(2019-2024)**



**ANIMAL HUSBANDRY AND VETERINARY DEPARTMENT
ASSAM::GUWAHATI-781003**

PIG DEVELOPMENT PROJECT FOR ASSAM (2019-2024)

INTRODUCTION

Assam has a land area of 78,438 sq. km. This is the home to a population of 31.2 million people (Human Census, 2011, Govt. of India). About 21.9 per cent of the populations live below poverty line (Human Census, 2011, Govt. of India). The economic upliftment of the people had been a major challenge and pig can play a vital role in the state. In Assam, more than 90 per cent of the populations are non-vegetarian and pig is a major source of meat, hence, there is huge importance of pig in the socio-economic life of the people of the state. Assam is surrounded by other north eastern states of India with predominantly non-vegetarian and tribal population which is the unique advantage for pig husbandry. Except religious or social restriction on pork consumption in some community, Assam and the North Eastern Region (NER) as a whole has far more acceptability of pork as compared to rest of the country. Besides high demand of pork in the state, there are market opportunities in adjoining NER states. The prospect of foreign market in the countries of the east is also promising. As such, among the livestock species, pig plays a very important role as a provider of quality protein.

As compared to the other states of India, Assam and other NER states are performing well in pig production. Pig population in the NER is above 38.42 percent of country's total and in Assam it is 15.89 percent. The share of meat production from pig is 18730 Tones as against the total meat production of 46870 Tones in Assam during 2016-17 (Integrated Sample Survey Report 2016-17).

The pig population in Assam is comprised preponderantly of non-descript local varieties and genetically graded pigs and hybrids. Local pigs are small sized with low prolificacy, but are highly adaptable to the harsh management conditions. Traditionally, these pigs in Assam are reared as scavengers under zero-input system. These animals are not profitable as commercial venture. Crossbreds and graded pigs are, therefore, slowly gaining popularity. Even entrepreneurs have started showing interest to rear pure superior exotics, although there is no provision to support their wish.

CURRENT STATUS

1. Present Positions of the Pig Farms:

Sl. No.	Name of Farm & Location	Functional/ Non-Functional	Nos. of Animal at present	Land Area (Bigha)	Animal Holding capacity
1.	Base Pig Breeding Farm, Rani, Khanapara, Ghy-22	Functional	83	15 Bigha	80
2.	Dirpai Pig Breeding Farm, Gogamukh, Dhemaji	Non-Functional	Nil	22 Bigha	120
3.	Small Pig Breeding Farm, Khanikar, Dibrugarh	Functional	37	111 Bigha	36
4.	Govt. Pig cum Poultry Farm, Diphu, Karbi-Anglong	Functional	42	122 Bigha	110
5.	Sonaigaon Pig Breeding Farm, Udalguri	Functional	23	10 Bigha	18
6.	Govt. Pig cum Poultry Farm, Sontila, Haflong, Dima Hasao	Functional	64	35 Bigha	100
7.	Pork production cum Pig Breeding Farm, Dongkamokam, Karbi-Anglong	Functional	80	25 Bigha	100
8.	Pig Sheed Farm Production Project, Chotto Lakhindong, Umrangso, Dima Hasao	Functional	24	100 Bigha	50

Sl. No.	Name of Farm & Location	Functional/ Non-Functional	Nos. of Animal at present	Land Area (Bigha)	Animal Holding capacity
9.	Pig Breeding Farm cum Demonstration Farm, Sonapur, Kamrup	Functional	39	5 Bigha	36
10.	Pig Breeding Farm, Bhatarmari, Kokrajhar	Functional	24	5 Bigha	20
11.	Govt. Pig Farm, Kathiatoli, Nagaon	Functional	36	122 Bigha	100
12.	Nucleus Base Pig Breeding Farm, Morigaon	Functional	36	34 Bigha	80
13.	Base Pig Breeding Farm, Bajalbari, Jorhat	Functional	24	3 Bigha	24
14.	Kuchdhowa Pig Breeding Farm, Goalpara	Functional	12	50 Bigha	30
15.	Kapahtoli Pig Fam, Halowating, Sivasagar	Non-Functional	Occupied by CRPF, stock shifted to Pig Farm, Khelua	5 Bigha	12
16.	Govt. Pig Farm, Gargaon, Sivasagar	Non-Functional	Damaged	13 Bigha	24
17.	Base Pig Breeding Farm, Khanapara, Guwahati-22, (Khanapara wing)	Functional	30	----	38
18.	Pig Farm, Khelua	Functional	62	7 Bigha	120
19.	Pig Farm, Deyangmukh, Dima Hasao	Functional	24	7.5 Bigha	30

2. District-wise Pig Population of Assam of last three Livestock Census

Sl. No.	District	2003	2007	2012
1	Kokrajhar	102001	93373	88409
2	Dhubri	50314	12542	4564
3	Goalpara	44754	58558	49353
4	Barpeta	35140	12256	13373
5	Morigaon	21525	29963	23287
6	Nagaon	38810	60367	44591
7	Sonitpur	86173	108754	156574
8	Lakhimpur	81214	142586	131243
9	Dhemaji	114185	177749	118913
10	Tinsukia	60539	81084	64344
11	Dibrugarh	117573	325885	116950
12	Sivasagar	62994	79714	86970
13	Jorhat	146855	90396	71943
14	Golaghat	105000	120650	86297
15	Karbi- Anglong	112426	168431	162295
16	Dima Hasao	52960	80912	34364
17	Cachar	30759	28341	28182

Sl. No.	District	2003	2007	2012
18	Karimganj	1071	4251	14624
19	Hailakandi	4454	2540	6960
20	Bongaigaon	34612	6947	10167
21	Chirang		131715	54412
22	Kamrup	93496		68473
23	Kamrup (M)		68455	22487
24	Nalbari	81014	5283	17847
25	Baksa		122954	80612
26	Darrang	55626	13985	9821
27	Udalguri		105740	68967
Total		1533495	2133431	1636022

Category-wise Pig Population of Assam in last three Livestock Census

(in thousand)

Category	2003	2007	2012
Exotic/Crossbred			
Male	234.00	287.10	334.20
Female	257.00	272.50	279.47
Total Exotic/Crossbred	491.00	559.60	613.67
Indigenous			
Male	514.00	746.16	528.91
Female	538.00	694.67	493.44
Total Indigenous	1052.00	1440.83	1022.35
Total Pigs	1543.00	2000.43	1636.02

3. Meat Production Scenario:

Category-wise Meat Production in comparison to total Meat Production Trends of Assam during 2016-17 (Integrated Sample Survey Report 2016-17)

(In Thousand Tones)

Year	Cattle	Buffalo	Goat	Sheep	Pig	Poultry	Total
2016-17	3.20	0.11	14.60	1.53	18.73	8.69	46.87

4. Projected Requirement, Availability & Shortfall of Meat during 2016-17 (Integrated Sample Survey Report 2016-17)

(In Thousand Tones)

Year	Meat (Thousand Tones)		
	Requirement	Availability	Short fall
2016-17	363.00	47.00	316.00

5. Comparative Chart for Prominent Indigenous & Exotic Pig Breeds

Sl. No.	Name of Breed	Distribution	Body Weight (kg)		Dressing %	Carcass weight (kg)	
			Male adult	Female adult		Male adult	Female adult
MAIN INDIGENOUS MEAT TYPE BREEDS OF PIGS:							
1.	Doom	Dhubri, Goalpara and Bonaigaon Districts, Assam	90.00	70.00	65.00	58.50	45.50
MAIN EXOTIC MEAT TYPE BREEDS OF PIGS:							
1	Yorkshire	US/UK	340.00	295.00	70.00	238.00	206.50
2	Hampshire	US	300.00	250.00	70.00	210.00	175.00
3	Large White	UK	340.00	270.00	69.00	234.60	186.30
4	Duroc	US	340.00	295.00	70.00	238.00	206.50
5	Large Black	UK	360.00	320.00	69.00	248.40	220.80

With increase in human population and changing trends in food habits, the demand for meat is increasing, thereby posing a great challenge to meet the requirement. The situation is worsened by continuing low productivity per animal and so poor productivity asset with the already poor farmer.

From the tables above, it is observed that there is adequate scope in increasing the body weight (and so better genetic merit) of our indigenous breeds and non-descript animals through cross breeding with the imported germplasm of high genetic merit. It is this quantum improvement which is important rather than mere increasing the population of animals of continued low quality. Only then can the problem of adequate meat would be addressed as also the need to increasing the farmer's income from holding of the pig and hence making it a more productive income generating asset. By allowing cross breeding by high genetic merit animals, the non descript population with low quality can be upgraded to a productive lot quickly.

Thus, to increase the meat production per animal, cross breeding with imported germplasm is the key which would, at the same time help in increasing the farmers' income as part of the achievement of the vision of the Hon'ble Prime Minister for doubling the farmers' income.



ACTION PLAN AS PER STATE PIG BREEDING POLICY, ASSAM 2018

1. STRATEGY FOR BREED IMPROVEMENT

Gap Analysis

The per capita consumption of meat in developed/industrialized countries is much higher compared with developing countries. Consumption of meat in the USA is 124 kg per capita per year (340 g/day). The global average meat consumption is 38 kg per year (104 g/day).

Countries whose population consumes the least amount of meat are located in Africa and Asia. The ten lowest-ranking countries in meat consumption consume 3–5 kg per capita per year. However, in case of India, it is much less in comparison to even African countries such as Ethiopia, where the average annual meat consumption per capita is estimated to be 8 kg/year as compared to India's per capita meat availability being only 4.94 kg per year. Thus it is apparent that there exists a huge gap of meat availability between India (4.94 kg per year) and the global average of 38 kg per year.

Analyzed from the point of required nutrition, as per WHO standards, the daily requirement of protein is 63 gm per day. In average Indian diet conditions, 50.75 gm per day per person (approx.) for the vegetarian population, and about 55.25 gm per day per person (approx.) for the non-vegetarian population is available. Notwithstanding this, the average deficit of protein requirement is approximately 12.25 gm for vegetarian and 7.75 gm for non-vegetarian.

Moreover, by 2050, it is expected that the population in India would increase by 34% and to fulfill the dietary recommended levels of the livestock products by Indian Council for Medical Research (ICMR) for a population of 1.7 billion people, the livestock sector should produce 186.2 million tons of milk, 18.7 million tons of meat and 306 billion eggs per annum. This means that the current level of production, the milk, meat and eggs would have to increase by 1.5, 3 and 4.7 times respectively. Fulfilling the feed demand of this huge livestock from same resource base of land and water is going to be a huge challenge. Therefore, rather than increasing the number of animals, improving the genetics through breed improvement programme might be a better strategy to address the required demand for animal protein.

This becomes a greater challenge, as there exists a low productivity index among Indian pig breeds with respect to potential growth rates and mature weight which may be considered as a gap to fulfill the meat demand as is clearly brought out in the chart above.

The objective of the "Pig Development Project for the state of Assam" is to increase the income of the Pig rearing farmer / entrepreneur/ NGO / Cooperative Society, etc so as to achieve the Honourable Prime Minister's plan for doubling the farmer's income. This is envisaged to be done by incorporation of superior germplasm of high genetic merit through import and then crossing them with the low productive indigenous breeds to eventually result in cross breeds which would perform and yield better harvest to the pig rearers.

The breeds to be imported and breeding plan will be strictly as per guidelines/ protocols of State Pig Breeding Policy, Assam 2018 and the breeds to be considered for import are Hampshire or Large Black or Large White Yorkshire.

Breeding units of pure indigenous registered breeds will be set up at the multiplier farms so that cross-bred pigs or pure indigenous breeds can be made available to farmers/ entrepreneurs/ SHGs/Co-operative societies/ Farmers Producer Organisations, etc. The non-descript breedable females available @ 5% shall be considered for breed improvement through this project. A breeding unit of Doom will be set up as Nucleus Farm in its breeding tract at Dhubri/Bongaigaon/Kokrajar for its conservation and genetic improvement.

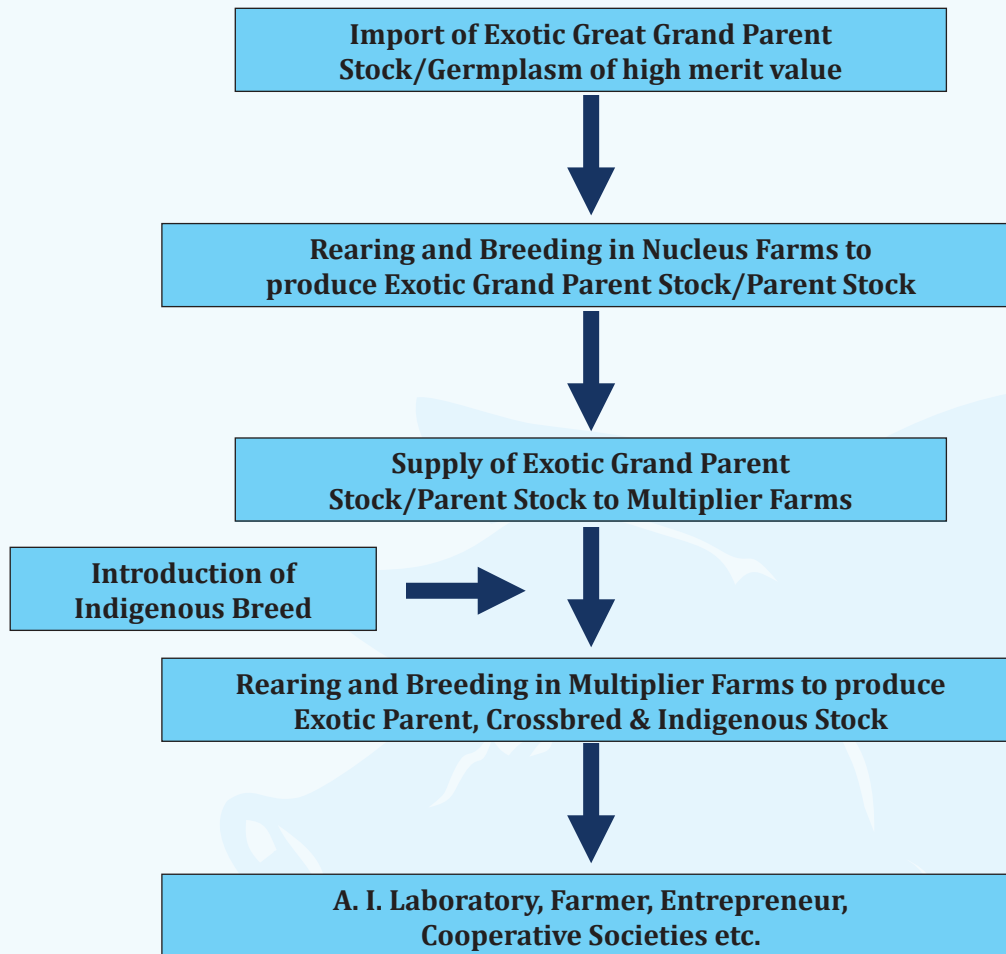
Setting up of 5 numbers of Nucleus Farms in 5 different climatic zones of the state are proposed. As a total of 109 exotic breeding pigs (27 boars and 82 sows) have been proposed under Innovative Pig Development Project for North East (IPDPNE), therefore, initially, only 3 numbers of Nucleus Farms in 3 different climatic zones of the state will be set up as "30 sow unit" under the project.



In addition to the proposed upgradation through cross-breeding by natural service, the component of Artificial Insemination by liquid semen in areas which are feasible and accessible is also being envisaged in the project and will be carried out as per proposed plan of IPDPNE.

All the imported animals in the Nucleus Farms as well as all animals in the Multiplier Farms including indigenous breeds, cross breeds, etc. to be insured and ear-tagged.

The flow chart for the above activities is as follows:



A. Strengthening of Govt. Pig Farm

At present, the A. H. & Veterinary Department, Assam have 19 Govt. Pig Farms out of which 16 farms are functioning, but with lower capacity. In order to supply quality piglets to the farmers, all the farms need to be made operational to its full capacity. At least 5 Pig Breeding Farms in 5 different agro-climatic zone of the state need to be strengthened as Nucleus Farm with pureline parent stock and all other Pig Breeding Farms need to be strengthened as Multiplication Farms. A total of 4 (four) Govt. Pig Farms will be developed as Nucleus Farm and 6 (six) Govt. Pig Farm will be developed as Multiplier Farm under the project. All other farms at farmers field will be considered as commercial piglet production and finishing units. Besides, establishment of a Pig Breeding Farm for conservation of germplasm of local pig (Doom) at Dhubri/Bongaigaon/Kokrajhar may be considered.

Following farms need to be strengthened as Nucleus Farm in different agro-climatic zones:

Sl. No.	Name of Farm & Location	Zone	Status
1.	Base Pig Breeding Farm, Guwahati, Kamrup	Lower Brahmaputra Valley	Proposed under IPDPNE with liquid semen laboratory
2.	Dirpai Pig Breeding Farm, Gogamukh, Dhemaji	North Bank Plains	To be considered in the proposed project
3.	Govt. Pig Farm, Kathiatoli, Nagaon	Central Brahmaputra Valley	Proposed under RIDF-XXIV by NLM
4.	Pig Farm, Khelua	Upper Brahmaputra Valley	To be considered in the proposed project

Following farms have been proposed by NLM, Assam to make functional to its full strength and will act as Multiplier Farms:

Sl. No.	Name of Farm & Location	District	Zone	Status
1.	Small Pig Breeding Farm, Khanikar	Dibrugarh	Upper Brahmaputra Valley	Proposed under IPDPNE and RIDF-XXIV by NLM
2.	Pig Breeding Farm cum Demonstration Farm, Sonapur	Kamrup	Lower Brahmaputra Valley	Proposed under RIDF-XXIV by NLM
3.	Base Pig Breeding Farm, Rani, Kamrup	Kamrup	Lower Brahmaputra Valley	
4.	Nucleus Base Pig Breeding Farm	Morigaon	Central Brahmaputra Valley	
5.	Base Pig Breeding Farm, Bajalbari	Jorhat	Upper Brahmaputra Valley	
6.	Pig Breeding Farm, Kuchdhowa	Goalpara	Lower Brahmaputra Valley	Proposed under IPDPNE and RIDF-XXIV by NLM

B. Construction of Nucleus Farm for Indigenous Pig at Dhubri/Bongaigaon/Kokrajar

Sl. No.	Component	Quantity (Nos.)	Rate (Rs. in lakh)	Amount (Rs. in lakh)
1.	Pig sty for 100 Nos. of Indigenous Pig (20 Boars and 80 Sows) @ 40 ft ² per pig for 100 pigs and @ Rs. 1000.00 per ft ² including electrification etc.	4000 ft ²	0.01	40.00
2.	Grower pan for 100 Nos. of Indigenous Pig (1/4 size of parent stock) @ Rs. 1000.00 per ft ² including electrification, water supply etc.	1000 ft ²	0.01	10.00
3.	Construction of Manager quarter	1 No	20.00	20.00
4.	Construction of V.F.A. quarter	1 No	15.00	15.00
5.	Construction of 3 units of labour barrack	1 No	12.00	12.00
6.	Construction of Office building with logistics	1 No	15.00	15.00
7.	Provision for water supply (Deep tube well with G.I. pipe connection to the entire farm)	L/S	L/S	10.00
8.	Construction of internal approach road, gate, culvert, drain with land development	L/S	L/S	10.00
9.	Construction of brick boundary wall	L/S	L/S	10.00

Sl. No.	Component	Quantity (Nos.)	Rate (Rs. in lakh)	Amount (Rs. in lakh)
10.	Construction of quarantine houses	1 Nos	5.00	5.00
11.	Furniture, Equipment and Utensils	L/S	L/S	4.00
12.	Procurement of Feed (To be supplied from department's head)	----	----	----
13.	Misc expenses	L/S	L/S	1.00
Total		----	----	152.00

Total Fund requirements for Nucleus Farms

Sl. No.	Component	Quantity (Nos.)	Rate (Rs. in lakh)	Amount (Rs. in lakh)
1.	Import of Boars	30	1.50	45.00
2.	Import of Sows	90	1.50	135.00
3.	Renovation of Nucleus farms	2	60.00	120.00
4.	Procuring indigenous pigs for the Multiplier farms	100	0.10	10.00
5.	Construction of Nucleus Farm for Indigenous Pig with furniture, equipments, and utensils at Dhubri/ Bongaigaon/ Kokrajhar	1	152.00	152.00
6.	Health Coverage @ 10% of animal cost	L/S	L/S	10.00
7.	Administrative cost including monitoring, insurance etc. @ 5% of total project cost (Insurance @ 5.9% of animal cost)	L/S	L/S	28.00
Total		----	----	500.00

Year wise expenditure of fund to support Nucleus Farm of both Exotic and Indigenous Pigs

Total Fund Requirement (Rs. in lakh)	Year-1 (Rs. in lakh)	Year-2 (Rs. in lakh)	Year-3 (Rs. in lakh)	Year-4 (Rs. in lakh)	Year-5 (Rs. in lakh)
	Renovation and Construction of Farms	Import of Boars & Sows and procurement of Indigenous Pigs for Nucleus Farm including health coverage	Monitoring, insurance, health coverage etc.	Monitoring, insurance, health coverage etc.	Monitoring, insurance, health coverage etc.
500.00	272.00	199.50	9.50	9.50	9.50

1. BUDGET FOR TRAINING OF BENEFICIARY (DETAILS IN CLUSTER APPROACH UNDER PRIVATE SECTOR)

Abstract showing the Cost of Training for Implementation of Pig Development Project through FPO:

Sl. No.	Proposed Activity	Total Nos. of Beneficiary	Nos. of Beneficiary per Batch of Training	No. of Batches	Cost Involvement per Batch (Rs. in lakh)	Total Cost Involvement (Rs. in lakh) (5 X 6)	Remarks
1.	Training Programme for Implementation of Pig Development Project	188750	20	9438	0.15	1415.70	



Total Project Cost Outlay (Year-wise) for 1st 5 years

Sl. No	Particulars	Total	Year-1	Year-2	Year-3	Year-4	Year-5
1.	Units (No. of Batches)	9438	1888	1888	1888	1887	1887
2.	Unit Cost (Rs. in lakh)	0.15	0.15	0.15	0.15	0.15	0.15
3.	Requirement of Fund (Rs. in lakh)	1415.70	283.20	283.20	283.20	283.05	283.05

2. BUDGET FOR INTRODUCTION OF LOCAL SERVICE PROVIDER (BORAH MITRA) IN TO THE CLUSTERS (DETAILS IN CLUSTER APPROACH UNDER PRIVATE SECTOR)**Total Cost for Introduction of Local Service Provider (Borah Mitra):**

Sl. No.	Proposed Activity	Nos. of Borah Mitra	Unit Cost (Rs.)	Total Cost (Rs.)
A.	Training of Borah Mitra			
1.	Registration including training etc.	30	1000.00	30000.00
2.	Fooding for 3 days @ Rs. 270.00 per Borah Mitra per day	30	270.00	8100.00
3.	Lodging for 3 days @ Rs. 150.00 per Borah Mitra per day	30	150.00	4500.00
4.	Resource Person for 3 days	----	L/S	10000.00
	Total	----	----	60000.00
B.	AI Kit to Borah Mitra	30	1000	30000.00
C.	Bicycle to Borah Mitra	30	5000.00	150000.00
D.	Stipend to Borah Mitra for 11 months @ Rs. 5000.00 per month	30	5000.00X11	1650000.00
E.	Miscellaneous Expenses	----	L/S	7400.00
Grand Total		----	----	1950000.00

Total Project Cost Outlay (Year-wise) for 1st 5 years

Sl. No	Particulars	Total	Year-1	Year-2	Year-3	Year-4	Year-5
1.	Units (No. of Borah Mitra)	30	----	----	30	----	----
3.	Requirement of Fund (Rs. in lakh)	19.50	----	----	19.50	----	----

Total Project Cost Outlay for Pig Development Project (Abstract) in Government Sector:

Sl. No.	Name of the Sub-Component	Total Fund Requirement (Rs. in lakh)	Year-1 (Rs. in lakh)	Year-2 (Rs. in lakh)	Year-3 (Rs. in lakh)	Year-4 (Rs. in lakh)	Year-5 (Rs. in lakh)
1.	Breed Improvement	500.00	272.00	199.50	9.50	9.50	9.50
2.	Training Programme for Implementation of Pig Development Project	1415.70	283.20	283.20	283.20	283.05	283.05
3.	Introduction of Local Service Provider (Borah Mitra) in to the Clusters	19.50	----	----	19.50	----	----
4.	Administrative Cost including Health Coverage @ 5% of Project Cost of both Government and Private Sector	1415.00	283.00	283.00	283.00	283.00	283.00
	Total	3350.20	838.20	765.70	595.20	575.55	575.55



**ACTION PLAN
FOR
PIG DEVELOPMENT ACTIVITIES
UNDER
PRIVATE SECTOR
(2019-2024)**



**ANIMAL HUSBANDRY AND VETERINARY DEPARTMENT
ASSAM::GUWAHATI-781003**

1. STRATEGY FOR PIG DEVELOPMENT THROUGH CLUSTER APPROACH

The goal of the project will be as follows:

- End poverty by supporting income generation through piggery development.
- End hunger, achieve food security, improved nutrition through sustainable and scientific operations and conservation of local breeds.
- Ensure health through animal protein supplements for all.
- Achieve gender equality and empower all women and girls.
- Ensure sustainable management of water through good management practices.
- Promote sustainable economic growth
- Build resilient infrastructure
- Ensure sustainable consumption and production pattern by maintaining food safety norms

The main objectives of the project will be as follows:

- Strengthening of Govt. pig Farms for demonstration of good pig husbandry practices and production of quality piglets for rearing at farmers field.
- To support the economically weaker section including women as a source of additional income by forming PRG and FPO, and thereby improving their livelihood condition.
- To upgrade the indigenous stock of pigs by introducing exotic germplasm.
- To promote best practices of feeding, health care and housing.
- To establish linkage with market for better price realization.
- To improve capacity building among the members to interact with the development agencies.
- Expanding pig rearing among rural women with semi-intensive system.
- Scaling up production by minimizing preventable diseases, parasitic infestation etc.
- Promoting quality management of livestock.

Project Approach

According to data available, approximately 3,16,000 Tones of meat fell short during 2016-17 against requirement of 3,63,000 Tones. This is in contrast a marked deficit of the average standard requirement of a person per annum as determined by the Indian Council of Medical Research (ICMR) of 10.76 kg of meat with current consumption in the state being 6.5 kg. Statistics available from the department reveals that in the year 2016-17 instead of 3,63,000 tones of meat only 47,000 Tones were available.

At present, the Govt. of Assam (GOA) has paid maximum attention to bring the rural people above poverty line through introduction of different schemes based on livestock production for self-employment generation, primarily associated with women empowerment on social and economic fronts and other strata of population in the society not included under Below Poverty Line (BPL) category but of similar low-income group segment within the civil society.

Support to Farmers for Pig Rearing:

A comprehensive pig development project is needed to minimize the gap between availability and shortfall of meat in the state. Besides, the project to be undertaken must be sustainable. All the project beneficiaries must be covered within a formal type of organization like FPO for their sustainability. The total No. of beneficiaries to be covered under this project will depend on the following aspects:

- a. Availability and shortfall of pork in the state in comparison to other meat variety
- b. Different schemes in operation for pork production.



It is obvious from the study of requirement, availability and shortfall of meat during 2016-17 that, meat production need to be enhanced by about 6.72 times to attain the requirement of total meat production. In comparison to total meat production and meat production from different categories of animals in the state, the pork production has to be enhanced to 1,26,000 Tones considering 6.72 times enhancement. Considering each slaughtered pig have a dress weight of 40 kg (with live weight of 70 kg), we will require 3150000 pigs to achieve the targeted pork production of 1,26,000 Tones.

Analysis of Present Production Scenario of Pig Production at Farmers Field:

1.	Total Pig Population of the State	1636000 Nos.
2.	Total Female	772910 Nos.
3.	Total Female used for Breeding (Say 10%) considering remaining are piglets or non-producing females	77291 Nos.
4.	Present piglet production with existing female breeding stock per year i.e., 16 piglets per year per sow (considering 10 piglets per farrowing, 2 farrowing per year and 20% mortality)	1236656 Nos.
5.	Piglets used for breeding (50%)	618328 Nos.
6.	Piglets used for fattening (50%)	618328 Nos.
7.	Pork production with existing stock (considering each fattener producing 30 kg of pork in average)	18549840 kg

Analysis of Requirement of Piggery Unit at Farmers Field:

1.	Total requirement of meat for the state (kg)	363000000
2.	Availability of Meat (kg)	47000000
3.	Shortfall of meat (kg)	316000000
4.	Enhancement Index (Shortfall/Availability) (times)	6.72
5.	Availability of Pork (kg)	18730000
6.	Enhanced quantity of pork needed (considering 6.72 enhancement index) (kg)	126000000
7.	Pork production per fattener (with live weight of 70 kg at 7 month of age) (kg)	40
8.	Total fattener needed to achieve targetted pork production (Nos.)	3150000
9.	Total breeding stock needed to produce targetted fattener (considering 8 piglets per farrowing, 16 piglets per year, 50% fattener and 50% breeding stock) (Nos.)	393750
10.	Farmers' units needed @ 1 boar:2 sows (the farmer must have 2 sows of their own) (Nos.)	196875

a. Different Projects/Schemes in Operation under A. H. & Veterinary Department, Assam:

A. Assam Agri-Business and Rural Transformation Project (APART):

The project will be implemented over seven years in the identified districts. The Pork Value Chain (PVC) will cover production, aggregation, processing and marketing. The project will be implemented through cluster approach. A total of 224 Pig Bandhu will be engaged in the selected cluster as service provider. A total of 16 districts were selected, namely: Nagaon, Sonitpur, Barpeta, Karbi Anglong, Kamrup, Dhubri, Golaghat, Kokrajhar, Lakhimpur, Darrang, Cachar, Sivasagar, Jorhat, Goalpara, Morigaon and Nalbari. Out of the above 16 districts, the piggery development scheme called PVC will be implemented in 13 districts, namely: Sonitpur, Barpeta, Karbi Anglong, Kamrup, Golaghat, Kokrajhar, Lakhimpur, Darrang, Sivasagar, Jorhat, Goalpara, Morigaon and Nalbari. The PVC under APART at a glance:



1.	Total project district under APART	16
2.	Total districts to be covered under PVC	13
3.	Total Clusters for PVC (Each cluster will have 1000 pig rearing families consisting of 100 FIG of 10 members each)	56
4.	Total Pig Rearing families to be covered (Nos.)	59390
5.	Total Pig Bandhu to be engaged (Nos.)	224
6.	Total fatteners to be produced per cluster (Nos.)	500
7.	Total fatteners to be produced (Nos.)	28000
8.	Total live weight of fatteners (considering 70 kg live weight at 7 months)	1960000
9.	Total pork produced per year (considering 40 kg dressed weight) (kg)	1120000
10.	Project period (years)	7

B. Area Development Scheme (ADS) of NABARD, 2019-24:

NABARD has formulated an Area Development Scheme (ADS) on Pig Farming for 23 districts of the state for enhancing the rural livelihood and as a good solution to the unemployment/underemployment problems among the rural youth. The ADS of NABARD at a glance:

1.	Total project district (Nos.)	23
2.	Total Physical Units (Nos.)	27440
3.	Unit Size (Boar:Sow) (Nos.)	1:3
4.	Total sows in the project area (27440X3) (Nos.)	82320
5.	Total fatteners to be produced (considering 8 piglets per farrowing, 16 piglets per year, 50% fattener and 50% breeding stock) (Nos.)	658560
6.	Total Pork production (considering 40 kg dressed weight) (kg)	26342400

C. National Livestock Mission (NLM):

NLM has proposed a pig development scheme to support pig rearers of the state. A total of 200 units will be taken during 2018-19. Under the scheme, each 200 farmers will be supported with 1 boar and 3 sows. The NLM Scheme at a glance:

1.	Total Physical Units (Nos.)	200
2.	Unit Size (Boar:Sow) (Nos.)	1:3
3.	Total sows in the project area (200X3) (Nos.)	600
4.	Total fatteners to be produced (considering 8 piglets per farrowing, 16 piglets per year, 50% fattener and 50% breeding stock) (Nos.)	4800
5.	Total Pork production (considering 40 kg dressed weight) (kg)	192000

D. Rashtriya Krishi Vikas Yojana (RKVY):

A Pig Development Project through Farmer Producer Organization (FPO) has been proposed under RKVY 2018-19. The project will be implemented by constituting Pig Rearer's Group (PRG). A total of 800 beneficiaries will be covered under the project. The scheme will be implemented in two blocks of projected districts of the state. The RKVY Scheme at a glance:

1.	Total Physical Units (Nos.)	800
2.	Total FPO (Nos.)	2
3.	Total beneficiary farmer per FPO (Nos.)	400



4.	Total PRG per FPO (PRG of 10 members each) (Nos.)	40
5.	Unit Size (Boar:Sow) (Nos.)	1:2
6.	Total sows in the project area (800X2) (Nos.)	1600
7.	Total fatteners to be produced (considering 8 piglets per farrowing, 16 piglets per year, 50% fattener and 50% breeding stock) (Nos.)	12800
8.	Total Pork production (considering 40 kg dressed weight) (kg)	512000

E. State Plan

A Pig Development Project through Piggery Co-operative Society (PCS) has been proposed under State Plan 2018-19. The project will be implemented by constituting Pig Rearer's Group (PRG). A total of 60 beneficiaries will be covered under the project. The scheme will be implemented in one block of projected district of the state. The State Plan Scheme at a glance:

1.	Total Physical Units (Nos.)	60
2.	Total PCS (Nos.)	1
3.	Total beneficiary farmer per PCS (Nos.)	60
4.	Total PRG per PCS (PRG of 10 members each) (Nos.)	6
5.	Unit Size (Boar:Sow) (Nos.)	1:2
6.	Total sows in the project area (60X2) (Nos.)	120
7.	Total fatteners to be produced (considering 8 piglets per farrowing, 16 piglets per year, 50% fattener and 50% breeding stock) (Nos.)	960
8.	Total Pork production (considering 40 kg dressed weight) (kg)	38400

F. Unified Pig Production Development Project (UPPDeP) – The Nazira Pilot Model:

The Nazira Pilot Model is a sequential production arrangement system of 26 UPPDeP clusters to ensure 36-40 finisher pigs per day, 5 days a week, all round the year from the 26th week of starting operations. It will benefit 1300 households, producing 9-10% of the daily demand of the upcoming Pork Processing Plant, continuously round the year. It will cover 260 Breeding Units (BU) at 1:4 (Male:Female) ratio and 1040 Fattening Units (FU) of 5 pigs each. The total cost of the Nazira Pilot Model is Rs. 29.60 Crore with Govt. support sharing sough is Rs. 11.04 Crore.

The UPPDeP Master Project is the multiplying project of the Nazira Pilot Project. Hence, the total project cost for the UPPDeP Master Project will be 355.15 Crore and Govt. support sharing sough will be Rs. 132.42 Crore (i.e., 12 times of the Nazira Pilot Project). It is a sequential production arrangement system of 312 UPPDeP clusters to ensure 400+ finisher pigs per day, 5 days a week, all round the year from the 26th week of starting operations. It will benefit 15600 households, producing 100% of the daily demand of the upcoming Pork Processing Plant, continuously round the year. It will cover 3120 Breeding Units (BU) at 1:4 (Male:Female) ratio and 12480 Fattening Units (FU) of 5 pigs each.

On the other hand, the PVC project under APART will be implemented through cluster approach in 13 districts of the state, namely, Sonitpur, Barpeta, Karbi Anglong, Kamrup, Golaghat, Kokrajhar, Lakhimpur, Darrang, Sivasagar, Jorhat, Goalpara, Morigaon and Nalbari. The following are the details of pig rearing families to be covered in each block of the districts under PVC project of APART:



District	Community Development Block	Cluster (Min 100 Families)	Approx Pig Rearing Families
Golaghat	Dergaon	Dergaon	260
	Gomariguri	Gomariguri	150
Golaghat	Bokakhat	Bokakhat	120
	Sarupather	Sarupather	265
	Bokakhat	Bokakhat	294
	Marangi	Marangi	260
Jorhat	Ujani Majuli	Ujani Majuli	5750
	Dekorgarha	Dekorgarha	320
	Majuli	Majuli	4128
Sivasagar	Khelua (Lakowah)	Khelua (Lakowah)	5793
	Gaurisagar	Gaurisagar	693
	Demow	Demow	1940
	Disangpani (Sonari)	Disangpani (Sonari)	4533
	Sapekhati	Sapekhati	1182
	Nazira	Nazira	1771
Barpeta	Bajali	Bajali	1195
Lakhimpur	Narayanpur	Narayanpur	850
	Ghilamora	Ghilamora	230
	N Lakhimpur	N Lakhimpur	377
	Boginodi	Boginodi	247
Morigaon	Bhurbandha	Bhurbandha	480
	Kapili	Kapili	243
Darrang	Kalaigaon	Kalaigaon	341
	Pachim Mangaldoi	Pachim Mangaldoi	562
	Sipajhar	Sipajhar	453
Sonitpur	Borsala	Borsala	152
	Dhekiajuli	Dhekiajuli	537
	Rangapara	Rangapara	61
			72
	Balipara	Balipara	818
	NA Duar	NA Duar	823
	Sakomatha	Sakomatha	823
	Baghmara	Baghmara	490
	Bihali	Bihali	512
Chayduar	Chayduar	670	



District	Community Development Block	Cluster (Min 100 Families)	Approx Pig Rearing Families
Goalpara	Rongjuli	Rongjuli	1418
	Kuchdhuwa	Kuchdhuwa	462
	Balijana	Balijana	1385
	Lakhipur	Lakhipur	1091
Nalbari	Borigog & Bongaon	Borigog & Bongaon	364
Karbi Anglong	Bokajan	Bokajan	236
	Lumbajong	Lumbajong	2372
	Howraghat	Howraghat	3066
	Rongkhang	Boithalanso	585
	Amri	Ulukunchi	461
	Silonijan	Silonijan	949
	Socheng	Kheroni	624
Kokrajhar	Kokrajhar	Kokrajhar	362
	Dotoma	Dotoma	1163
	Gossaigaon	Gossaigaon	989
	Debitola	Debitola	232
Kamrup	Rani	Rani	1470
	Boko	Boko	550
	Bangaon	Bangaon	370
	Rangia	Rangia	415
	Dimoria	Dimoria	2771
	Chaygaon	Chaygaon	660
Total	56	56	59390

It is obvious from the above table that, a total of 1771 pig rearing families of Nazira alone will get support under PVC of APART which is well above the UPPDeP target of 1300 pig rearing families for Nazira. The support to be provided to the pig rearing families of Sivasagar district will be 15912 which is again above the UPPDeP Master Project target of 15600 pig rearing families. Further, a total of 27459 pig rearing families will be supported in three upper Assam districts of Sivasagar, Golaghat and Jorhat under PVC of APART.

In addition to this, a total of 750 Pig Rearing Group (PRG) comprising of 7500 pig rearing families has been proposed for Sivasagar district in this project proposal. Thus, the target production of 400+ fatteners per year for the UPPDeP Master Project will be fulfilled if all the projects are implemented as proposed.

Abstract of Schemes Implemented under different Institute/Agency:

Sl. No.	District	Zone	APART (Production Cluster*)	ADS-NABARD, Assam	NLM	RKVY	State Plan	
1.	Kokrajhar	Lower Brahmaputra Valley	4	180	200	800	60	
2.	Dhubri							250
3.	Goalpara		4	500				
4.	Barpeta		1					
5.	Kamrup (M)		1					
6.	Kamrup		5	350				
7.	Bongaigaon			435				
8.	Chirang							
9.	Nalbari		1					
10.	Baksa			105				
11.	South Salmara, Mankachar							
12.	Morigaon	Central Brahmaputra Valley	2	500				
13.	Nagaon			100				
14.	Hojai			100				
15.	Sonitpur	North Bank Plains	9	1187				
16.	Lakhimpur		4	1260				
17.	Dhemaji			1750				
18.	Darrang		3					
19.	Udalguri			250				
20.	Biswanath			811				
21.	Tinsukia		Upper Brahmaputra Valley					
22.	Dibrugarh							264
23.	Sivasagar			6				150
24.	Charaideo			150				
25.	Jorhat	3		7065				
26.	Golaghat	6		358				
27.	Majuli			975				
28.	Cachar	Barak Valley						
29.	Karimganj							
30.	Hailakandi							
31.	Karbi-Anglong	Hill Region	4	5400				
32.	West Karbi Anglong		3	2000				
33.	Dima-Hasao			3300				
	Total Beneficiaries		59390	27440	200	800	60	

* 1 Production Cluster consist of approximately 1000 beneficiaries



Abstract of total Pork Production from different Schemes during 2019-20 along with strategic approach

Sl. No.	Name of the Scheme	Units (No.)	Unit Size (M:F)	Total Pork Production (kg)	Enhanced quantity of pork needed (kg)	Pork to be produced kg	Units Required at 1:2 (M:F)
1.	APART	59390	----	1120000			
2.	ADS-NABARD, Assam	27440	1:3	26342400			
3.	NLM	200	1:3	192000			
4.	RKVY	800	1:2	512000			
5.	State Plan	60	1:2	38400			
	Total	----	----	28204800	126000000	97795200	152805

Analysis of Requirement of Piggery Unit at Farmers Field:

1	Enhanced quantity of pork needed (considering 6.72 enhancement index) (kg)	126000000
2	Total Pork Production from different Schemes (kg)	28204800
3	Pork to be produced (1-2) (kg)	97795200
4	Pork production per fattener (with live weight of 70 kg at 7 month of age) (kg)	40
5	Total fattener needed to achieve targetted pork production (Nos.)	2444880
6	Total breeding stock needed to produce targetted fattener (considering 8 piglets per farrowing, 16 piglets per year, 50% fattener and 50% breeding stock) (Nos.)	305610
7	Farmers' units needed @ 1 boar:2 sows (the farmer must have 2 sows of their own) (Nos.)	152805

Analysis of Requirement of Piggery Unit at Farmers Field (As per information submitted by the District A. H. & Veterinary Officers for Sectoral Mapping) along with Expected Production of Piglets and Pork:

Districts A. H. & Veterinary Officers have submitted information on number of pig rearing families both village-wise and block-wise in their respective districts. The information received were analyzed and an action plan has been prepared to attain the targetted pork production, the abstract of which is as under.

Action Plan to attain Targetted Pork Production:

- Name of the Scheme: Pig Development Project through Farmer Producer Organization (FPO)
- Mode of Implementation: Through Pig Rearer's Group (PRG)
- Funding Pattern: 50:50
- Project Area: All districts of Assam excluding districts under sixth schedule and BTAD
- Cost of Model Scheme of Piggery: Rs.200000.00 (Rs. 20000.00 for each Beneficiary – Rs. 10000.00 Department's Share and Rs. 10000.00 Beneficiary's Share)
- Financial involvement against each PRG (Department's Share): Rs. 100000.00
- Financial involvement against each PRG (Beneficiary's Share): Rs. 100000.00
- Unit type: Cluster Unit - 10 beneficiaries (mainly women) – 1 boar and 2 sows per PRG member. Each PRG member must have at least 2 sows of their own.
- No. of PRG: 18875 (3775 Nos. for each year under 5 year action plan)
- No. of Beneficiaries: 188750 (18875 X 10)
- Proposed Model: All pig rearing families of each Village as per information submitted by the Districts A.



H. & Veterinary Officers will be covered. Every 10 families will be covered in a formal group called Pig Rearers' Group (PRG). All 18875 PRG will be covered during first 5 years of project period covering 3775 Nos. of PRG in each year. Beneficiaries will be covered in 30 Nos. of FPO with at least 1000 beneficiaries each. Each project district will have at least 1 FPO which will be increased to cover each targeted block depending on the success of the FPOs of first phase.

- Duration of the Project: Continuous
- Cost Sharing Agency: Govt. of Assam
- Project Implementing Agency: A. H. & Veterinary Department, Assam

On analysis of information received from Districts A. H. & Veterinary Officers, it is observed that, a total of 188750 Nos. (18875 PRG) of pig rearing families are to be covered against targeted pig rearing families of 153000 (15300 PRG). The targeted pork production to be achieved is calculated as 97795200 against which the expected pork production will be 108720000 kg at the end of 5th year of project period. The timeline to attain targeted pork production through PRG will be as follows:

Timeline to attain Targeted Pork Production through PRG of 10 members each

Sl No	Name of District	For the Proposed Project	Proposed under APART	Proposed under ADS-NABARD	Proposed under RKVY	Proposed under State Plan (SOPD-G)	Proposed under NLM	Proposed under any other Scheme like TSP, SCCP etc.	Target of Pig Rearer's Group (PRG) for 5 Years	Target for each Year (PRG)	Expected Piglet Production (No.)					Expected Pork Production (kg)				
											Year-1	Year-2	Year-3	Year-4	Year-5	Year-1	Year-2	Year-3	Year-4	Year-5
1	Biswanath	4751	2740	811	0	0	0	0	475	95	15200	45600	76000	106400	136800	0	912000	1520000	2128000	2736000
2	Golaghat	8000	1350	358	0	0	0	0	800	160	25600	76800	128000	179200	230400	0	1536000	2560000	3584000	4608000
3	Goalpara	8730	3090	500	0	0	0	0	875	175	28000	84000	140000	196000	252000	0	1680000	2800000	3920000	5040000
4	Jorhat	10950	750	7065	0	0	0	0	1095	219	35040	105120	175200	245280	315360	0	2102400	3504000	4905600	6307200
5	Tinsukia	7937	0	0	0	0	0	0	795	159	25440	76320	127200	178080	228960	0	1526400	2544000	3561600	4579200
6	Cachar	6024	0	0	0	0	0	0	610	122	19520	58560	97600	136640	175680	0	1171200	1952000	2732800	3513600
7	Nagaon	5222	0	100	0	0	0	0	520	104	16640	49920	83200	116480	149760	0	998400	1664000	2329600	2995200
8	Morigaon	5951	770	500	0	0	0	0	595	119	19040	57120	95200	133280	171360	0	1142400	1904000	2665600	3427200
9	Dibrugarh	7700	0	264	0	0	0	0	770	154	24640	73920	123200	172480	221760	0	1478400	2464000	3449600	4435200
10	Nalbari	3405	420	0	0	60	0	20	345	69	11040	33120	55200	77280	99360	0	662400	1104000	1545600	1987200
11	Bongaigaon	4252	0	435	0	0	0	0	425	85	13600	40800	68000	95200	122400	0	816000	1360000	1904000	2448000
12	Charaideo	12708	1600	150	0	0	0	0	1275	255	40800	122400	204000	285600	367200	0	2448000	4080000	5712000	7344000
13	Barpeta	1851	350	0	0	0	0	0	185	37	5920	17760	29600	41440	53280	0	355200	592000	828800	1065600
14	Darrang	5700	970	0	0	0	0	0	575	115	18400	55200	92000	128800	165600	0	1104000	1840000	2576000	3312000
15	Kamrup (M)	494	2190	0	0	0	0	20	50	10	1600	4800	8000	11200	14400	0	96000	160000	224000	288000
16	Kamrup	13256	3350	350	0	0	0	0	1330	266	42560	127680	212800	297920	383040	0	2553600	4256000	5958400	7660800
17	Dhemajai	16320	0	1750	0	0	0	0	1640	328	52480	157440	262400	367360	472320	0	3148800	5248000	7347200	9446400
18	Hojai	1075	0	100	0	0	0	0	110	22	3520	10560	17600	24640	31680	0	211200	352000	492800	633600
19	Lakhimpur	32951	1610	1260	0	0	0	0	3295	659	105440	316320	527200	738080	948960	0	6326400	10544000	14761600	18979200
20	Sivasagar	24021	4590	150	0	0	0	0	2405	481	76960	230880	384800	538720	692640	0	4617600	7696000	10774400	13852800
21	Sonitpur	5530	1360	1187	0	0	0	0	560	112	17920	53760	89600	125440	161280	0	1075200	1792000	2508800	3225600
22	Majuli	1050	6650	975	0	0	0	0	105	21	3360	10080	16800	23520	30240	0	201600	336000	470400	604800
23	Dhubri	400	0	250	0	0	0	0	40	8	1280	3840	6400	8960	11520	0	76800	128000	179200	230400
State Total		188278	31790	16205	0	60	0	40	18875	3775	604000	1812000	3020000	4228000	5436000	0	36240000	60400000	84560000	108720000



Indicators

1.	Pig Rearing Family	Approximate number of Pig Rearing Family in the Development Block
2.	Pig Rearer's Group (PRG)	Each PRG consisted of 10 numbers of Pig Rearing Family
3.	Target for Each Year (PRG)	Total number of Pig Rearing Family in the Development Block ÷ 5 (Considering as 5 Year Action Plan)
4.	Yearly Coverage	100% coverage in 5th year
5.	Pig population for the proposed project	Each member of the PRG will be provided with 2 sows and thereby total sows for each PRG will be 20 numbers
6.	Cummulative Pig Population	Each year's target pig population will be added with next year's pig population and 100% pig population will be achieved in 5th year. Replacement of parent stock after every 3 year will be the responsibility of the project covered pig rearer.
7.	Piglet production	10 piglets per sow per farrowing and 2 farrowing per sow per year and thereby 20 piglets per sow per year. Considering 20% mortality, there will be 16 piglets per sow per year. Out of the 16 sows, 8 will be male and 8 will be female. The male piglets will be used as fattener. The female piglets will be sold for breeding purpose.
8.	Marketable age of fattener	Each fattener will attain about 70 kg of body weight at 7 months of age. Pork per fattener will be about 40 kg.

Benefits or Anticipated Outcomes

A total of 188750 pig farmers organized in 18875 PRG and 30 FPO will be benefited from the project. The main objective of the project is to attain targeted pork production of 126000000 kg which will be achieved at the end of 5th year. Besides, each PRG will be linked with the FPO formed under the project. The FPO will look into the services like arrangement of input supply, financial and technical support, marketing linkage, training and networking etc.

Feed and Fodder

There is a big gap between the requirement and availability of feed and feed crops in Assam, particularly when it comes to pig. Maize is an important feed ingredient of pig feed. As maize cultivation is not very popular in Assam, its market price is high and availability is low. This result in higher cost of quality pig feeds affecting profitability and price of pork. It is imperative to locally produce or arrange supply of sufficient good quality feed and feed crops for efficient utilization of genetic potential of pig and for sustainable improvement in productivity.

In order to make the quality feed and feed ingredients available, necessary steps will be taken for cultivation of maize and other feed crops in farmers' field under different ongoing fodder schemes of the department. Besides, convergence with the State Agriculture Department will also be made for sufficient production of maize and other feed crops.

Feed for proposed Nucleus and Multiplier Farms will be arranged from the departmental budget provision as and when required. Necessary fund provision for the purpose will be created in due course of time.

Pig Health Coverage

The beneficiaries covered under the project will get health coverage for their pigs. The fund for the health coverage is included in the Administrative cost @ 5% of total project cost under cluster approach. Health coverage under strategy for breed improvement is created separately for the sub-component. Under health coverage of pigs, vaccines like Classical Swine Fever and FMD, and medicines like deworming and iron supplement are essential.

Pork Value Chain (PVC) and issue of Food Safety

Pork Value Chain (PVC) is the responsibility of the FPOs and necessary arrangement will be made through forward linkage with financial institutions. Food safety measures in regards to quality pig products like pork will be ensured through FPO.

Strengthening of Manpower

All the farms proposed as Nucleus and Multiplier Farm except Pig Breeding farm, Khelua, Sivasagar and Base Pig Breeding Farm, Khanapara, Guwahati-22, Kamrup have sanctioned post of different category. Sufficient labour on contract basis commensurate with requirement may be arranged for smooth functioning of the farms. Besides, manpower for the Pig Breeding farm, Khelua, Sivasagar and Base Pig Breeding Farm, Khanapara, Guwahati-22, Kamrup may be arranged to make the farms functional.

Introduction of Local Service Provider in to the Clusters (Borah Mitra)

Provision is created for introduction of local service provider called “Borah Mitra” in to all the clusters. In the first phase, a total of 30 (thirty) Borah Mitra will be developed. The Borah Mitra will be provided with training at NRC on Pig Rani, Kamrup on artificial insemination, breeding, feeding, health management etc.. The duration of training will be 3 days. The primary work of Gopal Mitra will be to provide Artificial Insemination (AI) service with liquid semen and oral anthelmintic at the farmers’ doorstep.

BUDGET

a) Budget for Support to Pig Farmers

Cost Outlay (Per Unit Basis for single beneficiary member of PRG)

Items of investment	Particulars	Total Cost (Rs)
Animal Cost	Improved Male piglet- 1 No. @ Rs. 3000 per Piglet (2-3 months or above)	3000
	Local Female Piglets – 2 Nos. @ Rs. 2500 per Piglet (2-3 months or above)	5000
Transportation Cost	Male	100
	Female	200
Feed Cost of Boar	First 90 days as single installment (waste and feed for remaining period to be borne by the beneficiary)	1688
Feed Cost of Weaners	16 piglets for 15 days (To be provided by the beneficiary)	----
Feed Cost of Sows	2 sows - First 90 days as single installment (waste and feed for remaining period to be borne by the beneficiary)	4050
Cost of Sty Construction	160 sqft @ 64 sqft per boar and 48 sqft per sow. Sty is to be constructed by individual beneficiary at their own premises. Traditional Pig Sty with bamboo side wall and thatch roofing.	4000
Insurance	@ 5.90% including GST	472
Utensils etc.	L/S	500
Medicine	L/S	500
Miscellaneous expenditure	L/S	490
Total		20000



Cost Outlay (Per Unit Basis for 10 beneficiary members of PRG)

Items of investment	Particulars	Units (No.)	Unit Cost (Rs)	Total Cost (Rs)	Govt. Share (Rs)	Beneficiary Share(Rs)
Animal Cost	Improved Male piglet- 10 Nos.	10	3000	30000	100000	100000
	Local Female Piglets – 20 Nos.		5000	50000		
Transportation cost	10 Nos. of Boar		100	1000		
	20 Nos. of Sows		200	2000		
Feed Cost of Boar	10 boars - First 90 days		1688	16880		
Feed Cost of Weaners	(16 piglets for 15 days) X 10 beneficiaries (To be provided by the beneficiary)		----	----		
Feed Cost of Sows	20 sows - First 90 days		4050	40500		
Cost of Sty Construction	160 sqft per beneficiary for 10 beneficiaries		4000	40000		
Insurance	For parent stock of 10 beneficiaries		472	4720		
Utensils etc.	For 10 beneficiaries		500	5000		
Medicine	For 10 beneficiaries		500	5000		
Miscellaneous expenditure	For 10 beneficiaries		490	4900		
Total		10	20000	200000	100000	100000

Total Project Cost Outlay with Fund Sharing

Sl. No.	Name of the Sub-Component	Units of PRG (No.)	Unit Cost (Rs. in Lakh)	Govt. share (50%) (Rs. in Lakh)	Beneficiary Share (50%) (Rs. in Lakh)	Total Govt. share (Rs. in Lakh)	Remarks
1.	Pig Development Project	18875	2.00	1.00	1.00	18875.00	Total Project Cost for 18875 PRG
Total		18875	----	1.00	----	18875.00	

Total Project Cost Outlay (Year-wise) for 1st 5 years

Sl. No	Particulars	Total	Year-1	Year-2	Year-3	Year-4	Year-5
1.	Units (No. of PRG)	18875	3775	3775	3775	3775	3775
2.	Requirement of Fund (Rs. in lakh)	18875.00	3775.00	3775.00	3775.00	3775.00	3775.00

b) Budget for Formation of FPO

Total Project Cost Outlay

Component	Total FPO	Unit	Unit Cost (Rs. in lakh)	Total Cost (Rs. in lakh)	Remarks
Formation of FPO	30	6 (5 FPO per Unit)	145.30	871.80	
Total	30	6	145.30	871.80	



Total Project Cost Outlay (Year-wise) for 1st 5 years

SL No	Particulars	Total	Year-1	Year-2	Year-3	Remarks
1.	Units (5 Nos. of FPO per Unit)	6	6	6	6	Works will be started in all the FPO in phase manner
2.	Requirement of Fund (Rs. in lakh)	871.80	322.80	312.60	236.40	

c) Budget for Training of Beneficiary (To be Implemented under Government Sector)
Abstract showing the Cost of Training for Implementation Pig Development Project through FPO:

Sl. No.	Proposed Activity	Total Nos. of Beneficiary	Nos. of Beneficiary per Batch of Training	No. of Batches	Cost Involvement per Batch (Rs. in lakh)	Total Cost Involvement (Rs. in lakh) (5 X 6)	Remarks
1.	Training Programme for Implementation of Pig Development Project	188750	20	9438	0.15	1415.70	

Total Project Cost Outlay (Year-wise) for 1st 5 years

Sl. No	Particulars	Total	Year-1	Year-2	Year-3	Year-4	Year-5
1.	Units (No. of Batches)	9438	1888	1888	1888	1887	1887
2.	Unit Cost (Rs. in lakh)	0.15	0.15	0.15	0.15	0.15	0.15
3.	Requirement of Fund (Rs. in lakh)	1415.70	283.20	283.20	283.20	283.05	283.05

d) Budget for Introduction of Local Service Provider (Borah Mitra) in to the Clusters (To be Implemented under Government Sector)
Total Cost for Introduction of Local Service Provider (Borah Mitra):

Sl. No.	Proposed Activity	Nos. of Borah Mitra	Unit Cost (Rs.)	Total Cost (Rs.)
A.	Training of Borah Mitra			
1.	Registration including training etc.	30	1000.00	30000.00
2.	Fooding for 3 days @ Rs. 270.00 per Borah Mitra per day	30	270.00	8100.00
3.	Lodging for 3 days @ Rs. 150.00 per Borah Mitra per day	30	150.00	4500.00
4.	Resource Person for 3 days	----	L/S	10000.00
	Total	----	----	60000.00
B.	AI Kit to Borah Mitra	30	1000	30000.00
C.	Bicycle to Borah Mitra	30	5000.00	150000.00
D.	Stipend to Borah Mitra for 11 months @ Rs. 5000.00 per month	30	5000.00X11	1650000.00
E.	Miscellaneous Expenses	----	L/S	7400.00
	Grand Total	----	----	1950000.00

Total Project Cost Outlay (Year-wise) for 1st 5 years

Sl. No	Particulars	Total	Year-1	Year-2	Year-3	Year-4	Year-5
1.	Units (No. of Borah Mitra)	30	----	----	30	----	----
2.	Requirement of Fund (Rs. in lakh)	19.50	----	----	19.50	----	----



Total Project Cost Outlay for Pig Development through Cluster Approach for all proposed Districts of Assam (Abstract):

Sl. No.	Name of the Sub-Component	Units	Unit Cost (Rs. in lakh)	Govt. Share (Rs. in lakh)	Total Project Cost (Govt. Share) (Rs. in lakh)	Year-1 (Rs. in lakh)	Year-2 (Rs. in lakh)	Year-3 (Rs. in lakh)	Year-4 (Rs. in lakh)	Year-5 (Rs. in lakh)	Remarks
I.	Pig Development Project	18875 PRG (18875 X 10 = 188750 Beneficiaries)	2.00	1.00	18875.00	3775.00	3775.00	3775.00	3775.00	3775.00	Unit cost and Govt. share per PRG of 10 members each.
II.	Farmer Producer Organization (FPO) for Piggery Development in Assam	6 (5 FPO per Unit 6)	145.30	145.30	871.80	322.80	312.60	236.40	----	----	Unit cost for 5 FPO per Unit. Formation of 30 FPO (6 Units X 5) will be started in the 1 st year and will continue for 3 years)
III.	Training Programme for Implementation of Pig Development Project	9438 Batches of 20 Beneficiaries per Batch	----	----	----	----	----	----	----	----	These three components will be implemented under Government Sector.
IV.	Introduction of Local Service Provider (Borah Mitra) in to the Clusters	30	----	----	----	----	----	----	----	----	
V.	Administrative Cost including Health Coverage @ 5% of Project Cost of Sl. No. 1	L/S	----	----	----	----	----	----	----	----	
	Total	----	----	----	19746.80	4097.8	4087.60	4011.40	3775.00	3775.00	

2. FIVE YEAR ACTION PLAN FOR PIG DEVELOPMENT ACTIVITIES UNDER PRIVATE SECTOR (2019-2024)

Considering the probable support to private investors in the form of incentives and subsidies under pig sector, a five year action plan has been developed to boost the pig scenario of the state.

Accordingly, the following activities have been proposed covering 26 Nos. of districts (23 Nos. of districts for Piggery Sector) of the state.

A. COMMERCIAL PIG FARMING

a) Commercial Pig Farming (Small):

It is proposed to support establishment of 553 Nos. of small commercial pig farms with a capacity of 10 parent stock pigs in each farm. The total project cost for each of the farm will be Rs. 5.00 lakh with a subsidy amount of Rs. 2.25 lakh. Year wise projection of the activity is as follows:

Year	Units (Nos.)	Unit Cost (Rs. in Lakh)	Total Project Cost (Rs. in Lakh)	Subsidy (Rs. in Lakh)
1 st year	118	5.00	590.00	265.50
2 nd year	112	5.00	560.00	252.00
3 rd year	112	5.00	560.00	252.00
4 th year	108	5.00	540.00	243.00
5 th year	103	5.00	515.00	231.75
Total	553	----	2765.00	1244.25

b) Commercial Pig Farming (Medium):

It is proposed to support establishment of 96 Nos. of medium commercial pig farms with a capacity of 50 parent stock pigs in each farm. The total project cost for each of the farm will be Rs. 25.00 lakh with a subsidy amount of Rs. 10.00 lakh. Year wise projection of the activity is as follows:

Year	Units (Nos.)	Unit Cost (Rs. in Lakh)	Total Project Cost (Rs. in Lakh)	Subsidy (Rs. in Lakh)
1 st year	25	25	625	250
2 nd year	20	25	500	200
3 rd year	19	25	475	190
4 th year	17	25	425	170
5 th year	15	25	375	150
Total	96	25	2400	960

c) Commercial Pig Farming (Large):

It is proposed to support establishment of 15 Nos. of large commercial pig farms with a capacity of 120 parent stock pigs in each farm. The total project cost for each of the farm will be Rs. 60.00 lakh with a subsidy amount of Rs. 21.00 lakh. Year wise projection of the activity is as follows:

Year	Units (Nos.)	Unit Cost (Rs. in Lakh)	Total Project Cost (Rs. in Lakh)	Subsidy (Rs. in Lakh)
1 st year	8	60	480	168
2 nd year	4	60	240	84
3 rd year	1	60	60	21
4 th year	1	60	60	21
5 th year	1	60	60	21
Total	15	60	900	315

B. STATE OF THE ART PIG BREEDING FARM WITH EXOTIC BREED AS SUGGESTED IN THE STATE PIG BREEDING POLICY, ASSAM 2018 IMPORTED FROM THE COUNTRY OF ITS ORIGIN:

It is proposed to support establishment of at least 1 No. of State of the Art Pig Breeding Farm in private sector with exotic breed imported from the country of its origin with a capacity of 50 Exotic Parent Stock.



The farm is proposed during 1st year with a project cost of 200.00 lakh and subsidy amount of Rs. 75.00 lakh. Year wise projection of the activity is as follows:

Year	Units (Nos.)	Unit Cost (Rs. in Lakh)	Total Project Cost (Rs. in Lakh)	Subsidy (Rs. in Lakh)
1 st year	1	200.00	200.00	75.00
2 nd year				
3 rd year				
4 th year				
5 th year				
Total	1	200.00	200.00	75.00

C. PIG BREEDING FARM WITH INDIGENOUS BREED (DOOM) AS SUGGESTED IN THE STATE PIG BREEDING POLICY, ASSAM 2018:

It is proposed to support establishment of at least 24 Nos. of Pig Breeding Farm in private sector with 100 Nos. of indigenous breed. The farms are proposed during all 5 years with a project cost of 50.00 lakh and subsidy amount of Rs. 25.00 lakh each. Year wise projection of the activity is as follows:

Year	Units (Nos.)	Unit Cost (Rs. in Lakh)	Total Project Cost (Rs. in Lakh)	Subsidy (Rs. in Lakh)
1 st year	10	50	500	250
2 nd year	5	50	250	125
3 rd year	3	50	150	75
4 th year	3	50	150	75
5 th year	3	50	150	75
Total	24	50	1200	600

D. PORK PROCESSING UNITS:

It is proposed to support establishment of 4 Nos. of pork processing units with a capacity of slaughtering 400 pigs per day. The pork processing unit also includes modern cold storage facility. The total cost for each pork processing unit will be Rs. 1200.00 lakh with subsidy amount of Rs. 100.00 lakh. Year wise projection of the activity is as follows:

Year	Units (Nos.)	Unit Cost (Rs. in Lakh)	Total Project Cost (Rs. in Lakh)	Subsidy (Rs. in Lakh)
1 st year	3	1200	3600	3000
2 nd year	1	1200	1200	1000
3 rd year				
4 th year				
5 th year				
Total	4	1200	4800	4000

E. FEED PRODUCTION UNITS:

It is proposed to support establishment of 7 Nos. of feed mills with a capacity of 10 MT feed per day. The total cost for each pork processing unit will be Rs. 20.00 lakh with subsidy amount of Rs. 8.00 lakh. Year wise projection of the activity is as follows:

Year	Units (Nos.)	Unit Cost (Rs. in Lakh)	Total Project Cost (Rs. in Lakh)	Subsidy (Rs. in Lakh)
1 st year	5	20	100	40
2 nd year	1	20	20	8
3 rd year	1	20	20	8
4 th year				
5 th year				
Total	7	20	140	56

**DISTRICT-WISE ACTION PLAN
FOR
PIG DEVELOPMENT ACTIVITIES
UNDER
PRIVATE SECTOR
(2019-2024)**



**ANIMAL HUSBANDRY AND VETERINARY DEPARTMENT
ASSAM::GUWAHATI-781003**

FIRST YEAR ACTIVITIES UNDER PRIVATE SECTOR

Sl. No.	Name of District	Commercial Pig Farming						State of the Art Pig Breeding Farm with Exotic Breed		Pig Breeding Farm with Indigenous Breed (Doom)		Pork Processing Units		Feed Production		Grand Total (Rs. In Lakh)		
		Small		Medium		Large		Units (No.)	Subsidy (Rs. In Lakh)	Units (No.)	Subsidy (Rs. In Lakh)	Units (No.)	Subsidy (Rs. In Lakh)	Units (No.)	Subsidy (Rs. In Lakh)			
		Units (No.)	Subsidy (Rs. In Lakh)	Units (No.)	Subsidy (Rs. In Lakh)	Units (No.)	Subsidy (Rs. In Lakh)											
1	Biswanath	5	11.25	1	10.00	0	0.00	0	0.00	1	25.00	0	0.00	0	0.00	0	0.00	46.25
2	Golaghat	23	51.75	5	50.00	1	21.00	1	75.00	1	25.00	1	100.00	1	8.00	1	8.00	330.75
3	Goalpara	23	51.75	1	10.00	0	0.00	0	0.00	2	50.00	1	100.00	1	8.00	1	8.00	219.75
4	Jorhat	4	9.00	1	10.00	1	21.00	0	0.00	0	0.00	0	0.00	0	0.00	1	8.00	48.00
5	Tinsukia	1	2.25	1	10.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	1	8.00	20.25
6	Nagaon	3	6.75	1	10.00	1	21.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	37.75
7	Bongaigaon	5	11.25	1	10.00	1	21.00	0	0.00	1	25.00	0	0.00	0	0.00	0	0.00	67.25
8	Cachar	9	20.25	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	20.25
9	Nalbari	6	13.50	1	10.00	1	21.00	0	0.00	0	0.00	0	0.00	0	0.00	1	8.00	52.50
10	Barpeta	2	4.50	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	4.50
11	Charaideo	4	9.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	9.00
12	Kamrup	3	6.75	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	6.75
13	Kamrup (M)	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0.00
14	Darrang	2	4.50	1	10.00	1	21.00	0	0.00	0	0.00	0	0.00	1	100.00	0	0.00	135.50
15	Hojai	7	15.75	2	20.00	1	21.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	56.75
16	Dhemaji	3	6.75	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	6.75
17	Dibrugarh	2	4.50	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	4.50
18	Sivasagar	4	9.00	1	10.00	0	0.00	0	0.00	1	25.00	0	0.00	0	0.00	0	0.00	44.00
19	Lakhimpur	4	9.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	9.00
20	Sonitpur	3	6.75	7	70.00	1	21.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	97.75
21	Dhubri	0	0.00	0	0.00	0	0.00	0	0.00	3	75.00	0	0.00	0	0.00	0	0.00	75.00
22	Morigaon	5	11.25	2	20.00	0	0.00	0	0.00	1	25.00	0	0.00	0	0.00	0	0.00	56.25
23	Majuli	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0.00
Total		118	265.50	25	250.00	8	168.00	1	75.00	10	250.00	3	300.00	5	40.00	5	40.00	1348.50



SECOND YEAR ACTIVITIES UNDER PRIVATE SECTOR

Sl. No.	Name of District	Commercial Pig Farming						State of the Art Pig Breeding Farm with Exotic Breed		Pig Breeding Farm with Indigenous Breed (Doom)		Pork Processing Units		Feed Production		Grand Total (Rs. In Lakh)
		Small		Medium		Large		Units (No.)	Subsidy (Rs. In Lakh)	Units (No.)	Subsidy (Rs. In Lakh)	Units (No.)	Subsidy (Rs. In Lakh)	Units (No.)	Subsidy (Rs. In Lakh)	
		Units (No.)	Subsidy (Rs. In Lakh)	Units (No.)	Subsidy (Rs. In Lakh)	Units (No.)	Subsidy (Rs. In Lakh)									
1	Biswanath	5	11.25	1	10.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	21.25
2	Golaghat	23	51.75	5	50.00	1	21.00	0	0.00	0	0.00	0	0.00	1	8.00	130.75
3	Goalpara	22	49.50	0	0.00	0	0.00	0	0.00	1	25.00	0	0.00	0	0.00	74.50
4	Jorhat	4	9.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	9.00
5	Tinsukia	1	2.25	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	2.25
6	Nagaon	3	6.75	1	10.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	16.75
7	Bongaigaon	5	11.25	0	0.00	0	0.00	0	0.00	1	25.00	0	0.00	0	0.00	36.25
8	Cachar	9	20.25	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	20.25
9	Nalbari	5	11.25	1	10.00	1	21.00	0	0.00	0	0.00	0	0.00	0	0.00	42.25
10	Barpeta	1	2.25	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	2.25
11	Charaideo	4	9.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	9.00
12	Kamrup	2	4.50	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	4.50
13	Kamrup (M)	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0.00
14	Darrang	2	4.50	1	10.00	1	21.00	0	0.00	0	0.00	1	100.00	0	0.00	135.50
15	Hojai	7	15.75	2	20.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	35.75
16	Dhemaji	2	4.50	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	4.50
17	Dibrugarh	2	4.50	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	4.50
18	Sivasagar	4	9.00	1	10.00	0	0.00	0	0.00	1	25.00	0	0.00	0	0.00	44.00
19	Lakhimpur	4	9.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	9.00
20	Sonitpur	2	4.50	7	70.00	1	21.00	0	0.00	0	0.00	0	0.00	0	0.00	95.50
21	Dhubri	0	0.00	0	0.00	0	0.00	0	0.00	2	50.00	0	0.00	0	0.00	50.00
22	Morigaon	5	11.25	1	10.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	21.25
23	Majuli	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0.00
Total		112	252.00	20	200.00	4	84.00	0	0.00	5	125.00	1	100.00	1	8.00	769.00



THIRD YEAR ACTIVITIES UNDER PRIVATE SECTOR

Sl. No.	Name of District	Commercial Pig Farming						State of the Art Pig Breeding Farm with Exotic Breed		Pig Breeding Farm with Indigenous Breed (Doom)		Pork Processing Units		Feed Production		Grand Total (Rs. In Lakh)
		Small		Medium		Large		Units (No.)	Subsidy (Rs. In Lakh)	Units (No.)	Subsidy (Rs. In Lakh)	Units (No.)	Subsidy (Rs. In Lakh)	Units (No.)	Subsidy (Rs. In Lakh)	
		Units (No.)	Subsidy (Rs. In Lakh)	Units (No.)	Subsidy (Rs. In Lakh)	Units (No.)	Subsidy (Rs. In Lakh)									
1	Biswanath	5	11.25	1	10.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	21.25
2	Golaghat	23	51.75	5	50.00	1	21.00	0	0.00	0	0.00	0	0.00	1	8.00	130.75
3	Goalpara	22	49.50	0	0.00	0	0.00	0	0.00	1	25.00	0	0.00	0	0.00	74.50
4	Jorhat	4	9.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	9.00
5	Tinsukia	1	2.25	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	2.25
6	Nagaon	3	6.75	1	10.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	16.75
7	Bongaigaon	5	11.25	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	11.25
8	Cachar	9	20.25	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	20.25
9	Nalbari	5	11.25	1	10.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	21.25
10	Barpeta	1	2.25	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	2.25
11	Charaideo	4	9.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	9.00
12	Kamrup	2	4.50	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	4.50
13	Kamrup (M)	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0.00
14	Darrang	2	4.50	1	10.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	14.50
15	Hojai	7	15.75	1	10.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	25.75
16	Dhemaji	2	4.50	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	4.50
17	Dibrugarh	2	4.50	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	4.50
18	Sivasagar	4	9.00	1	10.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	19.00
19	Lakhimpur	4	9.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	9.00
20	Sonitpur	2	4.50	7	70.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	74.50
21	Dhubri	0	0.00	0	0.00	0	0.00	0	0.00	2	50.00	0	0.00	0	0.00	50.00
22	Morigaon	5	11.25	1	10.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	21.25
23	Majuli	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0.00
Total		112	252.00	19	190.00	1	21.00	0	0.00	3	75.00	0	0.00	1	8.00	546.00



FOURTH YEAR ACTIVITIES UNDER PRIVATE SECTOR

Sl. No.	Name of District	Commercial Pig Farming						State of the Art Pig Breeding Farm with Exotic Breed		Pig Breeding Farm with Indigenous Breed (Doom)		Pork Processing Units		Feed Production		Grand Total (Rs. In Lakh)
		Small		Medium		Large		Units (No.)	Subsidy (Rs. In Lakh)	Units (No.)	Subsidy (Rs. In Lakh)	Units (No.)	Subsidy (Rs. In Lakh)	Units (No.)	Subsidy (Rs. In Lakh)	
		Units (No.)	Subsidy (Rs. In Lakh)	Units (No.)	Subsidy (Rs. In Lakh)	Units (No.)	Subsidy (Rs. In Lakh)									
1	Biswanath	4	9.00	1	10.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	19.00
2	Golaghat	23	51.75	4	40.00	1	21.00	0	0.00	0	0.00	0	0.00	0	0.00	112.75
3	Goalpara	22	49.50	0	0.00	0	0.00	0	0.00	1	25.00	0	0.00	0	0.00	74.50
4	Jorhat	3	6.75	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	6.75
5	Tinsukia	1	2.25	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	2.25
6	Nagaon	3	6.75	1	10.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	16.75
7	Bongaigaon	5	11.25	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	11.25
8	Cachar	8	18.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	18.00
9	Nalbari	5	11.25	1	10.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	21.25
10	Barpeta	1	2.25	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	2.25
11	Charaideo	4	9.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	9.00
12	Kamrup	2	4.50	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	4.50
13	Kamrup (M)	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0.00
14	Darrang	1	2.25	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	2.25
15	Hojai	7	15.75	1	10.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	25.75
16	Dhemaji	2	4.50	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	4.50
17	Dibrugarh	2	4.50	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	4.50
18	Sivasagar	4	9.00	1	10.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	19.00
19	Lakhimpur	4	9.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	9.00
20	Sonitpur	2	4.50	7	70.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	74.50
21	Dhubri	0	0.00	0	0.00	0	0.00	0	0.00	2	50.00	0	0.00	0	0.00	50.00
22	Morigaon	5	11.25	1	10.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	21.25
23	Majuli	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0.00
Total		108	243.00	17	170.00	1	21.00	0	0.00	3	75.00	0	0.00	0	0.00	509.00



FIFTH YEAR ACTIVITIES UNDER PRIVATE SECTOR

Sl. No.	Name of District	Commercial Pig Farming						State of the Art Pig Breeding Farm with Exotic Breed		Pig Breeding Farm with Indigenous Breed (Doom)		Pork Processing Units		Feed Production		Grand Total (Rs. In Lakh)
		Small		Medium		Large		Units (No.)	Subsidy (Rs. In Lakh)	Units (No.)	Subsidy (Rs. In Lakh)	Units (No.)	Subsidy (Rs. In Lakh)	Units (No.)	Subsidy (Rs. In Lakh)	
		Units (No.)	Subsidy (Rs. In Lakh)	Units (No.)	Subsidy (Rs. In Lakh)	Units (No.)	Subsidy (Rs. In Lakh)									
1	Biswanath	4	9.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	9.00
2	Golaghat	23	51.75	4	40.00	1	21.00	0	0.00	0	0.00	0	0.00	0	0.00	112.75
3	Goalpara	22	49.50	0	0.00	0	0.00	0	0.00	1	25.00	0	0.00	0	0.00	74.50
4	Jorhat	3	6.75	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	6.75
5	Tinsukia	1	2.25	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	2.25
6	Nagaon	2	4.50	1	10.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	14.50
7	Bongaigaon	4	9.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	9.00
8	Cachar	8	18.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	18.00
9	Nalbari	5	11.25	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	11.25
10	Barpeta	1	2.25	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	2.25
11	Charaideo	3	6.75	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	6.75
12	Kamrup	2	4.50	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	4.50
13	Kamrup (M)	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0.00
14	Darrang	1	2.25	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	2.25
15	Hojai	7	15.75	1	10.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	25.75
16	Dhemaji	2	4.50	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	4.50
17	Dibrugarh	1	2.25	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	2.25
18	Sivasagar	4	9.00	1	10.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	19.00
19	Lakhimpur	4	9.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	9.00
20	Sonitpur	2	4.50	7	70.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	74.50
21	Dhubri	0	0.00	0	0.00	0	0.00	0	0.00	2	50.00	0	0.00	0	0.00	50.00
22	Morigaon	4	9.00	1	10.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	19.00
23	Majuli	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0.00
Total		103	231.75	15	150.00	1	21.00	0	0.00	3	75.00	0	0.00	0	0.00	477.75



ABSTRACT OF THE ACTIVITIES UNDER PRIVATE SECTOR

Sl. No.	Name of District	Commercial Pig Farming						State of the Art Pig Breeding Farm with Exotic Breed		Pig Breeding Farm with Indigenous Breed (Doom)		Pork Processing Units		Feed Production		Grand Total (Rs. In Lakh)		
		Small		Medium		Large		Units (No.)	Subsidy (Rs. In Lakh)	Units (No.)	Subsidy (Rs. In Lakh)	Units (No.)	Subsidy (Rs. In Lakh)	Units (No.)	Subsidy (Rs. In Lakh)			
		Units (No.)	Subsidy (Rs. In Lakh)	Units (No.)	Subsidy (Rs. In Lakh)	Units (No.)	Subsidy (Rs. In Lakh)											
1	Biswanath	23	51.75	4	40.00	0	0.00	0	0.00	1	25.00	0	0.00	0	0.00	0	0.00	116.75
2	Golaghat	115	258.75	23	230.00	5	105.00	1	75.00	1	25.00	1	100.00	3	24.00	3	24.00	817.75
3	Goalpara	111	249.75	1	10.00	0	0.00	0	0.00	6	150.00	1	100.00	1	8.00	1	8.00	517.75
4	Jorhat	18	40.50	1	10.00	1	21.00	0	0.00	0	0.00	0	0.00	0	0.00	1	8.00	79.50
5	Tinsukia	5	11.25	1	10.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	1	8.00	29.25
6	Nagaon	14	31.50	5	50.00	1	21.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	102.50
7	Bongaigaon	24	54.00	1	10.00	1	21.00	0	0.00	2	50.00	0	0.00	0	0.00	0	0.00	135.00
8	Cachar	43	96.75	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	96.75
9	Nalbari	26	58.50	4	40.00	2	42.00	0	0.00	0	0.00	0	0.00	0	0.00	1	8.00	148.50
10	Barpeta	6	13.50	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	13.50
11	Charaideo	19	42.75	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	42.75
12	Kamrup	11	24.75	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	24.75
13	Kamrup (M)	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0.00
14	Darrang	8	18.00	3	30.00	2	42.00	0	0.00	0	0.00	0	0.00	2	200.00	0	0.00	290.00
15	Hojai	35	78.75	7	70.00	1	21.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	169.75
16	Dhemaji	11	24.75	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	24.75
17	Dibrugarh	9	20.25	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	20.25
18	Sivasagar	20	45.00	5	50.00	0	0.00	0	0.00	2	50.00	0	0.00	0	0.00	0	0.00	145.00
19	Lakhimpur	20	45.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	45.00
20	Sonitpur	11	24.75	35	350.00	2	42.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	416.75
21	Dhubri	0	0.00	0	0.00	0	0.00	0	0.00	11	275.00	0	0.00	0	0.00	0	0.00	275.00
22	Morigaon	24	54.00	6	60.00	0	0.00	0	0.00	1	25.00	0	0.00	0	0.00	0	0.00	139.00
23	Majuli	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0.00
Total		553	1244.25	96	960.00	15	315.00	1	75.00	24	600.00	4	400.00	7	56.00	3650.25		



ABSTRACT OF THE YEAR-WISE ACTIVITIES UNDER PRIVATE SECTOR (BOTH PHYSICAL AND FINANCIAL)

(Rs. in lakh)

Year	Commercial Pig Farming						State of the Art Pig Breeding Farm with Exotic Breed		Pig Breeding Farm with Indigenous Breed (Doom)		Pork Processing Units		Feed Production		Grand Total (Rs. In Lakh)
	Small		Medium		Large		Units (No.)	Subsidy (Rs. In Lakh)	Units (No.)	Subsidy (Rs. In Lakh)	Units (No.)	Subsidy (Rs. In Lakh)	Units (No.)	Subsidy (Rs. In Lakh)	
	Units (No.)	Subsidy (Rs. In Lakh)	Units (No.)	Subsidy (Rs. In Lakh)	Units (No.)	Subsidy (Rs. In Lakh)									
Year-1	118	265.50	25	250.00	8	168.00	1	75.00	10	250.00	3	300.00	5	40.00	1348.50
Year-2	112	252.00	20	200.00	4	84.00	0	0.00	5	125.00	1	100.00	1	8.00	769.00
Year-3	112	252.00	19	190.00	1	21.00	0	0.00	3	75.00	0	0.00	1	8.00	546.00
Year-4	108	243.00	17	170.00	1	21.00	0	0.00	3	75.00	0	0.00	0	0.00	509.00
Year-5	103	231.75	15	150.00	1	21.00	0	0.00	3	75.00	0	0.00	0	0.00	477.75
Total	553	1244.25	96	960.00	15	315.00	1	75.00	24	600.00	4	400.00	7	56.00	3650.25

Total Project Cost Outlay for Pig Development Project (Abstract) under Private Sector:

Sl. No.	Name of the Sub-Component	Total Fund Requirement (Rs. in lakh)	Year-1 (Rs. in lakh)	Year-2 (Rs. in lakh)	Year-3 (Rs. in lakh)	Year-4 (Rs. in lakh)	Year-5 (Rs. in lakh)
1.	Pig Development through Cluster Approach for all proposed Districts of Assam under Private Sector	19746.80	4097.8	4087.60	4011.40	3775.00	3775.00
2.	Pig Development Activities Under Private Sector	3650.25	1348.50	769.00	546.00	509.00	477.75
	Total	23397.05	5446.30	4856.60	4557.40	4284.00	4252.75



COST BENEFIT ANALYSIS:**ECONOMICS:****Inputs:**

Initial investment of each beneficiary = Rs. 93000.00

Feed for boar, feed for sows, feed for weaner, transportation cost, cost of insurance, medicines etc. feed for fattener

Output:

1. Sale of piglets @ 10 piglets per farrowing for 2 farrowing per year averaging 20 piglets per year per sow and 40 piglets per beneficiary with 20% mortality, say 32 living piglets per year per beneficiary out of which 50% i.e., 16 piglets will be sold at 2 months of age and remaining 50% i.e., 16 piglets will be sold as fattener at 7 months of age @ Rs. 2000.00 per improved piglet for 16 piglets and Rs. 7000.00 per Fattener for 16 fattener (16XRs. 2000.00+16XRs. 7000.00) = Rs. 144000.00

So, the Gross Profit: = Outputs – Inputs
= Rs. 144000.00 – Rs. 93000.00
= Rs. 51000.00

(Rupees fifty one thousand) only

(Gross profit will be more as the farmer will provide kitchen waste part of the feed from their own source. They will also earn more as they must have 2 sows of their own)

Output of Pig Development Project through Farmer Producer Organization (FPO/FPC):

1. Total No. of members per PRG : 10
2. Unit size per Beneficiary : 1 Boar : 2 Sows
3. Live Piglets produced per Sow per Year per member : 32
(Considering 10 piglets per farrowing for 2 farrowing in a year with 20% mortality)
4. No. to be Sold for Breeding per Sow per year : 16
5. No. to be sold as Fattener per Sow per year : 16
6. Weight at Fattening at 7 months of age : 70 kg
7. Total Meat produced per unit per Beneficiary in each year : 2240 kg (16X70X2)
8. Total Meat produced per unit of every PRG in each year : 22400 kg (2240X10)
9. Total Meat produced per unit of every PRG in each year : 44800 kg (4480X10)
(Including 2 sows of their own)



TOTAL PROJECT COST OUTLAY FOR PIG DEVELOPMENT PROJECT (ABSTRACT) OF BOTH GOVERNMENT AND PRIVATE SECTOR:

Sl. No.	Name of the Sub-Component	Total Fund Requirement (Rs. in lakh)	Year-1 (Rs. in lakh)	Year-2 (Rs. in lakh)	Year-3 (Rs. in lakh)	Year-4 (Rs. in lakh)	Year-5 (Rs. in lakh)	Percentage of Investment
1.	Breed Improvement	500.00	272.00	199.50	9.50	9.50	9.50	
2.	Training Programme for Implementation of Pig Development Project	1415.70	283.20	283.20	283.20	283.05	283.05	
3.	Introduction of Local Service Provider (Borah Mitra) in to the Clusters	19.50	----	----	19.50	----	----	
4.	Administrative Cost including Health Coverage @ 5% of Project Cost of both Government and Private Sector	1415.00	283.00	283.00	283.00	283.00	283.00	
A.	Total under Government Sector	3350.20	838.20	765.70	595.20	575.55	575.55	12.53%
1.	Pig Development through Cluster Approach for all proposed Districts of Assam under Private Sector	19746.80	4097.8	4087.60	4011.40	3775.00	3775.00	
2.	Pig Development Activities Under Private Sector	3650.25	1348.50	769.00	546.00	509.00	477.75	
B.	Total under Private Sector	23397.05	5446.30	4856.60	4557.40	4284.00	4252.75	87.47%
Grand Total (A+B)		26747.25	6284.50	5622.30	5152.60	4859.55	4828.30	100.00%





ANIMAL HUSBANDRY
& VETERINARY DEPARTMENT
Government of Assam

ANIMAL HUSBANDRY AND VETERINARY DEPARTMENT

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