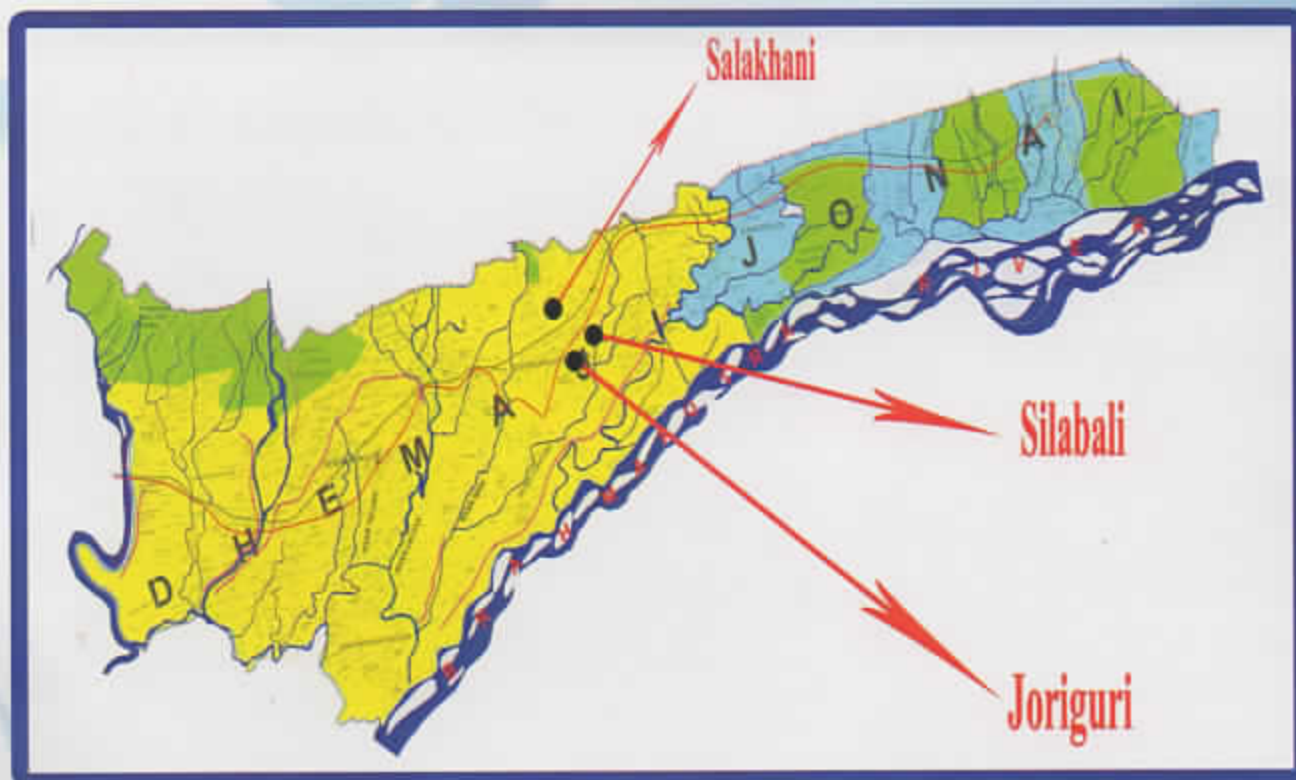


**FINAL REPORT**  
on  
**ACTION RESEARCH PROGRAMME**  
on PIGS REARING in DHEMAJI DISTRICT  
under  
**BACKWARD REGION GRANT FUND (BRGF)**



Implemented By:  
Krishi Vigyan Kendra, Dhemaji  
Assam Agricultural University  
Silapathar – 787 059

Sponsored by:  
State Institute of Rural Development (SIRD)  
Guwahati



## Implementation committee of Action Research Programme on Pig Rearing in Dhemaji District

Adviser : Dr. H. C. Bhattacharya, DEE, AAU  
 Chairman : Dr. Rijusmita Sarma Deka, Programme Coordinator  
 Coordinator : Dr. Ashim Kumar Saikia, Subject Matter Specialist (Animal Sc.)  
 Co- Coordinator : Mrs. Yater Das, Subject Matter Specialist (PBG)

### Members:

1. Mr. Gunjan Gogoi, Subject Matter Specialist (Plant Pathology)
2. Mrs. Bibha Ozah, Subject Matter Specialist (Soil Sc.)
3. Miss Binita Konwar, Subject Matter Specialist (Horticulture)
4. Mr. Monuranjan Gogoi, Subject Matter Specialist (Home Sc.)
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6. Dr. Mihir Sarma, Junior Scientist, LRS, Mandira

Under the Backward Region Grant Fund (BRGF) Programme 'The Action Research Programme on Pig Rearing in Dhemaji district' was sponsored by State Institute of rural Development and implemented by Krishi Vigyan Kendra, Dhemaji, Assam Agricultural University, Silapathar in the financial year, 2013-14 and 2014-15.

### Introduction and Objectives:

Pig is highly prolific, fast growing and one of the most efficient converters of feeds to meat among the livestock. It can play a significant role to improve socio-economic status of a sizable section of weaker community, women folk and unemployed youth. Pig farming can yield profit consistently than any other livestock farming.

As per Livestock Census Report, 2003, pig population of Assam is 15,43,489, which is around 40 and 11.5 % of total pig population of North Eastern Region and India respectively. On the other hand, Dhemaji, with a pig population of 1,14,185 (7.5 % of the state pig population) is one of the leading pig populated district of the state (Livestock Census Report, 2003). From the human population pattern it is observed that more than 50 % of the population of Dhemaji district belonged to ST and SC community (ST - 47.29 % and SC - 5.33 %), who are economically backward and they traditionally rear pigs and piggyery is the one of the major source of livelihood for them. Pork is very demanding meat in the district as more than 90 % of the population is non-vegetarian and pork is most preferred by the tribal as well as other people of the district. Thousands of pigs are also transported to neighboring districts and Arunachal Pradesh per months. But the pig rearing is going on very primitive ways without any scientific management practices. Most of the pigs reared in the district are of local non-descript type with very low prolificacy and growth rate in comparison to improved or exotic types of breeds. So, in the present study it is proposed to distribute three different breeds of pigs to 21 nos. of pig rearers of the district with proper guidance for rearing them in scientific ways and show them the difference of growth pattern and other parameters in their own farms.

Therefore, the study was proposed and carried out with following objectives -

1. Performance of three different types of breeds under same managerial condition and feeding practices
2. Demonstration of proper scientific management practices to rear the pigs in farmers farm
3. To see the effects of supplemented mineral mixtures on growth as well as reproductive traits like puberty, onset of heat etc
4. To examine the changes in socio-economic status of pig rearers due to the project activities
5. To study the adoption pattern of the technology in the post project period.

### Methodology/ Technical programmes:

Three (3) nos. of villages from surroundings of Silapathar area were selected for implementing the programme. The selected villages were Jariguri Mising, Silabali and 1 No. Holokhani, which were habitant of three different tribal communities i.e. Mising, Bodo and Sonowal Kachari, respectively. Seven (7) nos. of farmers were selected from each of villages, having experiences of pig rearing in the past. The economic conditions of the farmers were recorded and Participatory Rural Appraisal (PRA) of the villages was also conducted. Training on 'Scientific rearing of pigs' was conducted initially for the farmers and pigsty were prepared with the help of the beneficiaries in semi-intensive manner in each of the farmers houses. The farmers were also taken for an exposure visit to College of Veterinary Science, AAU, Khanapara, Guwahati for getting some first knowledge and information on housing, breeding, scientific management and other aspects of pig rearing. Three pig breeds were earmarked and given to the beneficiaries of three different villages viz. Ghungroo Crossbred to the farmers of Jariguri Mising village, T & D crossbred to Silabali village and Hampshire crossbred pigs to the farmers of 1 No. Holokhani village. Total of 63 nos. of piglets (21 male & 42 female) of 2-3 months age were distributed to the beneficiaries. Each of the beneficiaries was given 3 piglets (1 male & 2 female). The Hampshire crossbred and Ghungroo crossbred pigs were procured from local markets of Dhemaji and Silapathar area and T & D crossbred pigs were bought from C. V. Sc., AAU, Khanapara, Guwahati. All the distributed pigs were insured and vaccinated against Swine Fever and Foot & Mouth disease and de-wormers were fed on regular basis. The farm hygiene and sanitation as well as health status was monitored regularly throughout the project period. One fourth of the total feed requirement for

the pigs were supplemented in the form of concentrate feeds and rest portion was met from the locally available feed materials like kitchen waste, vegetable leftovers, colocasia, banana stem, banana leaves, mewa or juguli, rice polish, different kinds of grasses etc. Eighteen (18) nos. (6 gilts from each group) of pigs were supplied with the mineral mixtures (AAUVETMIN) on regular basis to see their growth and reproductive performances in comparison to non-mineral mixture fed pigs. Monthly body weights of all the pigs were recorded up to 8th months of age. The average age at onset of puberty, average age at the time of 1st farrowing, average litter size of 1st farrowing and survival rate of newborn piglets from the females of all three breeds were also recorded.

#### **Observations and outcomes:**

The average growth rate of 287 gram, 260 gram and 248 gram per day were recorded in Hampshire cross, Ghungroo cross and T & D crossbred pigs, respectively during the recording period up to 8th months of age. The average daily body weight gain was maximum in Hampshire crossbred pigs and minimum in T & D crossbred pigs. The better growth rate of Hampshire crossbred pigs in this study may be due to the better adaptability of the breed to the climatic condition of the district. The average age at the onset of puberty as well as average age at the time of 1st farrowing were also earlier in females of Hampshire crossbred pigs in comparison to Ghungroo crossbred and T & D crossbred female pigs. This may be due to the breed difference and better adaptability of the breed to the climatic condition and the feeding pattern of the locality. The average litter size at 1st farrowing was also high in Hampshire pigs (Av. 9 nos.) in comparison to other two breeds (Ghungroo cross- 7.5 nos. and T & D crossbred- 5.5 nos.) but the mortality rate in newborn piglets of all three breeds was almost uniform (20 %). The average daily weight gain in AAUVETMIN supplemented pigs was more than those of un-supplemented pigs. Better litter size was also seen in pigs given additional mineral mixtures i.e. AAUVETMIN than non-fed ones. Therefore, it may be concluded from the present study that the Hampshire crossbred pigs is more adoptable and suitable to rear in local rearing conditions of Dhemaji district of Assam with good growth and reproductive performances in comparison to Ghungroo cross and T & D crossbred pigs.

During the one and half year of project period 101 nos. of piglets were born in 1 No Holokhani village, where Hampshire crossbred pigs were reared. Nos. of piglets born in Jariguri Mising village (rearing Ghungroo crossbred) and Silabali village (rearing T & D, crossbred pigs) were 84 and 35 nos., respectively. Most of new born piglets were purchased by the pig rearers of the nearby area by observing their performances especially the Hampshire crossbred pigs. Some of the piglets were reared by the beneficiaries themselves as well as given to fellow farmers of the village to rear on contact basis. At this point of time the approximate value of the parent stock and other pigs in the beneficiaries houses was around Rs. 6,00,000.00 (Rupees six lacs) only in addition to the sum of Rs. 2,50,000.00 (Rupees two lacs and fifty thousand) only which is earned by selling piglets at the age of 2-3 months of age, making present total value of the project excluding the value of pigstys Rs. 8,50,000.00 (Rupees eight lacs and fifty thousand) only. To discuss the success of this programme a field day was also organized in 1 No Holokhani village which was attended the Additional Deputy Commissioner of Dhemaji district Mr. Bhaskar Pegu, District Veterinary Officer Dr. Pranab Kumar Duwara, District Agriculture Officer Mr. R. K. Doley and SIRD Faculty Mr. Manoranjan Choudhury and two hundred nos. of farmers from the village and neighboring areas. Mr. Jay Ch. Sonowal and Mr. Ghana Kanta Sonowal, two beneficiaries of the Action Research Programme, along with Dr. Ashim Kumar Saikia, SMS (Animal Sc.) have taken part in a Television Programme in Doordarsan, Dibrugarh on different aspects of pig rearing under this programme, which was broadcasted on 10th Feb., 2015 in DD-1 under Krishi Darsan Programme. By observing the success of the pig rearers in this Action Research Programme the farmers of adjoining areas are also motivated to adopt pig farming on scientific ways and taking piggery as a commercial venture.

## Action photographs from the Action Research Programme



*Starting of construction works of pigsty at Solokhoni village*



*T & D piglets, brought from C.V.Sc., AAU, Khanapara, before distribution to the beneficiaries at Silabali village*



*Mr. Mahendra Phukan, DAO, Dhemaji & Dr. Rijusmita Sarma Deka, PC, KVK, Dhemaji distributing T & D piglets to beneficiaries at Silabali village*



*Dr. Ashim Kr. Saikia, detailing about T & D breed at distribution meeting at Silabali village & Group photo of beneficiaries*



*Visit of Mr. N. K. Pao, BDO, Dhemaji & In-charge, SIRD, EC, Chuoldhowaghat and Dr. K. C. Gogoi, DVO, Dhemaji & Mr. D. N. Saikia, Branch Manager, SBI, Kulajan Branch at ARP- village*



*Tagging for insurance of piglets in ARP village*



*Weighing of piglets in ARP village*



*Weighing of piglets in ARP village*



*Gungroo crosses pigs at Jariguri- Mising village under ARP*



*Hampshire pigs at Solokhoni village under ARP*



*Hampshire pigs at Solokhoni village under ARP*



*Vaccination of pigs under ARP at Silabali & Solokhoni villages*





*Vaccination of pigs under ARP at Silabali & Jariguri- Mising villages*



*Feeds and mineral mixture distribution at Silabali village*



*T & D crosses pigs at Silabali village under ARP*



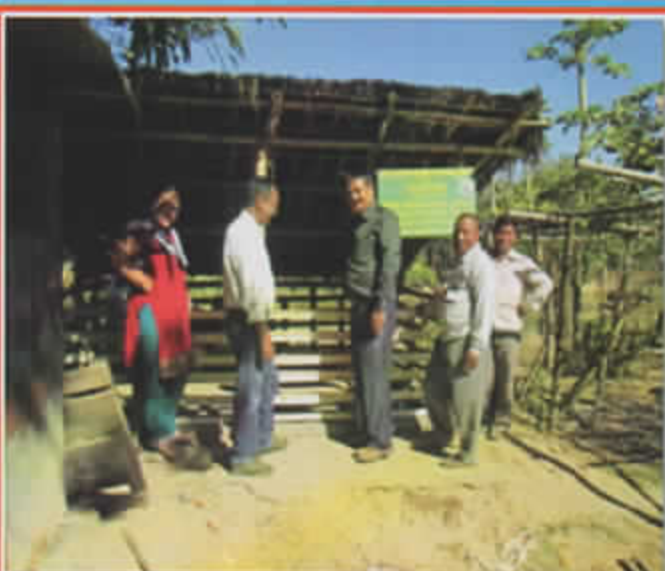
*Feeds and mineral mixture distribution by Mr. D. N. Saikia, Branch Manager, SBI, Kulajan Branch at ARP- village*



*Distribution of feeds to beneficiaries by Mr. D. N. Saikia, Branch Manager, SBI, Kulajan Branch at ARP- village i.e. Solokhoni*



Meeting organized for distribution of Feeds & Mineral mixtures which was presided by Mr. D. N. Saikia, Branch Manager, SBI, Kulajan Branch at ARP- village



Visit of Dr.A.Basumatary, Professor, Deptt. Of Soil Science, AAU, Jorhat & Dr. P. Sarma, Chief Scientist, AICRPDA, BNCA at ARP village



Sows at late gestation



Piglets farrowed at different beneficiaries houses under ARP



*Piglets at field and with their dam farrowed in ARP villages*



*Piglets at field and with their dam farrowed in ARP villages*

*Piglets farrowed under the ARP*



*Piglets farrowed under the ARP*



*Hampshire piglets farrowed under ARP*



*Pig feeds distribution in 3 villages under Action Research Programme*



*Hampshire piglets farrowed under ARP*



*Pig feeds distribution in 3 villages under Action Research Programme*





*Mr. Bhaskar Pegu, ADC, Dhemaji; Mr. R. K. Doley, DAO, Dhemaji; Dr. P. Duwarah, DVO, Dhemaji & Mr. M. Choudhury, FM, SIRD visiting ARP village*



*Mr. Bhaskar Pegu, ADC, Dhemaji; Mr. R. K. Doley, DAO, Dhemaji; Dr. P. Duwarah, DVO, Dhemaji & Mr. M. Choudhury, FM, SIRD visiting ARP village*



*Mr. Bhaskar Pegu, ADC, Dhemaji addressing the gathering in Field Day organized under ARP*



*Dr. P. Duwarah, DVO, Dhemaji during Field Day, while Dr. R. S. deka, PC, Dhemaji presenting the progress report of the ARP through PPP*



*Mr. M. Choudhury, Faculty, SIRD in the Field Day. A fraction of villagers in the Field Day programme*



*Mr. Bhaskar Pegu, ADC, Dhemaji and Dr. P. Duwarah, DVO, Dhemaji distributing pig feeds, feed supplements, de- wormers etc. during Field Day organized under ARP at Solokhani village*



*Mr. M. Choudhury, Faculty, SIRD and Dr. R. S. Deka, PC, KVK, Dhemaji distributing pig feeds, feed supplements, de- wormers etc. during Field Day organized under ARP at Solokhani village*



*Mr. Bhaskar Pegu, ADC, Dhemaji and Mr. R. K. Doley, DAO, Dhemaji distributing pig feeds, feed supplements, de- wormers etc. during Field Day organized under ARP at Solokhani village*



*Traditional Sonowal dance (Leseri) presented by women of Solokhani village during Field Day programme under ARP*





*Traditional Sonowal dance presented by women and Bihu and Modern dance by young girls of Solokhani village during Field Day prog. under ARP*



*Visit of Dr. H. C. Bhattacharyya, DEE, AAU to Salakhani village along with PCs of KVK, North Lakhimpur & Sonitpur*



*Visit of Dr. Premjit Singh, DEE, CAU to Salakhani village*



*Visit of Dr. Premjit Singh, DEE, CAU to Salakhani village*



*Newly farrowed piglets with their dam*



Newly farrowed piglets with their dam

অসমীয়া প্ৰতিদিন

**অসমীয়া প্ৰতিদিন**

প্ৰোগ্ৰাম কৃষি বিকাশ কেন্দ্ৰ  
**চিলাপথানত গাহৰি  
 পালনৰ আঁচনি উদ্বোধন**

চিলাপথানত প্ৰোগ্ৰাম কৃষি বিকাশ কেন্দ্ৰৰ আঁচনি উদ্বোধন কৰা হৈছে। ইয়াত গাহৰি পালনৰ আঁচনিৰ উদ্বোধন কৰা হৈছে।

কৃষক বাহিৰলৈ যোৱাৰি  
 গাহৰি এই পথাৰ - পথাৰ  
 পৰিষ্কাৰৰ বাবে কৃষক হ'লে কাম  
 উলিয়াব নহওঁতে পথাৰখনত কাম  
 ১০-২০ (৪৫) ১০০ মণি অৰ্ধশস্য  
 কাম কৰিব পাৰি।

সম্পাদক  
 'গৰু পথাৰ'  
 অধ্যক্ষক পিতা কামৰূপৰ  
 অধ্যক্ষ কৃষি বিদ্যালয়, যোৰহাট

# ঘৰে-পথাৰে

পমেৰীয়া কৃষি পত্ৰিকা  
 অসম কৃষি বিশ্ববিদ্যালয়, যোৰহাট

গ্ৰাহকসকলক বাবে | অসম কৃষি বিশ্ববিদ্যালয় | যোৰহাট | অসম | ৭৮১০০৫ | ফোন: ২৬৬১০১

## গাহৰিৰ দানা আৰু খনিজ পদাৰ্থৰ মিশ্ৰণ বিতৰণ

গাহৰিৰ দানা আৰু খনিজ পদাৰ্থৰ মিশ্ৰণ বিতৰণ কৰা হৈছে। এই উদ্যোগত গাহৰিৰ পৰিষ্কাৰ কৰা হৈছে।

গাহৰিৰ দানা আৰু খনিজ পদাৰ্থৰ মিশ্ৰণ বিতৰণ কৰা হৈছে। এই উদ্যোগত গাহৰিৰ পৰিষ্কাৰ কৰা হৈছে।

# The Assam Tribune

**Pig rearing project in three Dhemaji villages**

গাহৰি পালনৰ আঁচনিৰ উদ্বোধন কৰা হৈছে। ইয়াত গাহৰি পালনৰ আঁচনিৰ উদ্বোধন কৰা হৈছে।

ঘৰে-পথাৰে

পমেৰীয়া কৃষি পত্ৰিকা  
 অসম কৃষি বিশ্ববিদ্যালয়, যোৰহাট

## পথাৰ দিবস উদ্বোধন

পথাৰ দিবস উদ্বোধন কৰা হৈছে। ইয়াত গাহৰি পালনৰ আঁচনিৰ উদ্বোধন কৰা হৈছে।

**LIST OF FARMERS IN 'ACTION RESEARCH PROGRAMME'**

Sl. No.	Name of the beneficiaries	Father's/ husband's name	Address	Sex	Caste
1	Mr. Pinku Sonowal	Mr. Bireswar Saikia	Solokhonigaon, Phulbari, Silapathar	M	ST
2	Mr. Priya Sonowal	Lt. Dambarudhar Sonowal	-Do-	M	ST
3	Mr. Manoj Sonowal	Mr. Sarat Sonowal	-Do-	M	ST
4	Mr. Ghana Kt. Sonowal	Mr. Pona Kt. Sonowal	-Do-	M	ST
5	Mr. Rjeswar Sonowal	Mr. Baliram Sonowal	-Do-	M	ST
6	Mr. Jay Ch. Sonowal	Mr. Aliram Sonowal	-Do-	M	ST
7	Mr. Bhaikon Sonowal	Mr. Tera Nath Sonowal	-Do-	M	ST
8	Mrs. Kunti Khaklari	Mr. Nakul Khaklari	Silabaligaon, Silapathar	F	ST
9	Mrs. Nabami Basumatary	Mr. Nirbhay Basumatary	-Do-	F	ST
10	Mrs. Rubila Basumatary	Mr. Nripen Basumatary	-Do-	F	ST
11	Mrs. Malati Basumatary	Mr. Suren Basumatary	-Do-	F	ST
12	Mrs. Khilara Basumatary	Lt. Kulap Basumatary	-Do-	F	ST
13	Mrs. Rumila Basumatary	Mr. Bhupen Basumatary	-Do-	F	ST
14	Mrs. Hangmashri Basumatary	Mr. Gopal Basumatary	-Do-	F	ST
15	Mr. Bhaben Doley	Mr. Lila Doley	Jariguri- Misinggaon, Silapathar	M	ST
16	Mr. Moni Kt. Taye	Mr. Ranuram Taye	-Do-	M	ST
17	Mr. Dhansing Doley	Mr. Nila Kt. Doley	-Do-	M	ST
18	Mr. Kumal Ch. Pegu	Mr. Kachari Pegu	-Do-	M	ST
19	Mr. Beda Kt. Taye	Mr. Ranuram Taye	-Do-	M	ST
20	Mr. Umesh Ch. Darik	Mr. Phulchan Darik	-Do-	M	ST
21	Mr. Ratul Darik	Mr. Konpur Darik	-Do-	M	ST

*Programme Coordinator*  
Krishi Vigyan Kendra, AAU, Dhemaji