

# National Piggery Research Centre

Gelephu, Sarpang Dzongkhag

## Background

Bhutanese rear

Indigenous/local pig (small body weigh 60kg in year) since long ago, but with

development of the country having many income sources in recent times, pig

rearing in general is in diminishing trends.

Hence, the Royal Government supported in piggery development starting

the 1<sup>st</sup> Five Year Plan in 1960s.

A mini piggery farm with Indian breeds was

established in the year 1962 to upgrade the local pigs through cross breeding.

In the beginning it was attached with the cattle breeding farm at Wangchutaba,

Thimphu. Later in the year 1976 – 1977 this Farm was separated from cattle

breeding farm and became as central pig breeding station cum pork processing

plant.

In the course of development

during 6<sup>th</sup> plan, the pork processing Plant was privatized & the Centre was renamed as National Pig Breeding Centre (NPBC) with main objective

to, supply genetically improved cross breed Pig to the Farmers for further cross breeding with

Native Pigs to upgrade the local swine population. In the

course of development

the Centre also supplies Piglets to Schools & Institutions for breeding

& fattening purposes as a part of School Agriculture Program.

During the inception of the Farm,

the unit started with saddle back parent stock. However, over the past years

the Farm has received parent stocks like, Duroc Jersey from Philippines &

Large Black from Australia through FAO/UNDP. The Farm also received Duroc and

Hampshire parent stock from Demark through FEZAP.

Bhutan did imported white breed

but soon wipe out due to poor preference by farmers because of skin disease

problem. First lot of Large White and Landrace was imported in 1975 from India

and later from Thailand in 1982. Unfortunately, in 2002 all white breed breeding

were discontinued.

Latest import of exotic pig

parent stock (current breed) was done in the year 2003 with 82 Nucleus stock

from British Pig Breeding Association through TCP consisting of six family

lines in large black & saddle back breeds, and four family lines in Duroc

breed.

### **Breeding pattern in various farms:**

Upon the completion of the shed construction centrally executed

by DoL, Thimphu in the year 2003 and having placed new breeding plan, these

Nucleus stocks were transferred to Gelephu Farm during Dec. 2004 – Feb 2005

with their first production cycle completed at Wangchutaba Farm. Since then Gelephu Farm is recognized as the Nucleus Farm (GP), which maintain pure line breeding system. While cross breeding is being done at 2 regional multiplier farms at Yusipang, Thimphu and Ligmithang, Mongar.

### **Import of Duroc semen:**

Over the year Duroc breed is found to be the maximum in breeding co-efficiency and felt urgent needs to replenish or upgrade the Sire line. Hence, in 2013 imported 10 doses of Duroc chilled semen with support from DLD, Bangkok. Out of 5 sows insemination 3 sows farrowed and weaned 15 piglets. Now duroc breed is doing well.

### **Inception of National Piggery Development Centre:**

Considering the scope of piggery development in southern part of Bhutan the Department of Livestock, Ministry of Agriculture & Forests up-graded the Nucleus farm Gelephu and remained as “National Piggery Development centre (NPiDC), DoL, Gelephu to push forward the domestic pork production in the 11 FYP. The NPiDC being the National commodity program is identified as apex body for piggery development in the country henceforth and given the additional mandates, roles and responsibility of overseeing (a) Inputs

production, (b) Extension services- liaising with Dzongkhag (for establishment of micro, semi- commercial & commercial farms) and (c) processing (product development) in the 11FYP. In order to produce 1000 MT of pork in 11 FYP, activities & budget were planned accordingly including construction of additional infrastructure, HRD and mobility in the centre.

The NPiDC presently has three breeding farms for piglets production:

1. The Nucleus farm, Gelephu, Sarpang with 160 sow-level
2. Regional Pig Breeding Centre, Yusipang, Thimphu with 100 sow-level
3. Regional Pig & Poultry Breeding centre, Ligmithang, Mongar with 60 sow-level

The current National Pig Breeding Center, Gelephu, will be the focal agency for piggery development in the country and will assume the responsibility of National Piggery Development Center (NPiDC) along with the breeding unit.

## **Vision**

- To attain self reliance in pork and pork products in Bhutan

## **Mission**

- Fulfillment of 1000 MT of pork production in 11

plan ( 2013-2018)

- Enhance small scale pig production in rural areas through efficient service support
- Promote commercial and semi-commercial pig production in potential areas through Private Public Partnership (PPP) and Foreign Direct Investment (FDI).

## **Objectives**

- To support poverty reduction by supporting backyard & micro rural farming
- To reduce import of pork and pork products through commercialization of piggery enterprise
- To enhance piggery sector development by linking farmers to relevant stakeholders.

### ***Department of Livestock, Institutions, Mandates and Roles***

#### **NPiDC Mandates**

- Function as focal agency for piggery development.
- Support development of policies, strategies and guidelines for piggery.
- Plan, coordinate and implement piggery development.
- Carry out M&E on piggery development in the country.
- Coordinate the capacity development in piggery.
- Serve as center for technology hub in piggery.
- Function as focal institute for training on piggery production.
- Support research activities in piggery and product development.

- Liaise with relevant national and international organizations.
- Support collaborative development, conservation and sustainable utilization of native pigs.

## **Roles**

### ***Inputs Production Unit***

- Plan, produce and supply piglets.
- Carry out all input sourcing including TA.
- Quality control of piglets and other input supplies involving PPP.
- Support works on native pig conservation.
- Support establishment of multiplier farms under PPP.

### ***Piggery Extension Unit***

- Facilitate and implement PPP development initiatives.
- Provide technology and technical support to piggery farms.
- Facilitate, coordinate and promote farmers groups and associations.

### ***Processing Unit***

- Plan, coordinate and execute piggery product development activities.
- Quality control on piggery infrastructure design and development.
- Support establishment of processing plants under PPP.

## ***Information Management Unit***

- Maintain database on all piggery development activities in the country.
- Liaise with Information Management Section of DoL.
- Produce leaflets, newsletters, bulletins, posters, and other publications.
- Produce periodic reports of the center and submit to the department.
- Production, packaging and dissemination of piggery technologies including audio visual.
- Produce press release and other publicity materials for the media.
- Promote ICT based knowledge management.

## **Challenges of piggery Development in Bhutan**

- Strong religious & social pressure/ objection from public but certain communities prefers pig rearing
- Inadequate numbers of piglet supply to fattening farms due to less mother sows in the country
- No commercial breed (WHITE BREED) for production of adequate piglets
- Poor AI facility for pig breeding
- Poor Subject matter Specialists (SMS) in swine breeding and management
- Poor bio-security facility in pig farms
- Non availability of Saddleback and large black semen for replenishment of blood line.