

X. Ecological Implications

Livestock production impacts on the environment through possible effects on surface and ground water quality, gas emissions from animal wastes, and unpleasant odors arising from the enterprise. Manure management particularly in swine operations is of crucial importance in addressing all three concerns. Gases emitted in livestock enterprises include ammonia, carbon dioxide, methane, and nitrous oxide. The latter three contribute to atmospheric changes that lead to global warming. Unpleasant odors emanating from a livestock enterprise are a function of the scale of operation and sound manure management.

It is likely that the increasing scale of operation in livestock enterprises in the past years has also intensified the adverse environmental impacts of the industry. The challenge is to constantly develop more efficient and effective technologies for managing animal wastes tailored to different scales of production, even as various means of converting such wastes to useful products (e.g. biogas, fertilizer) have been in use for many years.

XI. Registration Requirements

1. Business Name Registration

From the Department of Trade and Industry (DTI)
Provincial Office of the province where the business is located
Validity: 5 years

2. Barangay Clearance

From the barangay office, which has jurisdiction over the area where the business is located

3. Mayor's Permit and License/Sanitary Permit

From the local government, which has jurisdiction over the area where the business is located
Validity: 1 year

4. Tax Identification Number (TIN)

From the Bureau of Internal Revenue (BIR) National Office
Diliman, Quezon City

5. Environmental Compliance Certificate

Department of Environment and Natural Resources (DENR)
Visayas Avenue, Diliman, Quezon City
Telephone No.: (632) 929.6626

XII. Financing

Agricultural Credit Policy Council (ACPC)

28/F, One San Miguel Avenue Building
San Miguel Avenue, Ortigas Center
Pasig City
Telephone Nos.: 634.3326 / 634.3320 to 21
Telefax: 636.3393

Land Bank of the Philippines (LBP)

Head Office: 1598 M. H. Del Pilar cor. Dr. J. Quintos Sts.
Malate, Manila
Telephone NOs.: 522.0000 / 551.2200

Development Bank of the Philippines (DBP)

Head Office: Sen. Gil J. Puyat Avenue cor. Makati Avenue
Makati City
Telephone No.: 818.9511 (connect to SME Department)

XIII. Technical Assistance

Department of Agriculture Bureau of Animal Industry (DA-BAI)

Visayas Avenue, Diliman, Quezon City
Telephone: (632) 926.6883
Fax No.: 927.0971

Technology Resource Center (TRC)

TRC Building, 103 J. Abad Santos cor. Lopez Jaena
Sts., Little Baguio, San Juan City (Near corner Wilson Street)
Telephone No.: (632) 727.6205

National Federation of Hog Farmers, Inc.

c/o Rm 401, R & G Tirol Bldg., No. 831, EDSA cor E. Lopez St.
Diliman, Quezon City
Telephone No.: 924.2317
Fax No.: 924.2259

Sources of Information:

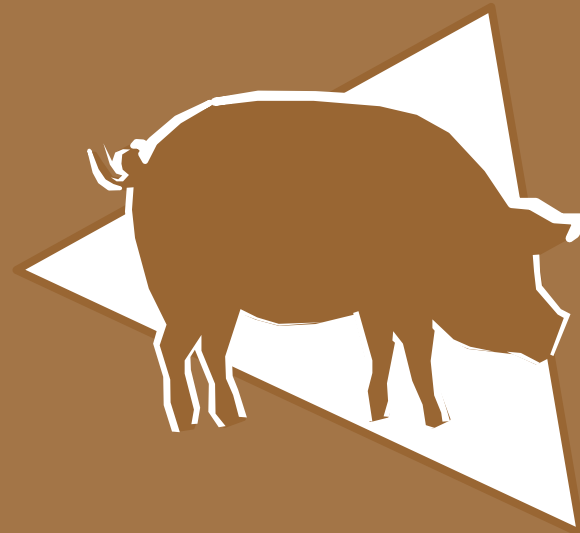
Department of Agriculture (DA)
Livestock Development Council (LDC)
Housing and Land Use Regulatory Board (HLURB) Implementing
Rules and Regulations to Govern the Processing of Applications for
Locational Clearance of Poultry and Piggery
Food and Agriculture Organization-United Nations website
UNIVET Nutrition and Animal Healthcare Company website



BUREAU OF MICRO, SMALL AND MEDIUM ENTERPRISE DEVELOPMENT (BMSMED)

5/F, Trade and Industry Building
361 Sen. Gil J. Puyat Ave. Makati City
Tel. Nos.: (02) 897.1693 / 897.7596 / 890.4968
Fax No.: (02) 896.7916 ♦ Email: bmsmed@dti.gov.ph
www.dti.gov.ph

Starting A Business



HOG RAISING

Hog raising in the Philippines has been a profitable business for Filipinos through the decades. Its popularity is evidently seen among backyards of rural families. An average Filipino family usually raises a small number of pigs to augment their daily needs. While both parents are busy with their work, children may help in raising a few piglets until they reach their marketable age. No wonder, more hogs are produced in backyards compared to commercial piggeries.

Despite the challenges facing the swine industry (e.g. diet relying heavily on expensive concentrates; susceptibility to numerous diseases and parasites), still many people are venturing into this enterprise. This material hopes to bring appropriate information to interested producers / raisers so that they may realize profitable production and improve the quality of their lives.

I. Estimated Investment Costs

Housing	20,000.00
Material Cost	64,500.00
Piglets (10 piglets x P2,000/head)	20,000.00
Feeds (P1,100/sack x 10 pigs x 4 mos)	44,000.00
Medication	500.00
Operating Expense (Electricity and Water)	2,240.00
Estimated Initial Investment per batch	66,740.00
Estimated Total Cost	86,740.00

II. Acquiring Starter Pigs for a Grow-out Production System

A grow-out production system is a system that involves buying young pigs (usually around 12-20 kg each) and feeding them to market weight.

The key to success in a grow-out operation is to acquire starter pigs at those times when opportunity for profit is favorable. Over a hog cycle, profit prospects are best when farm gate prices are rising. Based on historical performance, profit will be higher from November to February. Therefore, starter pigs raised starting August up to November will likely fetch higher farm gate prices and better profits per head sold.

As important as when to buy is the matter of WHERE and HOW. It is best to establish a good relationship with a reputable supplier of starter pigs. During scarce supply period, a reliable supplier should be able to give you a steady supply of starter pigs at reasonable prices.

III. Advantages and Disadvantages of Engaging in a Grow-out Operation

Advantages:

- Rate of capital turn-over is relatively fast compared to farrow-finish operations. The period from start-up to first pay check is approximately 1 year with sow herds but only 3 1/2 to 4 months with grow-out operations.
- Specialized labor and demanding management needed by breeding herds and newborn pigs are avoided.
- The cost for halting operation is relatively smaller with grow-out operations. The loss associated with shutting down is the cost of idle buildings and equipment. This contrasts with a sow-litter operation, which faces serious problems in replacing breeding stocks and a long start-up period.

Disadvantages:

- There are significant expenses involved which will include a transport fee and in some cases, commissions from sales agents who help in sourcing starter pigs when supply is scarce.
- There is some production "penalty" for purchased starter pigs. When young pigs are amassed from various sources, co-mingled and sorted before shipment to their final home, gender uniformity will be lacking and the threat of disease increases.
- The price of starter pigs is highly variable and highly influenced by current market prices. Therefore, profits from feeding purchased pigs are likely to be quite favorable in a period of rising farm gate prices. Losses may likewise be multiplied in a period of falling prices.

IV. Location Requirements and Recommended Layout for Piggeries

- A piggery must be located outside urban areas.
- It must be located at 25 m. radius from sources of ground and surface drinking water.
- Medium and large scale piggery must be at least 1,000 m. away from built-up areas (residential, commercial, institutional, and industrial).
- There should be a dry lot area of 1.86 - 2.79 sq m. per sow; 0.74 - 1.12 sq m. per head of pig under 100 lbs; 1.12 - 1.86 sq m. per head of fattening hogs, 100-200 lbs; and 2.32-3.25 sq m. per boar.

V. Construction of Hog Houses

- Hog houses must be constructed properly to ensure the pigs' maximum growth. A poor one will certainly increase disease problems easily.
- For a small or backyard operation, cheap and locally available materials such as bamboo and *nipa* may be used.
- Hog houses should be constructed on a slightly sloping and well-drained area so that it will not become too muddy and inconvenient to work in.
- Permanent hog houses should have concrete floors for easy cleaning and to minimize the occurrence of parasites and diseases. Concrete floors must not be too rough to cause foot and leg problems nor too smooth to be slippery when wet.

VI. Facilities and Equipment

- Provide the pig house with the proper equipment such as feeders and drinking troughs. Feeders and water troughs are best made of concrete although other materials may be used. Some people use discarded automobile or truck tires cut in half.

VII. Feeding Management

- Begin feeding a commercially good pre-starter ration when the pigs are about one week of age.
- The ration of the pigs should be changed at different stages of growth but the shift from one ration to another should be done gradually in order not to upset the normal feeding behavior of the pigs. Always allow a transition period of at least one week before making any changes.
- A starter ration is given to pigs from weaning until two months of age and weighing about 10 - 25 kgs.
- The grower ration is next given to pigs when they are 30 - 35 kgs or two months old and until they are about 15 - 20 weeks old.
- When pigs reach 60 kg. or are about 20 weeks old, a finisher ration is given.
- In formulating a simplified ration, keep in mind that it should always contain sufficient carbohydrates, protein, vitamins, and minerals.
- Cassava, camote, corn and corn by-products, and discards from slaughterhouses, which are abundant in some parts of the country may be used provided they are properly cooked and dried.
- Dry feeding is practiced in commercial operations to save on labor and feeding equipment costs. Wet feeding is practiced mostly by backyard producers.
- Provide clean drinking water at all times.

VIII. Health Management

- Always keep buildings, runways, pens, and equipment clean. Sanitize and disinfect them regularly.
- Put in quarantine or isolate the hogs that are bought recently from other sources.
- When buying breeding stock for replacement, make sure that the animals have been immunized against prevalent diseases such as hog cholera and swine plague.
- Always seek the advice/services of the nearest veterinarian, the Office of the Provincial Veterinarian, or the Office of the Bureau of Animal Industry (BAI).

IX. Estimated Income per Batch (4 months)

Total Sales (10 pigs x 85 kgs target weight @ *P100/kg live weight / farm gate price * Based on DA-BAI figures as of Feb 2, 2009	85,000.00
Less: Total Expenses	66,740.00
Estimated Net Income for 4 months	18,260.00