Republic of the Philippines  
Province of Bohol  
Municipality of Loay

OFFICE OF THE MUNICIPAL AGRICULTURE

PROJECT PROPOSAL

I. PROJECT TITLE : MUNICIPAL SLAUGHTERHOUSE

II. PROPONENT : Municipal Agriculture Office

III. PROJECT LOCATION : Site that meets NMIS Guidelines

IV. BENEFICIARIES :

V. FUNDING SOURCE :

VI. RATIONALE :

A slaughterhouse or abattoir refers to the premises approved and registered by the controlling authority used in the slaughter of animals for human consumption. It is a basic commodity to be provided by the Local Government Unit (LGU) as stipulated under Rule 1, letter H, Article 25 of R. A. 7160 otherwise known as The Local Government Code of 1991.

Being a key element in the production and distribution chain for meat it is essential that slaughterhouses be as hygienic as possible in order to prevent the spread of both human and animal diseases as well as to reduce economic losses due to premature spoilage of meat caused by contamination.

The majority of abattoirs are public utilities provided by local government units but in LGU where there are no such established facilities slaughtering usually takes place in private facilities which are usually on a small scale and may or may not be under the supervision of a meat inspector. Others are not recognized abattoirs and may just be a part of a dwelling or other premises. Slaughtering at such places is generally considered to be illegal where the meat is to be sold but is not illegal where it is consumed in the owner’s household, or the slaughter and consumption forms part of a festival or celebration.

The obvious hygiene problem and inadequate meat inspection existing in the locality as in many other places do not always cause illness and disease because of practices which have evolved to reduce their effects. Although meat from unhygienic slaughterhouses may be heavily contaminated by microorganisms and other products which may cause food poisoning, the multiplication of these microorganisms is reduced by natural processes such as drying of the meat surface. Generally, meat is cooked thoroughly before consumption thereby destroying most of these harmful substances. It is in circumstances where these practices are not carried out that the most serious problems occur (e.g. keeping the meat unrefrigerated for too long; insufficient cooking, etc.).

In order to prevent problems arising from inadequate standards of hygiene, there is an urgent and extensive need for the establishment of a duly recognized slaughterhouse to supply the needs of the local populace and that of the neighboring town. Hence, this proposal.

VII. OBJECTIVES:

An accredited municipal slaughterhouse shall be established with the following objectives:

1. To provide every consumer a disease-free and quality meat and its by-products;
2. To protect its people against meat-borne diseases;
3. To eradicate the sale of “Hot Meat”
4. To reduce economic losses due to premature spoilage of meat caused by microbial contamination usually prevalent in unhygienic facilities.

VIII. PROJECT DESCRIPTION:

A municipal slaughterhouse will be established in one of the barangays of the Municipality of Loay at a site that will meet the Guidelines on Slaughterhouse Design and Construction set by the National Meat Inspection System (see attached Guidelines). This is done to ensure that the established slaughterhouse will pass NMIS Accreditation Standards, apply and enforce uniform national standards for hygiene and inspection, and reduce operating cost as the best utilization of facilities and expertise can be obtained. Furthermore, centralization of design expertise would result in a continuing improvement in designs.
GUIDELINES ON SLAUGHTERHOUSE DESIGN AND CONSTRUCTION

A. LOCATION:

1. Site is not subject to flooding
2. Not in the low lying area
3. Area is sufficient in size
4. With adequate distance from residential, and any other establishment (200 m.)
5. Not subject to undue pollution and contamination
6. With adequate distance from any inland water
7. With available and sufficient supply of potable water and electricity
8. Accessible to transportation
9. Suitable for adequate disposal of solid and liquid waste
10. Approved by the controlling authority

B. SLAUGHTERHOUSE DESIGN

A complete project involves the construction of different infrastructures/buildings which is necessary for an efficient and economic handling of meat and byproduct, namely:

1. Lairage / Holding pen
2. Slaughterhouse
3. Perimeter Fencing
4. Guard House
5. Office of the Meat Inspector
6. Personnel amenities
7. Water supply system
8. Drainage system
9. Wastewater treatment facility

C. SITE LAYOUT

The following aspects should be considered in designing the layout of buildings and facilities on the site:

1. Adequate access, traffic circle, washing and parking should be provided for vehicles bringing animals to the slaughterhouse and for meat transport vehicles.

2. Animal unloading facility and lairage should be located as far as practicable from the meat dispatching area.

3. The direction of the prevailing wind should be considered together with natural slope of the land, to position the lairage downwind and downhill of the slaughter hall.

4. Slaughterhouse building and facilities should be located to facilitate the natural run-off of storm water.

D. SLAUGHTERHOUSE CONSTRUCTION

1. BUILDING DESIGN
   Building should be constructed of durable and impervious materials, resistant to wear and corrosion.

2. SIZE AND GENERAL ARRANGEMENT
   a) Allow separate slaughter by species.
   b) One way operational flow
   c) Clean and dirty operation are physically separated.
   d) Separate the entrance of animals and exit of meat and by-products.

3. VENTILATION
   a) Facilitate entry of fresh air and removal of obnoxious odor, heat and moisture.
   b) Its opening provided with mesh wire / screen
   c) Movement of airs is from clean to dirty area

4. LIGHTING
   With adequate light both of natural and artificial for all work rooms
   - All inspection area – 3-40 watts (Fluorescent lamp) / 6.00 sq. m.
   - Working area - 2-40 watts (Fluorescent lamp) / 6.00 sq. m.
   - Chilling room - 1-20 watts (Fluorescent lamp) / 6.00 sq. m.
5. ROOF
   Properly designed, durable and resistant to wear, with provision of skylight and ventilator.

6. FLOOR
   a) Construction of durable and impervious materials
   b) Easy to clean and non-slip
   c) Slope towards drain
   d) All angles between the floors and walls curved of at least 7.62 cm. (3”) from the floor

7. WALL
   a) Exterior walls should be constructed of durable and non-permeable materials
   b) Interior walls should be smooth, flat and constructed in impervious materials. It should be of white or light color, or materials that do not require painting should be used.

8. DOOR / DOORWAY
   a) Wide enough to ensure no contact between the door jambs and means of conveyances / product (at least 1.5 m. wide).
   b) Opening from parts of the slaughterhouse where meat is handled should be fitted w/ plastic curtain or self closing door.
   c) Non permeable door.

9. WHEEL BATH
   a) Located at the main entrance of the premises / compound
   b) Sufficient length, width and depth to completely disinfect the whole tires.

10. FOOT BATH
    a) Located at all workers entrance of the slaughterhouse
    b) Sufficient width, length and depth to completely disinfect the lower half of the boots

11. WATER SUPPLY SYSTEM
    a) Adequate water reservoir
    b) Adequate supply of potable water for drinking, carcass washing and cleaning purposes.
    c) Supplies thru overhead pipes

12. DRAINAGE SYSTEM
    a) Sufficient to carry peak loads
b) Drainage at the interior of the building should be open canal with iron gratings

c) Adequate slope to facilitate smooth flow of waste water

13. OFFICE OF THE MEAT INSPECTOR
   Properly located with enough office equipment and facilities.

E. HOLDING FACILITIES AND SPACES FOR SPECIAL PURPOSES

1. HOLDING PEN / LAIRAGE
   a) Physically separated from the slaughter hall (10 m.)

   b) Provided with adequate unloading facility with squeeze chute for large animals.

   c) Enough space to accommodate holding capacity of slaughter (2.23 sq. m. / cattle and .60 sq. m. /hog)

   d) Minimum width of aisle (1.20 m. or 4 ft.)

   e) Floor constructed of durable and water resistant materials, and non slip

   f) Swing gates for individual pens will close the aisles or corridors.

   g) Good traffic flow (separate facilities for entry and exit of animals).

   h) Sufficient slope of floor towards open canal with iron gratings
      
      - Large animal 5% or 5 cm. in every 1 meter
      - Small animal 4% or 4 cm. in every 1 meter

   1.) Adequate potable drinking water supply shall be provided for the animals

   j.) With built-in shower for cleaning of animals prior to slaughter.

   k.) Provided with artificial lighting when slaughtering is conducted after sunset before sunrise.

   1.) Provided with durable and properly design roof

2. ISOLATION PEN
   Physically separated from other holding pen, reserve for the isolated stock and suspected animals.

3. CHUTE
   a) Properly designed so as to facilitate movement of animals to stunning area

   b) Width of the chute should only accommodate one animal at a given time (0.50 m. width for swine and 0.80 m. width of r large animals)
4. TRIPERY AND GUTTERY SECTION  
   a) Physically separated from the slaughtering area  
   b) With facilities, equipments for efficient cleaning of tripes and guts  

5. AMENITIES  
   a) Dressing room – with adequate and suitable lockers for each worker. With separate room for each gender  
   b) Comfort room – with hand washing lavatory and with separate room for each gender, toilet opening not directly to the area where meat and other edible products are being handled and equipments and facilities are being used  

6. CANTEEN / DINING ROOM  
   Provided w/ tables and chairs, eating utensils, and water jug / dispenser  

**MAIN FEATURES OF THE SLAUGHTERHOUSE**  
1. Facilities for proper care of animals prior to slaughter  
2. Separate dressing floor between hogs and large animals  
3. Separate handling of meat and offals  
4. Equipments and implements for proper handling of meat and by-products  
5. Provisions for hanging room and if possible refrigeration  
6. Provision for adequate meat inspection and disposal of condemned  
7. Adequate water and light facilities  
8. Drainage  
9. Separate room or portion of a room under lock and key for storing suspected meat. This shall be designed as to prevent contamination of other meat  
10. Separated room or any other appropriate device under lock and key for storing condemned meat and by-product  
11. Separate room for deboning and cutting in cases where meat is boned-out and cut-up  
12. Supply of hot water  
13. Amenities for meat inspectors, butchers and other workers