TIPS IN THE CARE & MANAGEMENT OF PIGS
(Gilts, sows, boars, piglets, weaners, growers and fatteners)
A. MANAGEMENT OF THE GILT (REPLACEMENT)

Breeds and breeding:

1. Select the stock from animals which have good performance blood line
   
   Performance = 70% environment and 30% genetic potential

2. Choose the breed according to your purpose of raising. There is no best breed.

3. Examples of breeds and their characteristics are as follows:

<table>
<thead>
<tr>
<th>BREED</th>
<th>COLOR</th>
<th>EARS</th>
<th>TYPE</th>
<th>OBSERVATIONS</th>
</tr>
</thead>
<tbody>
<tr>
<td>Landrace</td>
<td>White</td>
<td>Drooping</td>
<td>Meat</td>
<td>Long face, small head, good mothers, prolific, lacks hardiness, weak legs,</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>maternal breed</td>
</tr>
<tr>
<td>Large</td>
<td>White</td>
<td>Standing</td>
<td>Meat</td>
<td>Curved back, slightly dished, Ferile, fast grower, high quality meat</td>
</tr>
<tr>
<td>white</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Berkshire</td>
<td>Black with 6 white</td>
<td>Standing</td>
<td>Lard</td>
<td>Dish-shaped face, Short snout, black skin, more resistant to diseases</td>
</tr>
<tr>
<td></td>
<td>points</td>
<td></td>
<td></td>
<td>compared to white breeds</td>
</tr>
<tr>
<td>Hampshire</td>
<td>Black with white band</td>
<td>Standing</td>
<td>Meat</td>
<td>Short, good quality meat, strong legs, prolific</td>
</tr>
<tr>
<td>Duroc</td>
<td>Red (golden)</td>
<td>2/3 erect</td>
<td>Meat</td>
<td>Strong legs, fast grower, resistant to stress, prolific, adapts well to</td>
</tr>
<tr>
<td>Jersey</td>
<td></td>
<td>1/3 hanging</td>
<td></td>
<td>rugged conditions, outstanding terminal sire</td>
</tr>
<tr>
<td>Pietrain</td>
<td>Black and white</td>
<td>Standing</td>
<td>Very</td>
<td>Very meaty ham and loin, very susceptible to stress, prolific but lack</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>meaty</td>
<td>mothering ability</td>
</tr>
</tbody>
</table>

4. Hybrids result from combination of good traits from each breed. Examples: Tyson, Babbcock, Hypor

5. Avoid in-breeding if strict selection is not practiced. This will result to decreased strength and resistance, decrease number of piglets born and weaned, and occurrence of abnormalities

6. Upgrading the native stock is done to improve the performance of the animal
Judging and Selection of Animals:

1. Double selection is done if we select the breeders from our own farm. The first selection is done while the pigs are 2-3 months old (66%) and the next is done while the weaners reach 6 months of age (80%)

2. Selection is also based on economic performance of the parent stock and judging is done on the external features of the animal such as the following:

<table>
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<th>EXTERNAL FEATURES</th>
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<tbody>
<tr>
<td>1. Good production of the sow</td>
<td>More than 18 piglets weaned per year</td>
<td>Number of good teats (12-14 up) elongated (U shaped and pointed) Equal spacing of teats</td>
</tr>
<tr>
<td>2. Long life</td>
<td>More than six farrowings</td>
<td>Strong back and feet</td>
</tr>
<tr>
<td>3. Fast growth (ADG) of offspring (piglets)</td>
<td>650 grams per day</td>
<td>Well proportioned and long length of body</td>
</tr>
<tr>
<td>4. Good feed converter (FCR)</td>
<td>Less than 3 kg. of feed/kg gain</td>
<td>Balanced arch of body</td>
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<tr>
<td>5. Good carcass quality of meat of the offspring</td>
<td></td>
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</table>
Age to Breed Gilts:

1. Best age recommended for breeding is 8 months (at least 2\textsuperscript{nd} or 3\textsuperscript{rd} heat) weighing about 100-110 kg.
2. A difference of about 2 piglets is obtained if gilts are bred on the third heat

Health Management:

1. All arriving or newly purchased gilts should be quarantined (separated) from the rest for at least two weeks to check diseases and acclimatize the animal in the new farm
2. Deworm the gilt 7-14 days before breeding
3. Treat against external parasites 14 and 7 days before breeding
4. Inject with vitamin (ADE) once before breeding
5. Vaccinate with Hog Cholera, FMD and others at 6-8 months of age

Feeding Management:

1. Avoid the gilts from becoming too fat. Follow recommended feeding guide
2. About 10-14 before the gilts are served, increase the feed ration to 3.0-3.5 kg./day (flushing). This aims to increase the number of egg cells to be fertilized.

B. MANAGEMENT OF THE PREGNANT SOW

1. Monitor closely the gilt at 3 weeks (18-24 days) after breeding and again at 6 weeks (38-44 days) after breeding. If the gilt does not come in-heat, we can assume that it is pregnant
2. Gestation period (pregnancy) of pigs is 114 days (average)

3. Avoid stress, rough handling, fighting and disturbances to the pregnant sow especially within the first 3-4 weeks of pregnancy. Stress could cause death of embryos resulting in few number of piglets.

Feeding Management of the pregnant sow:

1. Feed the sow with brood sow or breeding feeds

2. Don’t over-feed or under-feed the sow. Feed 2 kg. of feeds daily. Increase this to 2.5-3.0 kg. per day one month before farrowing (85-110 days). Reduce the feeds to 2.0 kg. three days before farrowing (111-113 days). On the day of farrowing (114 days), the sow usually has no appetite to eat so don’t give feeds or give just a handful to keep her quiet. This will help the sow to have easy farrowing.

3. Feed roughage or green feeds like grasses, camote, sayote leaves and other vegetables.

4. Clean, fresh water should be available at all times.
Health Management:

1. Bath the sow especially during hot weather. High temperature is also a stressor.

2. Fourteen (14) and (7) days before farrowing, treat the sow against mange especially if the gilt or sow has been treated before breeding. Wash and scrub first the animal before treating

3. Deworm the sow 7-14 days before farrowing. Use broad spectrum dewormer

4. Antibiotic supplement may be added to the drinking water or feed 3-10 days before farrowing and 5—10 days after farrowing. This is to protect the sow from farrowing stress

Preparations for Farrowing:

1. If using a separate farrowing pen or house, place the sow one week before farrowing. This will allow sufficient time for sow to adjust and be relaxed at farrowing time
2. Clean and disinfect the farrowing pen/house including the feeding and watering through at least 7 days before transferring the sow

3. Before being moved to the farrowing pen/house, the sow should be thoroughly bathed and scrubbed with soap and water especially at the sides and udder. This is done to remove the parasite eggs and bacteria.

4. If possible, the pens should be provided with piglet protection facilities like hurdles or guard rails to prevent crushing.

5. Check the pens for presence of sharp edges or protruding part or anything that might hurt the sow or piglets

6. Check the lighting and brooding facilities

7. Clean the udder of the sow with clean cloth soaked in warm water a few hours before farrowing

**Signs of Farrowing:**

1. Building its nest, pushing slightly of hurdles, guard rails, walls, flooring

2. Restlessness, uneasiness, biting of hurdles and guard rails

3. Sow is always in “sitting dog” position

4. Enlarged and distended udder. Pink, shiny and pointing outside direction

5. Teats produces milk (farrowing in 12-24 hours) but not always

6. Small round size manure of sow and frequent urination

7. Swollen vulva, mucus discharge and meconium (first feces of piglets). Red and loosen.

8. Signs of labor like muscular spasms, deep and fast breathing
9. Duration of farrowing is 30 mins. to 6 hours and an average of 2.5 hours interval between piglets should not be longer than 15 minutes.

10. Placenta comes off partially during farrowing but the rest comes out 30 mins. after birth of all Piglets.

11. Piglet interval of 45 minutes with restlessness, and excessive straining is sign of difficult farrowing where assistance is needed.

12. With difficult farrowing, check the condition of the sow before injecting with oxytocin. Giving more oxytocin without checking the sow if problem exists will do more harm. After 10 minutes of injection, and no piglet comes out, help the sow thru “dukot system” of piglet.

Causes of Difficult Farrowing:

1. Problem with the sow
   - Contractions are weak
   - Sow is too fat
   - Sow has eaten too much before farrowing
   - Narrow birth canal
   - Restlessness/aggressiveness
   - Sick or very thin or weak sows
   - Uterine abnormalities
   - Sow is exhausted because she has been farrowing for a long time
   - Farrowing house is too warm

2. Problem with piglets
   - Dead piglets before birth
   - Too big or ill-shaped
   - Two piglets enter the birth canal at the same time
   - Mal-presentation
C. MANAGEMENT OF NEWBORN PIGLETS:

1. Wipe the newborn piglet with clean dry cloth including its nostrils and mouth to remove mucus that may cause suffocation.

2. If piglets can’t breath freely, hold the hindlegs upward, head down and swing gently to hasten removal of mucus.

3. Some piglets may be born weak or lifeless. Examine the umbilical cord. If still beating, lift the hindlegs, head down, tap the back gently or perform artificial respiration or suck the mucus.

4. Do not cut the umbilical cord immediately after birth. This may cause disease organisms to enter into the body of the piglet. Soak the cord in disinfectant like tincture of iodine or alcohol. The cord will dry and fall on its own about 6 hours after birth or longer in weak piglets.

5. If the piglet is bleeding from the navel (umbilical cord), stop the bleeding by tying the umbilical cord with a clean thread or fasten or clip with forcep about 1.0-1.5 inches from the body. Cut the cord below the knot and soak the stump with disinfectant.

6. Cut the needle teeth (4 pairs) immediately after birth. Don’t cut the teeth too close from the base to avoid hitting the gums which may cause infection.
7. **Provide a brooder (heater) for the piglets.** Ideal brooder temperature for piglets is 30-32 degrees centigrade. A two-75 watt or three 50 watt could be used as heaters especially during the early mornings (1:00-4:00 AM)

**Brooders and Heaters**

1. The right brooder temperature for piglets is shown by their behavior. If piglets stay close to the sow or to the source of heat (bulb) or huddle together, then the temperature is too low. If piglets stay close to the sow but stay away from the source of heat but still huddle together, then the heat source might be too high. If piglets are evenly distributed in the pen and in the brooder, then the temperature is just right.

2. A two 75 watt or three 50 watt electric bulb could be used as heaters.

3. If there is no electricity, use kerosene lamp or improvised charcoal brooder

4. Rough haircoat may indicate sickness or cold temperature

5. Always keep the brooder and creep area warm, dry and clean.

**Colostrum and fostering of piglets:**

1. Allow the piglets to immediately suck colostrum (first milk of newly farrowed sow). Aside from food nutrients, this contains antibodies that will help the piglets fight diseases.

2. Fostering is done if sows do not produce enough milk or have given birth to large litter. This is best done to sows which have farrowed 1-2 days earlier or later, if not on the same day. Always transfer the bigger piglets to cope up with the fighting with new littermates.
3. Closely observe the sow and its litter a few days after farrowing for any disease condition and inadequate milk production

Crushing of Piglets may be caused by the following:

- No protective facilities of farrowing pen like hurdles and guard rails
- Weak legs of sow especially the hindlegs, which tend to fall abruptly when lying down
- Weak piglets which are not able to get away quickly
- Slippery flooring and improperly made farrowing hurdles.
- Inadequate heating resulting to huddling near the sow
- Poor water supply of the sow resulting to frequent standing and lying down to drink
- Disturbance of the farrowing pen causing excitement of the sow
Iron Supplementation and feeding:

1. Inject iron supplements at 3-5 days old. May repeat at 10 days old depending on iron content of the product.
   Needed iron per piglet per day - 7 mg.
   Iron from milk - 1-2 mg
   Shortage - 5-6 mg/day x 30 days = 150-180 mg.

2. Start feeding the piglet at 7-10 days old with pre-starter feeds

Castration Reminders:

1. Castrate the male piglets at 1-2 weeks old. Ten days is ideal.
2. Check whether the male piglets are healthy. Postpone in case of illness like diarrhea
3. Check whether there are pigs with hernia to avoid complications
4. Clean the pen thoroughly before castration
5. Don’t transfer the piglets before or after castration to avoid extra stress

Other management:

1. Vaccinate the piglets and sow with Hog Cholera at 30-35 days, 42 days for FMD
2. Wean the piglets at 30-42 days depending on health and condition of the piglets
3. Deworm the piglets at 42-45 days old
D. MANAGEMENT OF THE NEWLY FARROWED and LACTATING SOW

1. To avoid diseases associated with stress during farrowing, antibiotic supplement mixed with drinking water or feeds 3-10 days before farrowing and 5-10 days after farrowing is done. Others simply inject broad spectrum antibiotics immediately after farrowing especially if the sow is weak.

2. Some sows produce small amount of milk due to the swollen or inflamed udder, massaging the udder with cloth soaked in lukewarm water may help, followed by injection of antibiotics is done.

3. Don’t feed the sow at the day of farrowing. Gradually increase the feed until day 7. At day 8 until day of weaning, give 2.0 kg + 0.3- kg. additional per suckling piglet.

4. Suckling period may be from 28-42 days depending on the practice of the farm.

5. A short lactating period for the sow would be will maximize sow production efficiency but young weaned piglets requires more care and attention and special feeding.

6. Don’t feed the sow at weaning. This will stress the sow for early occurrence of heat.

Weaning Management

(weaning is the act of separating the suckling piglets from its mother)

Considerations in Weaning:

1. Be sure the piglets are used to solid feeds at weaning.

2. Do not change the kind of feed given one week before until one week after weaning.
3. Reduce to half the kind of feed given on the day of weaning. One kg. of pre-starter is enough for 10 weaners fed for 3-4 times a day. Be sure that all weaners can eat at the same time. This is to avoid excessive feeding by the weaners.

4. Gradually increase the amount of feeds given (restricted feeding) for one week until it reaches about 3% of the body weight. This is to avoid digestive problems.

5. Remove and transfer the sow from the farrowing pen and not the piglets. They should remain in the same pen for 3-5 days after weaning. This is to prevent additional stress to the piglets.

6. Avoid mixing litters at least one week after weaning. When mixing, put together stronger piglets and the weaker ones together.

7. The pen should always be clean, dry and warm. Cold and dumpy pen predispose the weaners to diseases. Provide clean and fresh medicated drinking water for at least 3 days to avoid post-weaning diarrhea.

E. MANAGEMENT OF THE DRY SOW (Dry Period):

Dry period is the time interval from weaning to service. The sow is unproductive (dry).

A good sow should come back to heat within 3-7 days after weaning.

1. Always keep the sow in good health and condition especially during the lactation period.

2. Keep the lactation period not longer than six (6) weeks (42 days).

3. Do not feed the sow on the days of weaning. This will stress the animal for an early occurrence of heat.
4. After weaning, increase the feed to 3.5-4.0 kg. per day (flushing) until service

5. Expose weaned sows to the boar. Place the sow pen near the boar.

6. Mixing the sow with other dry sows in a pen also influences heat

7. If sows do not come into heat after 10 days, hormonal injection could be given

8. Old sows which farrowed 8x and above tend to have longer dry periods

9. Keep sows as cool as possible during summer to avoid heat stress

10. Check dry sows for heat occurrence twice a day during feeding time

11. Observe the right time of breeding.

12. Breed good sows and cull bad sows immediately
Signs of heat:

1. Swelling and reddening of the vulva
2. Appearance of mucus discharge from the vulva
3. Grunting and restlessness
4. Mounting her penmates (if group)
5. Frequent attempts to urinate with little or no discharge especially in the presence of a boar
6. Assumes a stationary attitude (mating stance) when touched
7. Cocks her ears, becomes rigid in every limb, and may quiver at her haunches
8. Stands firm in one place and resist attempts to move her away cannot be herded the ordinary way (standing heat)

F. MANAGEMENT OF WEANERS, GROWERS, 
& FATTENERS (fattening period)

(Weaner- a piglet that has been separated from its mother to become fully mature)
(Grower- pigs from 30-60 kg. or about 3-5 months old)
(Fattener- pigs from 60-90 Kg or about 5-6 months)

Considerations in Purchasing:

1. Purchase piglets that had been weaned from its mother for at least 1-2 weeks.
2. If possible, purchase piglets from one source or farm
3. Purchase piglets that are of high quality and healthy
4. Avoid buying the piglet that are being peddled (you are not assured of its health and quality)

5. Follow the following space requirements for growers and fatteners:

<table>
<thead>
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<th>Weight of Pig</th>
<th>Floor Space Requirement</th>
</tr>
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<tbody>
<tr>
<td>20-45 Kg.</td>
<td>0.37 sq.m./pig</td>
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<td>46-100 Kg.</td>
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</tbody>
</table>

6. Provide feeding through where all pigs can eat at the same time

7. Follow the proper feeding guide based on its nutritional requirements

Management During Transport of weaners and Growers:

1. Add vitamins and electrolytes or anti-stress medications to the drinking water least two days before transport and continued 3-5 days after arrival

2. Transport the pigs during the coldest part of the day. The vehicle should be well ventilated and protected against direct sunlight

3. The pigs should not be handled roughly. Place beddings of straw or grasses at the flooring of the vehicle to protect the legs and feet of the animals

4. Do not mix big and small animals

5. Do not fully feed the pigs during transport. Drinking water should be given during long trips
Care for Newly Arrived Pigs

1. Clean and disinfect the pens prior to their arrival.

2. Maintain a warm pen environment of 21-24 degrees centigrade for the first few days after arrival.

3. Group pigs according to their sizes not ages. Separate weak ones

4. Restrict feeding for the first few days after arrival to avoid digestive problems

5. Do not immediately change the kind of feed given. Gradually shift within one week period.

Tips on how to Minimize or Avoid fighting among mixed Piglets

1. Do not use a pen where one litter has already been housed. Use a pen that is new to all.

2. Give the piglets “Toys” like balls to keep them busy

3. Spray with Cresol especially around the ears and tail

4. General stability is reached after 48 hours

Other Management Practices:

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2. Provide feeding through where all pigs can eat at the same time
3. Provide proper ventilation in the pig house and avoid overcrowding

4. The pens should be regular cleaned

5. Bath or spray the animals especially during hot weather (27 degrees)

6. Follow the proper feeding guide based on its nutritional requirements

Tips in Transporting and Marketing of fatteners

1. Group pigs according to size

2. Loading facilities should be provided in the delivery truck

3. Carefully load and unload the pigs from the truck or vehicle

4. The floor of the truck or vehicle should be bedded with sand or sawdust. This should be wet during hot weather

5. Slow down the vehicle during transport especially at sharp curves

6. Remove all protruding nails and other pointed objects on the floor or sides of the truck

7. Do not excite or over-heat pigs. This will make pigs in feverish condition and its meat tend to sour.

References:

1. Basic Pig Keeping Manual by ITCPH
2. Tips in swine raising Handouts by Mr. Cristino E. Balancio, Sr. Agriculturist, ATI-CAR
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