

— **SMALLHOLDERS STEP-BY-STEP SERIES** —



PIG KEEPING AS AN ENTERPRISE

TRAINING PAMPHLET

DEVELOPED BY THE

 **SMALLHOLDERS FOUNDATION**

".....for small farmers to overcome poverty"

**VERSION 1
REGULARLY UPDATED
MAY, 2013**

FORWARD

Nigeria has great potential to become an agricultural powerhouse. 70% of our great landmass is suitable for agriculture, yet only 30% of the land is currently used for cultivation. Nigeria's diverse climate, from the tropical areas in the South to arid zones in the North, allow the cultivation of virtually all agricultural products grown in the tropical and semitropical regions of the world. There is thus abundant opportunity for growth and expansion.

The agricultural sector contributes 70% of labor force, 80% of consumed food, but only 40% of gross domestic product (GDP). 90% of agricultural production is produced by smallholders with the average farm size in the South reaching about 0.5ha and in the North 4ha. Subsistence smallholder farming thus continues to dominate the sector.

Pig keeping as an enterprise is one of the numerous approaches which will successfully transform Nigeria's subsistence agriculture.

This training pamphlet which is part of our "easy to read and understand" Smallholders Step-by-Step Series is to:

Equip farmers with "quick-win" skills to keep high quality pigs,

Equip farmers with "quick-win" financial skills to generate profit from pig farms,

Encourage non-farmers to establish viable pig farms easily.

I will like to acknowledge the immense contribution of Mr. Chukwudi Precious, Programs Officer of The Smallholders Foundation. Chukwudi's focus is on re-engaging smallholder farmers to gradually move up the ladder from subsistence agriculture to a more commercial agriculture.

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Pig domestication started about 9,000 BC in the West of Asia. During those days, pigs were bred using animals with good characteristics for domestication and meat production. This helped in changing their appearance and nature. Wild swine are omnivores and can have a life span of 15-20 years. They encouraged plant to grow as their dropping enriches the soil nutrients. Rearing of pig is a very profitable business to venture in. pig farming is also an easy business to manage. Pigs have a short generation interval and can born 5-6 children at the spot. Pigs are good in converting kitchen waste into foods. It has the most efficient carcass yield of 70% compared to that of cattle 52% and sheep 50%. It adapt readily to different environments. There are three production system of rearing pigs: free range, semi-intensive and intensive systems. But intensive system is widely accepted.

Species of pigs reared in West Africa:

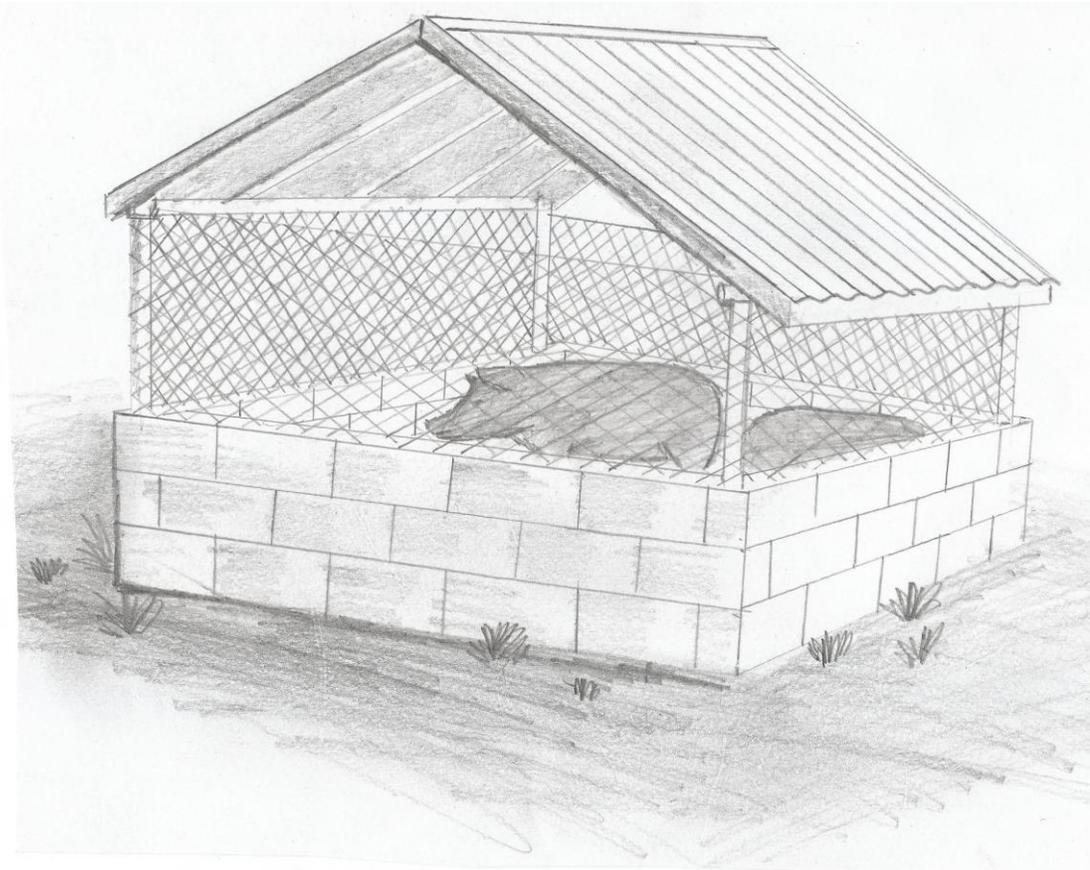
- ❖ West African Guinea Hog
- ❖ Landrace
- ❖ Chester White
- ❖ African dwarf
- ❖ British lop

Steps in Pig Production

Site Selection - Piggery farms should be located in areas that have free air movement and natural ventilation. You should always face the building in the North-South direction to prevent excessive penetration of sunlight into the pen. The building should be constructed on a slight slope for easy drainage and disposal effluent. It is required that the area where the farm is to be established most have access to water, good road, and expansion space.

Step 1: Construct on a slight slope facing building North-South with space for expansion

Housing - The size of the pen should be of 4m x 5m to contain about 20 piglets and 10 fattening pigs or 14m x 2m for 10 weaners. Use aluminum sheets for the roof and make sure it is high enough with dwarf walls of about 30cm high. The space between the wall and the roof must be covered with wire gauze. Solid rough concrete floors are recommended.



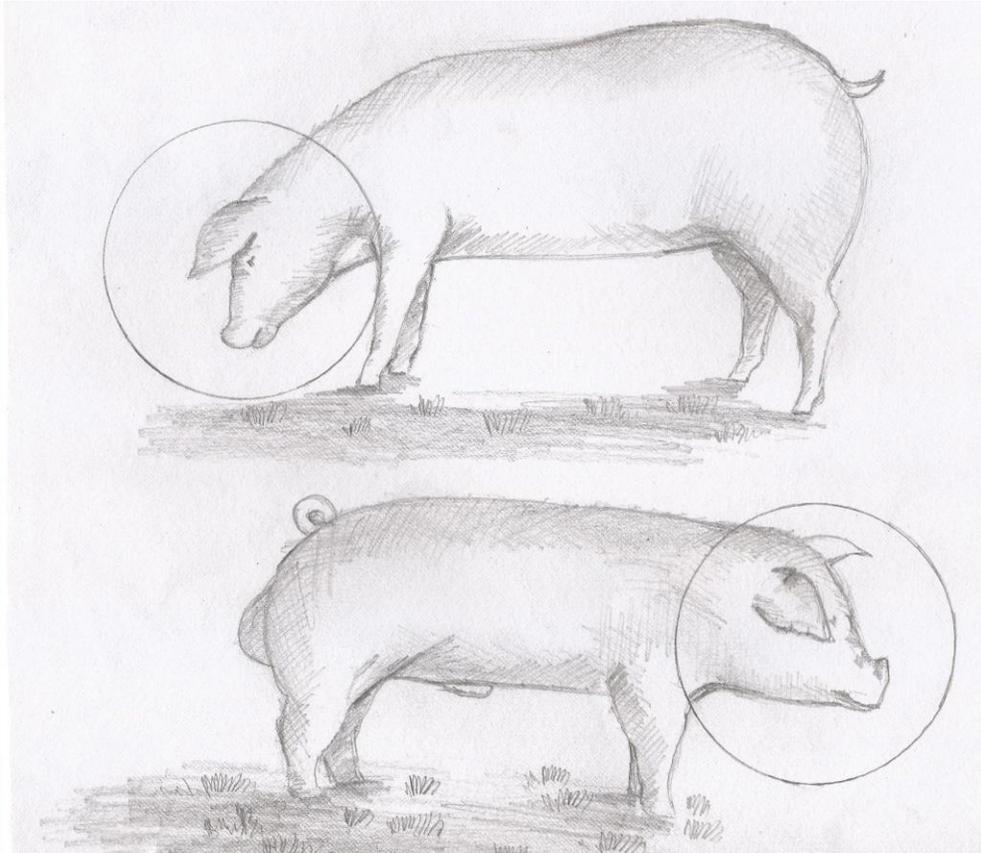
The space between the wall and the roof the pig pen should be covered with wire gauze

Step 2: Use solid rough finishing concrete floor and make roofing high

Housing Equipment - Feed and water troughs should be separated inside the pen. There should be compartments to allow free access to feed and water. They should be washed and disinfected at least once a week. Farrowing crates should be constructed to prevent sows from laying down and crushing the baby.

Step 3: Separate feeding and drinking troughs for all the pigs to have access and construct crates for sows to prevent them from lying down and crushing their baby.

Breed Selection - There are over 230 varieties of pigs all over the continent. Pig varieties are grouped into indigenous and modern species of pigs. It is recommended that you select the modern varieties as it has much competitive market value while the indigenous do not have. Landrace, Large white, Chester White, and Buroc are the most recommended varieties of pigs.



Landrace on top with its nose pointed down and Large White with pointed up nose

Step 4: Select modern exotic varieties

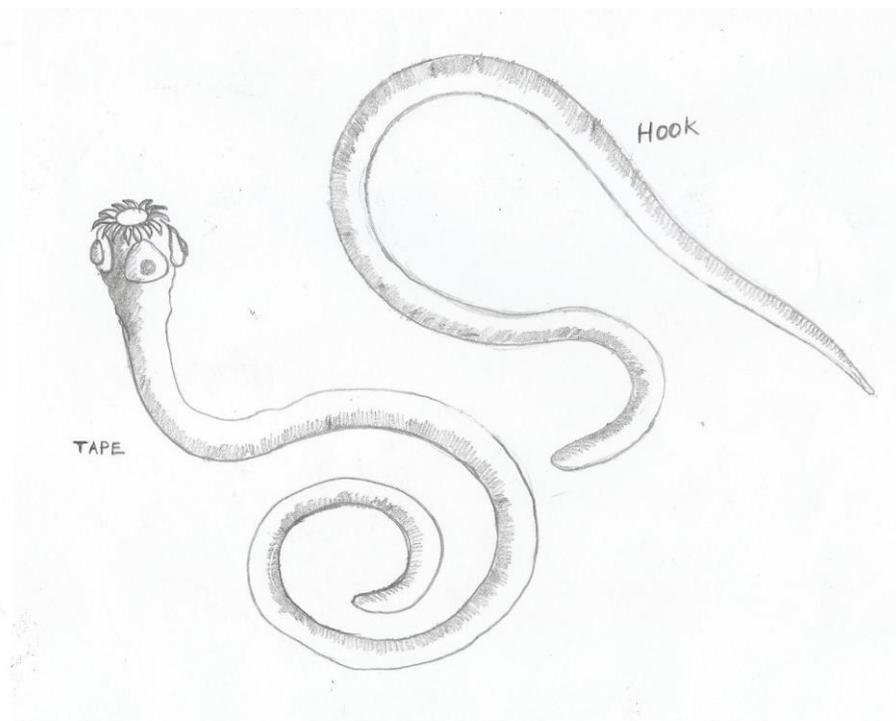
Stocking- It is recommended that you stock 10 weaners in a spacing of 14m x 2m. 5 to 10 pregnant sows may be stocked with extreme care and attention and must have space for the piglets when they farrow.

Step 5: Stock 10 weaners in 14m x 2m space

Feeds and feeding - Pigs normally eat maize, guinea corn, cassava, yam, potato, banana, groundnut-cake, waste from breweries, waste rotten foods, as well as vegetables and fresh young grass with plenty of water. Young stocks at the age of 2-3weeks when they are still suckling the mother should be introduced to solid food. About 1.98-0.21kg of a mixture of equal parts of well crushed maize and fattening concentrate per head per day will be sustainable.

Step 6: Pigs eats almost everything, always give them plenty of water do not over feed the young ones.

Pregnancy Management - Pregnant sows should be served 2-3 times daily. Feed with enough green leave and vegetables, provide sufficient wallows and shade to prevent excessive heat and heat stress, de-worm them 2-3weeks prior to farrowing to prevent it from passing it to the new born piglets. Carefully watch out signs for farrowing which include restlessness and arranging her bedding. Direct piglets obtain their first successful suckle of colostrums within 45minutes after birth. Sows can farrow 8-13 piglets at a pregnancy.



Deworm your pigs from tape and hook worm 2-3 weeks before they farrow

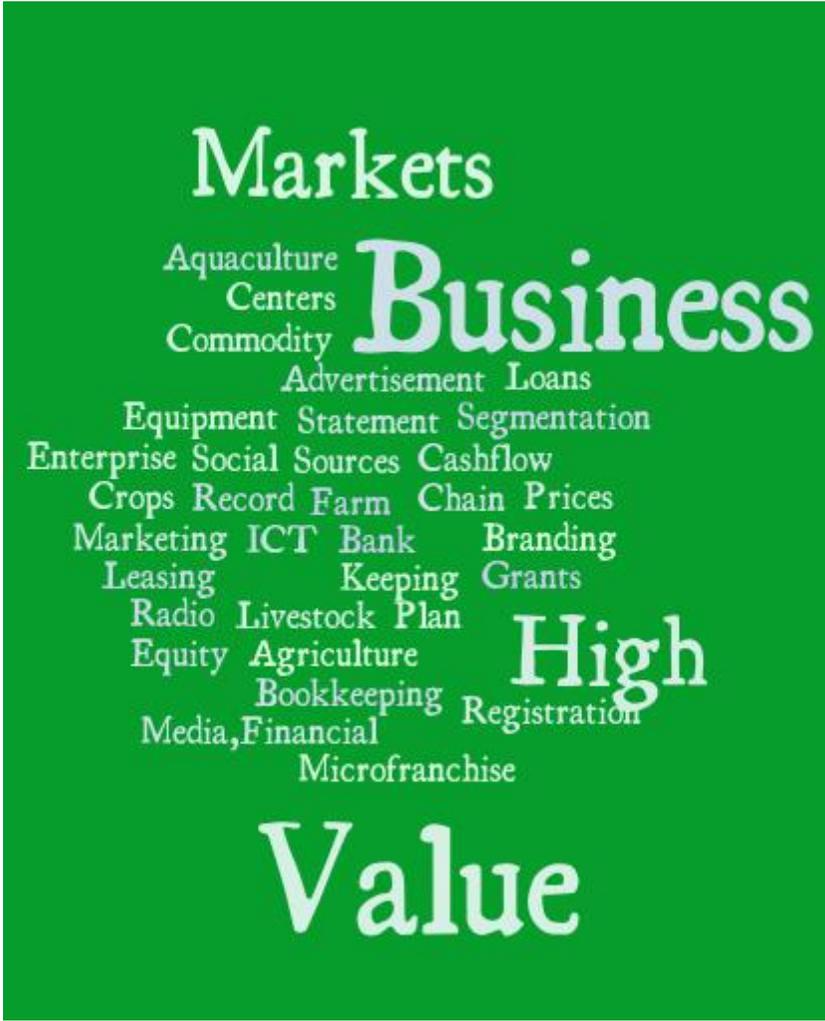
Step 7: Carefully observe for pregnancy signs, ensure that piglets suckle colostrums within 45minutes after birth. Feed sows with green vegetables and de worm them adequately.

Tentative Cost to establish 1 Pig Farm Enterprise

Items	Qty	Unit	Unit Price	Value
Cost				
Purchase of weaner pigs	10	No	7000	70,000
Pig feed/2100kg of mix local feed stuffs (cereals/maize 40% wheat offal/Breweries waste 20%)	2,100	Kg	50	105,000
Veterinary supplies vaccines/Antibiotics	Lump	-	-	50,000
Disinfectant (Izal recommended)	1	Bottles	10,000	10,000
Labour	9	Months	10,000	90,000
Transport	Lump	-	10,000	10,000
Pig house (14m x 5m)	1	-	52,000	52,000
Total Cost				387,000
Income				
Assumption: 7 females had 8 piglets	56	Piglets	8,000	448,000
	6	Females	15,000	90,000
	1	Boar	10,000	10,000
Droppings for organic fertilizer	200	Kg	200	40,000
Total Income				588,000
Profit				201,000

REFERENCES

1. **Agromisa Foundation, Agrodok Series (2004):** Pig keeping in the tropics.
2. **IFAD/FGN/NDDC CBNRMP (2012):** A practical guide to improved package of practices for increased productivity of pig keeping in the Niger-Delta.
3. **NFRA & FAO (2008):** Farm Management Advisory Services – Upstream and Downstream modular Enterprises Advisory Handbook.



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