

### #3. Income Generating Activity Information Sheet

## Pig Farming

Start-up & running costs: For raising 8 pigs for 6 months: UGX 2,737,200 (USD739.8)

Profitability: UGX 862,800 (USD233.2)

Needed: Capital investment in sty, tools, equipment-UGX 2,497,000 (USD674.8)

Issues: Space and shelter for pigs, diseases, fluctuating feed prices

### Introduction



Pork production is an emerging sector in East Africa, mainly by small holder farmers raising pigs as a household income activity in peri-urban and rural areas.

This document is a set of practical guidelines aimed at helping the farmer plan and manage their investment in pig farming.

### Why farm pigs?

- Consumption of pork products is growing across East Africa and globally
- Pigs multiply fast as their fertility rates are high
- Pigs are highly adaptable and relatively easy to farm
- Pig waste provides a cheap source of manure
- Pigs feed on a wide variety of food
- Pork is an economical source of animal protein and is a source of vitamins B1, B2 & B3, selenium, zinc and phosphorous



### Overview of market condition

Pork products are sold through both formal and informal channels. Although there is no organized market system in Uganda, the demand for pork and products is high. In the rural areas, there are local markets that cater for farmers, butchers and middlemen who may transport live pigs to urban centers for slaughter. Irrespective of the type of channel, the current demand for pork outstrips supply and hence the need for increased production.



### Investment & Start-up Equipment needed



A pig farmer has to invest in: a pigsty (shelter), wheel barrow, appropriate clothing, coffee husks, spade, rake, brooms, hoes and durable gum boots. An average space of 6ft\*6ft/pig is recommended size for the pigsty shelter. Structural designs vary according to the budget available and the farmer's interest. The farmer also needs to invest in training to be confident with the basic minimum standards for pig farming. The cost of investment is always higher in the first year.

### Stocking your farm



There are several breeds but the most common in East Africa include: Duroc, Hampshire, Landrace, Large White, Large Black and Camborough. The farmer can also consider crossbreeds. Specialised breeds and crossbreeds grow faster than local breeds and produce 8 to 10 piglets twice a year, yielding returns faster than local breeds. Crossbreeds combine desirable traits in the parent breeds. These can include 'mother-ability' (ability to take care of its piglets) and large litter sizes. It is advisable to buy a 2-month-old piglet. At this level, the piglets are old enough to be independent from their mother.



## Productive Process – Daily to do list

The daily list of tasks for the pig farmer include; general cleaning in and around the piggery, preparing and supplying feeds and water, observing behavior of pigs (during eating, urinating and defecating), stocking feeds and other farm inputs, marketing and record-keeping. A large amount of the farmer's time on a daily should be dedicated towards promoting good hygiene so as to reduce disease transmission. Ensure all the feeding and drinking troughs are cleaned on a daily basis.



## Feeding

Pigs have a high food to weight conversion rate. Feeding is the biggest cost of pig farming (70% of production costs) but appropriate feed is crucial for high growth rates and profitability. Feed requirements vary according to the different types of pigs and their condition. Feed quantities vary for piglets, weaners, growers, pregnant sows, sows and suckling piglets.

### Feeding Quantities:

Pig type	Weight (kg)	Feeds (kg/day)	Feed Item	Quantity (kg)
Weaners	–	1.0	Maize brand	100
Growers	25	1.5	Palm kernel meal	15
	45	2.0	White salt	2
	65	3.0	Silver fish	5
	85	3.0	Wonder pig/ Big pig	2
Breeding sow/boar		2.5–3.5	<b>Note:</b> This mix applies to pigs ranging from 2 months old onwards	
Suckling sow		2.5 plus 0.5/piglet		

### Food quantity/pig/month

	Period	Kilos	Pigs	Unit Cost	Total Cost (UGX)	Total Cost (USD)	Your Total
<b>Feeds</b>	Month 1	30	1	640	19,200	5.2	
	Month 2	45	1	640	28,800	7.8	
	Month 3	60	1	640	38,400	10.4	
	Month 4	60	1	640	38,400	10.4	
	Month 5	75	1	640	48,000	13.0	
	Month 6	90	1	640	57,600	15.6	

**Note:** Unit cost is based on the current average price per kilo of mixed feeds.

## Risks analysis and mitigation in pig farming

Risk	Likelihood of occurrence	Level of Impact	Mitigation measure
Diseases e.g. swine fever	Low	High	Daily check-up, cleaning the sty, applying disinfectants, regular check by veterinarian.
Sows killing their newly born piglets	Medium	High	Keeping young ones away from their mothers after breastfeeding, monitor during breastfeeding.
Predators	Low	High	Ensure piggery is securely fenced and locked, regular check-ups, being alert to any noise from pigs.
Increased running costs	High	Medium	Stock feeds in bulk, regularly review suppliers, make clients aware, increase prices.
Theft of piglets, assets, inputs or products	Medium	Medium	Regular review of asset register, clear financial processes, orders and receipt books used in financial processes, secure locks.
Competition	Medium	High	Market research, competitor analysis and customer care.
Poor management of business operations	Low	High	Management and technical training.
Stunted growth	Medium	High	Review the feeds, feeding based on weight, seek veterinary advice, timely vaccination and deworming.



## Pig diseases, treatment and control

Disease	Clinical signs	Treatment	Control
African swine fever	Fever, dullness, loss of appetite, coughing, vomiting and diarrhoea, death	No vaccine	Restrict movement of pigs; slaughter of all pigs on the affected farm, disinfection
Foot & mouth disease	Fever, wounds on nose, mouth, foot, lameness, saliva running from the mouth	No treatment, animal should be destroyed	Slaughter of pigs in the affected houses; vaccination
Swine erysipelas	Sudden death, loss of appetite, red and bluish appearance of the skin and ears, reproductive failures	Penicillin	Clean, disinfect and treat pigs with penicillin.
Piglet anaemia	Pale mucous membranes and skin, dullness and diarrhea	Ferrous sulphate injections or oral formulations	Put red soil in pig pen or give iron injection to young piglets
Mastitis, Metritis & Agalactia (MMA)	Sow fails to release milk after farrowing, swollen and painful udder	Use antibiotics and oxytocin	Good hygiene in the pig pen
Worms	Poor performance of the pigs with low growth rate, coughing in case of lungworms, straight tail	Anthelmintics like Levamisole and Piperazine	Deworm pigs every two months after weaning

- Note:**
- Vaccination is key as it introduces immunity by stimulating antibody development
  - Maintain good hygiene standards, even when carrying out veterinary tasks
  - Keep the farm free from diseases and health problems. Proper vaccination, de-worming are very important steps
  - For more details check

## Financial Analysis and Projections

The figures below are an estimate of the costs of production for 6 months of raising 8 pigs based on an experienced Ugandan farmer. Figures are divided into 3 sections: investment, startup/running costs and production, profit and loss.

**NB:** The blank 'Your Total' column gives space for your own calculations.

### a. Investment Budget

Item	Qty	Unit Cost	Total Cost	Total USD	Your Total
Sty	1	1,500,000	1,500,000	405.4	
Wheel barrow	1	135,000	135,000	36.5	
Spade	1	50,000	50,000	13.5	
Scrubbing brush	2	6,000	12,000	3.2	
Piglets	8	100,000	800,000	216.2	
<b>Total</b>			<b>2,497,000</b>	<b>674.8</b>	

### b. Start-up/Running costs

Item	Qty	Unit Cost	Total Cost	Total USD	Your Total
Feeds in Kilos (month 1)	240	640	153,600	41.5	
Feeds in Kilos (month 2)	360	640	230,400	62.3	
Feeds in Kilos (month 3)	480	640	307,200	83.0	
Feeds in Kilos (month 4)	480	640	307,200	83.0	
Feeds in Kilos (month 5)	600	640	384,000	103.8	
Feeds in Kilos (month 6)	720	640	460,800	124.5	
Disinfectants	6	15,000	90,000	24.3	
Transport	6	20,000	240,000	64.9	
Vaccination	6	12,000	72,000	19.5	
Deworming	6	12,000	72,000	19.5	
Labour	6	70,000	420,000	113.5	
<b>Total</b>			<b>2,737,200</b>	<b>739.8</b>	

**Note:** Feeds are calculated based on 8 pigs to be reared for 6 months



### c. Production, Profit and Loss projections (based on 6 months production)

Item	Unit	Freq	Unit Cost (Ugx)	Total (UgX)	Total (USD)	Your Total
<b>Production calendar</b>						
Pig meat	Kilos	60	8	480		
<b>Sales Calendar</b>				Sales Calendar		
Pig meat	Kilos	480	7,500	3,600,000	973.0	
<b>Income</b>				<b>3,600,000</b>	<b>973.0</b>	
Running cost	Yearly	1	2,737,200	2,737,200	739.8	
<b>Net profit/loss</b>				<b>862,800</b>	<b>233.2</b>	

### Keeping business records

Record keeping is essential to allow the pig farmer to track the major activities undertaken from the start of the pig farming business. Keeping simple records of costs and income from sales will allow determination of the profitability of the pig-farming business. Records such as pig stock, costs, income, deaths, sales etc. need to be maintained. At the end of the year (and at intermediate periods), the above records will provide information on total value of pigs sold and profit and losses. Record keeping is essential to allow the pig farmer to track the major activities undertaken from the start of the pig farming business. Keeping simple records of costs and income from sales will allow business analysis and provide evidence to potential investors. Above all, for a farmer to run a legitimate business enterprise, it is important to register with the relevant authorities so as to obtain lawful operational license and as well enable the business to comply with taxes.

### Other relevant resources

1. Seeds of gold: Managing a piggery farm: <https://www.youtube.com/watch?v=u2rSqOvniq0&pbjreload=10>
2. Modern piggery farming: <https://www.youtube.com/watch?v=BUpc9GIIJf8>
3. On the farm: <https://www.youtube.com/watch?v=BWdRxPLBQYM>
4. Understanding commercial pig farming in Uganda – part one: <https://www.youtube.com/watch?v=tR-x4doLyBY>
5. On the farm: Dealing with waste management in pig farming: <https://www.youtube.com/watch?v=RhMOHDO10v0&t=193s>

### Point of Reflection – Think through the following:

- a) How can you add value to your product? Do you sell live or can you process (dry, smoke, salt) and sell for a higher price?
- b) Who is your market? Do you sell to wholesalers or can you sell directly to the public?
- c) How can you grow your brand, what unique selling point can you bring to your brand/product?
- d) Is there any value to animal waste, can you process dung and sell quality manure or use it to grow your own vegetables?

### Further Information

For further information, please contact Teach A Man To Fish ([www.teachamantofish.org.uk](http://www.teachamantofish.org.uk); [info@teachamantofish.org.uk](mailto:info@teachamantofish.org.uk)) or see Agripreneurship Alliance ([www.theagripreneur.org](http://www.theagripreneur.org); [info@theagripreneur.org](mailto:info@theagripreneur.org))