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FARMERS CHOICE LTD

An Overview of Value Chains Associated with Swine Production and Marketing – Eastern Africa

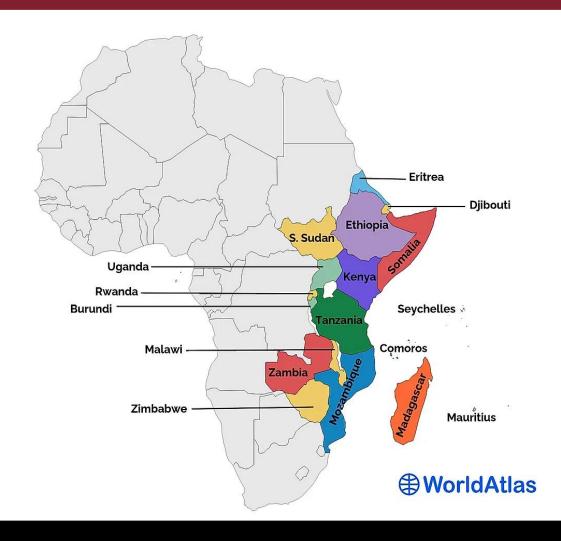


Regional training course (Africa)
Import risk analysis for African swine fever
9 November – 14 December 2021



Organisation Mondiale de la Santé Animale World Organisation for Animal Health Organización Mundial de Sanidad Animal

Eastern Africa

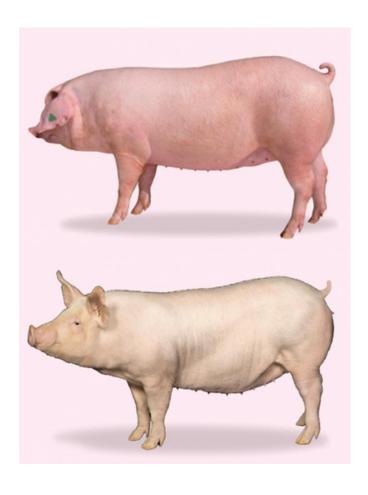


- There are 18 countries and 2 dependencies in East Africa
- Seven of East Africa's countries are landlocked countries.
- Most populous sub region of Africa;
 Population 455 million
- 70% of the population live in rural areas.
- East Africa has some of the world's fastest growing economies, including Ethiopia, Rwanda, Tanzania and South Sudan

Demographics of Pig Production in Eastern Africa

- Pig production is a dynamic and rapidly growing sector in the region.
- Growth is driven by a rising demand for pork and pork products.
- Recent estimates indicate that demand for pork and poultry products in East Africa will increase 4—fold by 2030.
 - Changing tastes
 - Increasing human population
 - Increased incomes
 - Urbanisation
- Small scale pig farming is the predominant production system > 70%, across the region but it's contribution to improving livelihoods and enhancing food security is limited by frequent disease outbreaks.
- Breeds kept indigenous, Exotic or crosses of the two

Breeds - Maternal Lines



Traits

Prolificacy

Efficiency

Robustness

Conformation

Longevity

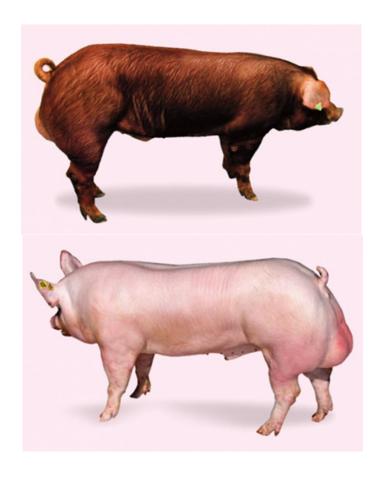
Temperament

Mothering ability

High health status

Disease resistance

Terminal Lines



Traits

Growth rates,

Feed intake & FCE

ADG

High kill out % and carcass yields

Maximum hybrid vigor

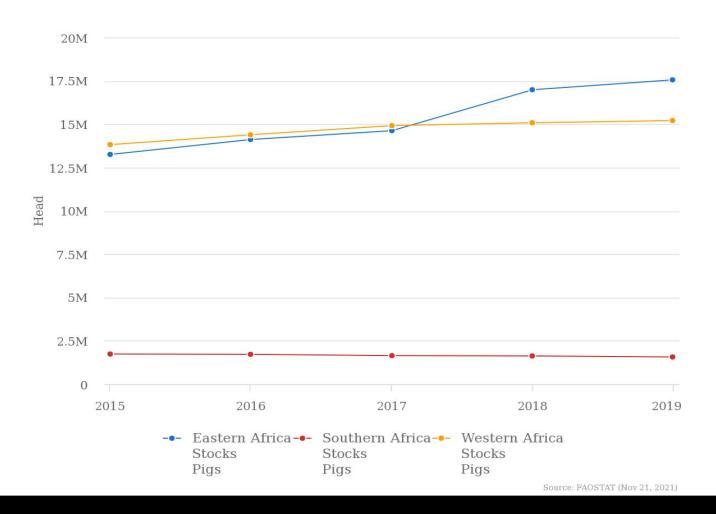
Disease resistance

Robustness

Hardy

High health status

Eastern Africa Pig Population



Area	ltem	Element	Year	Value
Kenya	Pigs	Stocks	2019	596414
Madagascar	Pigs	Stocks	2019	1166555
Malawi	Pigs	Stocks	2019	7283584
Mauritius	Pigs	Stocks	2019	18643
Mozambique	Pigs	Stocks	2019	1635049
Zimbabwe	Pigs	Stocks	2019	298532
Rwanda	Pigs	Stocks	2019	1228465
Seychelles	Pigs	Stocks	2019	4618
Somalia	Pigs	Stocks	2019	3859
United Republic of Tanzania	Pigs	Stocks	2019	523563
Uganda	Pigs	Stocks	2019	2746453
Ethiopia	Pigs	Stocks	2019	36535
Zambia	Pigs	Stocks	2019	1207294
Burundi	Pigs	Stocks	2019	804013

COUNTRY	Total meat production (all species, Tonnes)	Proportionate (%) contribution of each species to total meat production (2015 - 2019 average)					
		Chicken	Cattle	Goat	Pig	Sheep	Camel
Burundi	42,631.40	16	35	22	25	2	
Ethopia	684,811	10	50	12	0.3	13	4
Kenya	750,756	10	63	6	2	4	10
Rwanda	105,023	17	31	19	12	5	
Uganda	413,544	16	42	9	31	2	
Tanzania	562,938	14	68	7	3	4	

	Thousand tonnes			% change	Annual Growth rates		
	2010	2030	2050	2010 - 2050	2010 - 2030	2030 – 2050	2010 - 2050
Beef	467	734	1277	173%	2.28%	2.81%	2.55%
Poultry	4839	7513	13298	175%	2.22%	2.90%	2.56%
Mutton & goat	87	103	127	46%	0.89%	1.02%	0.95%
Pork	13	29	48	268%	4.14%	2.49%	3.31%

The Pork Value Chain in Eastern Africa

INPUT SUPPLY

- Live pigs
- Feed, water
- Vet. and lab Services
- Extension

PRODUCTION

- Feeding
- Mgt. of the animal

MARKETING

- Buying (traders, marketing groups)
- Transporting

PROCESSING

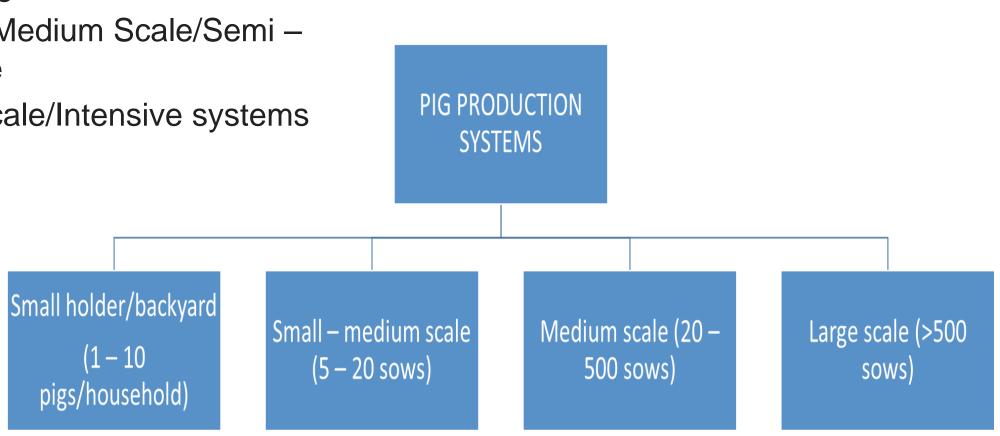
Slaughtering
Chilling
value addition
Packing
Distribution

CONSUMPTION

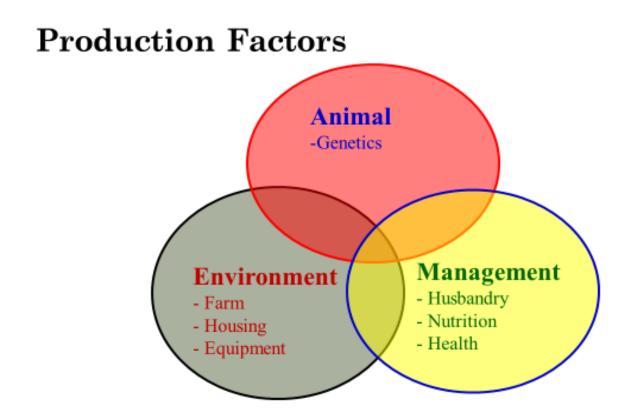
Domestic Export

Pig Production Systems

- Free range/Extensive
- Small Medium Scale/Semi -Intensive
- Large Scale/Intensive systems



Production Practices Associated with each System



1. Free Range (Backyard)/Extensive

- Less than 10 pigs
- Pigs left to roam freely and in some cases are housed in the evenings.
 - Owners don't own land
- Poor access to Veterinary, Extension, financial and market information services.
- Poor husbandry and health management practices.
- Poor genetics characterised by inbreeding, absence of appropriate breeding strategies.
- Breeding stock/pigs sourced from neighbours.
- Feed options scavenging from dumpsites, swill, kitchen leftovers, market spoils.
- Market weight is low and pigs take long to attain this >10 months
- Low input and gain
- High sales occur mostly during festivities or disease outbreaks









2. . Small – Medium Scale/Semi – Intensive

- 5 500 sows.
- Improved genetics, sourced from private and government institutions and sometimes from neighbours.
- Use of communal boars. A.I in some cases
- Feed commercial supplemented with swill/kitchen waste whilst others do their own mix.
- Improved husbandry practices coupled with access to Veterinary and extension services.
- Housing provided Semi permanent or permanent using locally available materials.
- Majority are farrow to finish units with a small percentage selling off weaners.
- Improved access to markets and market information.
- Higher market weights at a younger age.
- Better biosecurity knowledge and implementation.













3. Large Scale/Intensive Systems

- > 500 sows
- World class genetics often imported from Europe with breeding strategies in place.
- High investments Modern housing, management, labour, piped & treated water, biosecurity and better gains.
- Vertical integration common.
- A.I favoured over natural mating.
- Feeds High quality commercial feeds, suited to the different classes of pigs.
- Access to good veterinary services coupled with high biosecurity leads to low diseases burden and mortality.
- High market weight at a young age < 6 months.</p>
- Waste management strategies manure, carcasses.
- Structured and better market access.
- Examples Farmers Choice Ltd Kenya, Breeds, Feeds and Meats Uganda







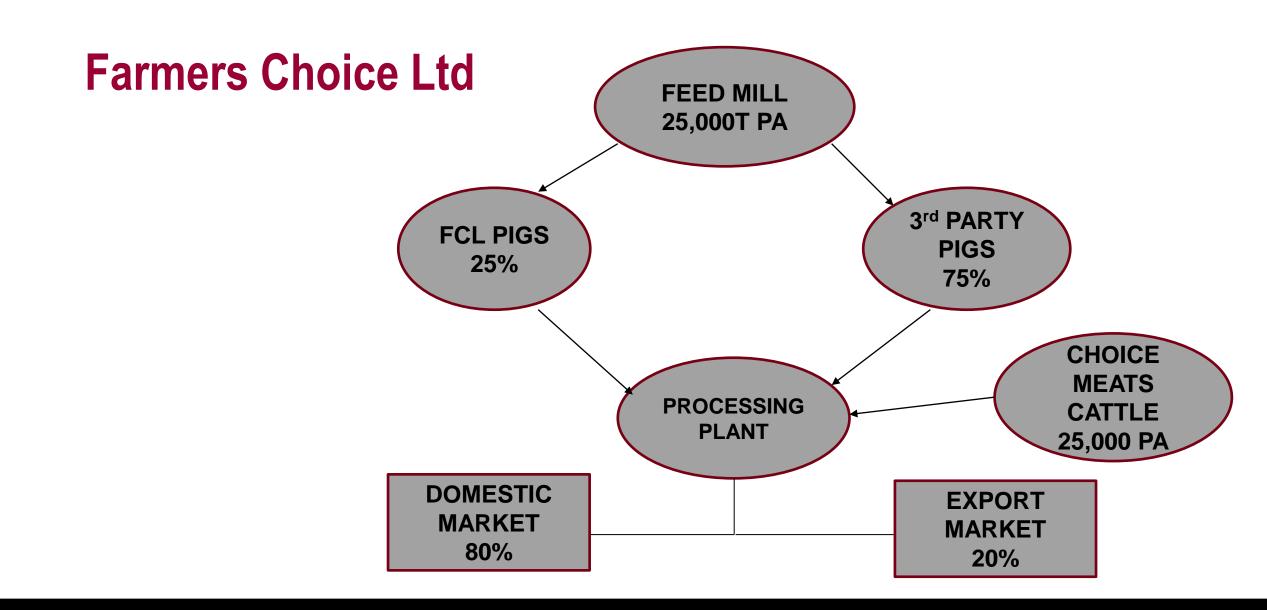








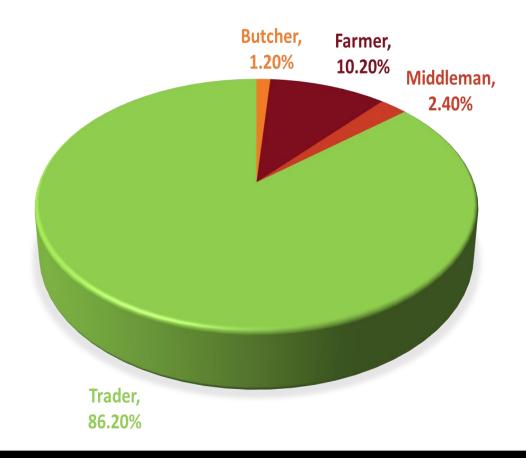




Trade and Marketing Practices Associated with each System

1. Free Range/Extensive System

- Butchers and traders move from homestead to homestead and village to village – fattening &/or slaughter.
- Transport modes pick ups, saloon cars, boda bodas, bicycles.
- Local slaughter small to medium size slaughter houses, slaughter slab.
- Consumption mostly local pork joints, butchers.



Transport Modes



Photos courtesy – World Animal Protection









2. Small – Medium Scale/Semi - Intensive System

- Farmers sell directly to slaughter houses or to butchers & traders.
 May be contracted.
- Higher number of pigs sourced from one farm.
- Medium large size slaughter houses or own slaughter slabs.
 - Lairage running water Chillers/Cold rooms Meat inspection
 - Stunning and bleeding area Waste management Trained personnel
- Transport better organised Pick ups, trucks.
- Consumption local butchers, pork joints, further processing.







Large Scale/Intensive Systems

- Produce high numbers.
- Deal with medium large scale slaughterhouses.
- Payment done on cold dressed weight after slaughter.
- Welfare friendly transport, mostly trucks.
- Value addition Fresh and processed products.
- Market High end retailers (hotels, restaurants, supermarkets), export.



















References

- Murungi et al 2021: The Nairobi Pork Value Chain: Mapping and Assessment of Governance,
 Challenges and Food Safety Issues.
- Dione. M, et al 2017: Enhancing Biosecurity along Uganda's Pig Value Chains.
- Dione et al 2016: Qualitative Analysis of the risks and practices associated with the spread of ASF within the small holder pig value chains in Uganda.
- Lichoti et al 2017: Pig Traders' Networks on the Kenya Uganda border highlight potential for mitigation of African Swine Fever virus transmission and improved ASF disease risk management
- FAO Livestock Country Reviews Pig Sector, Kenya. 2012
- Yamo 2021 Animal welfare in pig production.











Thank you for your attention!













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