



#### **Presentation Outline**

- Background and introductions
- Pig Value chain assessment
- Pig production system
- Pig production inputs in Kenya
- Pig Supplies
- Pig abbattoirs
- Processors
- Transportations
- Marketing
- Challenges
- Wildlife interactions in the pig value chain
- Risk Factors Associated with spread of ASF



## **Background & introduction...**

- Pig production in Kenya started in 1904 imported from Seychelles.
- In 1907 the Upland Factory was constructed and in 1940 farmers started the Pig Producers Association.
- The association was dissolved in 1959 and Uplands Factory became a parastatal.
- In 1964 indigenous Africans started producing pigs. They were mainly small scale farmers around Kiambu, Nakuru and Murang'a.
- In 1972 Uplands became a large scale factory with some government support.

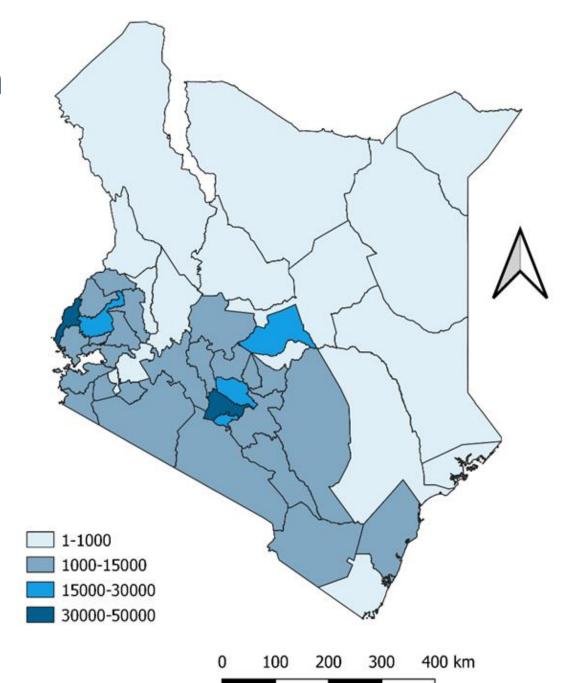


## **Background & introduction...**

- In 1986 the Uplands Factory was closed and the pig industry declined processing limited to one company.
- Pig production in Kenya has grown steadily in the last 10 years the main obstacles in the industry currently is the high feed prices to introduction of taxes on animal feed.
- Most commercial pigs in Kenya are of exotic breeds, intensively managed and concentrated around Nairobi County and its environs.

# **Background & introduction**

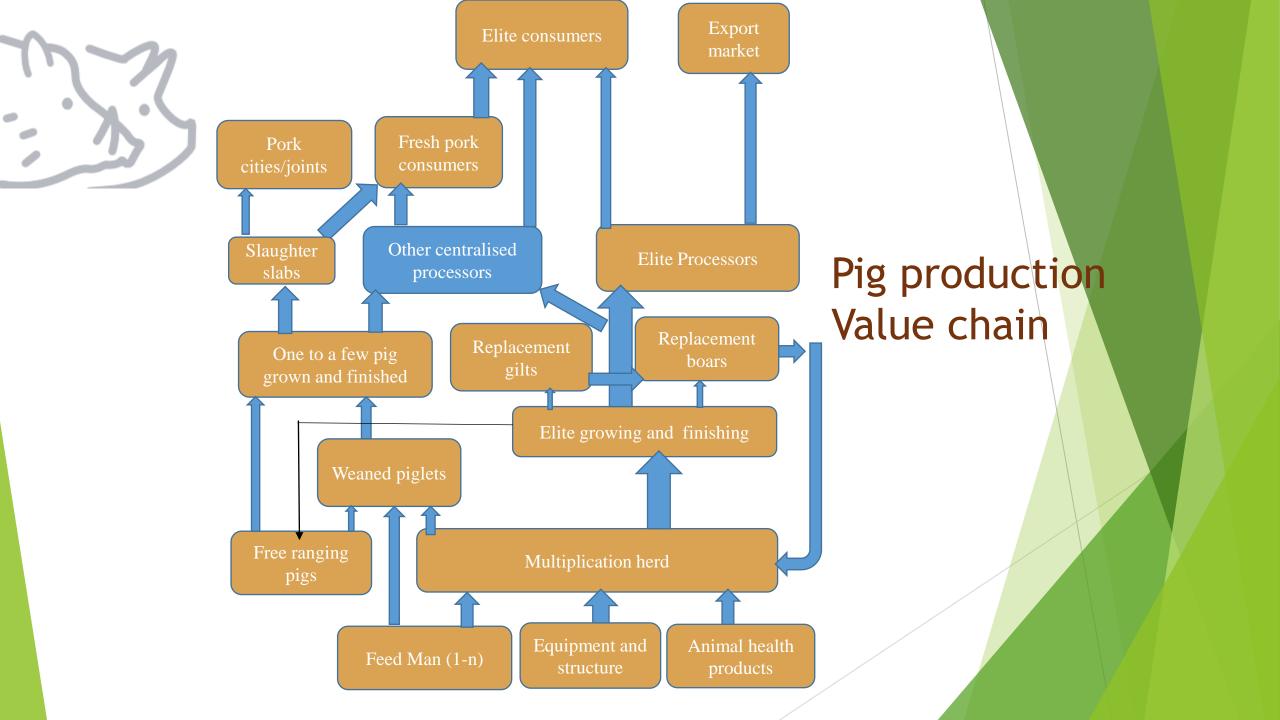
- Kenya's pig population is estimated at about 800,000 pigs.
- Western, Rift Valley, Nyanza, Eastern, Central and Nairobi are the regions with significant pig populations
- Small scale farmers constitute about 70% of the total pig farmers.





## Pig Value Chain Assessment...

- In Kenya the current per capita consumption of pork is 0.4 kg, behind bovine meat at 12.2 kg, mutton/goat at 2.2 kg, and poultry at 0.6 kg FAO. FAOSTAT. (2020).
- Recent estimates indicate that the demand for pork and poultry products in East Africa will increase 4-fold by 2030 (Alexandratos 2012).
- Attributed to urbanization, increasing incomes and human population growth (FAO 2012)
- Monogastric animals have shorter production cycles, require smaller land areas and have better concentrate feed conversion rates than ruminants (FAO 2012)
- Pork meat provides an opportunity to cater for the projected increasing demand for meat



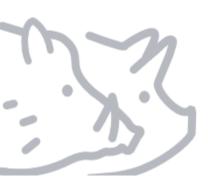


## Pig production systems

- Currently, intensive pig farming and free range scavenging systems are the most prevalent farming systems in the country (11, 12).
- Majority of peri urban farmers in Nairobi confine their pigs (Wabacha 2004), while in rural areas, most pig keepers let their pigs scavenge for feed (15-18).
- This system is however common in urban Nairobi, in particular dumping sites (19)
- Characterized by minimal or no health care, supplementary feeding, poor housing and high level of inbreeding (Kagira et al 2010).







#### Inputs

- feed accounts for about 80% of the cost of pork production.
- Feed manufacturers are not specialised in pig feed but provide feed for all types of livestock; pig feed accounts for 3% of feed output from millers.
- mushrooming of businesses providing cheap but poor quality feeds.
- ► Farmers are increasingly producing their own feed from raw materials purchased and mixed at the farm and supplemented with the compounded feeds to cut costs.
- Veterinary medicine suppliers are readily available, though they contribute to less than 2% of the cost of production.



## Pig supply

- Mainly organized by traders, brokers and butchers,
  - ▶ Traders merchants who buy live pigs from brokers, or less commonly, from farms.
  - Brokers merchants who act as the bridge between the farmer and the trader and did not normally own pigs but rather get a commission for connecting a traders and farmers.
- large majority 70% of all slaughtered pigs are sourced from small-scale pig farms nearby counties of Nairobi.
- A small proportion of pigs slaughtered originated from further away counties from western Kenya (Akoko et al 2019).
- ▶ Illegal importation from neighbouring countries porous borders
- Legal requirements: Pigs brought to the abattoirs are required to be accompanied by movement permit certificates and "no objection" permits, when coming from a different district.



# Marketing

- Live pigs Brokers, traders and producers
- Slaughtered pigs Meat inspectors, slaoughter house workers, buthers
- Eateries and butcheries consumers, producers
- Processed products consumers



## Transportation

- Use of motor vehicles represented the main transport mode - 30 pigs per week
- Trekking of pigs
- Transport through motorcycle
- Products are distributed mainly through motorcycles, with a few traders owning cars or trucks with a meat box.





## Pig abattoirs

- Few abattoirs exist in Kenya and much of the slaughter takes place informally in farms and unlicensed slaughter points.
- There is one large pork processing firm in the country that accounts for over 80% of the national supply of processed products.
- ▶ There are 5 main pig abattoirs in Kenya; Farmers' Choice with a capacity of 400 pigs a day, Kenol-Kabati slaughter house in Thika with capacity of 30 pigs per day; Ndumboini Slaughterhouse in Kabete with capacity of 50 pigs per day; Lyntano slaughter house in Nairobi with capacity is 8 pigs per day; and London slaughter house in Nakuru with capacity of 50 pigs per day, Naromoru slaughter house, Kitengela pig slaughterhouse 15-20 pigs .
- The remaining pork chains run through unorganized slaughter slabs and local backyard slaughtering (FAO 2012).
- there are over 300 small-scale unlicensed in-farm pig slaughterhouses or slabs in virtually all parts of the country (KNPFA)
- Lapses in biosecurity measures





#### **Processors**

- ► The large pork processors are located in Nairobi area and major cities
- The main pork processors are FC, and other small processors in Nairobi, Nakuru, Njoro and Eldoret.
- Most processors source carcasses from Ndumboini and Kabati slaughterhouses with the exemption of FC.
- Low adherance to international quality standards such as Hazard Analysis Critical Control Point (HACCP), BVQI (Bureau VERITAS Quality International), ISO and Total Quality Management standards.







#### Wildlife interaction in value chain

- In Kenya wild suid species warthogs (Phacochoerus spp.), bushpigs (Potamochoerus larvatus) and the giant forest hog (Hylochoerus meinertzhageni) are abundant and widely distributed
- Species of warthogs
  - the desert warthog (Phacochoerus aethiopicus delaramei) which occur in the northeast, east, southeast and central Kenya
  - ▶ the common warthog (Phacochoerus africanus) which occur widely in free range grassland and savanna habitats
- ▶ Bush pigs occurs in a wide range of altitude predominantly in southwest, central and south eastern parts of Kenya.
- In peri-urban and rural areas bushpigs and warthogs have been reported to forage for food in croplands and compost pits





## challenges

- Feeding market waste. Feedmillers face challenges of availability and supply of quality raw materials.
- Diseases and parasites
- Inbreeding and lack of AI accessing quality breeding stock and pig artificial insemination services are unavailable.
- Levies and licences
- limited knowledge among the industry value chain actors on various key topical issues.
- inability to access the market
- Poor organization and coordination among the value chain actors



#### **Risk Factors Associated with spread of ASF**

- Over-reliance on hotel left-overs (swill) by producers
- Uncontrolled and sometimes illegal movement of pigs and pig products within the country and into the country - inadequate enforcement
- poor production system all-in, all-out production system not common
- Freely roaming pigs, bush pigs and warthogs.
- Interaction of domestic pigs with wild suids
- Porous borders illegal importation of pig and pig products
- Lack of compensation by the government
- Weak early warning system
- Lapses in Biosecurity at pig slaughterhouses and therefore facilitating spread of ASF to other farms.

# Thanks!









