

Tracing the origin of external feed inputs to assess the circularity of livestock farming systems in Kenya

D.J.M. Braamhaar¹, S.J. Oosting¹



Objectives

To assess circularity of livestock production systems in Kenya

Sub-objectives:

- To assess diet composition of pig, poultry and dairy farms
- To identify external feed inputs of livestock farms
- To trace the origin of ingredients of compound feeds

Conclusion

Pig and poultry farms highly depended on external feed inputs (e.g. by-products food industry) for their compound feed. Protein sources (e.g. soybean meal, sunflower seed cake) were mainly derived from East-African countries, while wheat as energy source and feed additives (e.g. minerals) were often derived from global market.

Background

Consumption of animal-source food (ASF) is expected to increase in Kenya. Policymakers often focus on increasing livestock production through intensification practices that increase the need for high quality feed inputs such as maize and concentrate as detriment of low opportunity cost feed. Therefore, intensification will increase feed-food competition and sourcing of products from elsewhere, and consequently interrupt nutrient cycling and circularity.

Methods

Research area: Njoro Ward, Nakuru County, Kenya

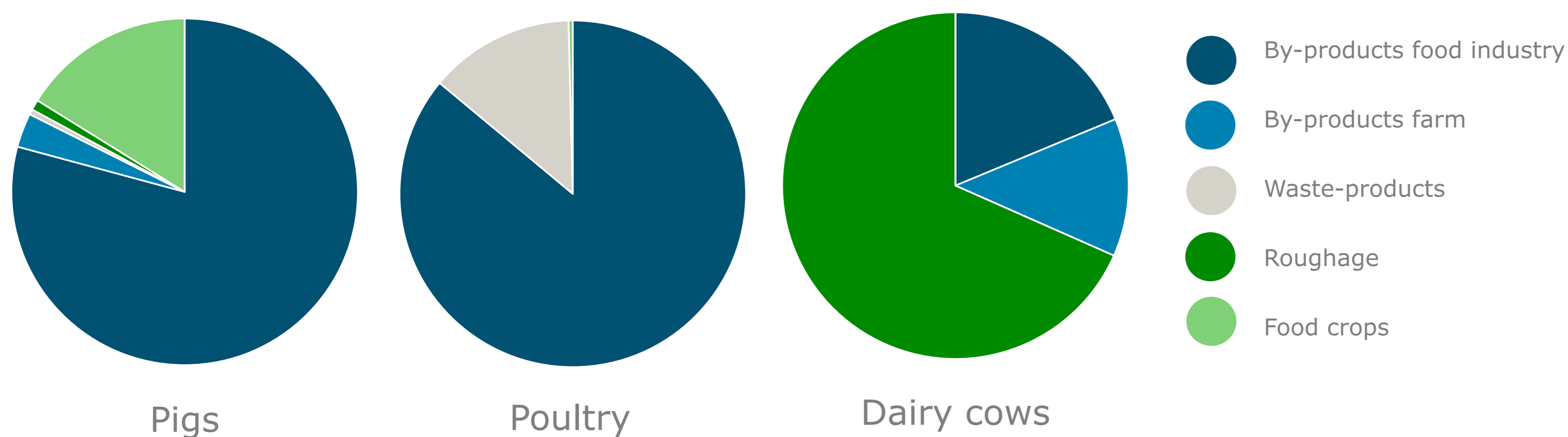
- In-depth interviews with
- Farmers ($N=19$) → feed composition
 - Feed suppliers → feed origin

Classification of feeds: by-products (i.e., produced during production of the primary product), waste-products (i.e., no longer valuable in the context of the process that generated it), roughage, and food crops.

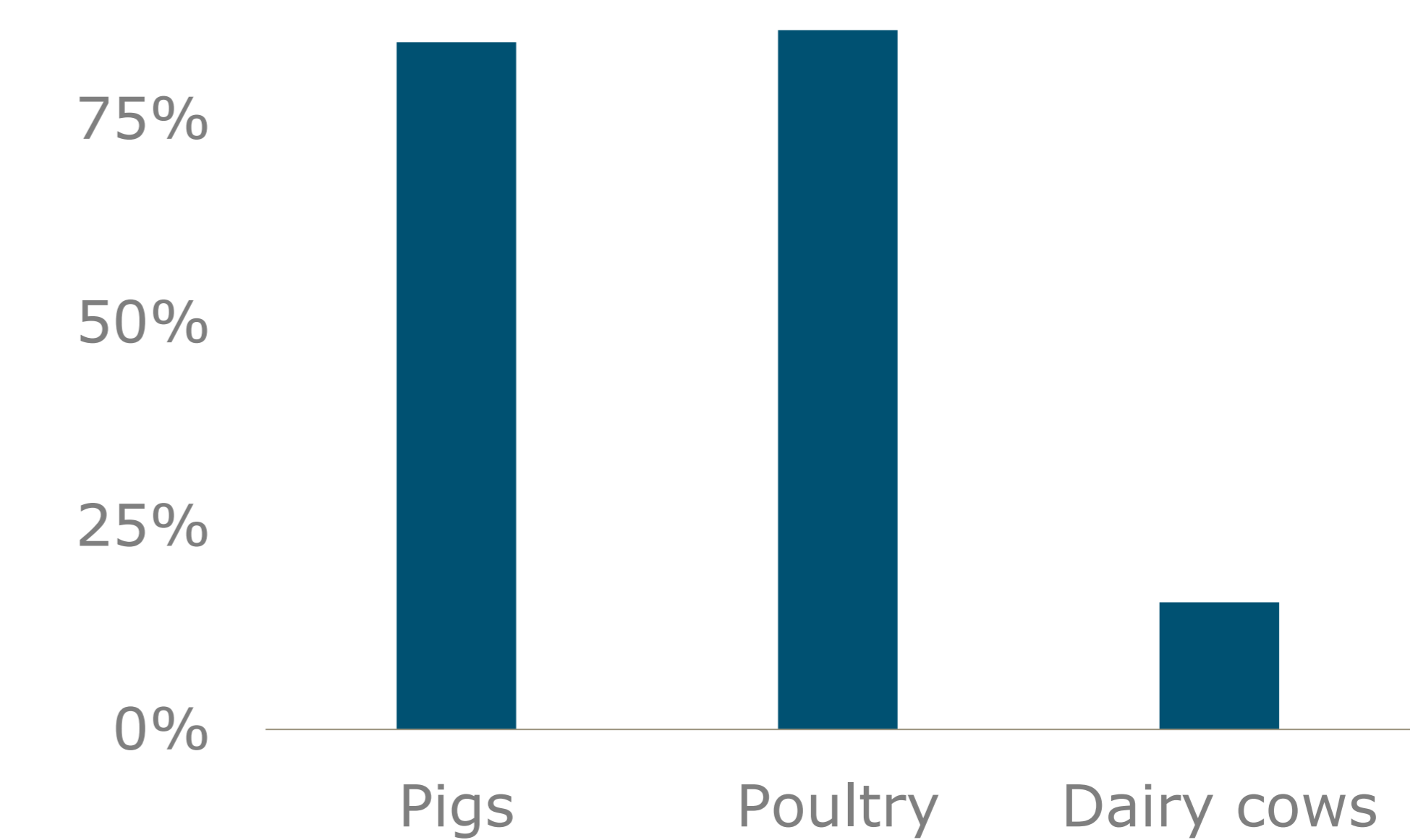


Results

Diet composition (%)



External feed inputs (%)



Location of compound feed ingredients

