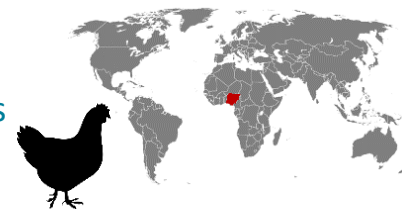


Poultry production in Nigeria

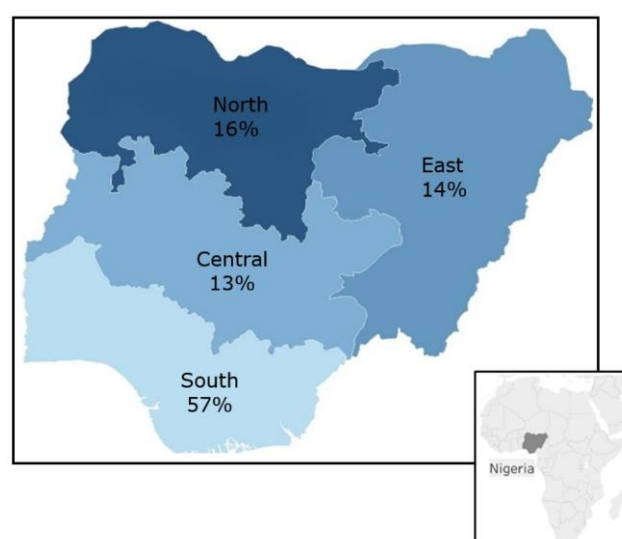
The Nigerian poultry sector has expanded rapidly in recent years. Local production only addresses 30% of the demand for chicken eggs and meat, thus there is huge scope for the industry to expand.



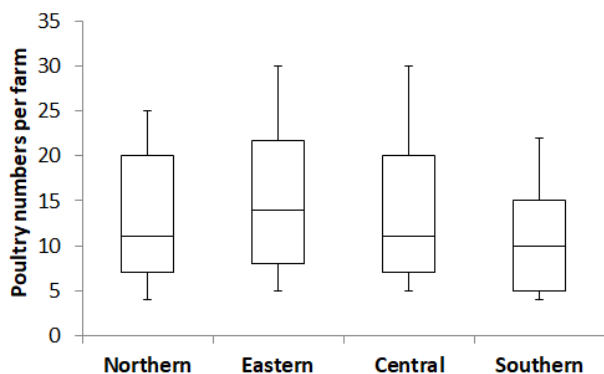
Industry snapshot:

- Nigeria has the largest annual egg production and second largest chicken population in Africa.
- The Nigerian poultry industry comprises about 180 M birds.
- Of these, 80 M chickens are raised in extensive systems, 60 M in semi-intensive, and the remaining 40 M in intensive systems.
- Poultry production in Nigeria amounts up to 300 Mt of meat and 650 Mt eggs per year.
- About 85 M Nigerians are involved in poultry production (many on a small to medium scale.)

Total poultry population by agricultural zone (Data from 2016 livestock census)



Baseline poultry numbers per farm for different regions within Nigeria. Box plots below show 10th, 25th, 50th, 75th and 90th percentile flock size, based on data from the LSMS survey (2016) (based on the extensive indigenous flock households with < 100 birds).



Poultry production systems

Extensive system

- The extensive/free-range/backyard system comprises nearly half of the chicken population.
- Flock sizes comprise of up to 50 birds.
- Production is subsistence-oriented, mainly for family consumption with low levels of egg productivity.
- The flock includes birds of different indigenous species and varying ages.

Semi-intensive system

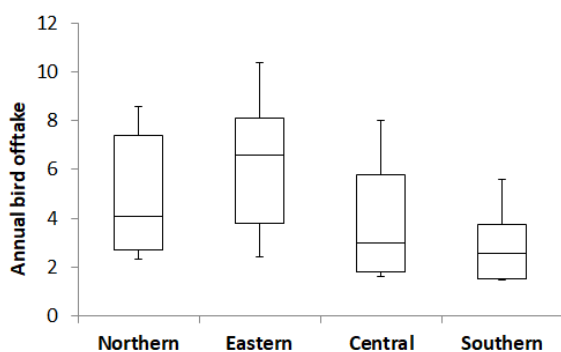
- The semi-intensive system is a family-based subsistence and market-oriented production system, comprises about one third of total chicken population.
- The average flock size ranges from about 50 to about 2,000 birds including both improved and indigenous breeds with low to medium productivity levels.

Intensive system

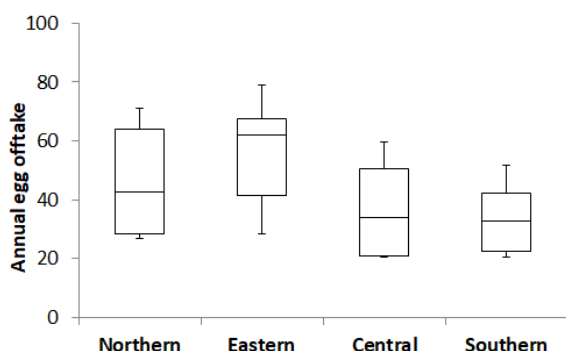
- The intensive poultry system is a market-oriented production with high bird numbers (> 2,000 birds) and high productivity levels from exotic breeds of poultry.
- Around 21% of chickens in Nigeria are raised in commercial/integrated farms.
- Most of these are concentrated in the south west region, near major cities

Poultry yields

Median annual bird production rates (birds sold or consumed) range from 3 to 7 birds/year (box plots below show 10th, 25th, 50th, 75th and 90th percentile) (Modelled in VIPOSIM (Udo et al. 2006) using data from LSMS (2016)).



Median annual egg production rates (eggs/hen sold or consumed) range from 33 to 62 eggs/hen per year (box plots below show 10th, 25th, 50th, 75th and 90th percentile) (Modelled in VIPOSIM (Udo et al. 2006) using data from LSMS (2016)).



Issues and opportunities for poultry

- The traditional indigenous poultry system is inexpensive and low input, with the capacity to handle harsh weather conditions and adapt to adverse environments.
- Rural poultry systems are generally of small-scale, characterized by insufficient hygiene management and receive little or no veterinary inputs.
- The costs of labour, medication, and fluctuating feed prices constitute substantial input costs in poultry production.
- Small-scale farmers suffer from marketing problems due to lack of market access with poor infrastructure.
- Indigenous birds are preferred by the majority of Nigerians for their taste, pigment, leanness and suitability for traditional dishes.
- Poultry production has not kept pace with the rapid increase in domestic consumption.
- There is enormous potential for the poultry industry in Nigeria to enhance food and nutritional security, while contributing to household and economic growth.
- Modelling can assist in understanding how interventions can improve egg and meat production for extensive backyard systems.

References:

FAO (2019) The future of livestock in Nigeria. Opportunities and challenges in the face of uncertainty. FAO, Rome, Italy.

Heise et al. (2015) The poultry market in Nigeria: Market structures and potential for investment in the market. International Food and Agribusiness Management Review 18: 197-222

LSMS Survey (2016)

<https://microdata.worldbank.org/index.php/catalog/2734>

PAN (2017) History of the poultry association of Nigeria. Poultry Association of Nigeria, Abuja
<http://www.poultryassociationng.com/>

Udo et al. (2006) Modelling the impact of interventions on the dynamics in village poultry systems. Agricultural Systems 88, 255-269.

This work was funded by the Bill and Melinda Gates Foundation (Project OPP1134229, Supporting Evidence-Based Interventions to Achieve Agricultural Development Goals [SEBI] LiveGAPS 2).

CONTACT US

t 1300 363 400
+61 3 9545 2176
e csiorenquiries@csiro.au
w www.csiro.au

FOR FURTHER INFORMATION

Agriculture and Food
Mario Herrero
t +61 7 3214 2538
e Mario.Herrero@csiro.au
w <https://research.csiro.au/livegaps/>

