

Hygiene and biosecurity practices among traditional poultry farms for the control of zoonotic diseases in rural areas of the Centre-Nord region of Burkina Faso

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Key messages

- There is need for context-specific evidence-based interventions to tackle the persistence of zoonotic risks and environmental pollution.
- It is crucial to enhance training, increase community awareness, and enable compliance with appropriate hygiene and biosecurity measures within households and the environment.
- Women and children should be deliberately targeted for interventions that aim to reduce the risk associated with livestock management, especially chickens.

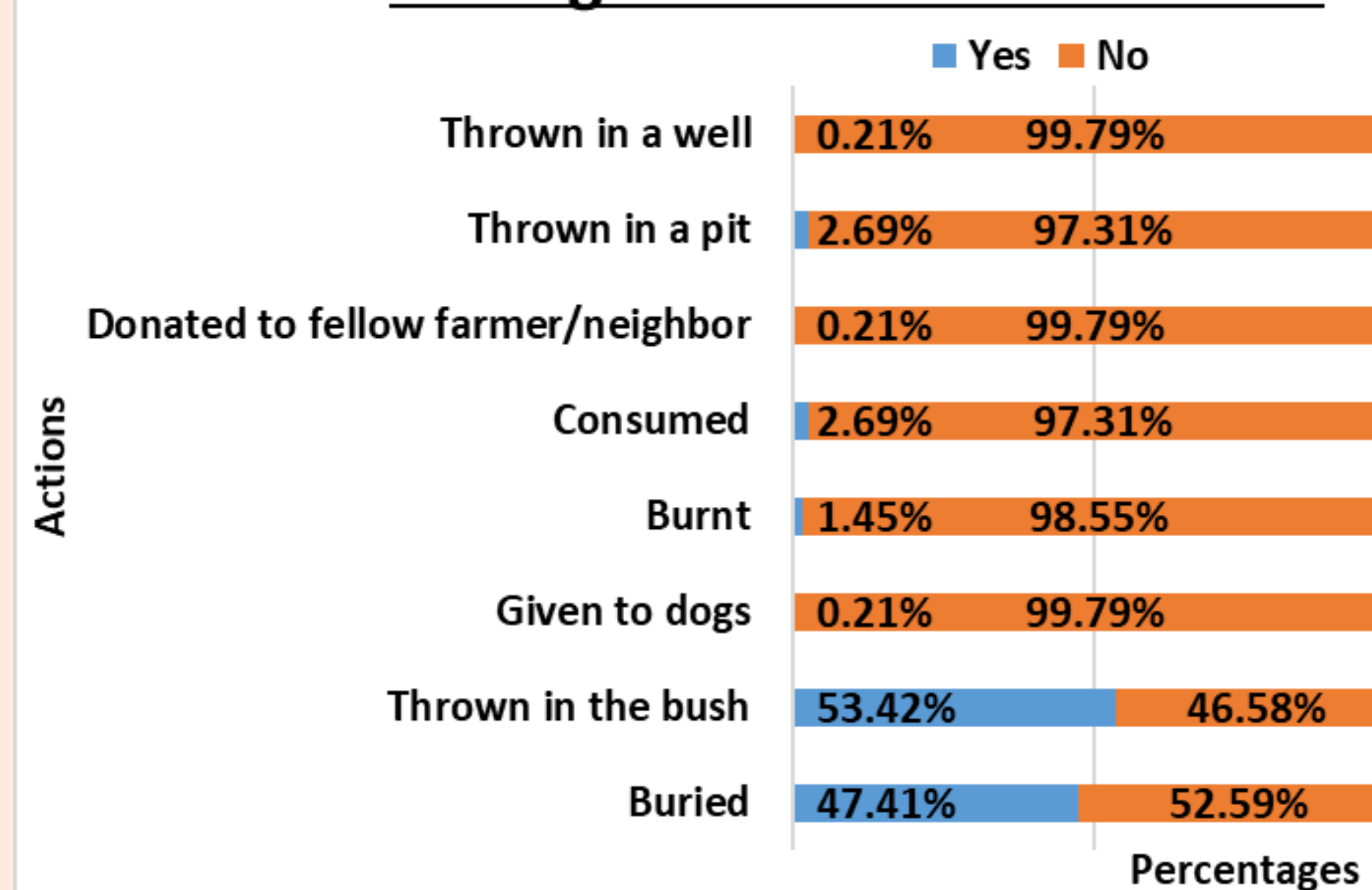


Free-range chickens with access to people's living areas, Photo credit: Brice Ouedraogo

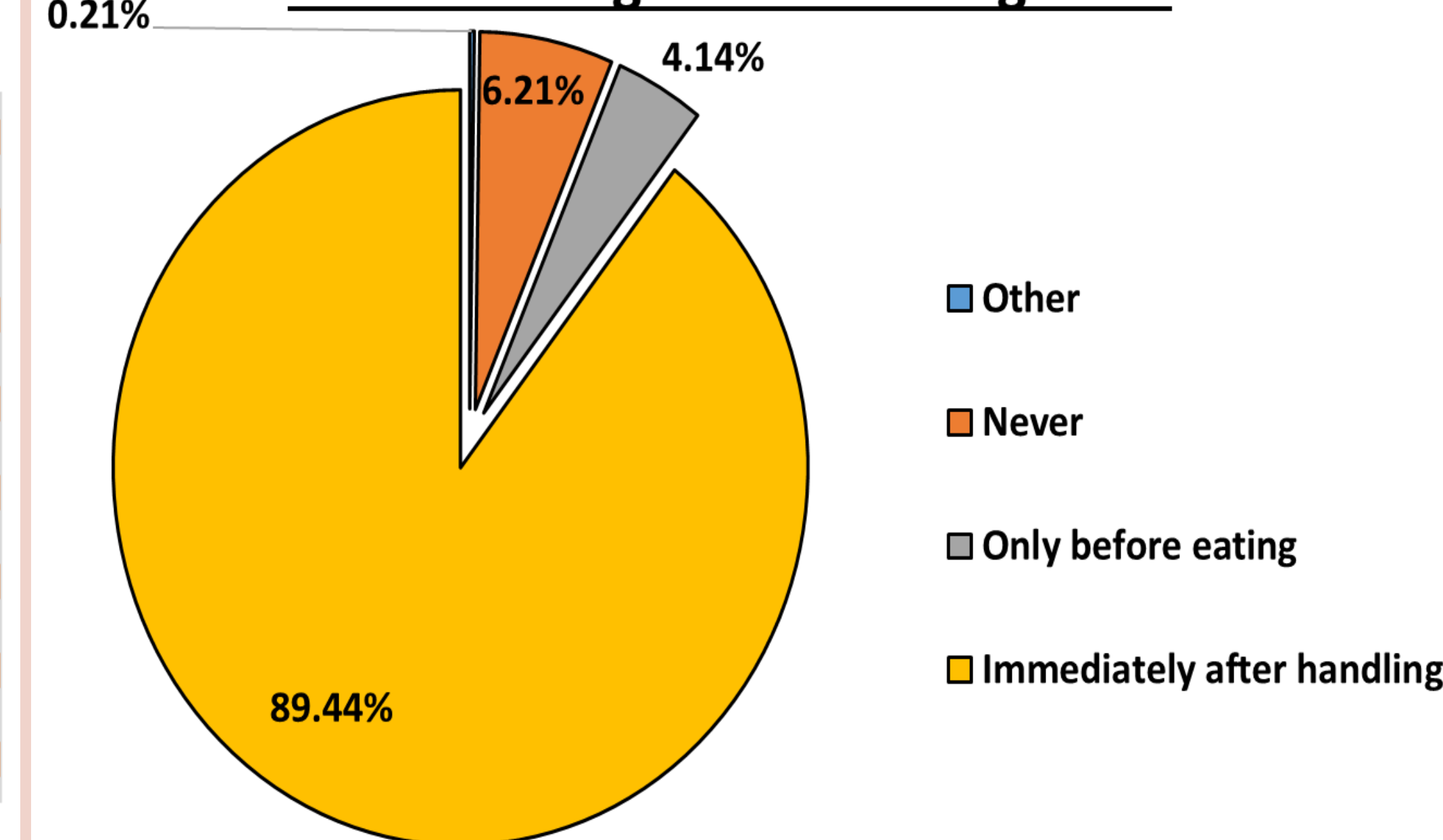
Context

- Traditional poultry farming, which supports over 75% of the workforce in Burkina Faso, is predominantly small-scale, run by women, and deeply integrated into local communities.
- It is a vital foundation for income generation and household nutrition and sustains livelihoods across generations.
- However, a range of challenges are encountered by poultry farmers, including limited access to health inputs and inadequate biosecurity measures, which increase the risk of community members to zoonotic diseases.

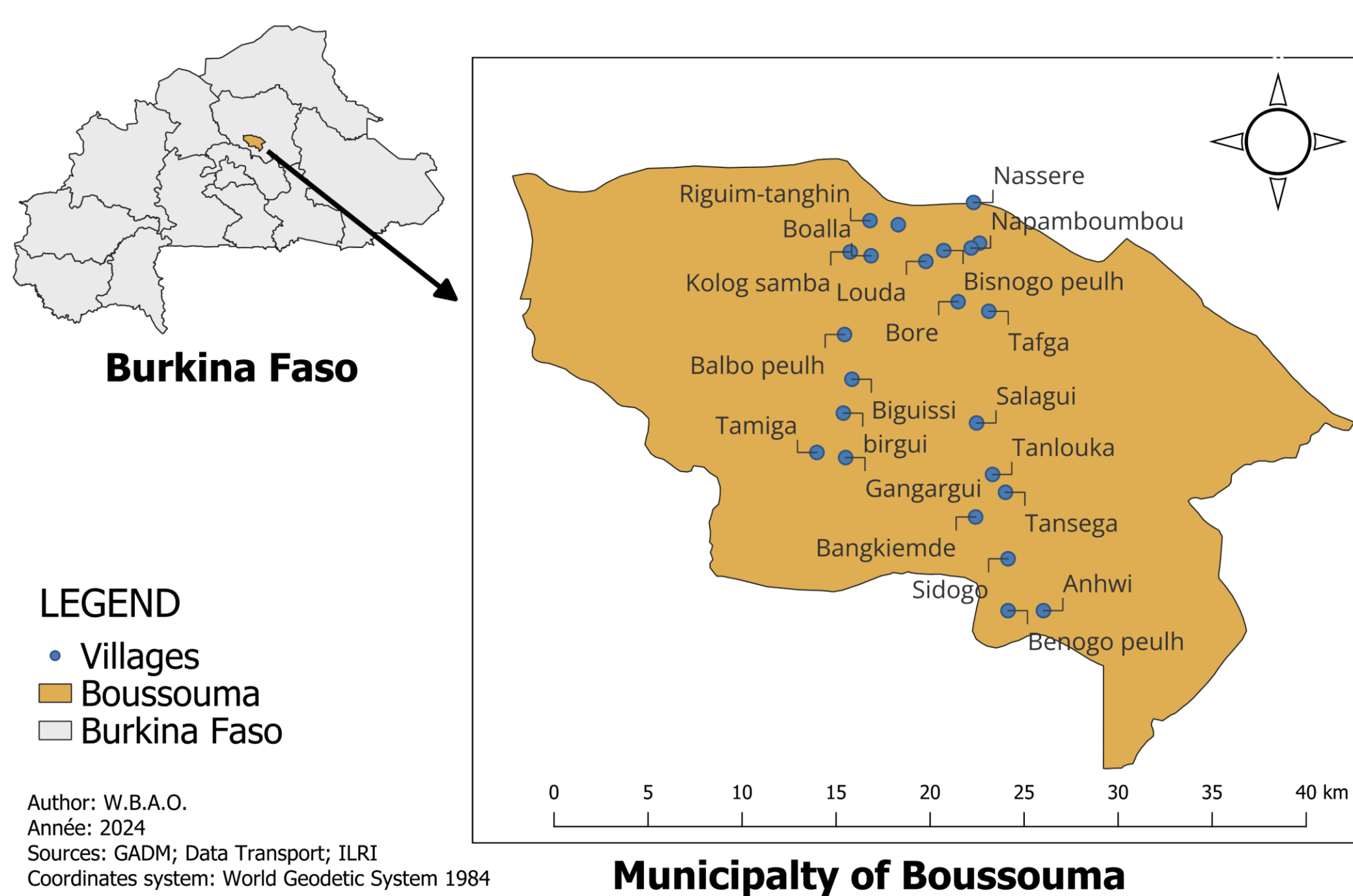
Management of dead chickens



Handwashing after handling birds



Our approach

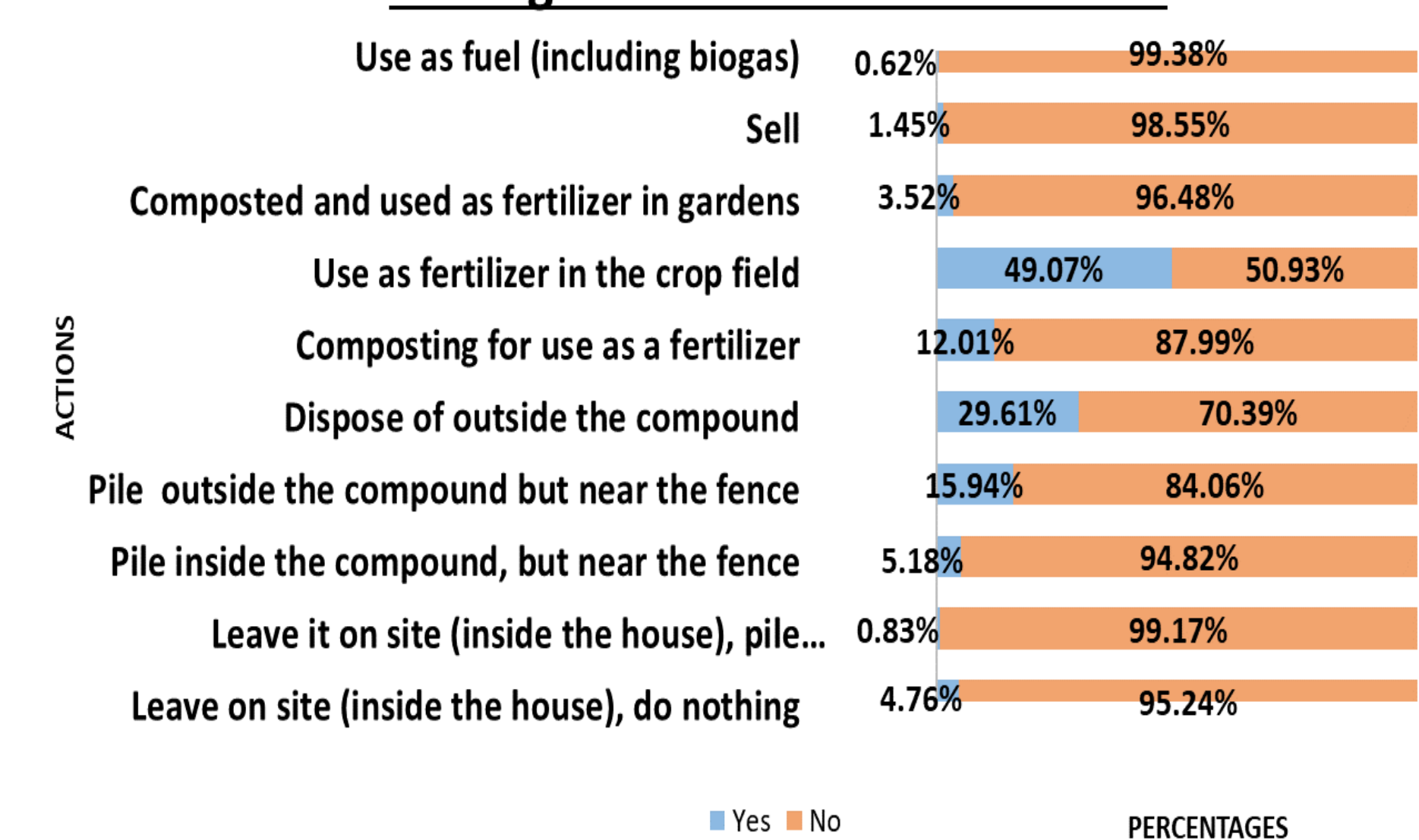


Author: W.B.A.O.
Année: 2024
Sources: GADM; Data Transport; ILRI
Coordinates system: World Geodetic System 1984

Outcomes

- Most farmers do not confine their chickens during the day (97.52%) or at night (64.15%).
- Only 2.84% of respondents reported that they never clean chicken faeces in their confinement areas (chicken coop), while 5.11% do so only, when necessary, 4.55% clean once a month, and 0.57% every six months. The remaining 86.93% clean more regularly, with frequencies ranging from weekly to daily.
- Most of households (64.80%) clean chicken faeces from their compounds at least once per day.
- The management of chicken manure varies among households, with 12.01% practicing composting, primarily in male-headed households (chi2, P=0.011), and 49.07% using manure as organic fertilizer, a practice significantly more common in male-headed households compared to female-headed ones (Chi2, P=0.018).
- More than half of the respondents (53.42%) reported disposing of dead birds by throwing them into the bush, 47.41% stated they bury them, and 2.69% indicated they consume them.
- In households with children under five, 18.49% reported contact between children and poultry, with 23.68% of those households noting at least one instance of exposure to chicken faeces. Of these, 16.67% observed their children ingesting poultry faeces at least once.

Management of chicken manure



Conclusion

- Traditional poultry farming is essential for rural livelihoods in Burkina Faso but poses challenges to the management of animal health and zoonotic disease risks.
- The adoption of good hygiene and biosecurity practices is vital to reduce zoonotic disease transmission between chickens and humans.
- Targeted interventions feasible under local conditions are essential to improve biosecurity are crucial for protecting public health and the environment.



Chicken with access to people's living area, Photo credit: Brice Ouedraogo

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