



# Trade-offs and Synergies Between Intensifying Livestock Production and Human Health, Focusing on Zoonoses in Africa

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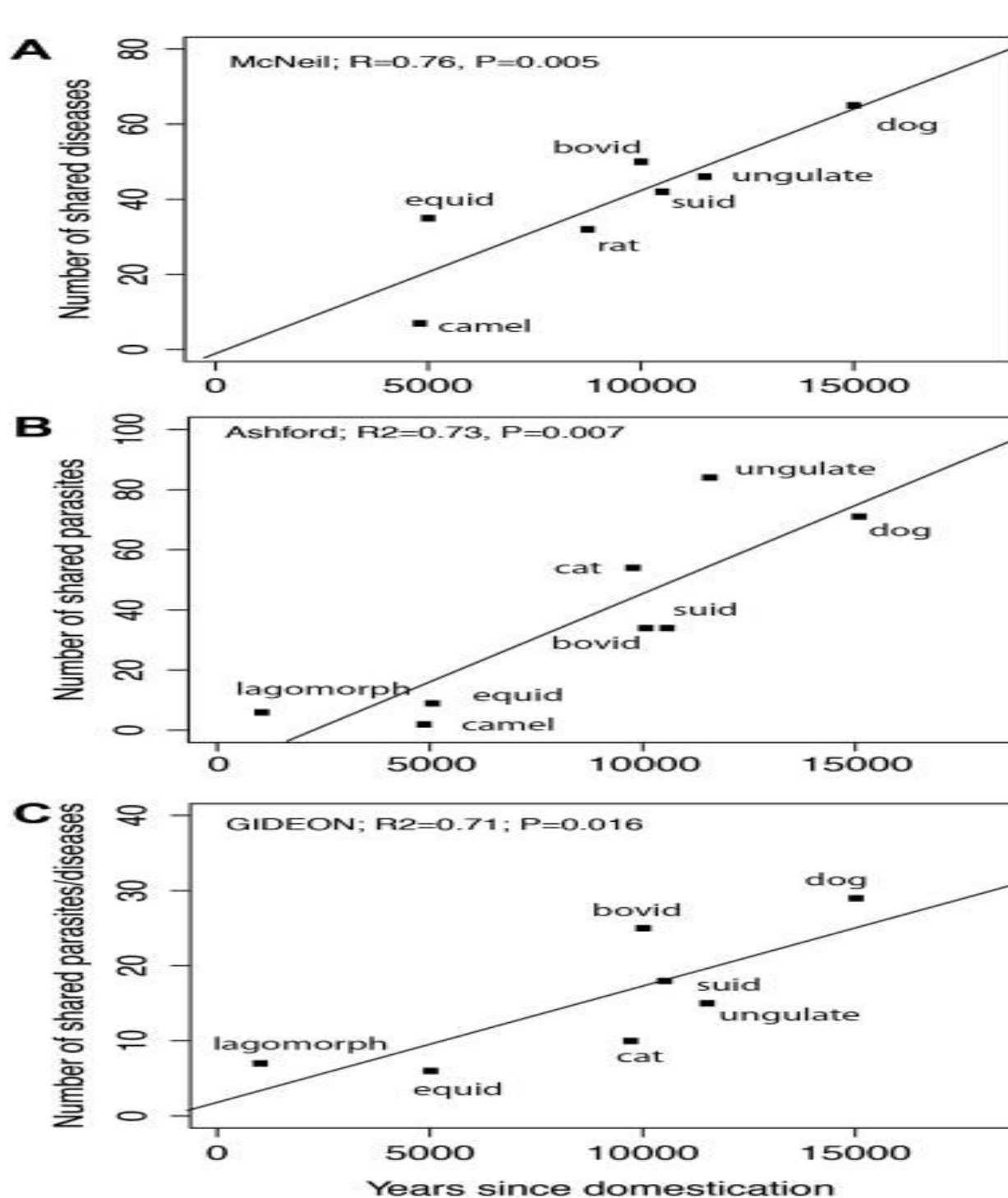
## Introduction

- Understanding the link between agriculture and zoonotic diseases is important for a healthy sustainable future.
- Zoonotic diseases are infectious diseases that can be transmitted from humans to animals- including livestock, wildlife, pets and vice versa
- Subject to type and intensity, livestock-human interactions significantly contribute to emergence or re-emergence of zoonotic diseases,

## Methodology

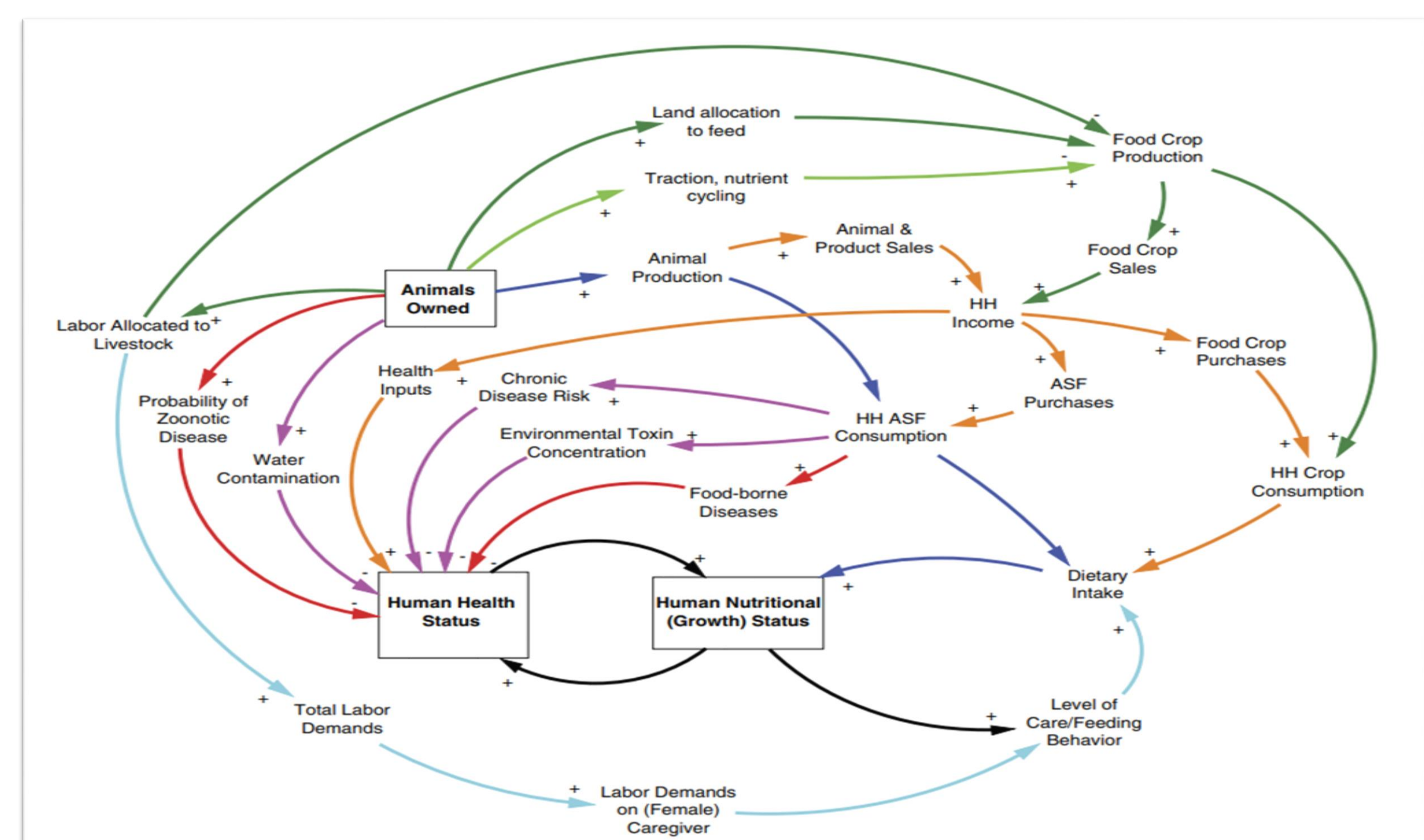
- Desk study based on systematic literature review
- A specific criteria for selecting of publications was used

## Results



Evidence shows increased number of shared disease with domestication

- Homogenous populations are more likely to suffer serious epidemics (Springbett et al. 2003).
- Not adapted breeds, which pose a higher risk to infections (Blench 1999).
- Land use change plays a major role.
- Both extensive and intensive farming can equally contribute to the transmission of zoonotic disease.



Human-livestock-disease interactions. ASF= animal-source food, HH= household  
Source: Herrero et al. 2013, p. 8, based on Randolph et al. 2007

## Discussion

- Livestock are a valuable asset and significantly contribution towards food security, source of income and livelihoods.
- With increasing livestock numbers to match the rising demand, increased livestock-human interaction with an impact on zoonotic diseases would be expected.
- The spread of zoonoses is not a deliberate move rather it is mainly promoted by unawareness and poor basic conditions, such as poor infrastructure and low hygiene standards.

## Conclusion

- Livestock intensification should be in the context of general development, economic growth and human welfare.
- In the future, particular attention in Africa should be paid to how to strengthen joint animal health and human health monitoring, surveillance and cooperation in mitigating the spread of zoonotic diseases and use of One Health approaches.