



UNIVERSITY OF PARAKOU

Doctorate School of Agronomic and Water Sciences (EDSAE)

Specialty: Sociology of Natural Resources

**CURRENT STATE OF BEEKEEPING VALUE CHAINS IN AFRICA: A
SYSTEMATIC REVIEW WITH A FOCUS ON BENIN**



Student Conference
USAMV București

Presented by :
DJOWAMON Cyrille

Thesis supervisor:
Prof. YABI A. Jacob

PRESENTATION HEADS

- 1. INTRODUCTION**
- 2. RESEARCH QUESTIONS**
- 3. AREA OF REVIEW**
- 4. METHODOLOGICAL APPROACH**
- 5. MAIN RESULTS**
- 6. CONCLUSION AND RECOMMENDATIONS**



INTRODUCTION

Global context

- Growing scientific interest regarding honey industry.
- Especially on honey production, quality and economic performance over the past two decades.

The local context (Africa)

- The beekeeping sector has strong economic and social potential.
- Persistent challenges: low productivity and quality, restricted market access.
- Need for a thorough analysis of past researches to provide recommendations for more effective policies.



INTRODUCTION

Place of the presentation in ONE HEALTH CONCEP

Beekeeping is more than an income-generating activity; it intersects directly with the One Health approach, which recognizes the interdependence between human health, animal health, and environmental health. Bees, as key pollinators, provide essential ecological services that influence all three dimensions.

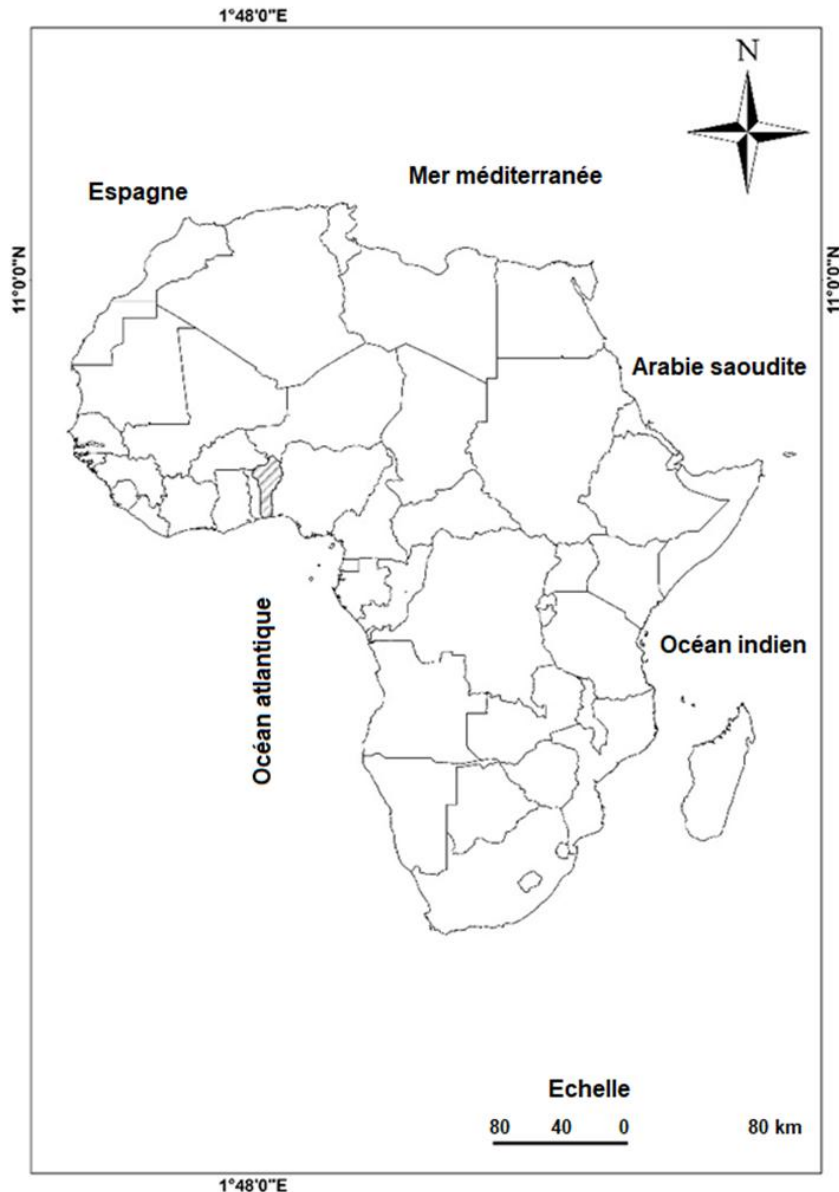


RESEARCH QUESTIONS

- ❖ **Q1** : What is the current technological level of honey production systems in Africa, and how does the adoption of modern technologies impact honey yield ?
- ❖ **Q2**: Who are the main stakeholders involved in the honey value chain in Africa, and what roles do they play ?
- ❖ **Q3** : How is the honey value chain structured and coordinated in Africa?
- ❖ **Q4**: How does the honey value chain in Benin differ from those of other African countries?
- ❖ **Q5**: What are the main factors influencing honey yield and the main challenges to the development of the honey value chain in Africa?



MATERIALS AND METHODS



Africa :

Largest and second most populated continent on Earth: **1.48** billion inhabitants (2024)

Figure 1: Study area (**54 African countries**)

MATERIALS AND METHODS

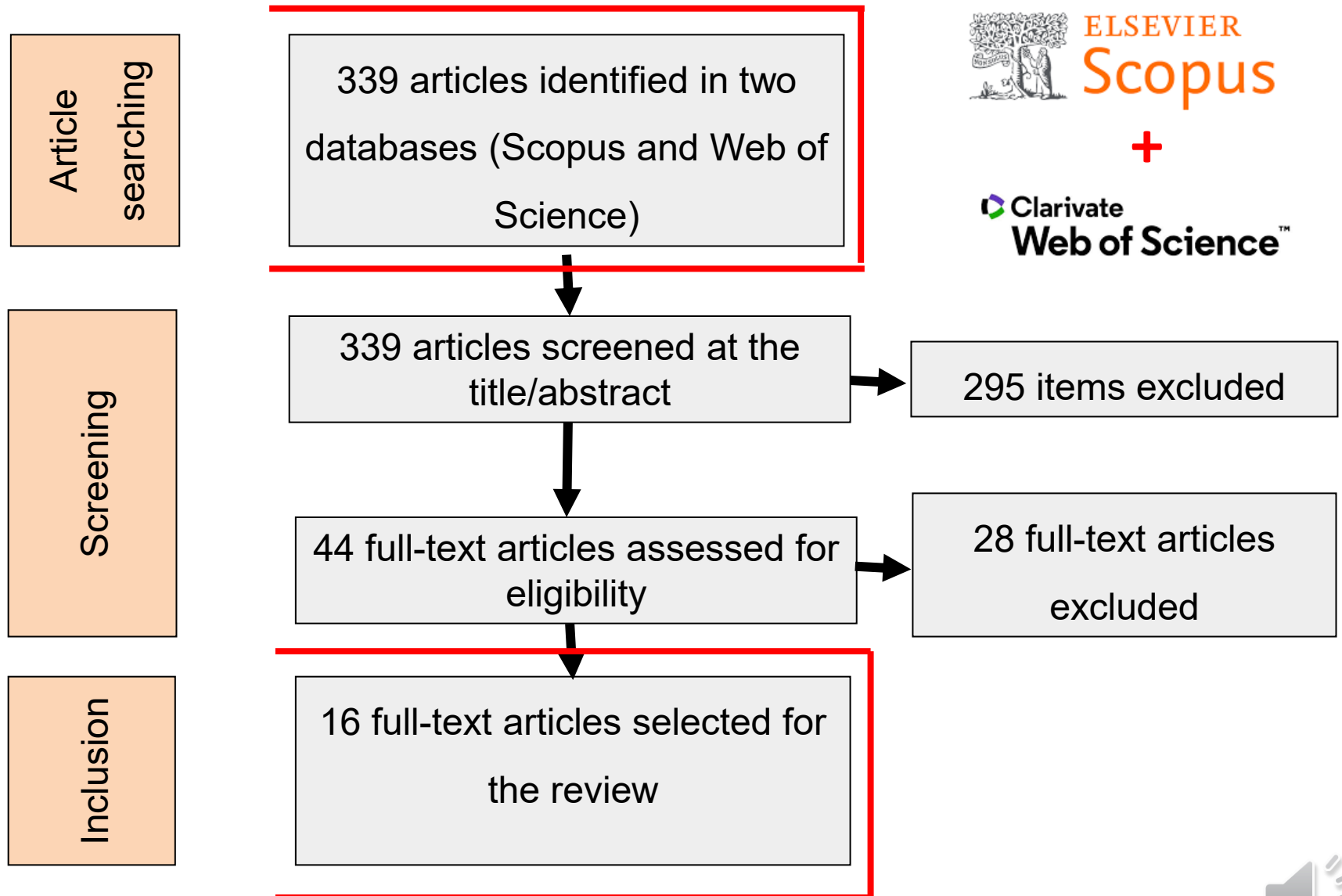


Figure 2: ROSES flow diagram illustrating the selection process

RESULTS AND DISCUSSION

❖ Temporal evolution of publication efforts

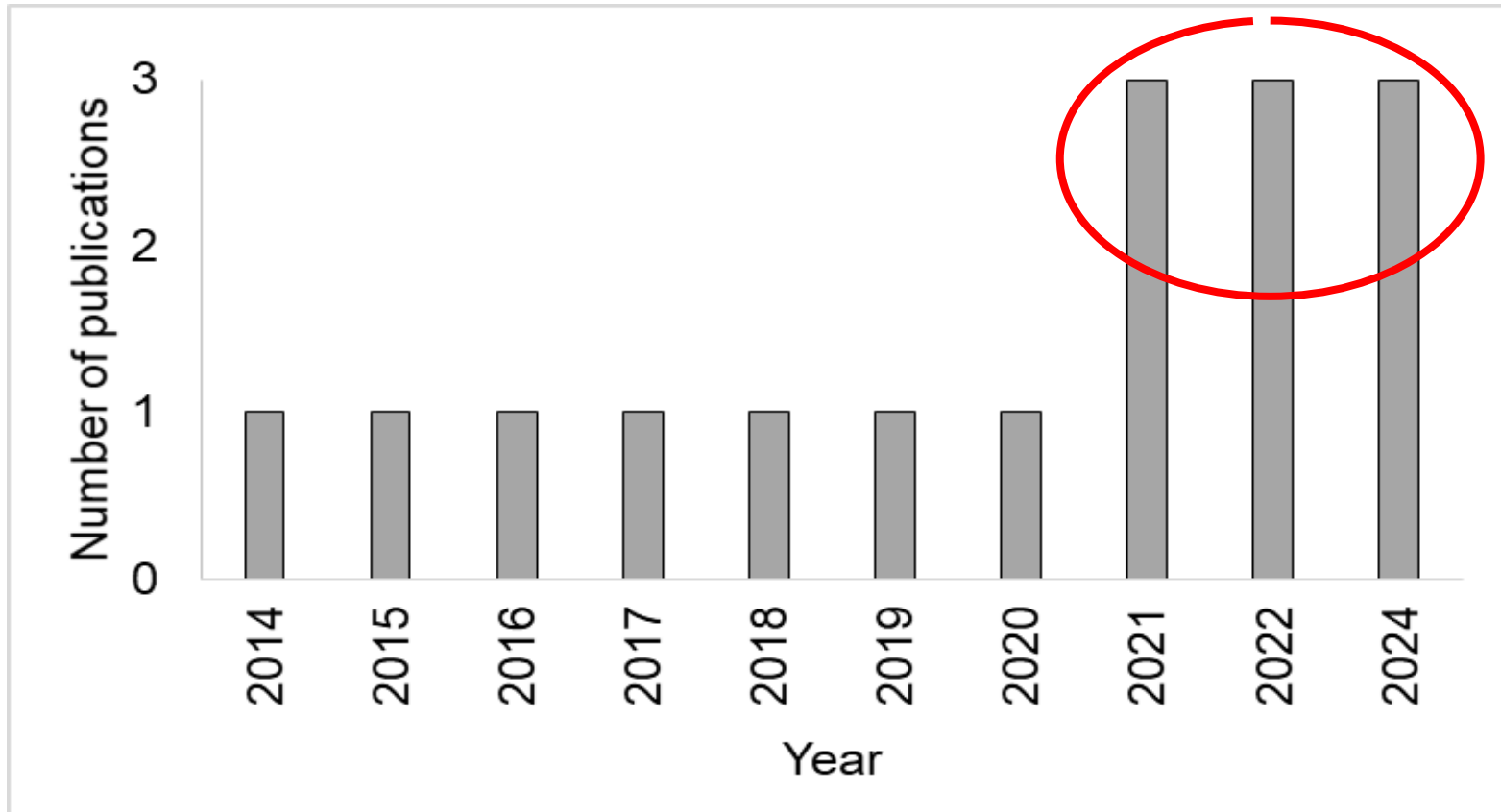


Figure 3: Number of articles published over time



RESULTS AND DISCUSSION

❖ Spatial pattern of publication efforts

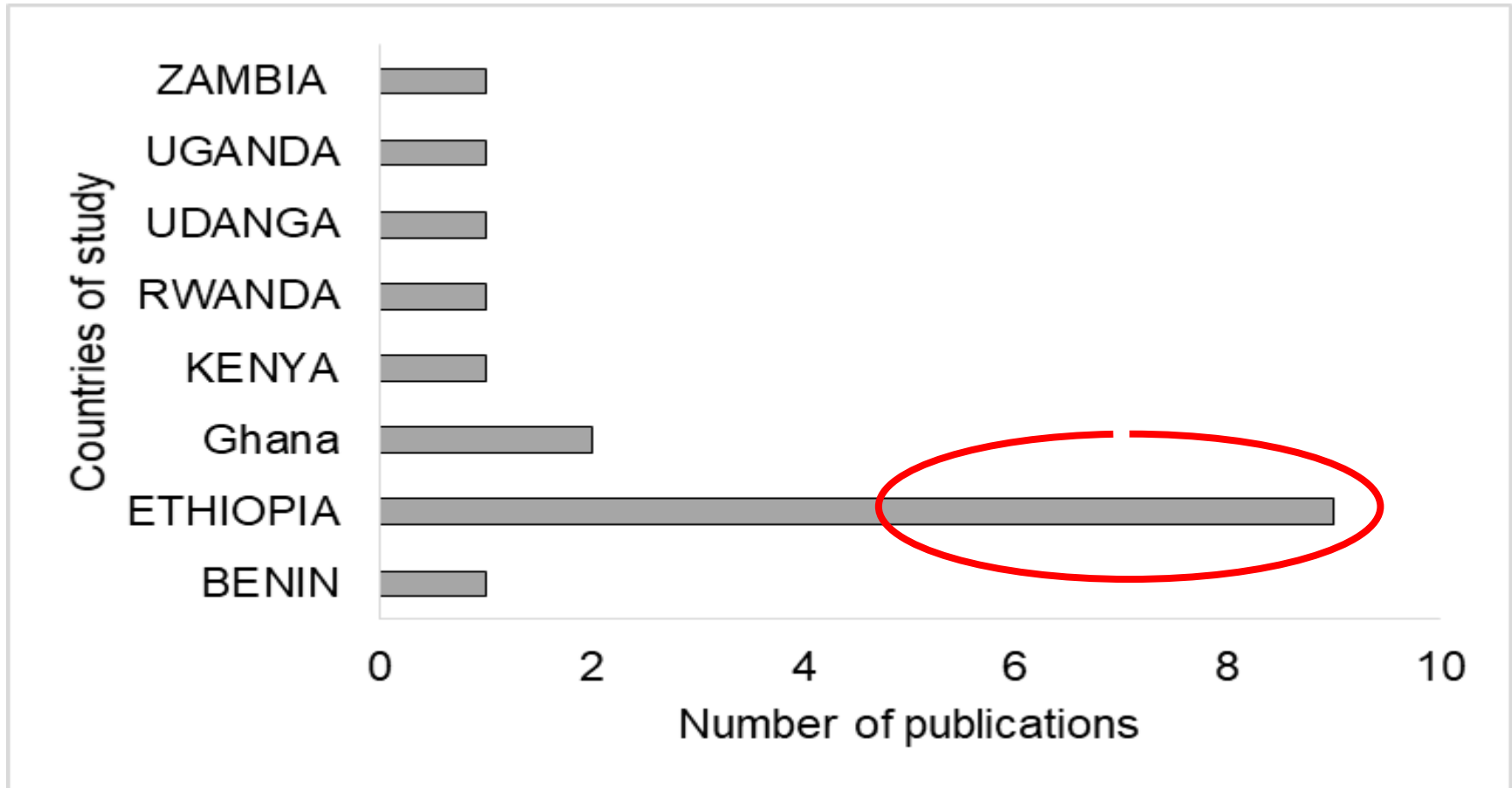


Figure 4 : Number of articles published by country



RESULTS AND DISCUSSION

❖ Technological level and honey productivity

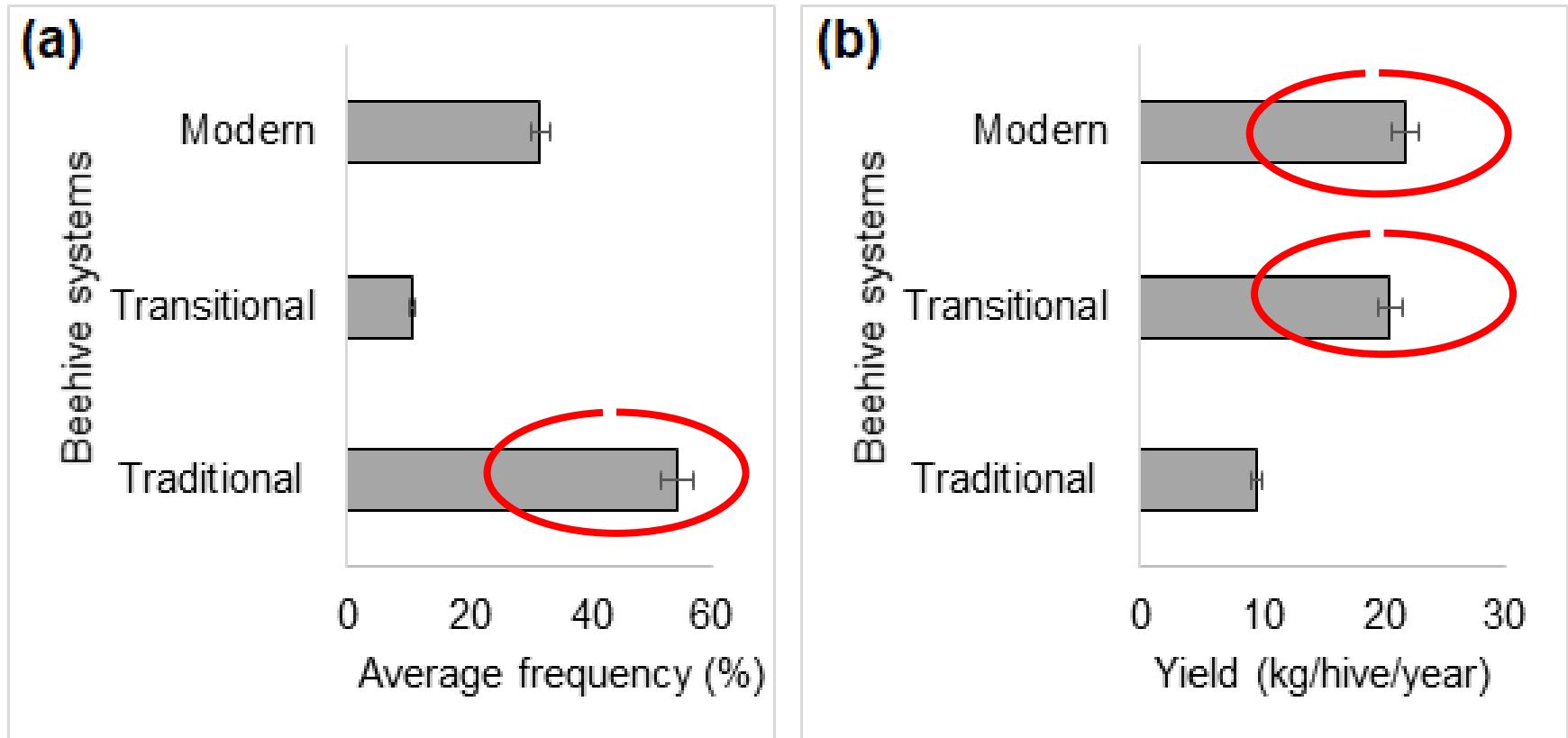


Figure 5: (a) Types of beehives and (b) honey yield per beehive system according to the evaluated studies

RESULTS AND DISCUSSION

❖ Actors and roles in the value chain

Direct actors :

- Input suppliers ,
- Producers (beekeepers and hunters),
- Merchants ,
- Transformers,
- Consumers

Indirect actors :

- Technical partners,
- NGO,
- Financial institutions
- Transporters

(*Dossou et al., 2022;*
Meaton et al., 2021)

RESULTS AND DISCUSSION

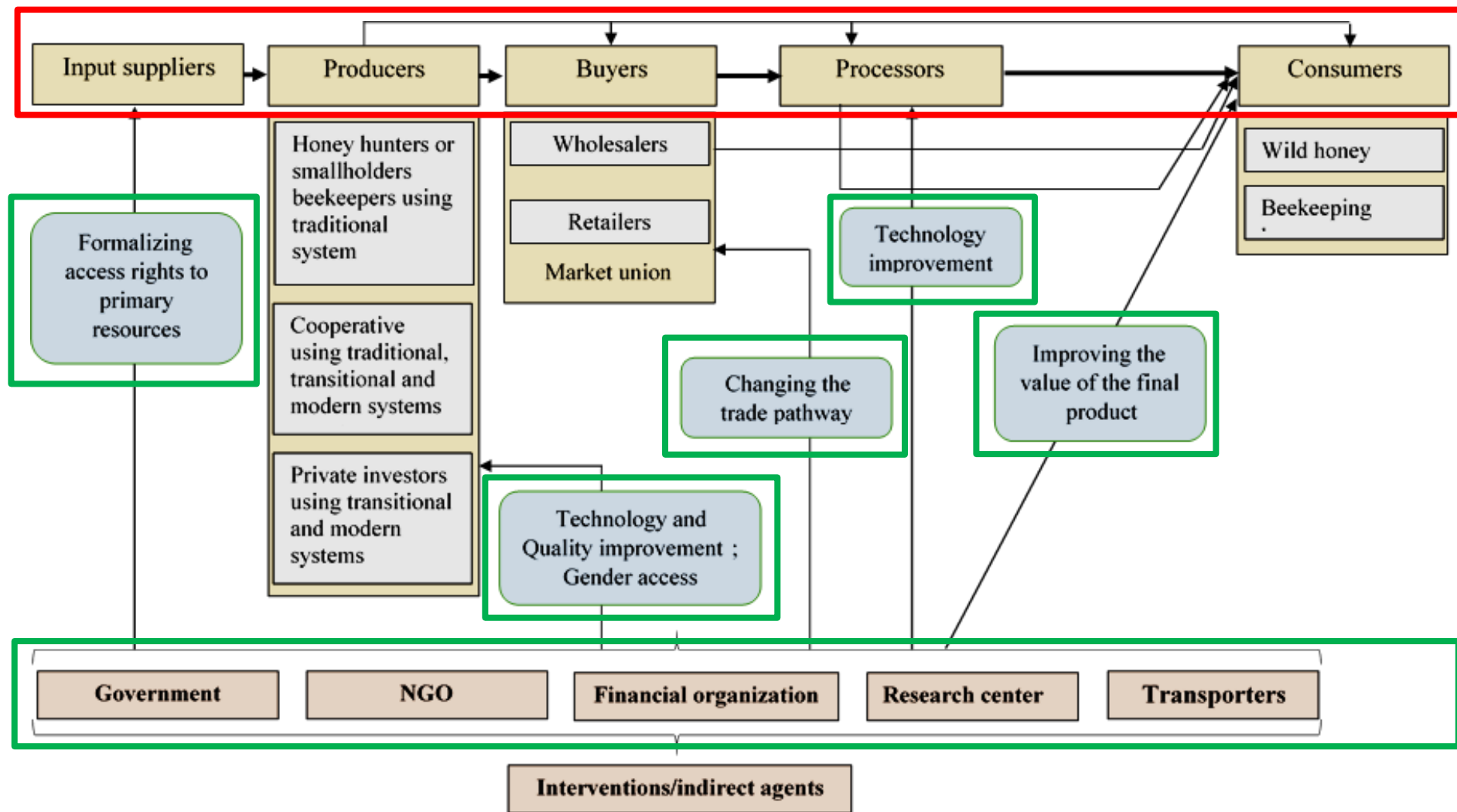


Figure 6: Depicted honey value chain diagram from the reviewed articles

RESULTS AND DISCUSSION

❖ Structure and coordination of the value chain

Ethiopia and Zambia: export-oriented market, formalized, and heavily regulated by the State, with a male predominance in strategic links .

Benin: domestic market, low added value, increased dependence on microcredit

RESULTS AND DISCUSSION

❖ Factors influencing honey yield

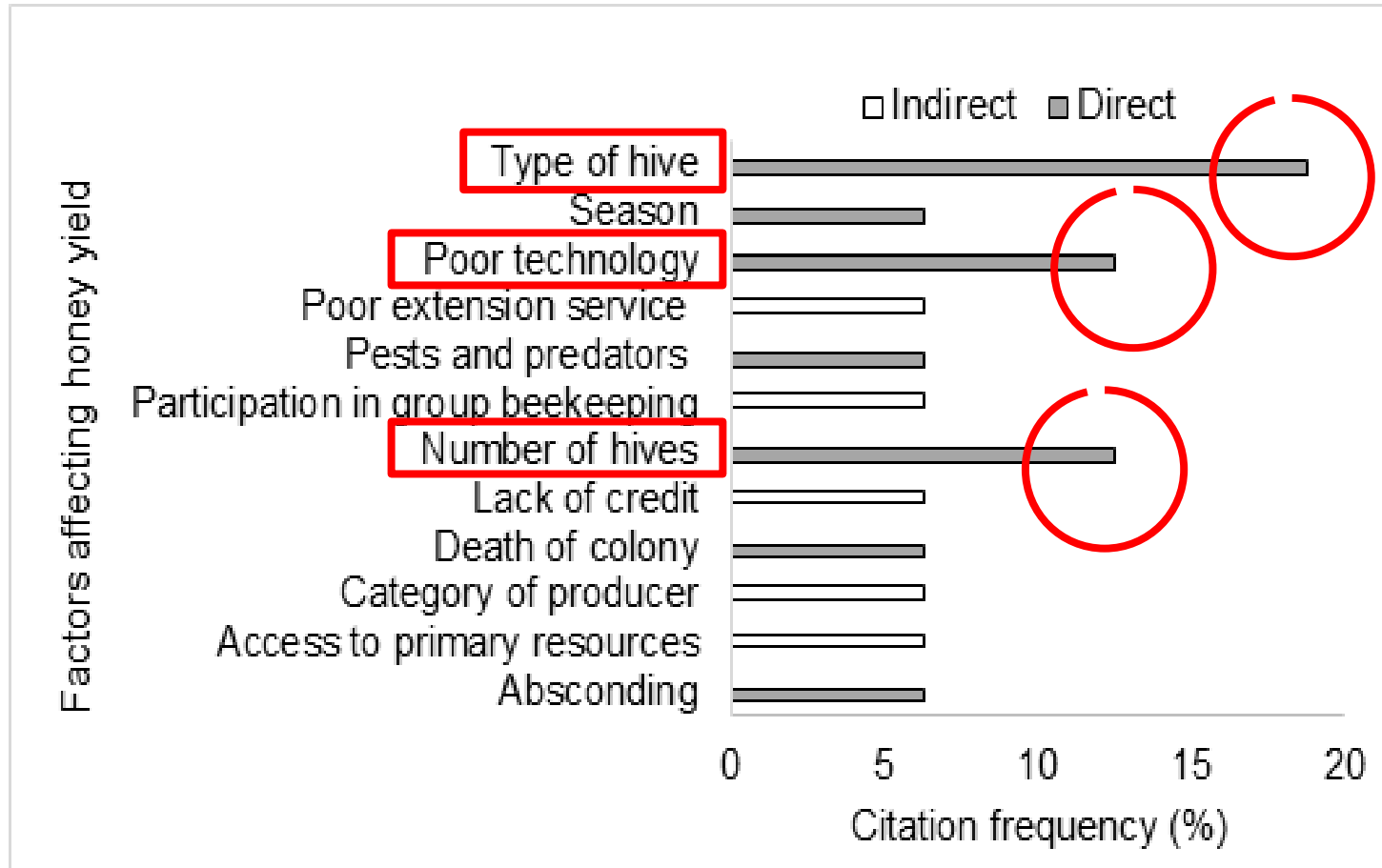


Figure 7: Factors affecting honey yield based on the reviewed articles

CONCLUSION

- Market coordination is weaker in Benin than in other countries (Ethiopia, Zambia).
- Need for institutional strengthening and better structuring of producers.
- Type of hive, number of hives, biological and environmental are factors influencing honey yield .
- Need to improve technological level and promote organizational innovations.
- Future researches : expand geographical coverage, integrate unpublished studies and local knowledge.

THANK YOU

