

# Tropentag 2023, Berlin, Germany September 20-22, 2023

## SUSTAINABILITY AND ADDED VALUE IN AGRIBUSINESS PRODUCTION **CHAINS: THE POULTRY CASE**

Valquíria Duarte Vieira Rodrigues<sup>1</sup>, Alcido Elenor Wander<sup>1,2,3</sup>, Fabricia da Silva Rosa<sup>4</sup> and Luiz Paulo de Oliveira Silva<sup>5</sup>

<sup>1</sup> Graduate Program in Agribusiness, Federal University of Goiás (UFG), Goiânia-GO, Brazil.

<sup>2</sup> Embrapa Rice and Beans, Rodovia GO-462, km 12, 75375-000 Santo Antonio de Goiás-GO, Brazil. Email alcido.wander@embrapa.br.

- <sup>3</sup> Graduate Program in Regional Development, Centro Universitário Alves Faria (UNIALFA), Goiânia-GO, Brazil.
- <sup>4</sup> Federal University of Santa Catarina (UFSC), Florianópolis-SC, Brazil.

<sup>5</sup> Ministry of Regional Development (MDR), Brasília-DF, Brazil.



To present an analysis of the environmental management of sustainable food systems and how this activity has impacted the change in land use based on the analysis of the case of the poultry production chain.

#### **METHODOLOGY**

Case study: analysis of environmental management practices in each value chain link and how these practices have interfered in land use.

Table 1: Impact of each value chain link on the use of water, energ					
and waste gene	ration. CNAE	Water use	Energy use	Waste generation	Land use
Hen houses	Agroindustry	High	High	High	High
Hatchery	Agroindustry	High	High	High	Low
Broiler chicken houses (integrated farms)	Producers	High	High	High	Medium/ High
Warehouses	Storage	Low	High	Low	High
Bone meal and oil factory	Agroindustry	High	High	Low	High
chemical ETE	Industry	Low	High	High	Low
Feed factory	Agroindustry	High	High	High	Medium/ High
Slaughterhouse	Agroindustry	High	High	High	Low
Factory (processing plant)	Agroindustry	High	High	High	Low

#### **RESULTS AND DISCUSSION**

#### Figure 1: Poultry production chain object of study.



## **CONCLUSIONS AND OUTLOOK**

- Importance of considering water and land use in developing sustainable agrifood systems.
- Environmental management is a powerful tool to develop strategies and practices to mitigate the impacts of the activity and the systems' climate adaptation process.
- Main driving factor for adopting environmental accounting systems is the growing demand from consumers for providers of goods whose impacts generated in the supply chain, production, storage, transportation and commercialization are duly quantified and disclosed.
- This research contributes developing environmental to management practices aligned with the Brazilian agricultural business strategy and managing natural resources, such as water and land use.
- Future research can address the influence of these water and land resources on sustainability and competitiveness in the poultry value chain of poultry and other agrifood chains.

### ACKNOWLEDGEMENT

This research was supported by Brazilian Government through the Ministry of Regional Development and the Interamerican Institute for Cooperation in Agriculture.

