

Fabiana THOME DA CRUZ

fabianathome@ufg.br

Professor

Ana Paula dos Santos MOREIRA

Graduate Student

Federal University of Goiás - UFG / Brazil

## **Agroecology Scientific Day 2024**

Workshop n°2, Session n°2

### **Title:**

From the Hegemonic Food System to Sustainable Food Systems: The Perspective of the Nature-Belonging Relationship in the Agricultural System of a Traditional Community in Goiás, Brazil

### **Abstract:**

Although the modernization of agriculture has led to relatively satisfactory productivity data, it has also brought about social and environmental consequences. Since the 1980s, this model has become increasingly prevalent across the Brazilian Cerrado, impacting traditional agricultural systems (Eidt & Udry, 2019).

This research aimed to analyze food production within a traditional agricultural system in the Quilombola Kalunga Engenho II Territory, located in Cavalcante, northeastern Goiás, Brazil. The study not only aims to evaluate its current (although marginalized) contribution to sustainability and food sovereignty, but also the technical elements that it can provide to the agroecological transition of industrialized production systems and larger scale production. To achieve this objective, semi-structured interviews were conducted with eight producers from the Quilombola Kalunga Engenho II Territory. Additionally, visits were made to the cultivation areas, known as slash-and-burn agriculture farms ("roça de toco"). Fieldwork was carried out between March and November 2023. The data were transcribed, systematized, and analyzed.

The slash-and-burn agriculture farms revealed a great diversity of cultivated species, including rice, beans, corn, and cassava. In total, 70 varieties are currently cultivated: 14 varieties of rice, 17 of beans, 5 of corn, and 34 of cassava, among other foods. Unlike the industrialized system, based on a few crops and varieties and depends on external inputs, this traditional agriculture integrates a variety of crops within the same cropping area, operating without any external inputs such as agrochemicals. However, despite the variety of crops, findings indicate that this diversity is diminishing over time.

This traditional farming system employs techniques and ancient knowledge that have been passed down for over three hundred years, taking into account the phases of the moon and seasonal rainfall, with a fallow period of 3 to 5 years after harvest to maintain soil health (Moreira & Thomé da Cruz, 2023). The research underscores the importance of recognizing and valuing these practices, which align with many agroecological principles and offer insights for transitioning to more sustainable food systems.

Furthermore, the findings highlight the significance of the slash-and-burn farming system in ensuring Food Sovereignty and Food and Nutrition Security. This system also contributes to local gastronomy, using territorial ingredients such as local fruits and traditional recipes like “paçoca de carne,” made with cassava flour and meat, thereby promoting healthy, diversified, seasonal, and culturally appropriate diets.

In summary, the findings suggest that the techniques and dynamics of Kalunga’s slash-and-burn agriculture are aligned with agroecological principles, particularly in terms of input reduction, soil health, biodiversity, social values, and diets, as well as land and natural resource governance. Traditional productive systems, such as slash-and-burn agriculture, offer valuable insights for the agroecological transition on both small and large scales. This contributes not only to the preservation of these traditional systems but also to the assurance of Food Sovereignty, Food and Nutrition Security, and sustainability. Therefore, in-depth research focused on these productive techniques through the lens of agroecological principles is required.

### **Bibliographic references**

- Eidt, J. S., Udry, C. (2019). *Sistemas Agrícolas Tradicionais no Brasil*. Brasília, DF: Embrapa.  
[https://www.alice.cnptia.embrapa.br/alice/bitstream/doc/1109452/1/Colecao\\_povosecomunidade\\_tradicionalised01vol03.pdf](https://www.alice.cnptia.embrapa.br/alice/bitstream/doc/1109452/1/Colecao_povosecomunidade_tradicionalised01vol03.pdf)
- Krenak, Ailton (2022). *Futuro ancestral*. São Paulo: Companhia das Letras, 2022.
- IPCC, 2023: Sections. In: *Climate Change 2023: Synthesis Report. Contribution of Working Groups I, II and III to the Sixth Assessment Report of the Intergovernmental Panel on Climate Change* [Core Writing Team, H. Lee and J. Romero (eds.)]. IPCC, Geneva, Switzerland, pp. 35-115, doi: 10.59327/IPCC/AR6-9789291691647
- Thomé da Cruz, F. *Governança de sistemas alimentares para a soberania e segurança alimentar e nutricional* (2020). In: Preiss, P; Schneider, S (Org.). *Sistemas alimentares no século 21: debates contemporâneos*. Porto Alegre: Editora da UFRGS. <https://lume.ufrgs.br/handle/10183/211399>
- Goodman, D., Dupuis, M. E., Goodman, M. K. (2012). *Alternative food networks: knowledge, practice, and politics*. Abingdon: Routledge.
- Moreira, A. P. dos S.; Cruz, F. T. da. (2023). *Desenvolvimento Rural e Sistemas Agroalimentares Sustentáveis no Contexto da Produção e Comercialização de Alimentos Agroecológicos e da Sociobiodiversidade de Goiás*. In: *Anais do 20o Congresso de Pesquisa, Ensino e Extensão (CONPEEX)*. Goiânia: Cegraf UFG, 2023. <https://anaisconpeex.ciar.ufg.br/edicoes/20/index.html#trabalhos>.
- Wiskerke, J. S. C. (2009). On places lost and places regained: reflections on the alternative food geography and sustainable regional development. *International Planning Studies*, n. 14, v. 4 p. 369-387. <https://doi.org/10.1080/13563471003642803>