

Understanding territorial bioeconomy systems: Ríos Unidos, a rural women's community-based organization using biodiversity for the production of natural products in Colombia

Mojica-Lopez, Daniela; Vargas-Carpintero, Ricardo
University of Hohenheim, Department of Biobased Resources in the Bioeconomy

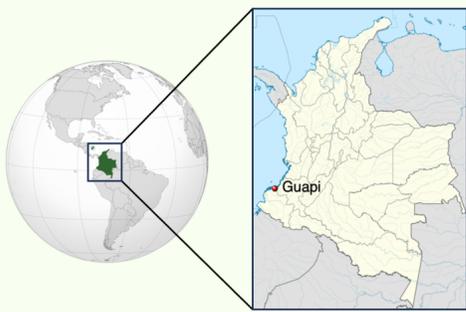
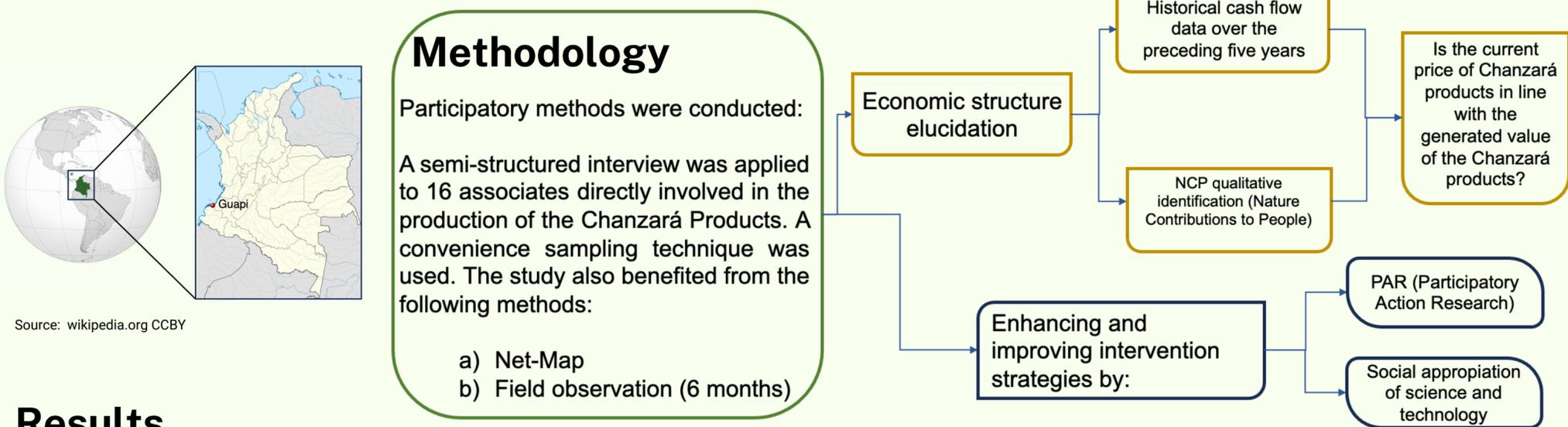
Introduction

- Ríos Unidos is a **rural women's community-based organization** located in **Guapi, Cauca, Colombia**.
- One of their pillar is the production of **natural products** such as the Chanzará Products, using **traditional knowledge** and techniques for transforming **wild plants** into phytotherapeutic products.
- Understanding the values and management of this **territorial bioeconomy system** is key for identifying up-grading opportunities that can contribute to the performance of Ríos Unidos.



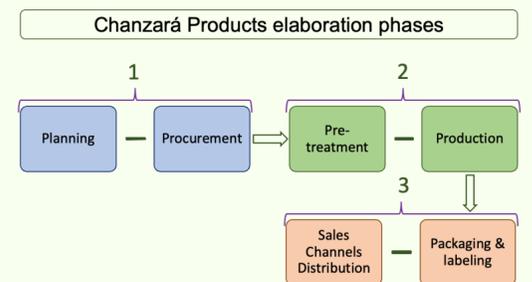
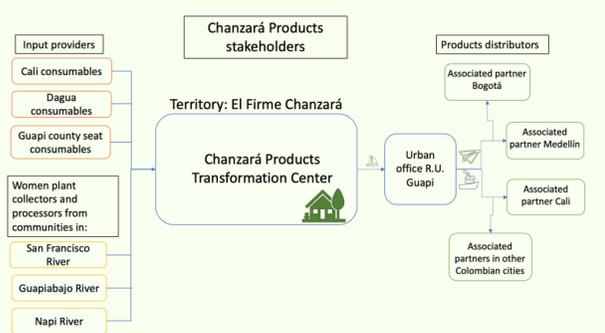
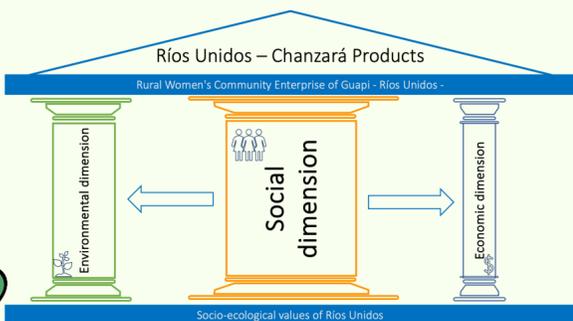
Objective

We aim to characterize the territorial bioeconomy system Ríos Unidos with a focus on the **Chanzará Products** line. Based on this, **up-grading opportunities** are identified, considering traditional knowledge and handicraft elaboration as building blocks.



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Results



- The identified **values** associated to the community-based organization Ríos Unidos and Chanzará Products were classified in three categories:

- Ancestral knowledge
- Traditional practices
- Product's effectiveness

- These values define the **social, environmental and economic** dimensions of the Chanzará Products and their interrelation.

- Key stakeholders of the Chanzará Products were identified
- A cost-benefit analysis indicates a **positive economic performance** of the Chanzará Products.
- Additional values could be captured, related to the NCP framework:

- Material:** Medicinal, biochemical, and genetic resources ► **Product's effectiveness**
- Non-Material:** Learning and inspiration; Physical and Physiological experiences; Supporting identities ► **Traditional practices and ancestral knowledge**

- Three main up-grading intervention strategies were identified:

- Standardization** of the formulations and procedures for the existing Chanzará Products.
- The facial cream formulation was **optimized** and two facial products were **co-created** through the social appropriation of Sc&T and PAR approaches.
- The calculation method for defining the **costs** and **quantities** of consumables and raw materials was optimized.

Conclusions and outlook

- Ríos Unidos exhibits a traditional organization mode strongly bound to ancestral knowledge and traditional practices for the use of medicinal plants.
- Cultural and territorial drivers, in interplay with the rational use of natural resources, define the productive activities of Ríos Unidos, and the characteristics and functionality of Chanzará Products.
- The implementation of the up-grading interventions, aligned to organization's values, can contribute to improving the transformation process in terms of quality and economic performance.
- The intangible values related to the Chanzará Products could result in additional value-added, for which a quantitative evaluation would be suggested.
- The characterization of this territorial bioeconomy system contributes to understand the complex structure of similar cases in high biodiverse regions.

References

- Bongaarts, J. (2019). IPBES. 2019. Summary for policymakers of the global assessment report on biodiversity and ecosystem services of the Intergovernmental Science-Policy Platform on Biodiversity and Ecosystem Services. Population and Development Review, 45(3), 680–681. <https://doi.org/10.1111/padr.12283>
- Dam Lam, R., Gasparatos, A., Chakraborty, S., Rivera, H., and Stanley, T. (2019). Multiple values and knowledge integration in indigenous coastal and marine social-ecological systems research: A systematic review. Ecosystem Services, 37, 100910. <https://doi.org/10.1016/j.ecoser.2019.100910>
- Daza-Callejo, S., Maldonado, G., Arboleda-Castrillón, T., Falla, S., Moreno, P., Tafur-Sequera, M., & Papayayo, D. (2017). Hacia la medición del impacto de las prácticas de apropiación social de la ciencia y la tecnología: propuesta de una batería de indicadores. Historia Ciencias Saude-manguinhos, 24 (1), 145–164. <https://doi.org/10.1590/s0104-59702017000100004>
- Lundqvist, M., Schimik, M., Börner, J., Duchelle, A., & Frey, G. P. (2023). Multidimensional forests: Complexity of forest-based values and livelihoods across Amazonian socio-cultural and geopolitical contexts. World Development, 165, 106200. <https://doi.org/10.1016/j.worlddev.2023.106200>

Contact

daniela.mojica@uni-hohenheim.de
ricardo.vargas@uni-hohenheim.de



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