

Knowledge, Assets, Needs, and Challenges of the Community of El Tiple, Colombia

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Introduction

Traditionally, rural communities in Colombia rely on natural resources from the environment. El Tiple, a rural community with 1,800 inhabitants located in Colombia [1] (Fig. 1), has been negatively impacted by the presence of the sugarcane industry [1] (Fig. 2).

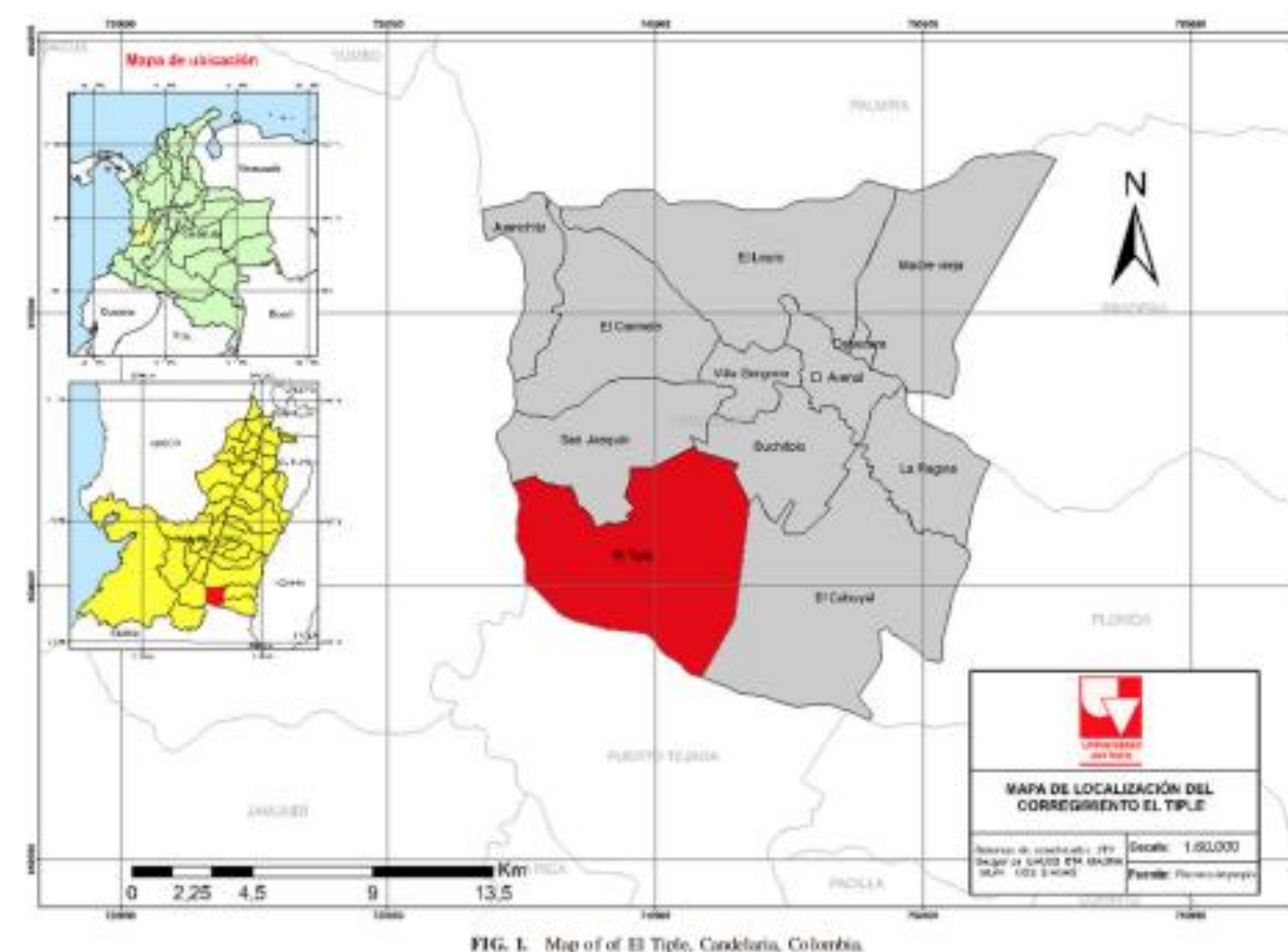


Fig. 1. Map of El Tiple, Colombia [1]

Objectives

To characterize the context of the community in terms of knowledge, assets, needs, and challenges, focusing on water and environmental issues.

The long-term objective of the project is that community members can use tools to support natural resources management and provide accurate data to respective governmental agencies.

Methodology

This research is based on community-based participatory research (CBPR) guidelines. Surveys (n=45) were administered to assess demographic information and water consumption. Interviews (n=7) were conducted to investigate the effect of mono cultivation on cultural aspects and to evaluate the role of government positions in addressing environmental challenges.



Fig. 3. Mixed methods techniques

Results

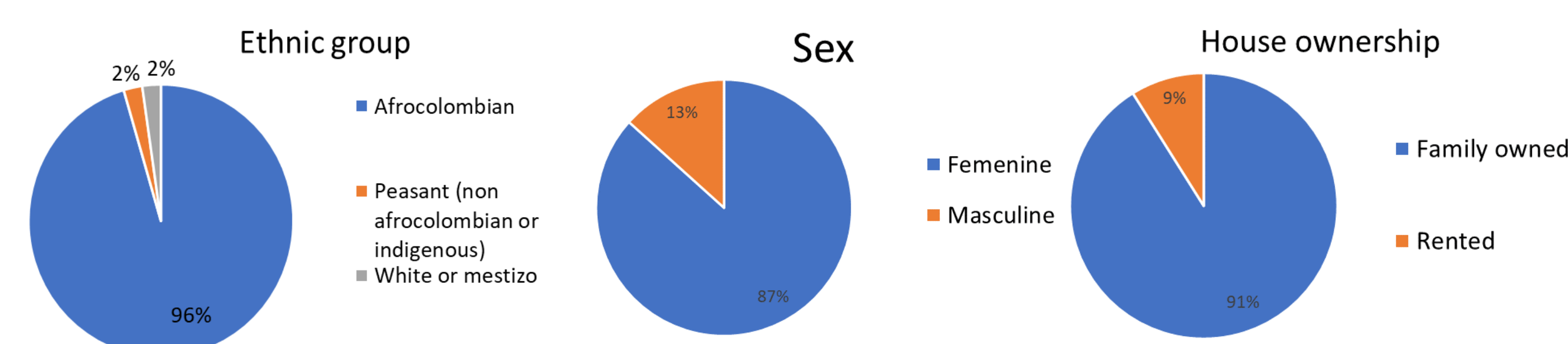
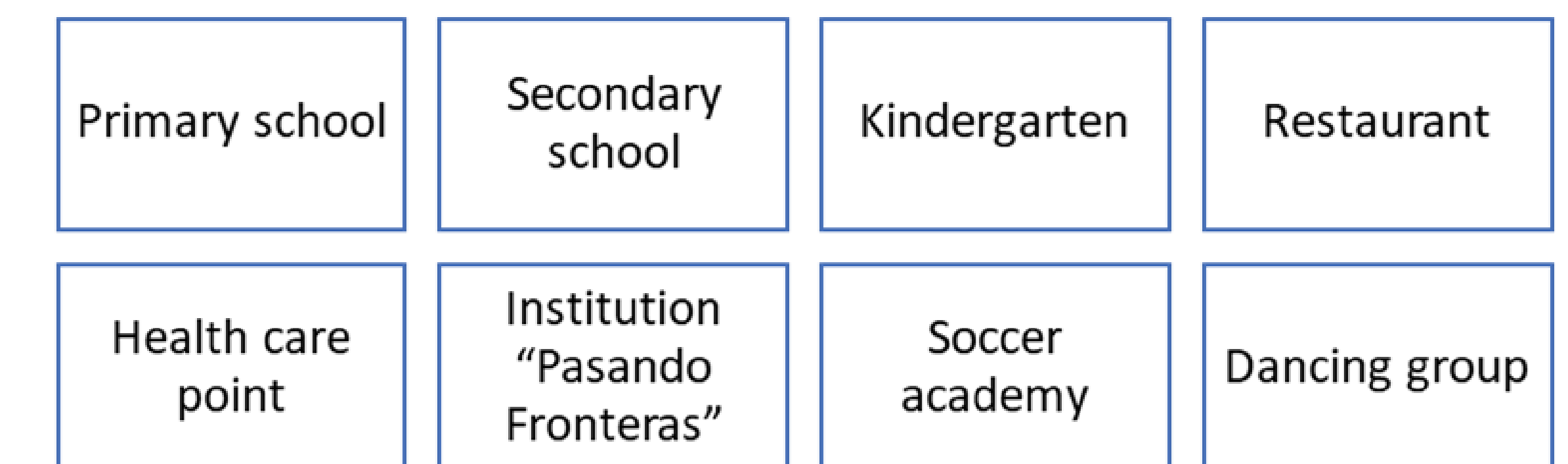


Fig. 4. Survey results

Local institutions



Community associations



Individual talents



Fig. 5. Assets map

Data gathered from interviews indicated several trends, including an increase in deforestation and water contamination and a loss of gastronomy and food traditions. Community leaders have stressed the importance of sustainability and self-sufficiency through preservation of remaining territory and education of younger generations.

Acknowledgements

We would like to thank to the community of El Tiple and the Black Community Council of El Tiple, Colombia. We would also like to acknowledge the support from the Creative Inquiry program at Clemson University, Clemson, SC

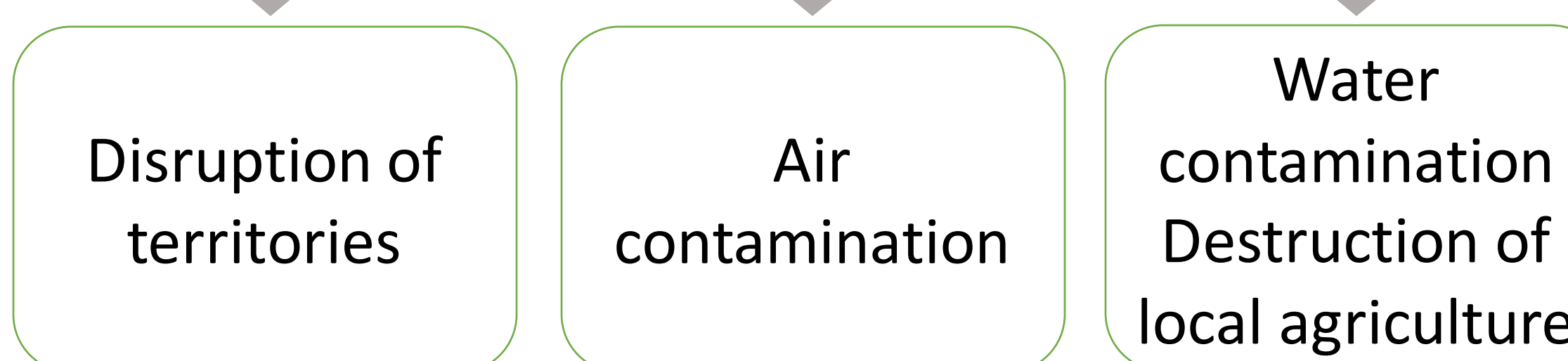
References

1. Velez-Torres et al., 2021. DOI: 10.1089/ees.2020.0282
2. Bernal Galeano, 2019. <http://hdl.handle.net/10554/45450>
3. Moore de Peralta, Smithwick, & Torres, 2020. <https://digitalscholarship.unlv.edu/jhdrp/vol13/iss1/4>
4. Kretzmann & McKnight, 1996. Assets-based community development. National civic review, 85(4), 23-30.

Agro-industrial practices



Direct impacts



Broader impacts

- Reduction of water sources
- Changes in the culture
- Food insecurity
- Public health risk

Fig. 2. Factors affecting the context of El Tiple. Adapted from [1-2].