

Farming Adaptation Strategies for Climate Change: A Case Study of Campesinos in the Piedras



River Watershed, Colombia

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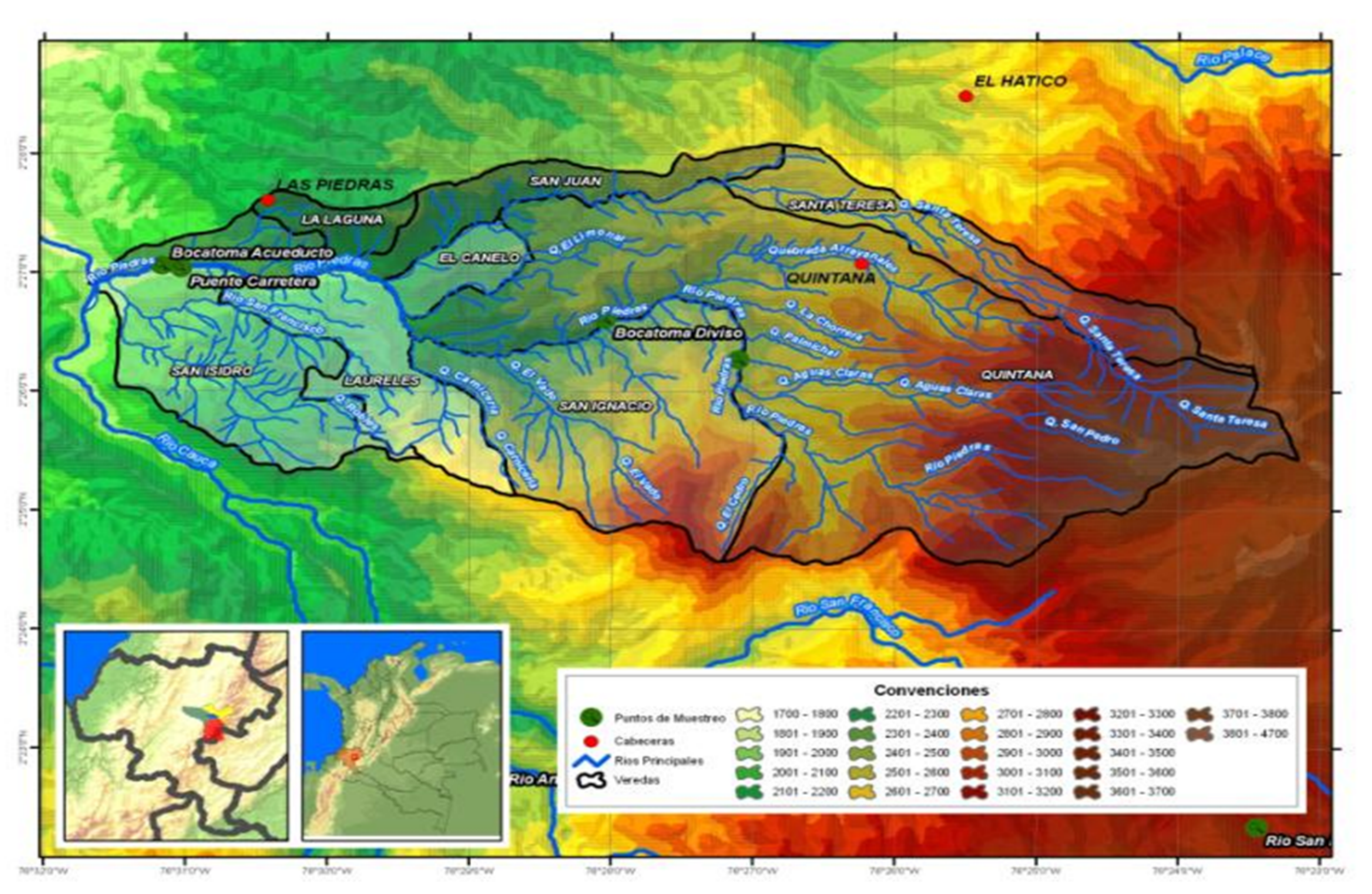


Introduction

Climate Change is expected to pose two distinct sets of challenges for poor rural households:

1. The first challenge is the increasing frequency and severity of weather shocks, which will leave rural households unable to create or maintain resilient agricultural production.
2. Second, are the challenges related to long-term shifts in temperature, rainfall patterns, water availability, and other environmental factors, which will affect food security and resilient agricultural production. (Baez et al, 2013).

Even though climate change is beginning to be recognized as a global threat, the focus has been mainly on scientific and economic solutions. This has often excluded human and gender dimensions (Aboud, 2011). Women account for a high proportion of farmers in many developing countries yet often have very little access to the resources they need to support their livelihoods, including land, livestock, technology, farm labor, extension services, financial services and education.



Background

The Piedras River watershed includes different agro-climatic zones related to elevation with a population of around 3,000 people. The Piedras River watershed is under the jurisdiction of the Popayán municipality. Crop and livestock specialization varies according to elevation. ASOCAMPO is the main organization for campesinos. They are the driving force helping the small-holders adopt CSA strategies.

Objective

The objective of this study was to identify crops that are vulnerable or resilient/resistant to climate change and how these changes will impact farmer livelihoods. We investigated if climate change perceptions differ by gender and if there are gender specific vulnerabilities to climate change. This included mapping the household farming system.

Methodology

- Household Interviews
- Ethnographic Research
- Capacity and Vulnerability Analysis
- Farm Mapping
- Seasonal Calendar

Results

Percentage of members of ASOCAMPO using CSA practices (n=36)	
Compost, Organic Fertilizer	65.4%
Pasture Land Rotation	50.0%
Reincorporating Native/ Natural seed Varieties	30.8%
Manure Management	23.1%
Water Storage	19.2%
Integrated Pest Management	19.2%
Silvopastoral Systems	19.2%
Crop Residue	19.2%
Improving Livestock Breeds	15.4%
Crop Rotation	15.4%
Tree Barriers	15.4%
Associated/ Integrated Cropping	15.4%
Green House	15.4%
Improved Forage	11.5%
Irrigation	7.7%
Growing Crops incrementally	7.7%
Adaptation Measures and Practices Divided by the Roles of the Family.	

Men	Entire Family	Women
-Land preparation	-Conservation areas	-Management of small livestock
-Maintenance of fences	-Reforestation	-Growing vegetables
-Planting and processing of cabuya	-Milking	-Conservation of crop seeds
- Rotating the grazing pastures	-Compost	-Selling in the market
-Management of cattle	-Planting and harvesting of crops	-Creating organic pesticides
	-Management of trout	

Conclusion

Farmers who are members of ASOCAMPO are taking proactive measures in the Piedras River watershed to adapt farming strategies to climate change, largely at the initiative of the organization. Both male and female households have adapted multiple climate smart agriculture practices. Women also play a significant role in HH food security. They are in charge of the HH garden which provides 80-90% of their vegetable/ fruit consumption.

Although the farmers know of climate change and stated noticeable observations, they refer to it as climate variability within the region.



References

Aboud, Georgina. 2011. "Gender and Climate Change." *BRIDGE Development-Gender*.
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