

# Climate Resilience in Churute, Ecuador: Subjective Evaluations and Conceptualizations

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## INTRODUCTION

Anticipating the exacerbating effects of climate change, particularly in coastal and natural resource dependent communities requires an understanding of not only how climate change impacts local community members, but also how they understand and demonstrate resilience and adaptation to climate change.

To better inform a long-term **mangrove reforestation project** to improve climate adaptation capacity and quality of life in coastal communities in Ecuador.

## OBJECTIVES

- Identify **local perceptions of climate change**
- Identify **local conceptualizations of resilience**
- Evaluate the (if/any) **relationship between climate resilience and psychological resilience**

## PRACTICUM SITE



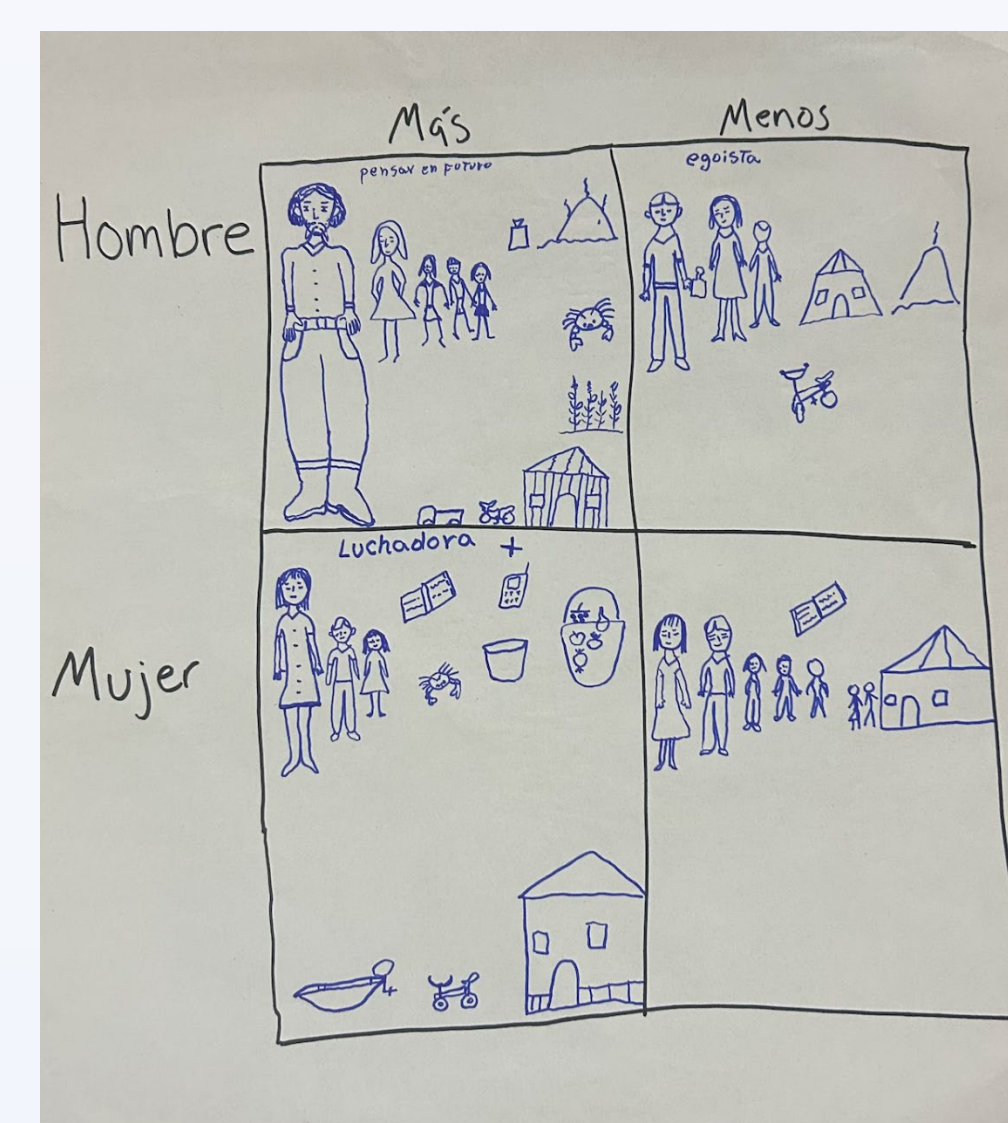
This study was conducted in coordination with the La Cooperativa La Flora, a local crab fisher-people co-operative in Churute, Ecuador.



## METHODS

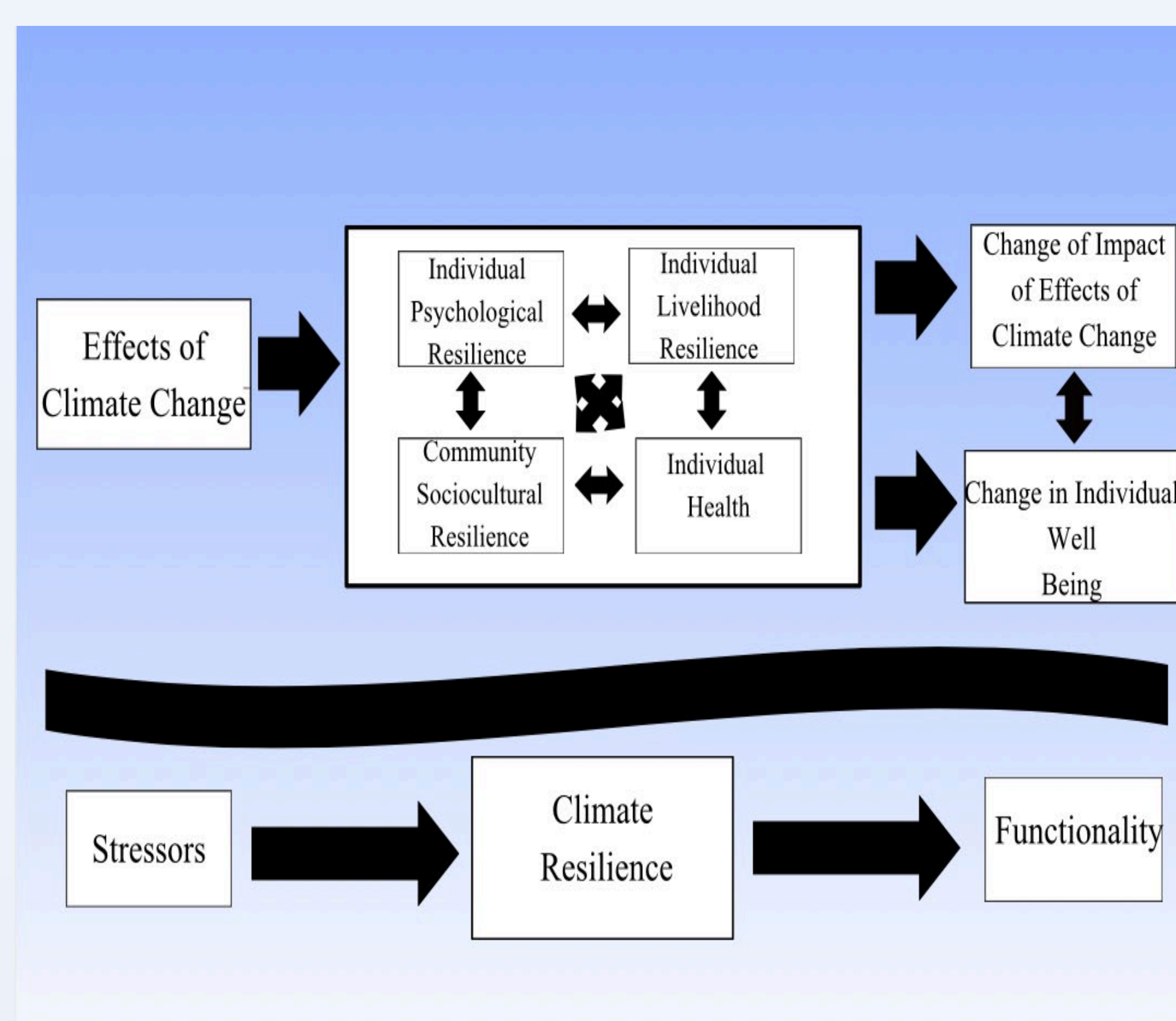
The study utilized mixed methods including the following:

- Semi-structured key informant interviews
- Surveys
  - Adapted version of Subjectively self-Evaluated Resilience Survey (SERS)
  - Connor Davidson Resilience Scale 10-Item (CD-RISC10)
- Community Concept Drawing (CCD)



Cooperative members framed climate resilience as both multi-scalar and multidimensional

## CONCEPTUAL FRAMEWORK



## RESULTS

- **Perceived effects of climate change:**
  - Increased sea level (mainly impactful during high tide), extreme temperatures, varied rainfall and rain patterns
- **Perceived effects of human manipulation of the environment:**
  - Increased sedimentation in the mangroves, pollution and contamination of the water
- **Components of climate resilience:**
  - **Psychological resilience:** optimism, future oriented thinking, ability to learn lessons from past experiences
  - **Livelihood resilience:** diversification of income, age, education
  - **Social resilience:** belonging to a community organization, family and friend support networks
  - **Cultural resilience:** continuation of traditional knowledge



## IMPLICATIONS

Initiatives intending to bolster climate resilience **must acknowledge the various dimensions of climate resilience outside just the built and natural environments which communities live in.**

Initiatives, such as Mangroves for the Climate, **should support these different dimensions in addition to the resilience of the built and natural environments.**

## ACKNOWLEDGEMENTS

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