Reinforcing Bottom-up Initiatives for Climate Change Adaptation in Latin America and the Caribbean (Adapto)



Gonzalo Lizarralde, Benjamin Herazo, Danielle Labbé, Lisa Bornstein, Adriana López, Andres Olivera, Hernán Ascui, Holmes Julián Páez, Karine Bouchereau





#### **Objectives**

 Identify adaptation strategies developed by local leaders in informal settings in small/medium-sized cities

- Reveal how these strategies can be:
  - Scaled up to increase their impact
  - Transferred between contexts to enhance innovation
  - Integrated into policy to guarantee sustained change

The double paradox of Disaster-Risk Reduction - DRR

Paradox 1

Whereas informal settlements in the region are typically vulnerable to water-related risks and CCV ...

they are also effective incubators of bottom-up, informally-driven mechanisms of adaptation.

#### Paradox 2

These strategies are very often initiated and led by women, who constitute a particularly vulnerable group...

but who play a crucial role in building the social fabric that make such adaptation possible.

Analytical framework

- Critical vulnerability
- Critical resilience
- Socially-just governance mechanisms
- Gender sensibility to CCV

**Research questions** 

• What is the role of different stakeholders in DRR in the face of CCV?

 Which approaches do they adopt to achieve resilience? Is there a consensus?

 Do bottom-up initiatives have any influence on local policies or municipal budgets?

## Methodology

#### Montreal, Canada

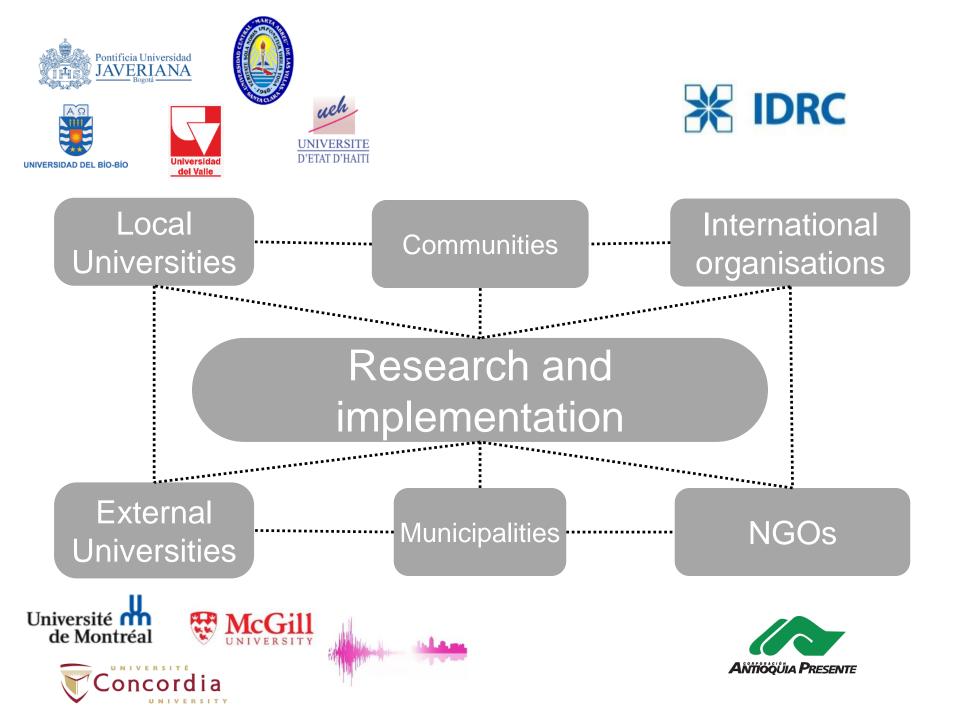


# Yumbo, Colombia

Concepción, Chile

## Steps

- Identify:
  - The best ideas and creative solutions developed in academia
  - The best bottom-up initiatives
- Match them
- Assess their impact
- Facilitate South-South exchange of lessons learned



Early results

#### Case study 1 Villa Clara Region, Cuba















Early results

#### Case study 2 Yumbo, Colombia











Results

Case study 5 **Canaan, Haiti** 





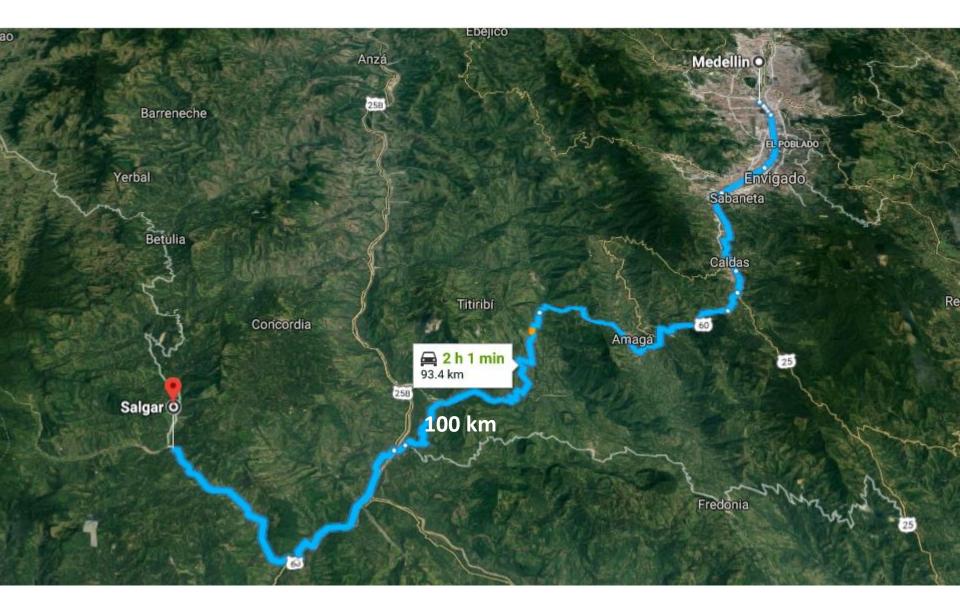




#### Early results

#### Case study 3 Salgar, Colombia





# **GEOGRAPHICAL LOCATION OF SALGAR**

Foto: Gobernación de Antioquia

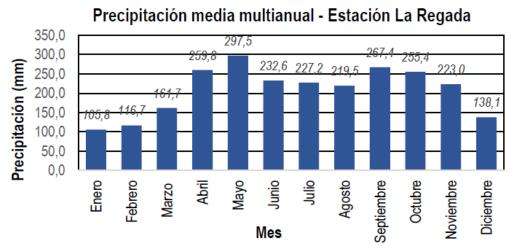
# **SALGAR, 2015**

larepu



- In 2015, the municipality of Salgar in Colombia (18000 inhabitants) suffered a sudden landslide that killed 100 people and destroyed a significant part of the urban and rural settlements.
- Principal affected: River La Liboriana, Village La Margarita, part of the urban área.
- Deathly victims: approximatly one hundred, more than a dozen are still missing.
- Significant economic losses.

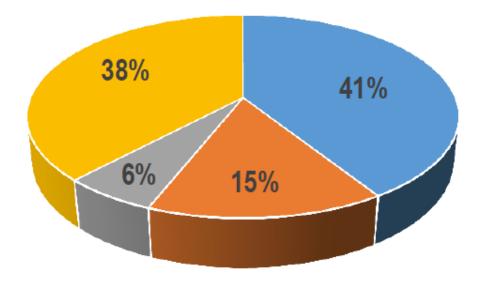
# The problem: Multi-year average rainfall in the Barroso river





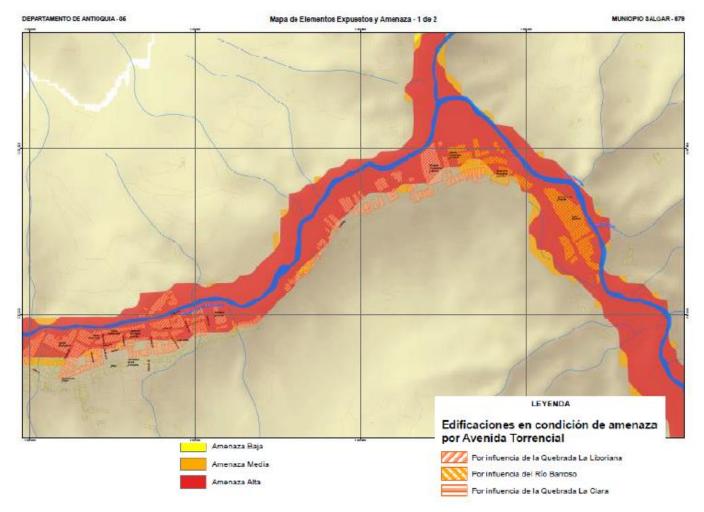
#### Representative economic activities of Salgar

#### Actividades economicas representativas en el municipio de Salgar Fuente: DNP (2015)

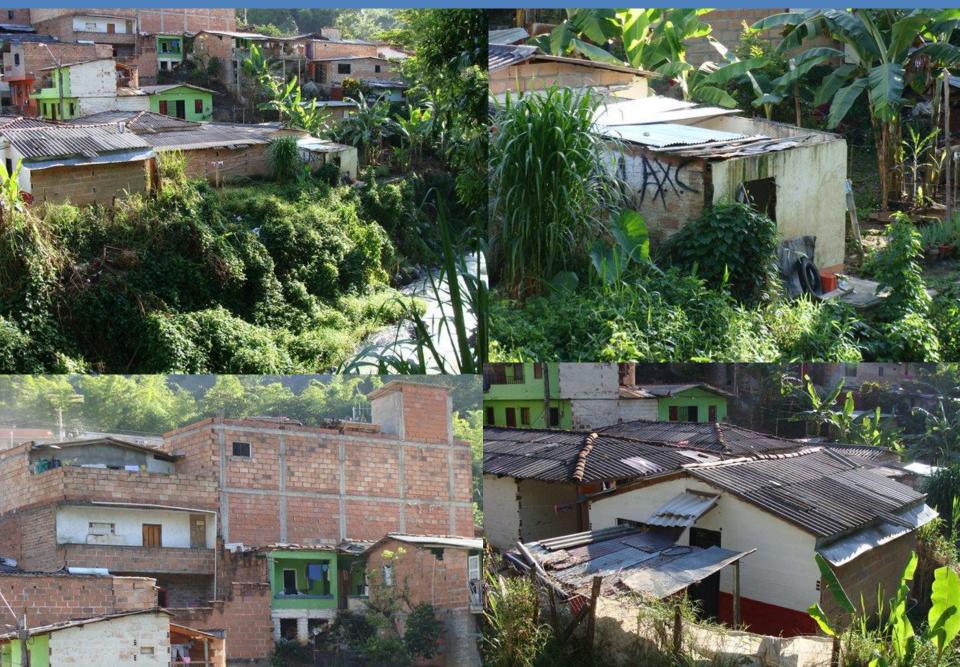


- Cultivo de café
- Actividades de servicios
- Actividades inmobiliarias
- Otras actividades (agricultura, ganadería, comercio, labores calificadas)

# Threat scenarios



# ¿WHAT IS IN DANGER?



# ¿WHAT IS IN DANGER?



### ¿WHAT IS IN DANGER?



## ¿WHAT IS IN DANGER?



During two years, more than 10 reconstruction projects were conducted by public and private organizations, demonstrating the considerable resilience capacity that exists in the region.

## This study explores how informal recovery strategies led by

women emerged in Salgar



# Longitudinal case study (2015-2018) is based on interviews with local residents, governmental officers, and representatives of NGOs.

Resource mapping, GIS cartography, and ethnographic analysis.



# Results show that the local economic activity (closely linked to <u>coffee production</u>) played a significant role in the recovery process.

The <u>reinterpretation of women's role</u> in reconstruction initiatives.

#### <u>Vulnerabilities have been reduced</u> by improvements in <u>early</u> <u>warning systems</u>.

The role that <u>female leaders</u> typically play during, and after, natural disasters.

<u>Women's capacity to overcomes the barriers of their historical</u> vulnerability.

#### Discussion

• These bottom-up initiatives and organizations, have little or no representation in political decision-making.

• Women play a significant role in water provision, urban space definition and management, and waste collection.

• A significant gap still prevails between formally sanctioned plans and rapid informal change

#### Discussion

• Women play a significant role on bottom-up DRR initiatives in the face of CCV; yet they are poorly represented in formal institutions an plans.

• Significant tensions in the use of water resources exist in these areas where local decision-makers face significant challenges in implementation.

#### Discussion

• Fragmentation between government and communities prevails

 Local universities play a crucial role in linking bottom-up local initiatives and resources to formal plans and policies.



Theoretical: There is rarely a synergy between local stakeholders and politicians and decision-makers.

Practical: Despite awareness about CCV, a resilience agenda based on bottom-up initiatives and local knowledge is still difficult to implement in informal settlements.

#### Conclusions

**Opportunities:** 

- The potential role of universities in bridging the gap between local communities and formal institutions
- The inclusion of local female residents in active decision-making at the municipal and governmental levels
- These results can help create a more integrated resilience agenda at the municipal level, capable of integrating valuable (albeit informal) local resources.

Paez.holmes@javeriana.edu.co

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# Thanks for your attention

Climate Change Adaptation in Informal Settings: Understanding and Reinforcing Bottom-up Initiatives in Latin America and the Caribbean













