



## Project in Uruguay

### *“Building resilience to climate change in vulnerable smallholders”*

Adaptation Fund Side Event – 10/11/2016 – CoP 22

*Family and Community Agriculture: Developing and Implementing Sustainable Climate-Resilient Agricultural Solutions*

Walter Oyhantçabal

Ministry of Livestock, Agriculture and Fishery

# Family cattle farmers and climate change

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- Grant of US\$ 9,662,967
- Timeframe: 5 years.
- Starting date: October 2012.
- National Implementation Agency: **ANII**
- Execution Agency: **MGAP**



# General description of the project





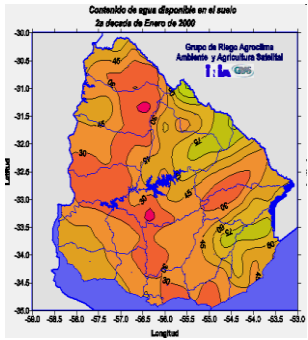
URUGUAY is inserted in one of the most important temperate grassland biomes worldwide: the "pampas" biome of south America.

- Uruguay is a livestock and cropland country with an economy strongly based on the agricultural sector (78% of all goods exports).

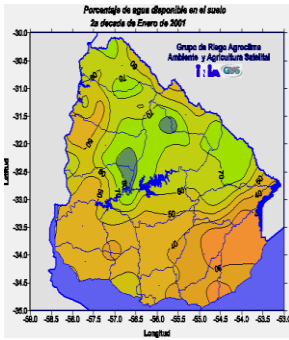


# Intensity and frequency of droughts in the last decade

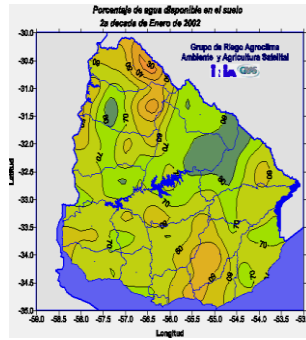
2000



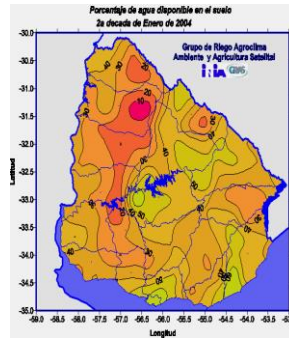
2001



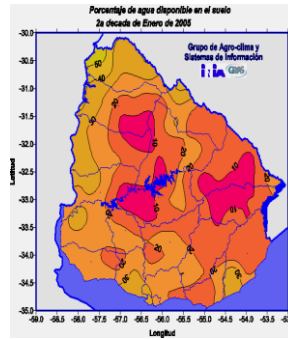
2002



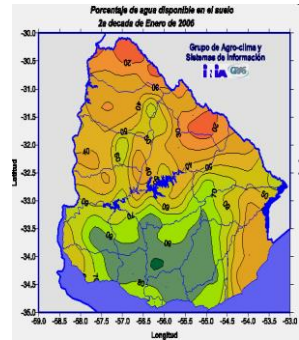
2004



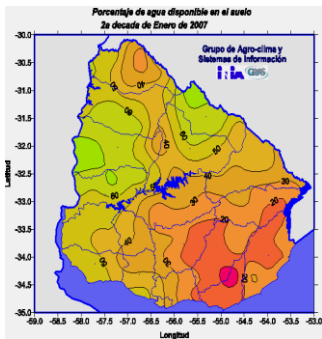
2005



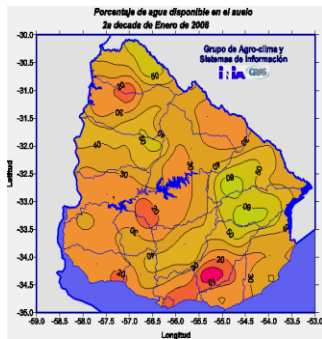
2006



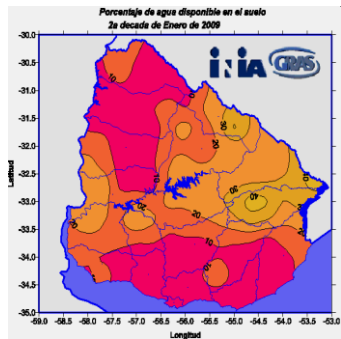
2007



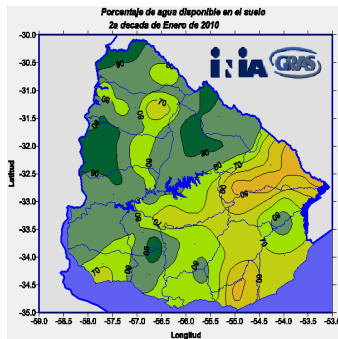
2008



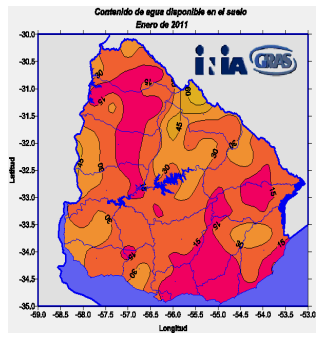
2009



2010



2011



# High damages and losses of extreme events



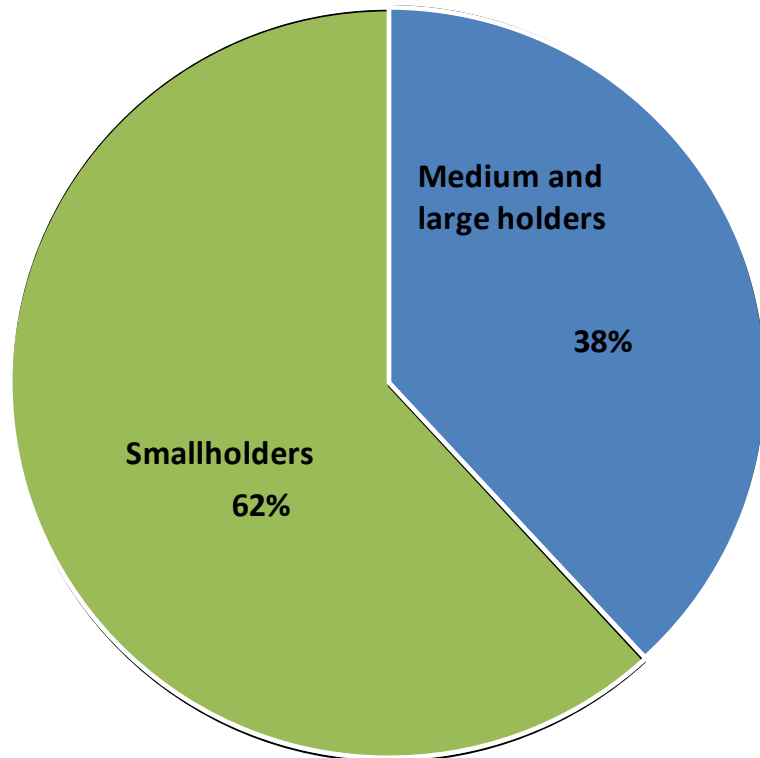
- 2008/09 drought: direct losses US\$ 342 millions; indirect losses: 1 billion US\$ (close to 2% GDP)

## Rural farmers in Uruguay (2011):

Total farmers: 41000

62% smallholders

Cattle and sheep farmers: 63% of all smallholders



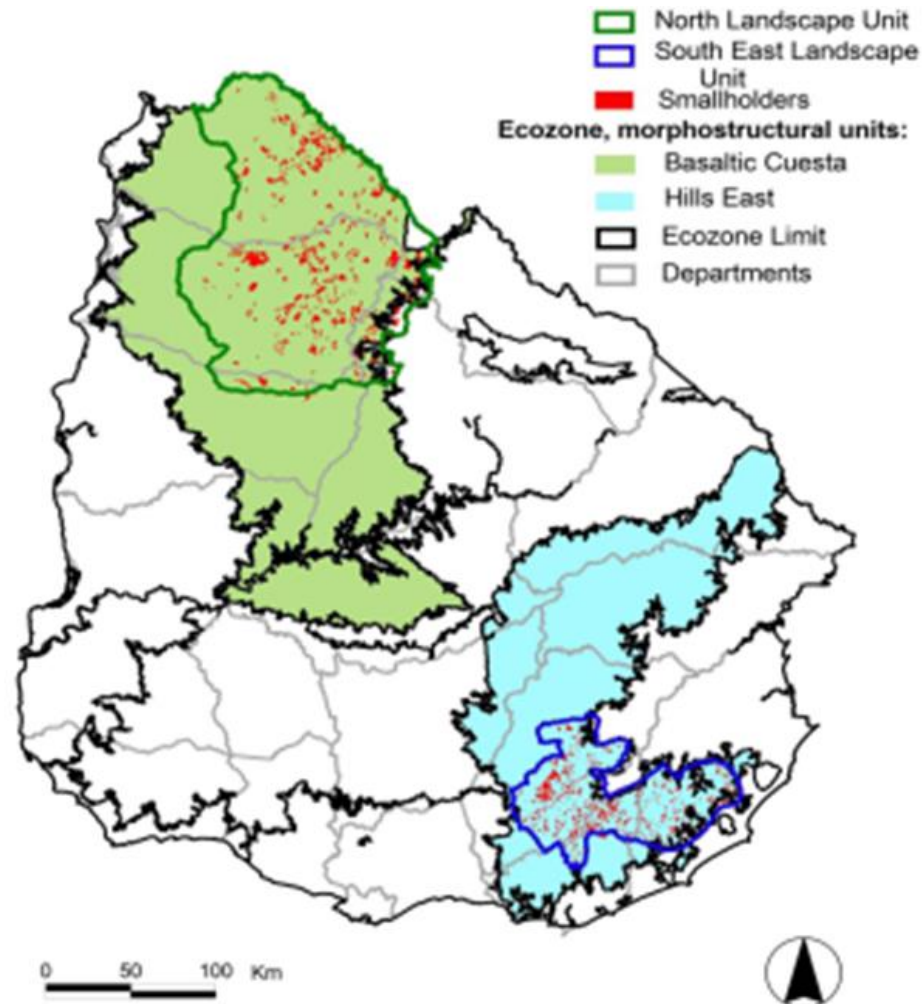


# Distinctive characteristics of the project

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- **Target public:** Vulnerable small family cattle farmers.
- **Territorial approach:** Activities focalized on Landscape Units (LU).
- **Methodology:** Participatory diagnosis and strategic planning elaborated with the beneficiaries in the LU.

# Territorial setting (LU)



- Cuesta basáltica
- Sierras del Este

# COMPONENT 1: Building resilience at farm level

1

700  
smallholders  
in Basaltic LU  
25% women

640  
smallholders  
Sierras del  
Este LU  
25% women

Increase in  
productivity and  
incomes and  
decrease of their  
variability due to  
CC

## Focus on:

- forrage management, water, and shadow solutions .
- Associative projects.
- Technical assistance and networks.

# 2

## COMPONENT 2: local networks

- Building a learning platform for farmers.
- Working with children, youth and women on: adaptation to CC and natural resources conservation .
- Forecasts, early warnings and decision support.



# 3

## COMPONENT 3: Knowledge management

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**Knowledge generation to support innovations to cope with climate variability and extreme events (droughts).**

**Participatory validation.**

Monitoring key indicators of resilience.  
Systematizing information.

Mesuring systems sensibility and validating good practices.

Delivering a catalogue of good practices.

Lessons learned.

# Institutional partnerships

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## 3

**Formal agreements to implement monitoring process and studies:**

- **SARAS**
- **Faculty of Agronomy, Faculty of Sciences & INIA:**
- **Instituto Plan Agropecuario:**

1

+

2

+

3

## Conceptual framework

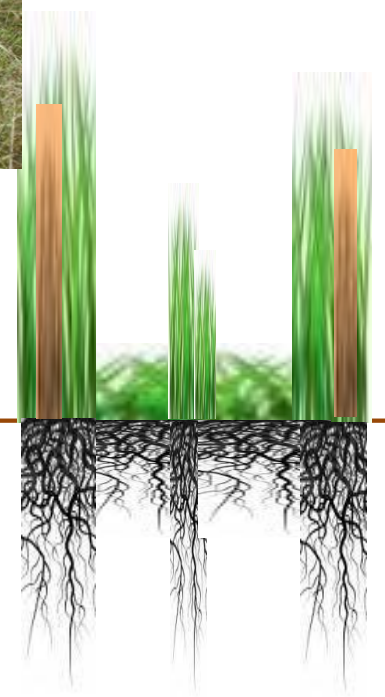
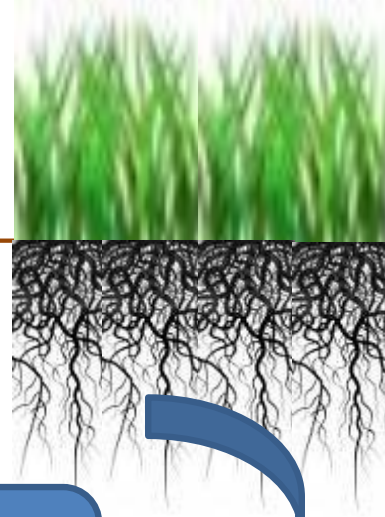
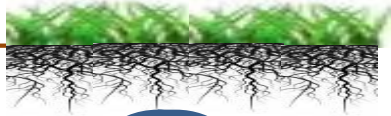
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- **Win-win** game: More productivity and more adaptation to climate variability **at the same time.**
- **Increase production without increasing costs significantly**
- **Restoring rangelands'** soils fertility and biodiversity as resilience drivers (C sequestration as co-benefit)

**¿HOW?**

**Low cost, soft, management technologies of high impact and knowledge intensive**

# Adaptation co-benefits



Less soil C



Rebuilding soil C



Synergies between adaptation and mitigation





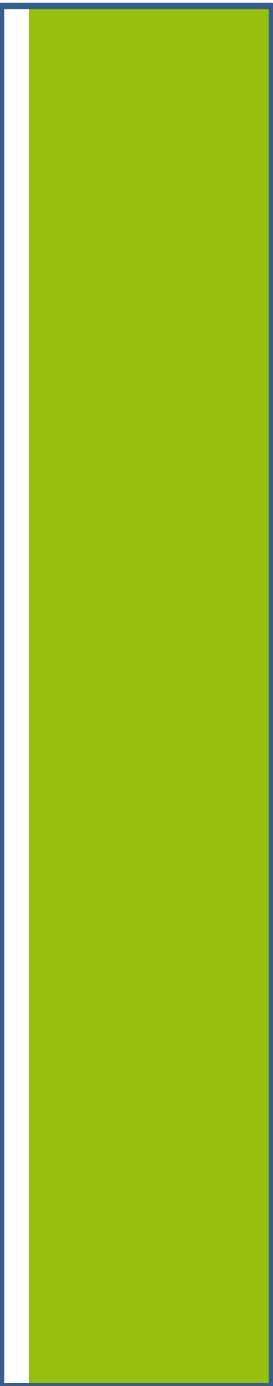
# M&E Strategy

**30**  
**Reference**  
**farms for in**  
**depth M&E**

**Assisted beneficiaries**

**Control group**

# Milestones



# Preliminary lessons learned

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- Adaptation integrated to development policies.
- Relevance of coordinating policies – science and social actors.
- Resilience is multicausal
- Low cost technologies can be of high impact.
- Technical change implies cultural and behavioural change and demand a facilitative environment.
- Adaptation is easier based on win-win strategies.
- Information, networks and organizations are key.

*“Building resilience to climate change and vulnerability in vulnerable smallholders”*

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**THANK YOU VERY MUCH!**



**MINISTERIO DE GANADERÍA  
AGRICULTURA Y PESCA**