

USAID Biodiversity & Forestry Seminar Series –Co sponsored by Agriculture Office and the Global Change team. USAID Information Center, Ronald Reagan Building.

# Adapting to Climate Change in Andean Ecosystems

SANREM CRSP LTRA 4

Practices and Strategies

May 7 2009 9:30-11am



# Overview

- Introduction to SANREM CRSP LTRA 4 C. Valdivia
- Altiplano Climate: Making Sense of 21 Century Scenarios A. Seth
- Soils, Organic Matter, Mitigation and Adaptation
- Anticipating and Responding to Biological P. Motavalli
- Complexity in the Effects of Climate Change on Agriculture K. Garrett
- Linking Knowledge Systems and Building Adaptive Capacity C. Valdivia

# I. Introduction

Research Design LTRA 4

# SANREM CRSP LTRA 4



**CLIMATE & MARKET  
DRIVERS & ECOSYSTEM  
DYNAMICS**

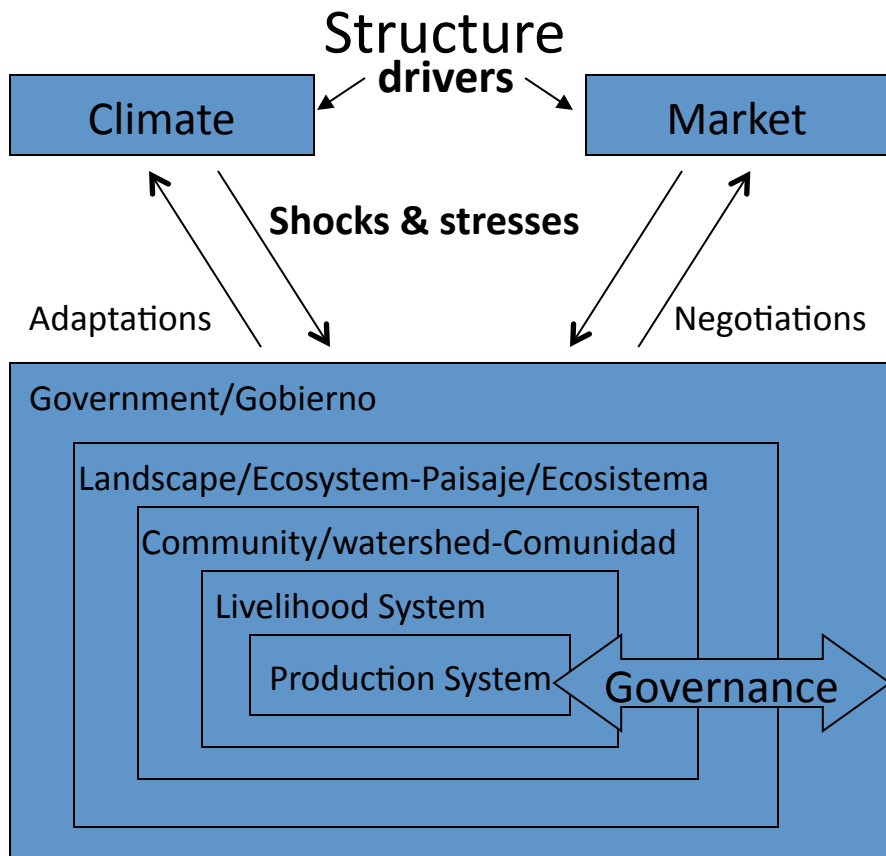
**CAPACITIES &  
CAPABILITIES  
ABILITY TO ACT**

**LOCAL KNOWLEDGE  
PERCEPTIONS RISKS**

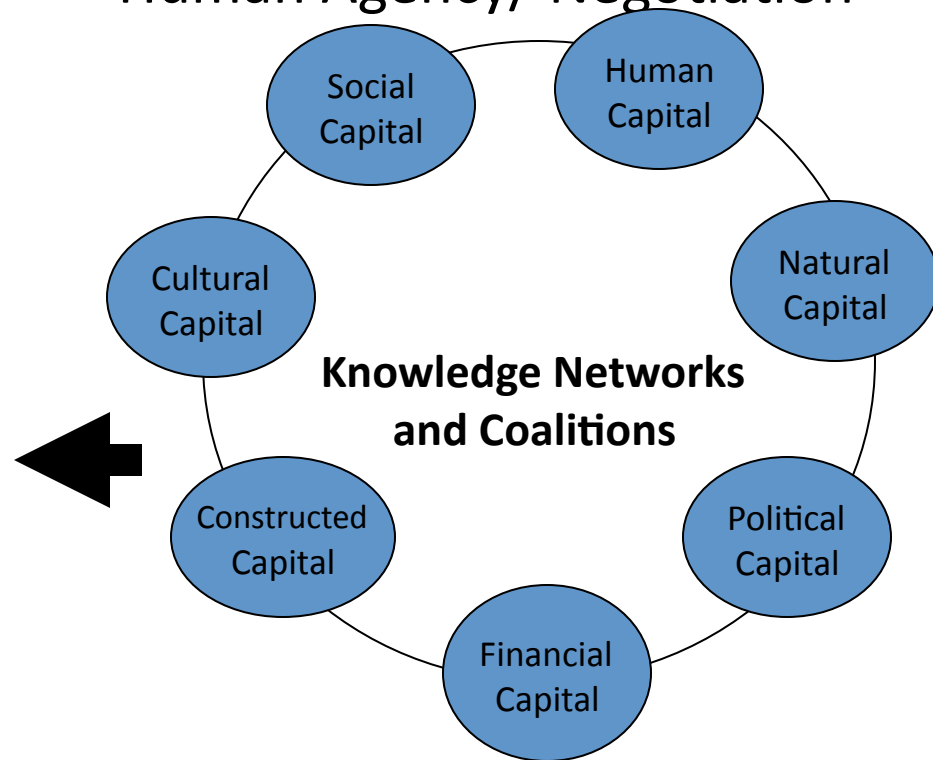
**BRIDGING KNOWLEDGE  
FOR MARKET ACCESS  
STRATEGIES**

**KNOWLEDGE BRIDGING  
PRACTICES & INFORMATION**

# SANREM CRSP LTRA4: ADAPTING TO CHANGE IN ANDEAN ECOSYSTEMS



## Human Agency/ Negotiation



### Hypotheses on the current state and its drivers

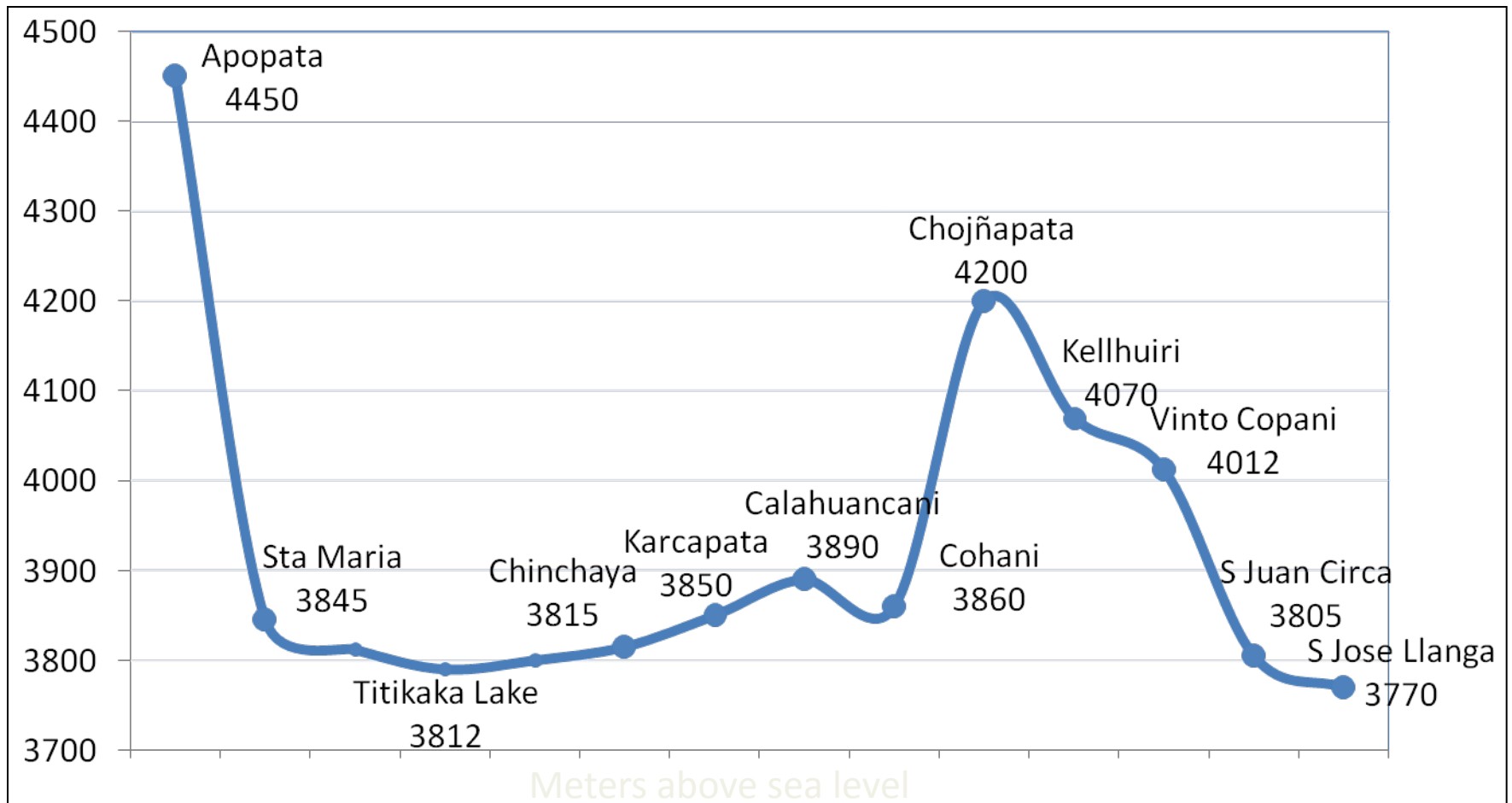
- Pests                      Local Climate
- Soils                        Local Markets
- Biodiversity              Livelihoods

### Transformative Hypotheses

- Bridging knowledge systems for change
- Building coalitions to implement change
- Risk and dread and ability to act



# DISTRIBUTION OF SANREM CRSP ALTIPLANO COMMUNITIES RESEARCH SITES BY ALTITUDE



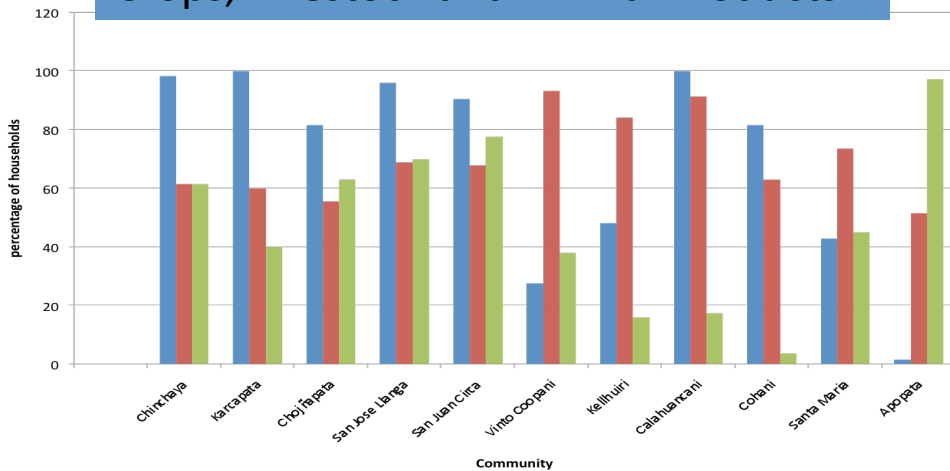
Prepared by C. Turin Canchaya

# ALTIPLANO LANDSCAPES

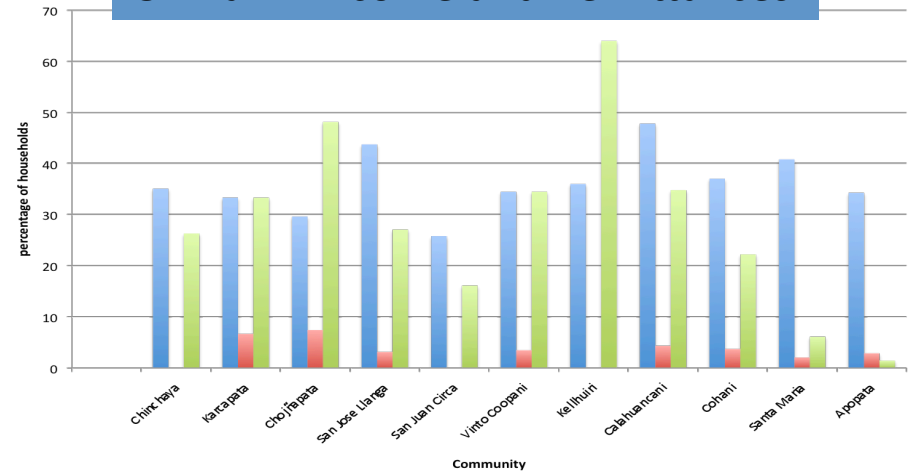


# Altiplano Ecosystems: Community Capitals, Livelihoods and Market Participation (11 Research Sites & % of Households)

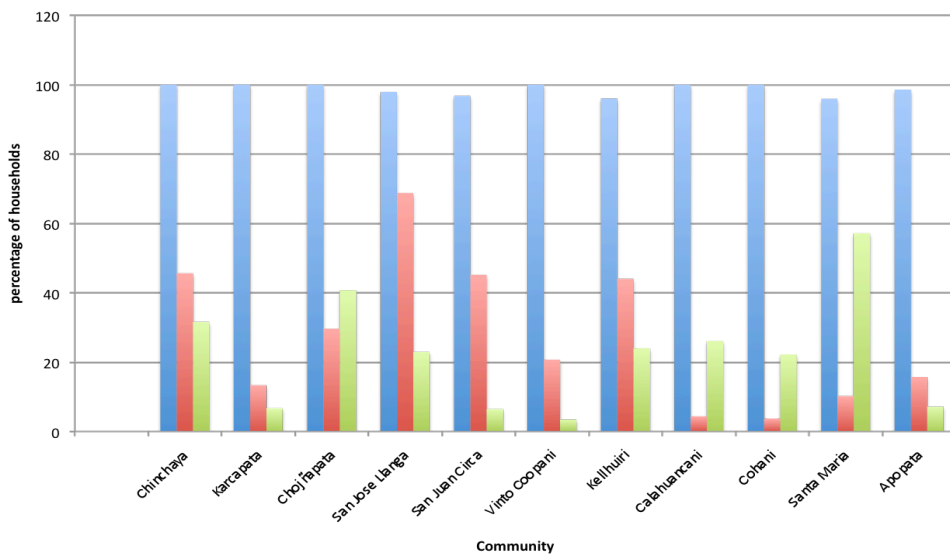
## Crops, Livestock and Animal Products



## Off Farm Income and Remittances



## Household Labor, Hired and Ayni (shared)



## Fallow fields: less than 1 to more than 6 years

