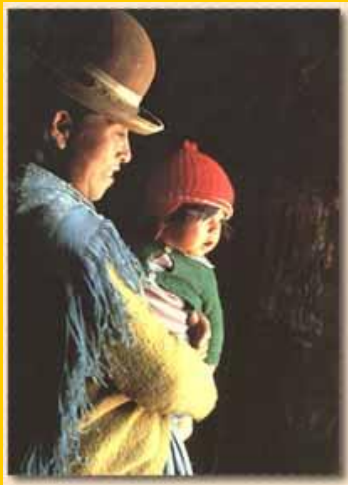


# ADAPTING TO CHANGE: CHANGES IN COMMUNITY PERCEPTIONS AND MANAGEMENT OF SOIL QUALITY AND SOIL ORGANIC MATTER



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# SANREM - CRSP



- **Sustainable Agriculture and Natural Resource Management – Collaborative Research Support Program**
- **Funded by USAID**
- **Primary objectives are to:**
  - ◆ **promote sustainable and environmentally sound development**
  - ◆ **increase stakeholder income generation**
  - ◆ **empower stakeholders, particularly women**
- **Was managed by the University of Georgia from 1992 to 2004. Now managed by Virginia Tech.**
- **Have given out 5 initial awards for approximately \$6 million.**



# FUNDED PROJECTS (2006 – 2009)



- **Decentralization Reforms & Property Rights: Potentials and Puzzles for Forest Sustainability and Livelihoods (Indiana University)**
- **Developing a Participatory Socio-Economic Model for Food Security, Improved Rural Livelihoods, Watershed Management, and Biodiversity Conservation in Southern Africa (Cornell University)**
- **Watershed-based Natural Resource Management in Small-scale Agriculture: Sloped Areas of the Andean Region (Virginia Tech)**
- ***Adapting to Change in the Andean Highlands: Practices and Strategies to Address Climate and Market Risks in Vulnerable Agro-Ecosystems (Univ. of Missouri)***
- **Agroforestry and Sustainable Vegetable Production in Southeast Asian Watersheds (North Carolina A&T Univ.)**

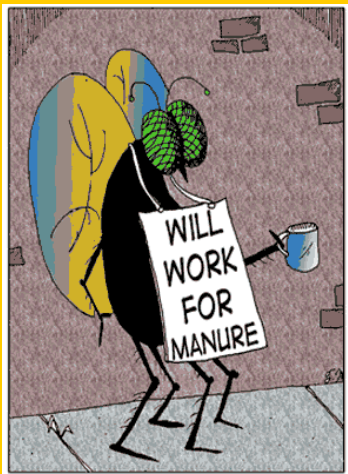
# OUR PROJECT



- Developed from initial participatory community surveys in the Altiplano Region of Bolivia and Peru that found:
  - ◆ Farming was increasingly vulnerable to the risks of climate variation: examples include increased risk of frost, longer dry and warmer spells.
  - ◆ Lack of markets, and market incentives that increase vulnerability.



# OVERVIEW OF RESEARCH



Climate Variability  
Migration  
Market factors

Community perceptions  
and assessments:  
Soil quality  
Organic amendments  
Soil organic matter

Changes in agricultural practices  
(e.g. use of organic soil amendments)

Scientific  
assessments:  
Soil quality  
Organic amendments  
Soil organic matter

Changes in soil organic matter

Changes in sustainable agricultural production  
and community status



# OBJECTIVES



- To determine the indicators that community members use for evaluating soil quality, classifying soils and quality of organic amendments.
- To identify changes in management practices that have occurred (e.g. type and frequency of tillage, application timing, type and amount of soil amendments) and perceptions of the relative value of organic versus inorganic soil amendments.
- To compare changes in soil organic carbon and nitrogen fractions and other soil properties under new versus traditional cropping systems.



# OBJECTIVES (CONTINUED)



- To examine the effects of different improved management practices suggested by the community on soil organic matter accumulation and crop growth in community field experiments.
- To train Bolivian and Peruvian professionals to conduct soils research activities.



# PREPARACION DE ABONO

