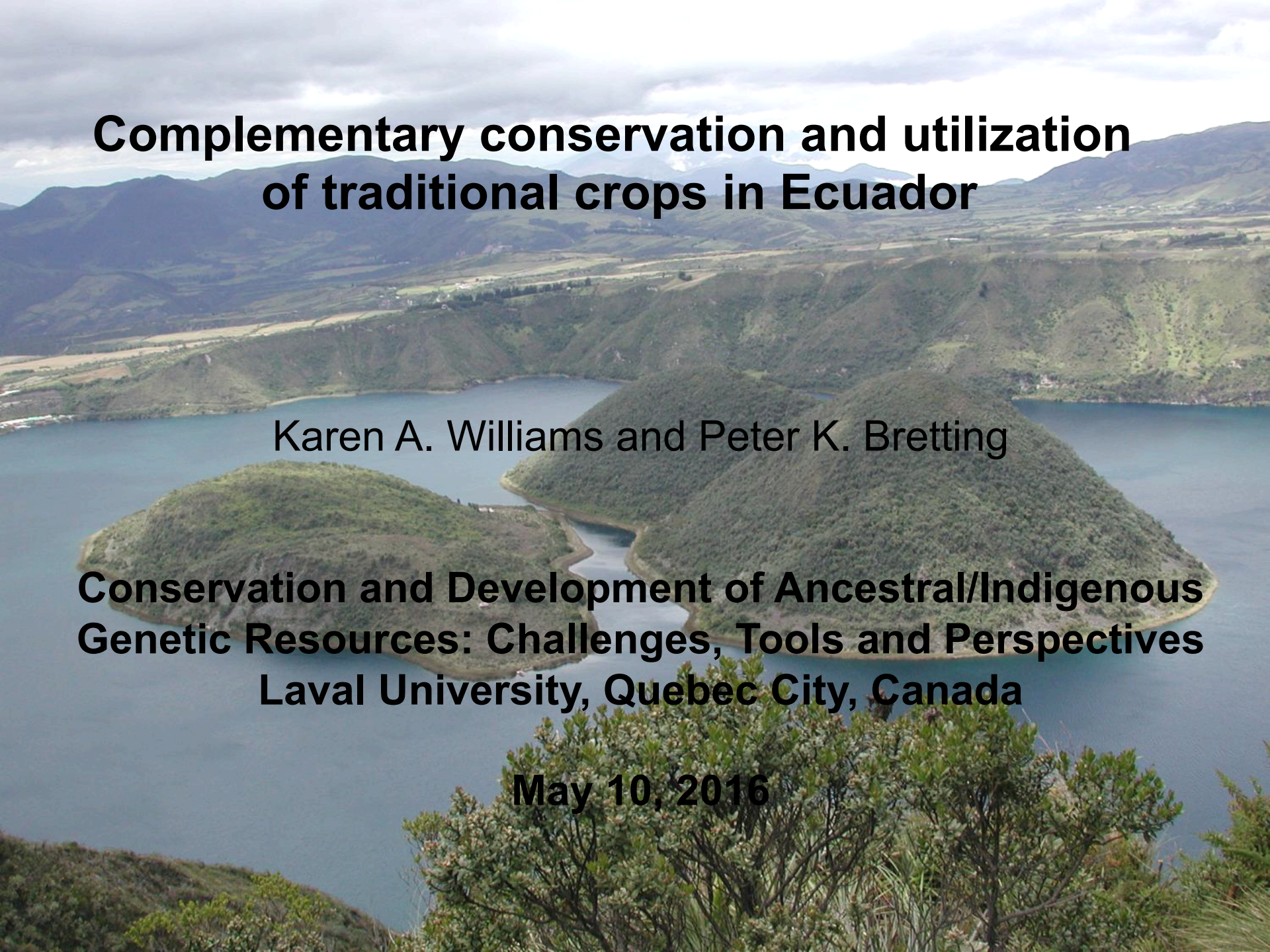

Complementary conservation and utilization of traditional crops in Ecuador

Karen A. Williams and Peter K. Bretting

Conservation and Development of Ancestral/Indigenous Genetic Resources: Challenges, Tools and Perspectives
Laval University, Quebec City, Canada

May 10, 2016

Cotacachi

Quito
Ecuador
Guayaquil
Cuenca
Piura
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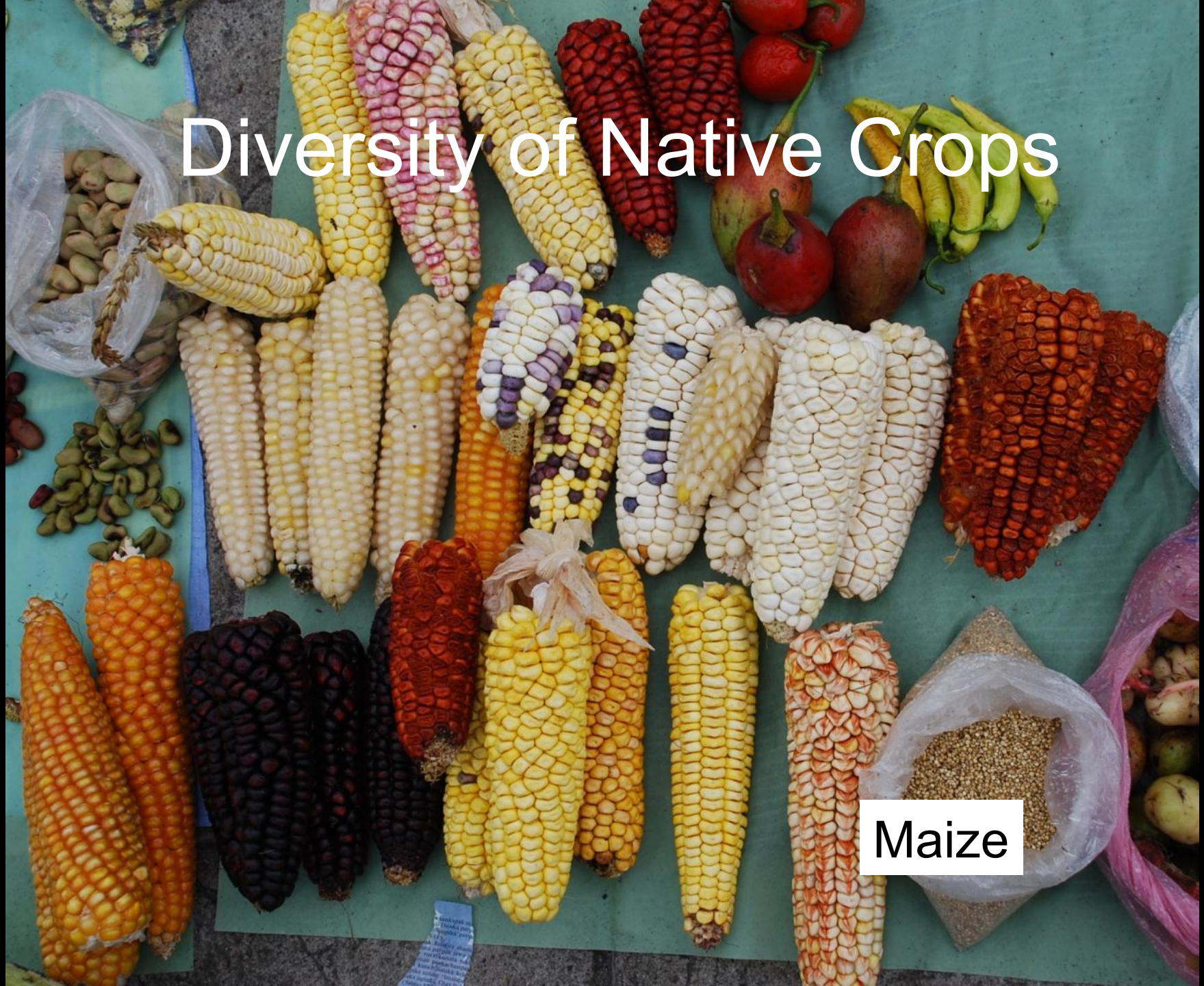
Traditional farming communities

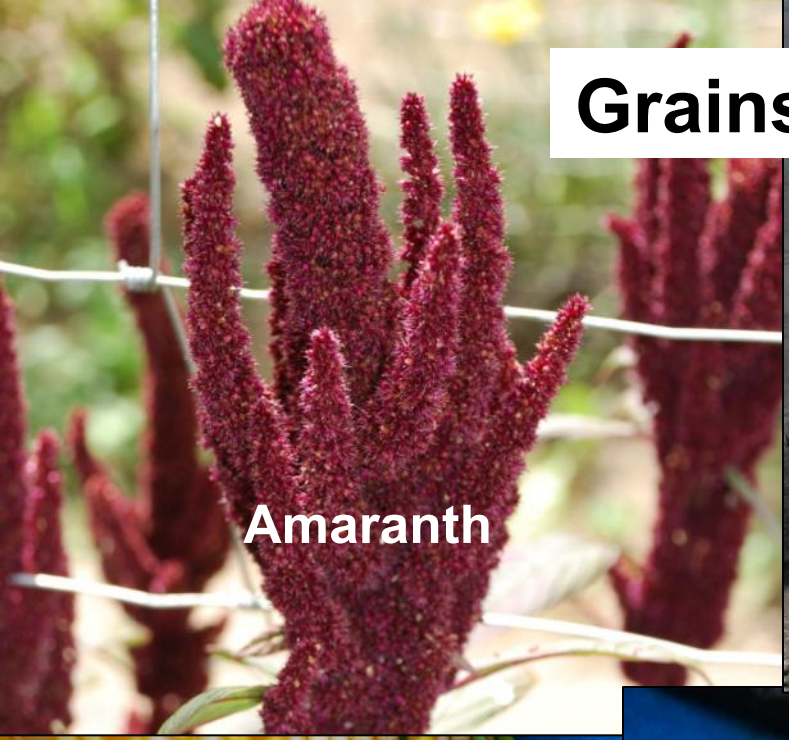
Animals

Guinea pigs (cuyes)

Diversity of Native Crops



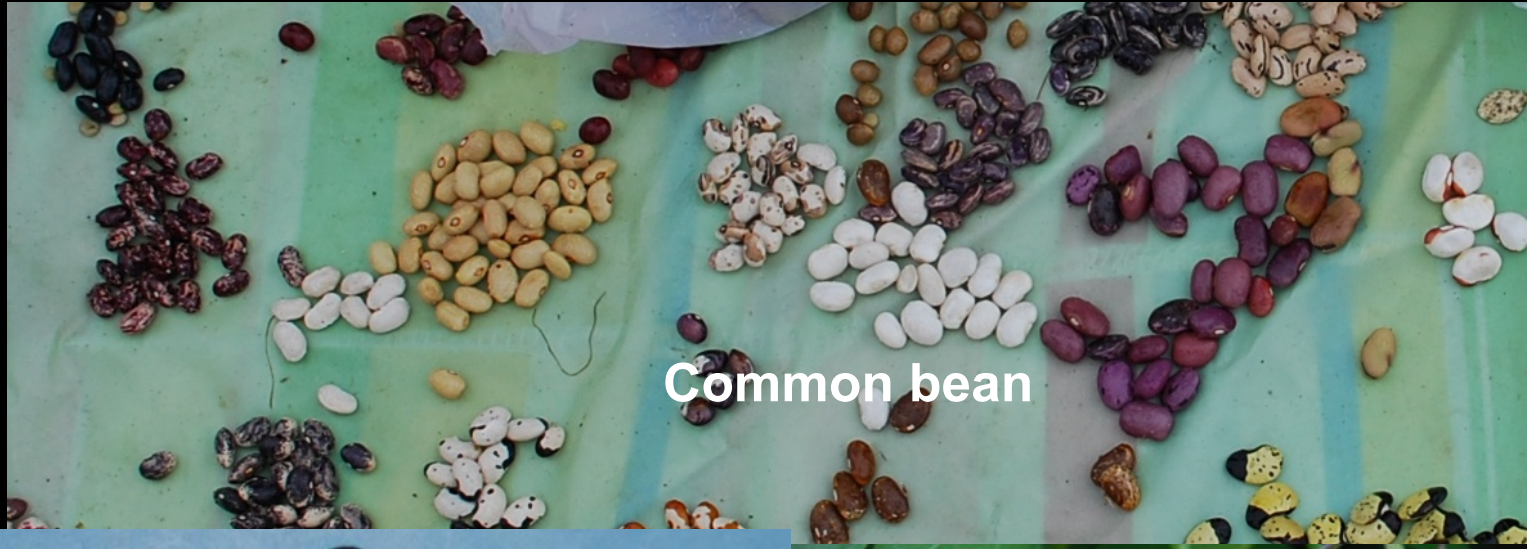
Grains and Vegetables



Roots and Tubers

Fruits

Beans



Project Partners

- UNORCAC (Indigenous organization)
- INIAP-DENAREF (PGR unit, genebank)
- Bioversity International
- USDA-ARS
- Runa Tupari Native Travel

Funding 2002 - 2008

USDA-FAS PL480 Food for Progress

Complementary Conservation Objectives

- On-farm (*in situ*) conservation of crop genetic diversity
- *Ex situ* conservation of crop genetic diversity
- Conservation of associated cultural traditions, practices and indigenous knowledge

Development Objectives

- complementary income from native crops (tourism, crafts, micro-enterprises)
- revitalize ethnic identity and knowledge
- improve food security and nutrition
- improve education in agrobiodiversity

Project Components

- Conservation *ex situ* and *in situ* (on farm)
- Enhancing value of native crops
- Education in agrobiodiversity
- Agrotourism

Collection of samples for conservation in INIAP's genebank

Samples of landraces and crop wild relatives were collected

Conservation On-farm

AGROBIODIVERSITY ENRICHMENT OF HOME GARDENS

SEED FAIRS: DISPLAY and EXCHANGE

Enhancing Value of Native Crops: Project's Pilot Plant

Established on UNORCAC property in the town of Cotacachi

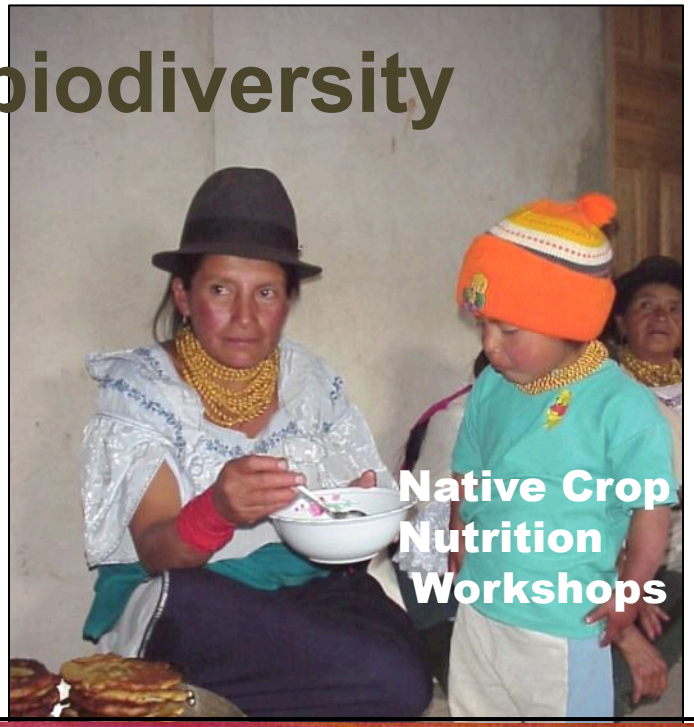
Use of native crops in non-traditional products

Pepper sauce (salsa)

Roasted squash seeds

Cape gooseberries – marmalade and dried

Education in Agrobiodiversity



Agrotourism

"Responsible travel to farming communities that promotes the conservation and use of agrobiodiversity in farmers' fields while providing tangible benefits to local communities"

- **Adds value to native crops and traditional farming practices**
- **Educates tourists about the connection between crop diversity, traditional farmers and farming systems**

Rustic lodges on farms

Ethnobotanical Garden

Lasting Impacts -- 2016

- UNORCAC has incorporated promotion of native crops into its agricultural programs – working with 300 farmers to grow “at-risk” varieties
- Seed fairs occur regularly and are widely known
- Production plant:

  -new products have been developed

  -most successful products are dried cape gooseberries, blackberries and chile peppers.

  -107 farms currently provide produce to plant
- Education modules on agrobiodversityare used in schools. Students visit the ethnobotanic garden.
- Agrotourism – tourist visits to rural lodges and other agricultural sites continue to provide income to locals.

Questions? Contact:
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