

# Methodology and Techniques of Participatory and Extension Development Projects

By

Dr. Sabrina Tuttle, Associate Extension Agent, Assistant Professor  
University of Arizona Cooperative Extension

Dr. Cathy L. Martinez, University of Arizona Cooperative Extension

Dr. Juanita Waits, University of Arizona Cooperative Extension

Linda Masters, University of Arizona Cooperative Extension

Jeannie Benally, University of Arizona Cooperative Extension

Matt Livingston, University of Arizona Cooperative Extension

Elisabeth Alden, University of Arizona Cooperative Extension

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# INTRODUCTION

An interesting definition of participatory development and extension projects can be translated from the native Aymara language of Bolivia –

***“We get to know ourselves”***

(Cox, 1996, p. 17).

Researchers assert that sustainable development must place local people's participation central to the development process.

# PURPOSE AND RESEARCH QUESTIONS

- The purpose of this paper is to review participatory methods that span the globe in order to inform ourselves on methods that may apply to our extension practices with poor, indigenous populations.
- Research questions include:
  - 1) What are the basic origins of participatory programs?
  - 2) What methodologies have been applied in different countries worldwide?

# METHODS AND DATA SOURCES

- Literature review from 2 international proceedings, 1 journal article and 10 books, containing both theoretical and practical applications of participatory extension and development.
- The researchers used qualitative methodology to divide data into 2 main categories:
  - origins of participatory programs
  - participatory methods and techniques.



Teaching Hopi boys  
the traditional  
corn planting way.

# RESULTS AND CONCLUSIONS

Kumar (2002) claimed that there were 5 major origins of participatory development projects:

- Participatory Action Research (PAR) focuses on how locals evaluate their own situation, and then use participation to foster changes. Participants become co-researchers with facilitators from outside of the community (Tuttle et al., 2003).
- Agro-Ecosystem Analysis utilizes visual and diagrammatic methods that illiterate people can understand.
- Applied Anthropology employs the community members' perspectives rather than that of outsiders.
- Farming Systems Research consists of research and extension where producers play an active role.

## RESULTS AND CONCLUSIONS (con't.)

- Rapid Rural Appraisal is the primary source of Participatory Rural Appraisal (PRA), but PRA was found to be more cost effective than survey instruments, while encouraging poor, marginalized, illiterate people to contribute (Kumar, 2002).
- Participatory Rural Appraisal applies space, time, and relational methods, ranging from maps drawn or colored by locals, seasonal diagrams, and daily time schedules to flow diagrams about community systems and networks, among others.



# Participatory Rural Appraisal

- Participatory Rural Appraisal (PRA) is a system to enable locals to:
  - Share, enhance, and analyze their own situation
  - Contribute to plans, actions, and evaluations
- PRA and numerous other participatory methods arose to avoid pitfalls of top-down development

SANREM-  
Andes, Perú  
Project

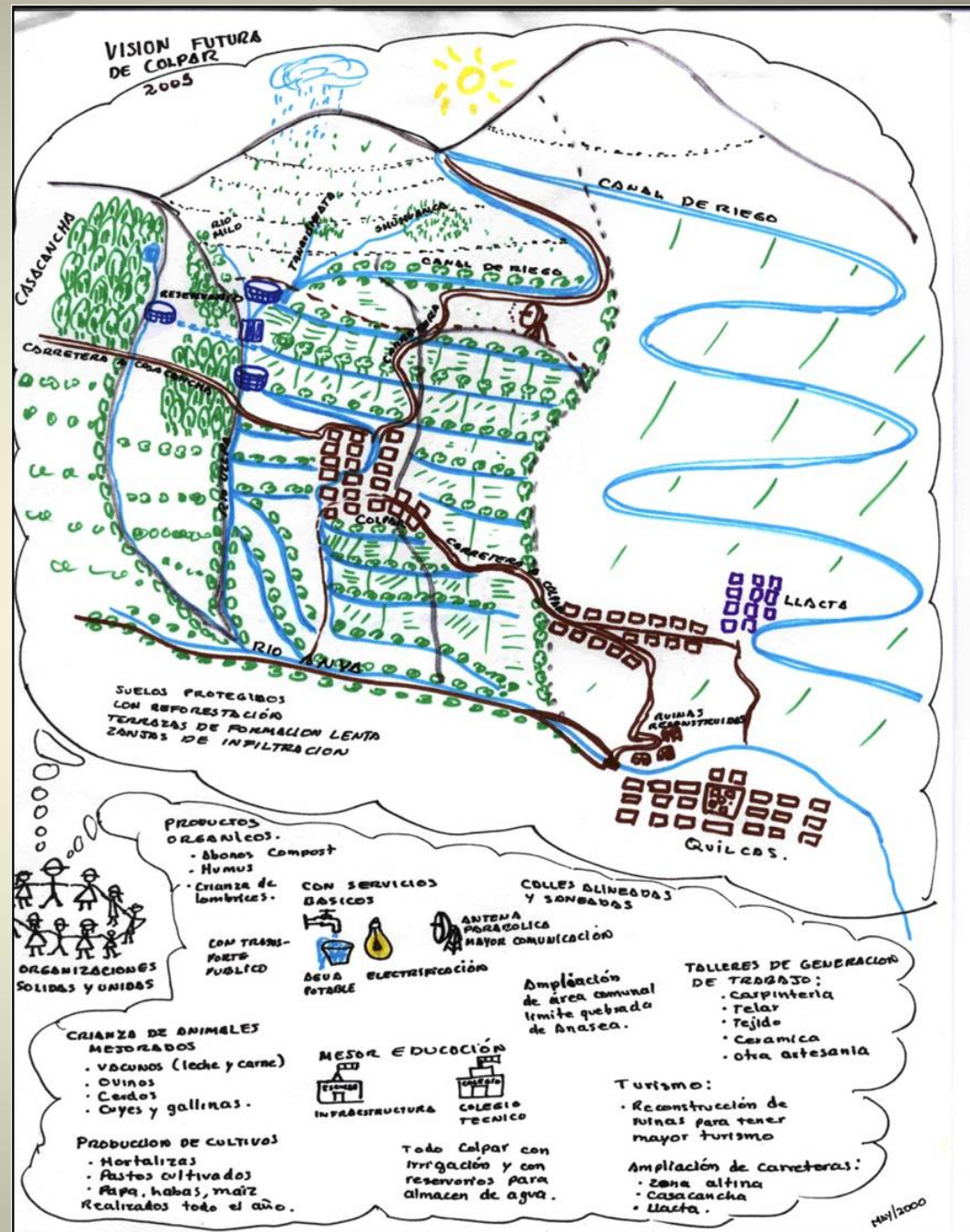
Photo courtesy  
of Dr. C. Flora



# Community Mapping

## ~ Future vision of the Community of Colpar

Courtesy  
of Dr. C. Flora





# RESULTS AND CONCLUSIONS (con't.)

- To illustrate field application of participatory methodologies, the researchers focused on 2 projects in Pakistan and Bolivia, though many other countries were reviewed, and participatory programs span the entire world.
- In Pakistan, Khan (2004) explained that the organizational model consisted of 3 components:
  - programs
  - participants
  - support organizations
- From the perspective of the local beneficiaries of the projects, activities including getting together, speaking out, participating in making decisions, doing new things, and going out and working with outsiders were necessary for building confidence and empowering the community and its members.
- Participants and the support agencies worked on infrastructure improvement, creating and improving skills, and improving management of agriculture and natural resources.

## RESULTS AND CONCLUSIONS (con't.)

- In the High Plains region of Bolivia, facilitators and community members employed 6 steps and 7 techniques to perform an assessment, which was also done in 5 other regions (Cox, 1996).
- The six steps included:
  1. overview of systems;
  2. logistics and organizational design;
  3. applied methods for each micro-region;
  4. review and organization of all documents and artifacts;
  5. defining problems, needs, solutions, and alternatives, as well as prioritization of projects;
  6. community approval of final documents, reports, and municipal resolutions to support the projects.

# RESULTS AND CONCLUSIONS (con't.)

## **The seven steps consisted of:**

1. community and agricultural maps drawn by small groups of locals
2. color coding geographical maps of the topography, roads, and population
3. ecological transect walks with locals, who also produce an elevation map of native/domestic plants and animals
4. other drawings such as landscapes, agricultural tools, evaluation cartoons
5. social dramas of situations, perceptions, relationships, and problems;
6. matrices employed for analysis of problems and solutions as well as other issues
7. the community and the researchers together to reflect, give feedback and edit documents from the whole analysis

# IMPLICATIONS AND APPLICATIONS

This brief taste of participatory extension and development projects, their origins, and two examples illustrate how poor and marginalized people may be included and empowered by these methods. All of the researchers who contributed to this paper work with Native Americans, who are still marginalized in the U.S., as are many indigenous peoples in the world. We continue to explore how to better reach and understand disadvantaged audiences, which is a lofty goal, but essential to Extension's mission.

Colorado River Indian Tribes

Photo courtesy of Linda Masters



# Arizona Examples of PRA

## Hopi Farmer Survey (2003)

- Project was requested by local tribal government. The methodology employed was PRA.
- 8 community representatives were hired, trained in PRA and had responsibility for:
  - Developing survey instrument\*
  - Interviewing farmers
  - Developing database, entering data
  - Analyzing data
  - Presenting results to Tribal Council and local communities



\*The survey instrument was all open ended questions that allowed interviewees to reply however they wanted to.



# Arizona Examples of PRA

## Understanding Traditional Foods Security of Hopi Single Parent Female Headed Households (2006)

- Proposal was developed after discussions with Hopi Tribal health programs and Hopi Cultural Preservation Office.
- Develop survey instrument with input from:
  - Hopi Special Diabetes Program
  - Hopi Community Health Representatives Office
  - AZ Department of Economic Services
  - Hopi Cultural Preservation Office
  - Hopi Pu'tavi Project
  - Community Representatives
  - University of Arizona Cooperative Extension
  - Dr. Cornelia Butler Flora – North Central Regional Center for Rural Development.
- Appreciate Inquiry was used as the methodology in developing survey instrument.



# Arizona Examples of PRA

## People's Garden Project-San Carlos Apache Reservation, Arizona



Randy Woodie, LDS Food Initiative Program; Millie Titla, USDA NRCS; Alan Stephens, USDA Rural Development and Sabrina Tuttle, University of Arizona Cooperative Extension, Shirley Dawson, Gila County, partners in \$5,000 grant awarded through USDA/NIFA

This project and grant proposal planned by local Tribal and County partners, well as Mount Turnbull Academy, an alternative high school on the reservation all are now participating in garden projects.

# Arizona Examples of PRA

## People's Garden Project

- Junior Master Gardener Nutrition curriculum
- Guest Teachers-Dr. Potts, Naturopathic physician; Paul Buck, soil conservationist; Millie Titla, traditional gardener
- Students learn how to find, harvest and process desert foods such as prickly pear cactus

