

Using Qualitative GIS to Explore Gendered Dimensions for CAPS in the Philippines: A Mixed Methods Approach

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Why Gender, CAPS, and the Philippines?

- Food insecurity and poverty rates
 - Degraded landscapes
 - Unsustainable agricultural practices
- CAPS can affect men's and women's time, resources, and labor
- “Development efforts in the Philippines, have either neglected to include women or increased their workload.” (Sobritchea 2005).

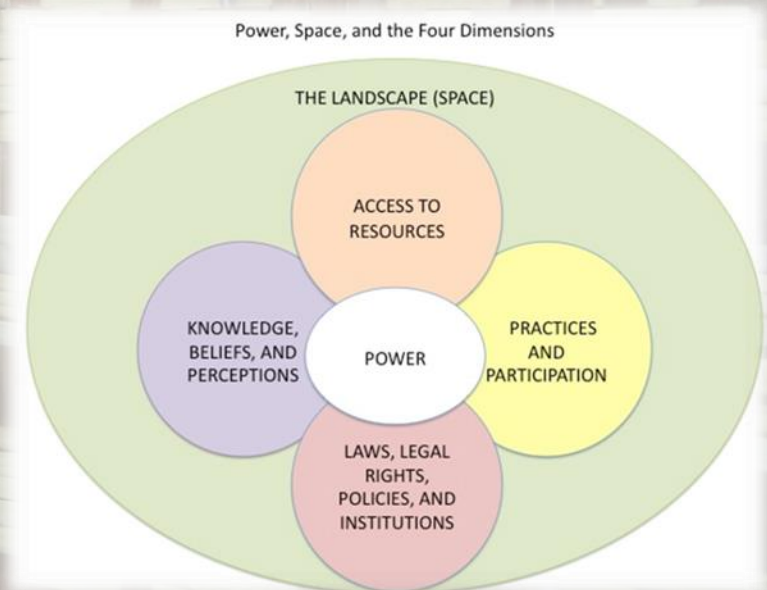


Introduction

- Conservation Agriculture Production Systems (CAPS)
 - Minimum tillage
 - Year-round crop cover
 - Diverse crop rotations
- Gender Dimensions
- Mixed method approach
 - Participatory & geospatial



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Objectives

- Identify gender-based constraints and opportunities that are relevant to CAPS.

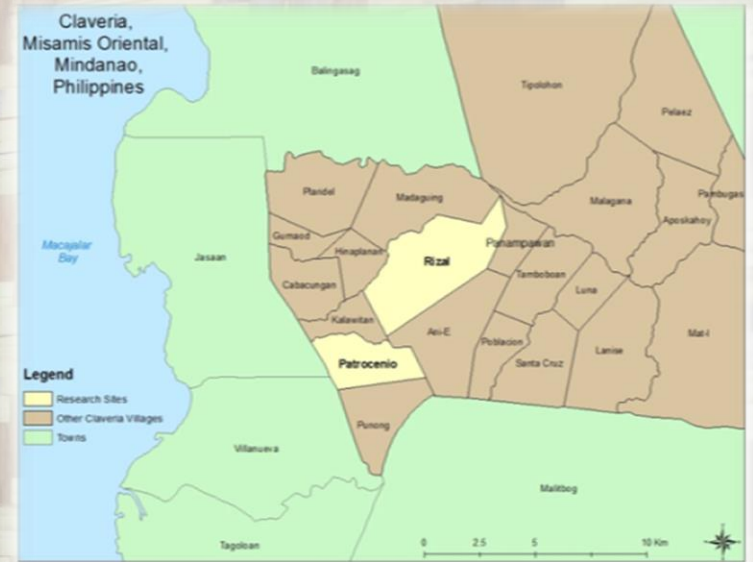
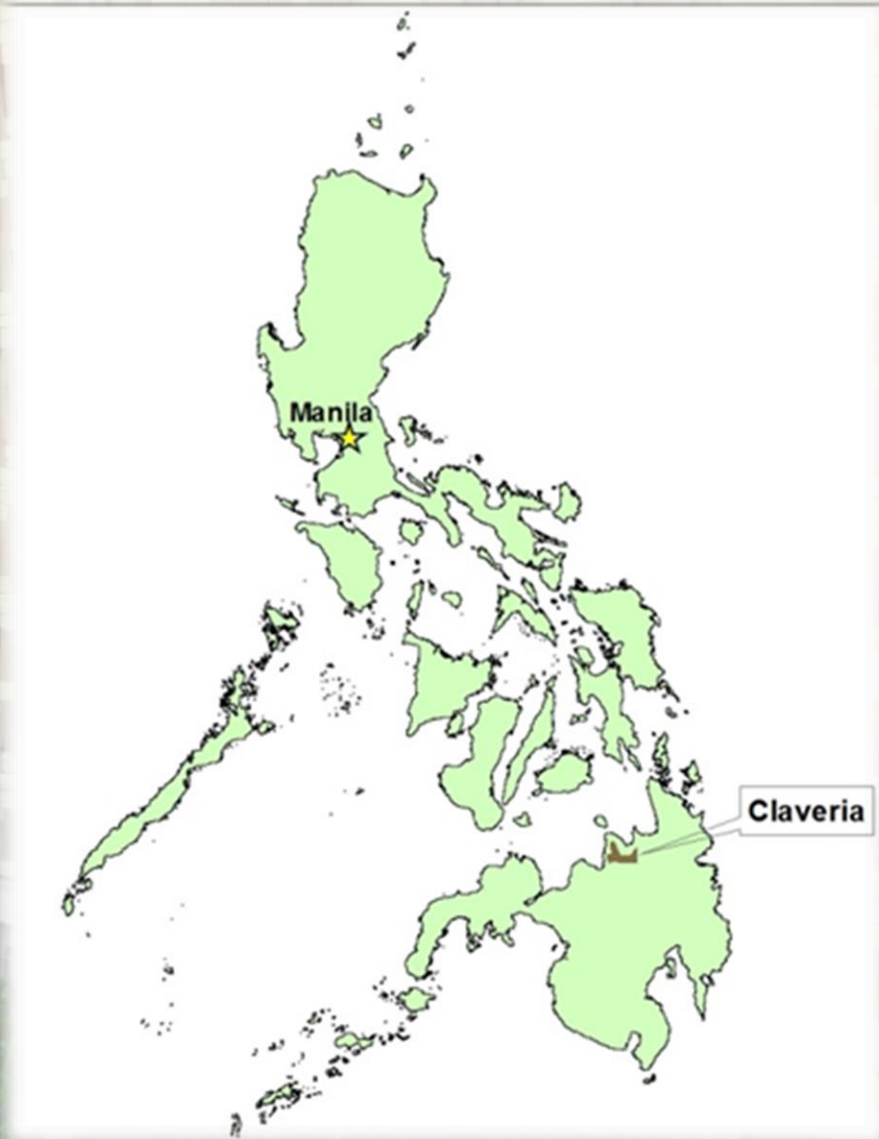


Research Questions



- Do men and women have different soil knowledge, access to resources, and agricultural practices?
- If so, how can the combination of participatory methods and geospatial techniques serve to document these in relation to CAPS?

Site Description



Claveria, Misamis
Oriental,
Mindanao,
Philippines

Research Methods

- **Focus group discussions**
- **Household interviews**
- **Field visits**
- Participant observation
- GPS mapping of community resources, households, and fields
- Soil sampling
- Farmer restitution



Focus Group Discussions

Rizal: 8 men, 15 women

Patrocenio: 6 men, 11 women

- Soil sample discussion
- Practices and participation
- Timeline activity
- Mapped community soils on satellite imagery
 - Name of soil
 - Description
 - Category
 - Use
 - Best & Worst



Household Interviews

- 19 households: 9 in Rizal, 10 in Patrocenio: 18 men, 18 women
 - Participatory Mapping
 - Field visits: GPS mapping of husband and wife's "best" and "worst" soil locations



Results: Gendered Soil Knowledge & Perceptions

Men

- Men have a physical perception of soils
- Large crops
- “Steep” soils

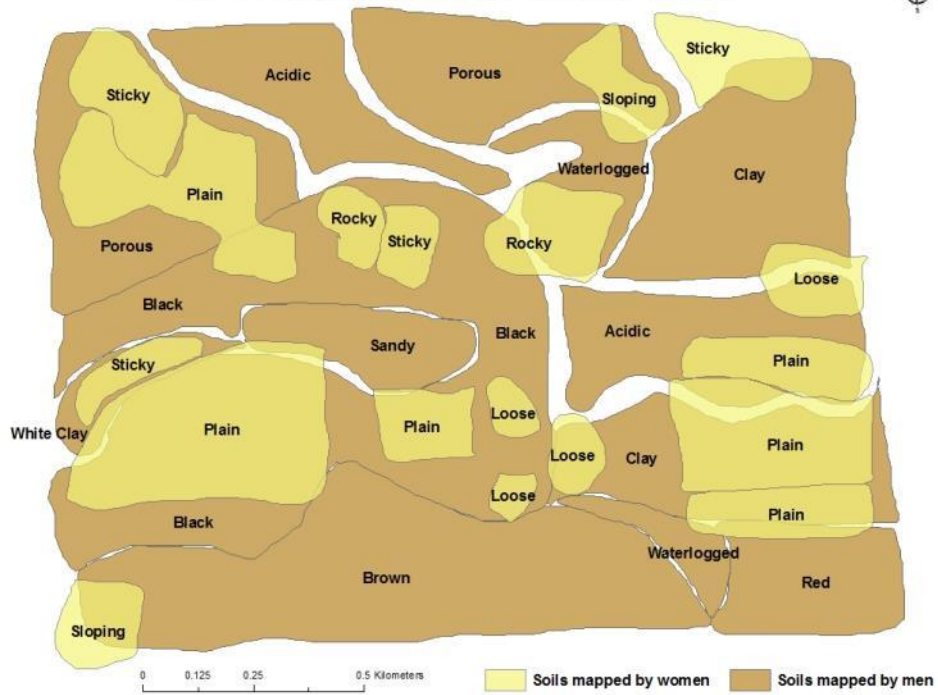


Women

- Women have a social, practical perception
- Small crops
- “Flat” soils



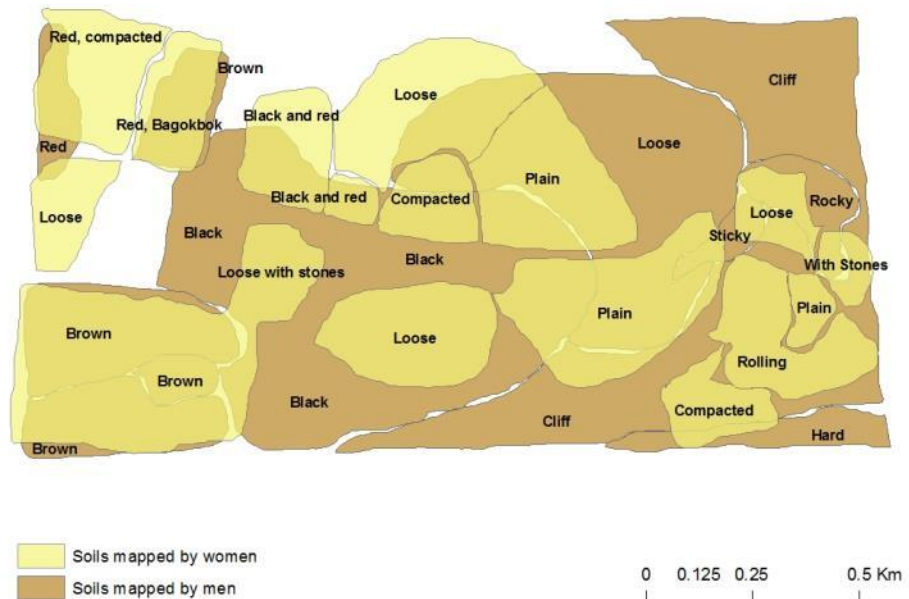
Patrocenio Village: Men and Women's Community Soil Names

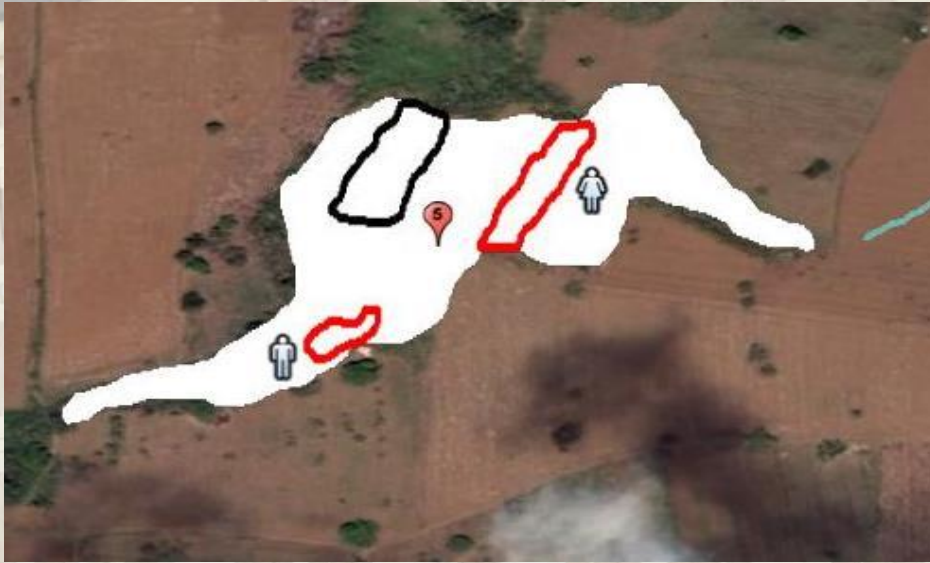


Community Soils Maps by Gender

- The men drew soils across greater areas than the women.
- Men drew soils based on their physical characteristics.
- Women drew soils based on land-use, ownership, and production.

Rizal Village: Men and Women's Community Soil Names



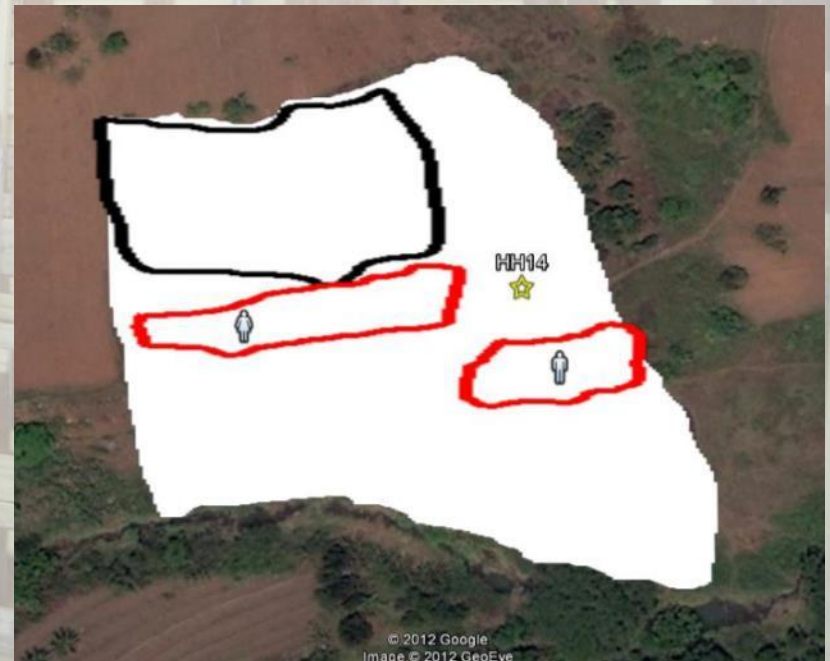


GPS Mapping of Household “Best” and “Worst” Soils

Black polygon: best soil

Red polygon: worst soil

White polygon: farm boundary



Practices and Participation

Men work primarily on the farm

- Land preparation
- Planting
- Hired off-farm labor



Women work primarily in the house

- Weeding
- Marketing
- Sari-sari stores
- Cooking, cleaning, childcare



Access to resources

Men

- Pastureland
- Opportunities outside farming

Women

- Land
- Trainings



Gender-based Constraints

- Land insecurity
- Trainings
- Women and weeding
- Men and tillage



Opportunities

- Perceive need for soil conservation
- Fertilizer use
- Gendered decision-making



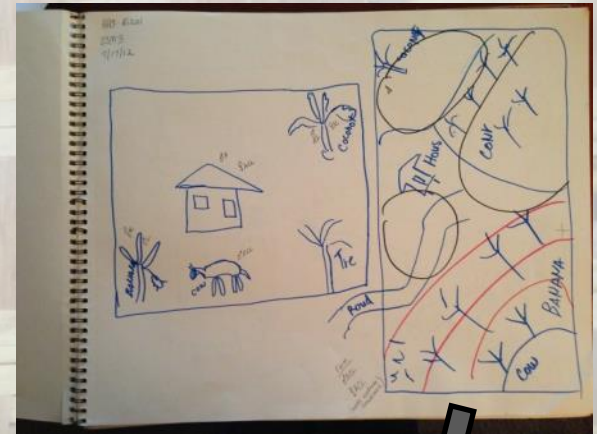
Recommendations

- Modify trainings
 - invite husband and wife
 - Include additional content applicable to women's role in the farming household
 - Promote outside village centers
- Determine and communicate short-term economic benefits
- Incorporate participatory, geospatial, and socio-economic research to determine gender-based constraints and opportunities for CAPS adoption



QGIS: A mixed methods approach for studying gender in agriculture

- Revealed multiple layers of gendered soil knowledge and perceptions
- Displayed the spatiality of knowledge and perceptions and resources
- Contributed to qualitative GIS by exploring how GIS can contribute to social research



Salamat Kaayo! Questions?

