

A Mixed Methods Approach to Studying Gender & Conservation Agriculture in the Philippines

Mary Harman

Dr. Maria Elisa Christie

Isidra Bagares



Introduction

- SANREM CRSP
- Gender CCRA
- NC A&T Project



SANREM CRSP



Women and Gender in International Development

Conservation Agriculture Production Systems (CAPS)

- Increase agriculture productivity and food security
- Contribute to increasing soil quality and fertility
- Three components:
 - Maintain year-round soil cover
 - Minimize soil disturbance by tillage
 - Utilize crop-rotation systems



Research Questions

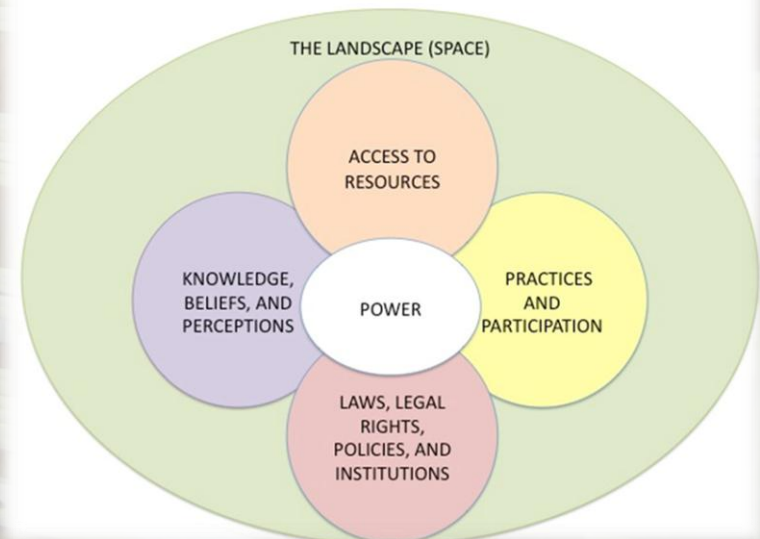
- **What are the implications of conservation agriculture production systems components** for men and women's local soil knowledge, agricultural practices, and access to resources in the Philippines?
- Do men and women have **different soil knowledge and access to resources** in the Philippines? Is this relevant to conservation agriculture?
- How can the combination of **participatory methods and geospatial techniques serve to document** gendered knowledge, practices, and resources in conservation agriculture production systems?
- How **can geospatial techniques help understand** meaningful relationships between **gender and conservation agriculture production systems?**

Theoretical Frameworks

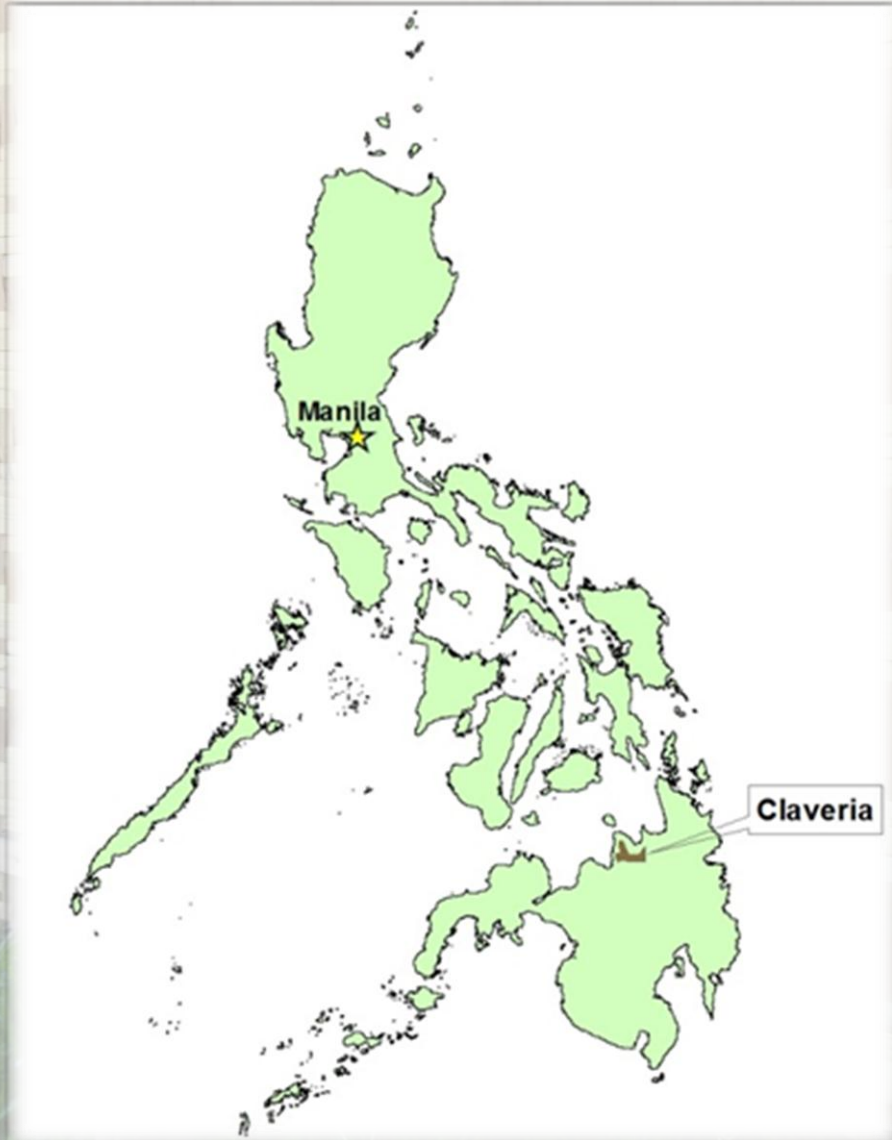
- **Feminist Political Ecology**
 - (Rocheleau et al. 1996)
- **Participatory Research Methods**
 - (Chambers 2006)
- **Feminist Geography**
 - (McLafferty 2002)
- **Critical GIS**
 - (Elwood 2006)
- **Feminist GIS**
 - (Pavlovskaya 2006)
- **Qualitative GIS**
 - (Kwan 2002)
- **Gender Dimensions Framework**
 - (Rubin et al. 2009)



Power, Space, and the Four Dimensions



Claveria, Misamis Oriental, Mindanao, Philippines





Research Methods

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

Focus Group Discussions

Rizal

- 8 men, 15 women

Patrocenio

- 6 men, 11 women

Activities:

1. Introduction: Gender, CAPS, IRB
2. What is soil?
3. Soil samples descriptions
4. Local soil quality indicators
5. Community soils list
6. Map community soils
on satellite image
7. Socio-economic activity chart
8. Timeline
9. Presentations

GENDER - Social



constructions of what is expected of, allowed & valued in a woman or man in a given culture, context, time &/or location



SEX



Biological differences between men & women



Babae



Lalake



Exercise 3:

- 1) Unsaon nimo paghulagway sa yuta?
- 2) Asa ang mas maayo sa duha ka sample sa yuta?
- 3) Giunsa nimo pagkahibalo nga kini ang mas maayo?







Household Interviews

- 19 Households-18 men and 18 women (including 1 widow and 1 widower)
- 9 households in Rizal and 10 Patrocenio
- Sample selection:
 - Obtained lists of farmers from Barangay Nutrition Scholar at the Local Government Unit, 2011
 - Randomized the lists using the =“RAND()” formula in Excel
 - From this random list, eliminated farmers who were no longer farming, no longer in the community, or hired labor.

Household Interview Activities

- Demographic info & farming history
- Photo interpretation
- Soil samples descriptions
- Participatory mapping
- Household soils list map
- Map household & community soils on satellite image
- Changes in climate & agricultural practices







*"I have no choice
but to farm..."*



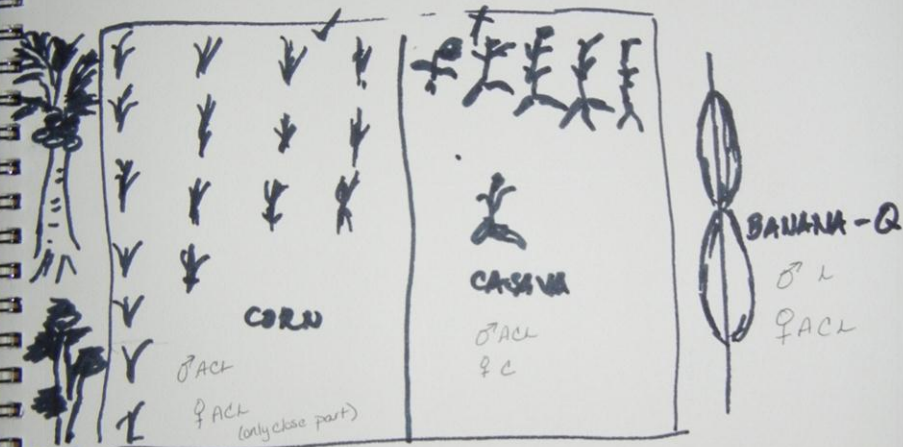
...it's all I know..."

*-Male farmer, interview,
July 16, 2012*





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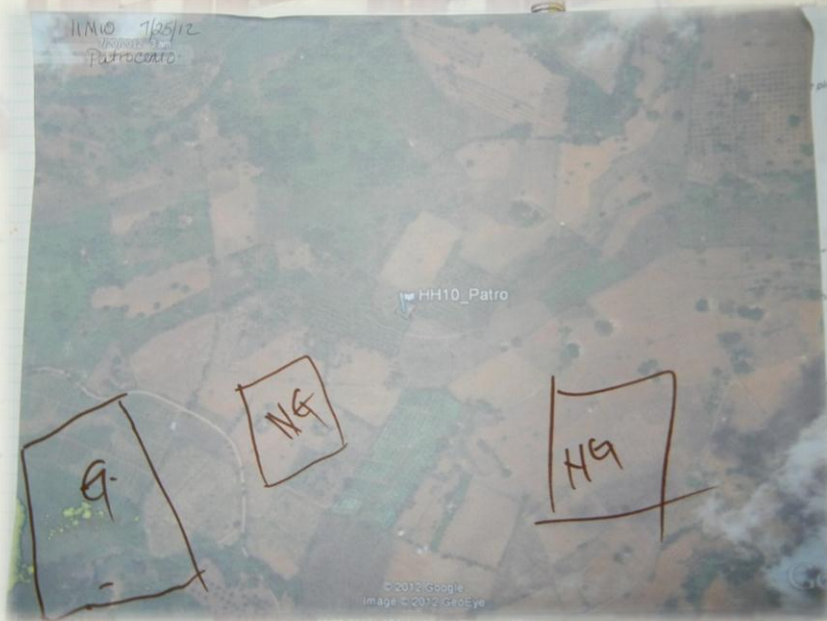


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4
High
Road





Field Visits

- GPS data:
 - Household points
 - Path to Farm/Road
 - Boundary of Farm
 - Man and Woman's Best and Worst Soils



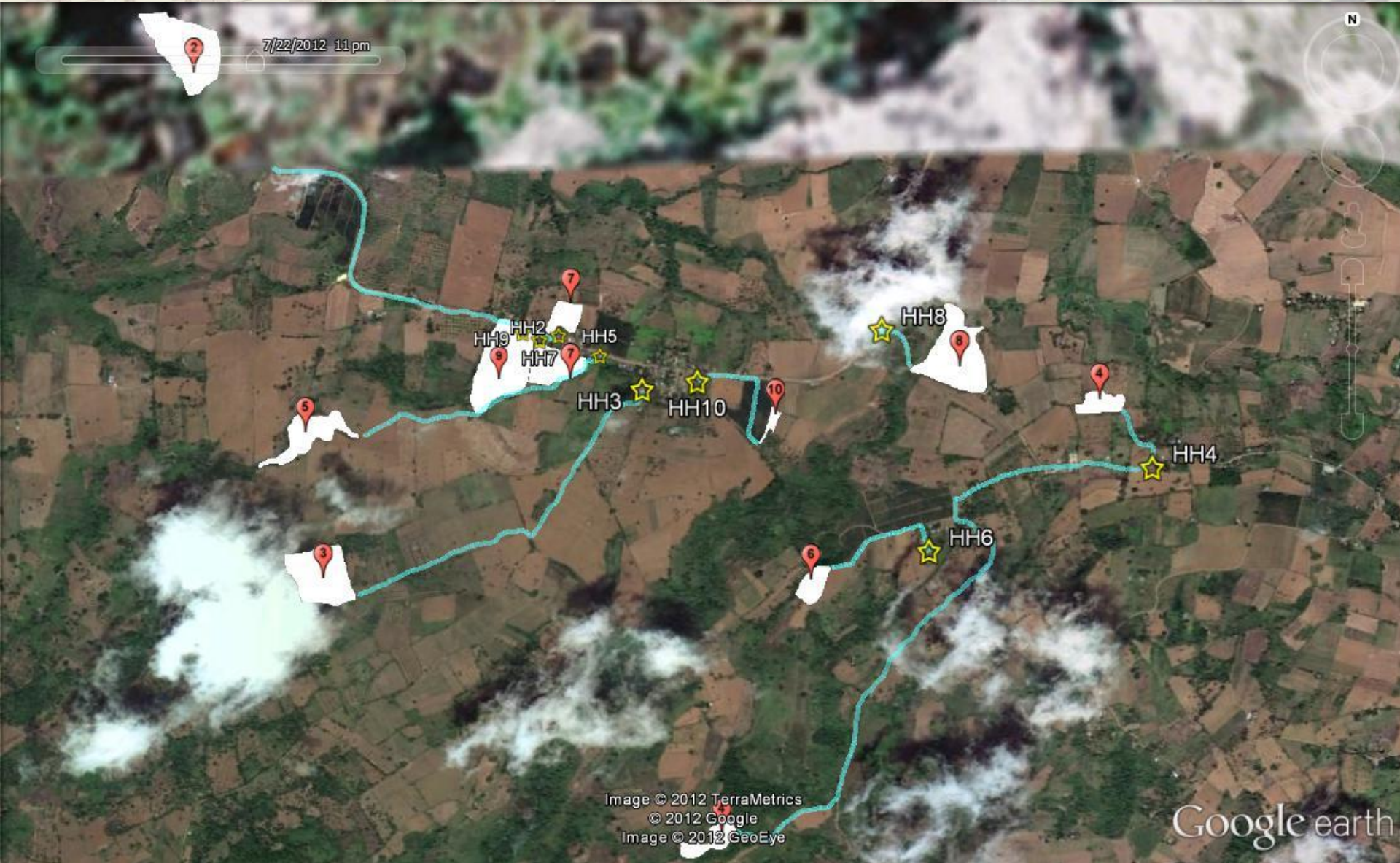




“My land is important to me because it’s where the future of my children is...”
-Male Farmer, interview, July 20, 2012



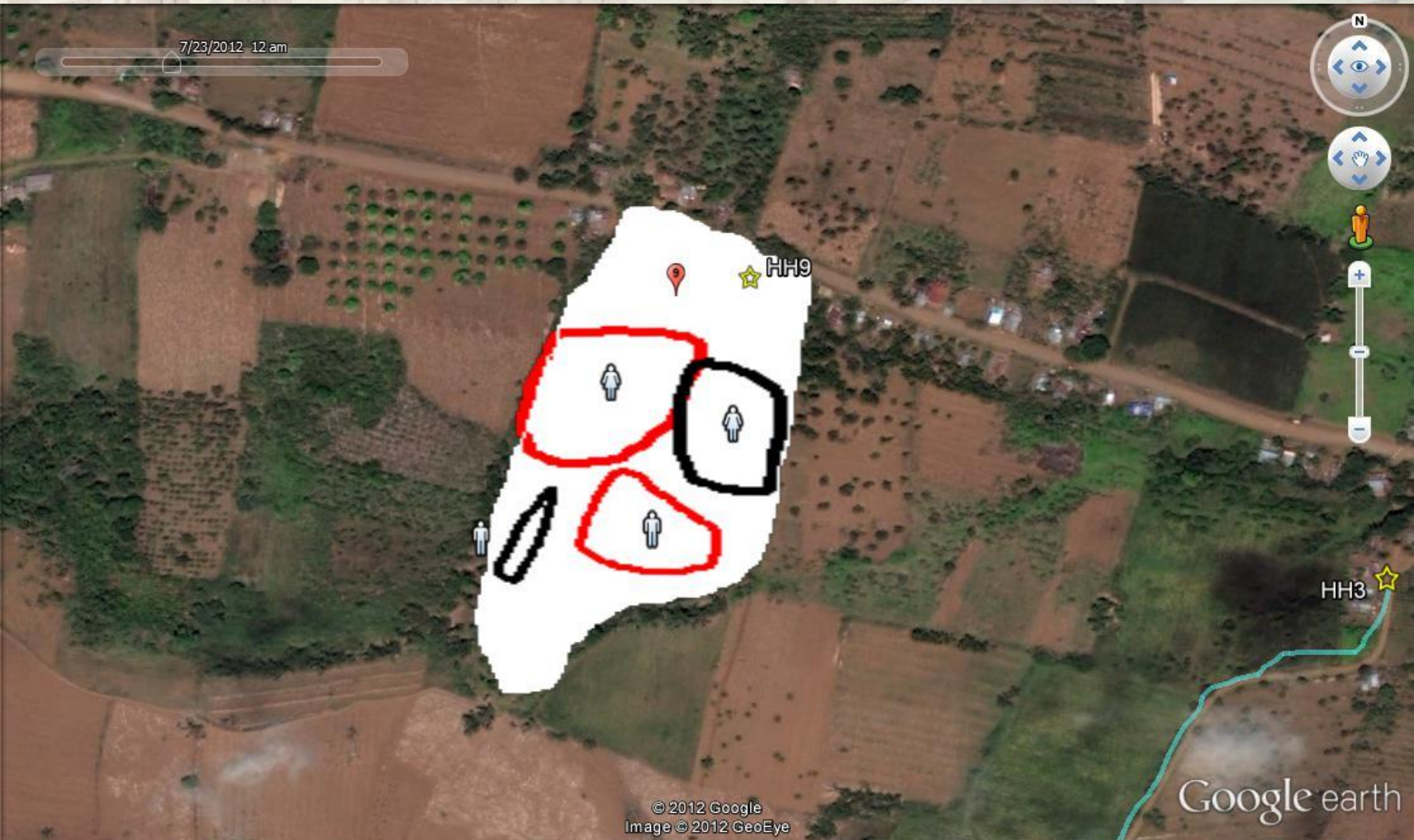
Barangay Rizal



Barangay Patrocenio



Household 9 Best & Worst Soils



Participant Observation



Participant Observation



Soil Sampling



GPS Mapping of Community Resources





Preliminary Findings

- **Gendered access to resources is spatial:**
 - Goats, pigs, chickens in house-lots (women)
 - Cows, carabao in fields (men)



- **Access to Resources:**
- Women do not have the same access to land as men.
- Women do not have as much access to trainings.



The widow is the only woman who I met who had a land title in her name.

- **Knowledge, Beliefs, Perceptions:**
- Men mainly describe soil through color.
- Women mainly describe soil through land use.



Rank	Men's Group	Women's Group
1	Color (black)	Land use <ol style="list-style-type: none"> Agricultural land – (para sa umahan) Residential land - (para balayan)
2	Topography (flat)	Topography <ol style="list-style-type: none"> Plain (patag) Rolling (hanayhay) Sloping (Handig, bakilid)
3	Distance to water (close to water is fertile)	Soil Quality (fertility) <ol style="list-style-type: none"> Fertile – good vegetative growth Not fertile – not good vegetative growth
4	Presence of organic matter (presence of weeds is fertile)	Color <ol style="list-style-type: none"> Black Red
5	Presence of pests (presence of pests is unfertile)	Type of vegetation
6	Presence of rocks (presence of rocks is unfertile)	Growth of plant in the soil (yield & production) <ol style="list-style-type: none"> Not good soil, corn have yellow colored leaves, poor yield
7	Color (red color is unfertile)	

- **Practices and Participation:**
- Men are responsible for land preparation and usually work with large crops (corn, fruit & rubber trees).
- Women usually do the weeding and often work with small crops (vegetables).



- **Practices & Participation:**
- Women are responsible for household duties and earning additional income.

“They [men] have just one task: farming. For me, I could not do that one task only. Because we could not survive. Only to sit and wait for the husbands and for the weeds to grow...”

-Patrocenio Woman Leader, Interview, August 5, 2012



- **Laws, Legal Rights, Policies, and Institutions:**
- The process of obtaining land titles is difficult and expensive
- Pasturing ordinance
- No divorce law



Constraints for CAPS

- Every farmer tills.
- Lack of resources, capital.
- Season variability
 - Unpredictability



“The heat of the sun hurts now...its like an insect biting you...”

-Male Farmer, Interview, July 20, 2012



14 - 14 - 14	complete	1,320.00	27.00
16 - 20 - 0		1,120.00	23.00
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0 - 0 - 60	potash	1,420.00	29.00
46 - 0 - 0	urea	1,400.00	29.00



Opportunities

- Farmers are extremely aware of soil degradation.
- They already utilize crop rotation systems.



Recommendations for CAPS

- Consider gendered plant knowledge and use.
- Benefits of CAPS should be translated to short-term monetary values.
- Target farmers who hire laborers.
- Include women in trainings.





Next Steps

- Continue entering and processing data.
 - Compare qualitative soil data with laboratory analysis.
 - Write thesis!

Salamat Kaayo!

(Thank you
very much!)



Questions?