Building Bridges:

Interdisciplinary communities of practice for gender responsive agricultural research

Hale Ann Tufan

Gender Summit Africa

28-30th April 2015

NEXTGEN CASSAVA

Cornell University

AWARE

Gender Rhetoric……..to Practical Action?

"Effective ways of linking domain expertise in different STEM fields with relevant gender expertise to tackle more effectively specific gaps in scientific understanding of gender issues in key areas (e.g. food security)"

Case studies:

①Meeting level: "Integrating end-user preferences into RTB breeding programs" workshop

②Project level: "Gender-Responsive Researchers Equipped for Agricultural Transformation" concept development

Two ends of a spectrum?

"How researchers choose their methods demonstrates a commitment to a version of the world and how the researcher can come to know that world."

Moon and Blackman, 2014

Biophysical Scientists

Social Scientists

Sliding Scales- Exploring “Boundary Language”

Moon and Blackman, 2014

1.0 ONTOLOGY: What exists in the human world that we can acquire knowledge about?

Realism: one reality exists			Relativism: multiple realities exist	
1.1 Naïve realism Reality can be understood using *appropriate* methods	**1.2 Structural realism** Reality is *described* by scientific theory, but its underlying nature remains uncertain	**1.3 Critical realism** Reality captured by broad *critical* examination	**1.4 Bounded relativism** Mental constructions of reality are equal in space & time within boundaries (e.g., cultural, moral, cognitive)	**1.5 Relativism** Realities exist as multiple, intangible mental constructions; no reality beyond subjects

2.0 EPISTEMOLOGY: How do we create knowledge?

2.1 Objectivism Meaning exists within an object: an objective reality exists in an object independent of the subject	**2.2 Constructionism*** Meaning created from interplay between the subject & object: subject *constructs* reality of object	**2.3 Subjectivism** Meaning exists within the subject: subject imposes meaning on an object

3.0 THEORETICAL PERSPECTIVE: What is the philosophical orientation of the researcher that guides their action/research?

Knowledge acquisition is deductive, 'value-free', generalizable ⟷ Knowledge acquisition is inductive, value-laden, contextually unique

Moon and Blackman, 2014

Application: to predict

3.1 Positivism Natural science methods (posit, observe, derive logical *truths*) can be applied to the social sciences

3.2 Post-positivism Multiple methods are necessary to identify a *valid* belief because all methods are imperfect

3.3 Structuralism The source of meaning comes from the formal structure found in language & can apply to all aspects of human culture

Application: to understand

3.4 (Social) Constructivism Meaning making of reality is an activity of the individual mind

3.5 Interpretivism Natural science methods cannot apply to social science; interpretations of reality are culturally derived & historically situated

3.5a Hermeneutics Hidden meaning (of language) exists in texts, practices, events & situations, beneath apparent ones

3.5b Phenomenology The essence of human experience of phenomena is only understood when the researcher separates their own experiences

3.5c Symbolic interactionism The researcher must take the position of those researched (interaction) by sharing language & other tools (symbols)

Application: to emancipate or liberate

3.6 Critical theory Research & theory should be used to change situations (focuses on power relations, critiques assumptions & evolves)

3.6a Emancipatory The subjects of social inquiry should be empowered

3.6b Advocacy or participatory Politics & political agendas should be accounted for

3.6c Feminism The world is patriarchal & the culture it inherits is masculine

Application: to deconstruct

3.7 Post-structuralism Different languages & discourses divide the world & give it meaning

3.8 Post-modernism Truth claims are socially constructed to serve interests of particular groups, methods are equally distrusted; might not be possible to arrive at any conclusive definition of reality

Application: any or all

3.9 Pragmatism All necessary approaches should be used to understand research problem

① Meeting Level: Meeting facilitation

Workshop: "Integrating End User Preferences in RTB Breeding Programs"

BILL & MELINDA GATES foundation

NEXTGEN CASSAVA

CGIAR | RESEARCH PROGRAM ON Roots, Tubers and Bananas

- Bring together three domains of expertise- social scientist (gender experts and ag economists), food scientists and plant breeders
- Present evidence/viewpoint from each group
- Brainstorm to translate knowledge and bridge silos
- Construct roadmap of cross-disciplinary holistic solution to issue

① Meeting Level: Setting the scene

Case Study:

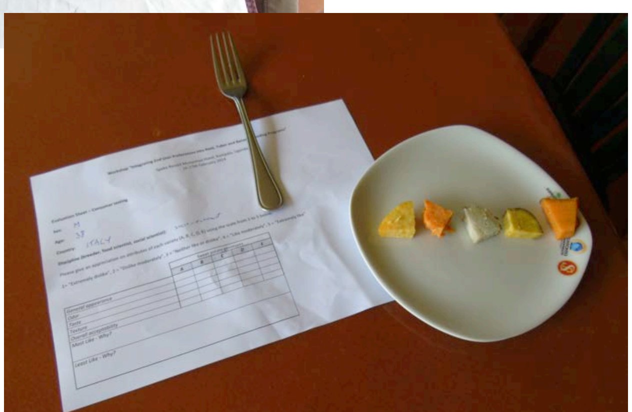
A team of researchers just received funding to develop a novel purple-fleshed yam variety. The donors required that the variety meet specific demands of young women who earn a living making purple-pounded yam in Ghana.

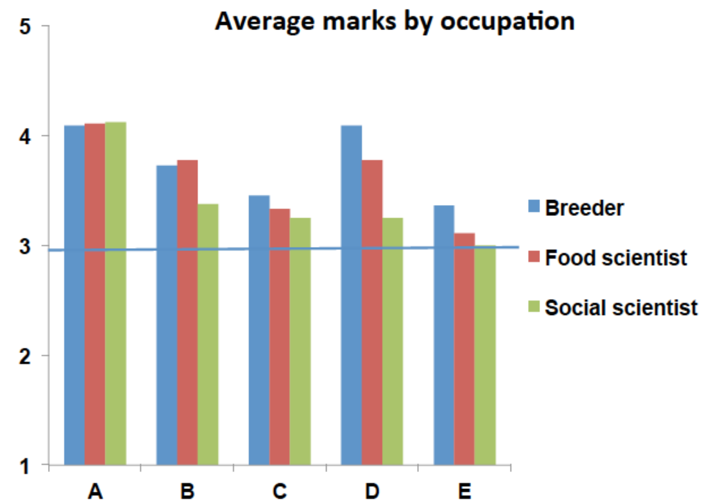
How would you consult the end users to understand their preferences?

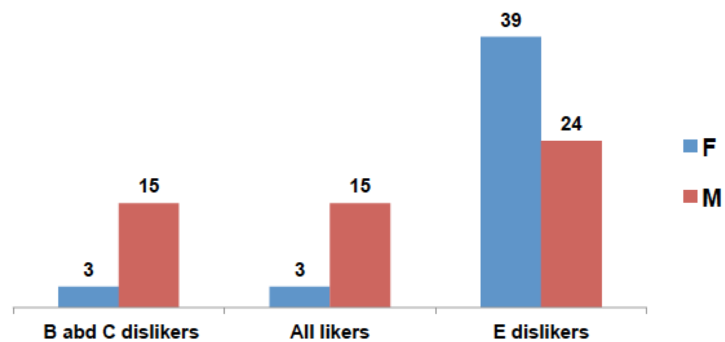
Divergence: Social scientists focused on qualitative and open-ended methods. Biophysical scientists focus on "traits" and data collection.

Convergence: all suggested looking at value chain, socioeconomic context, getting intended users preferences and perceived benefits. Focus on women.

① Meeting Level: Seeing is believing

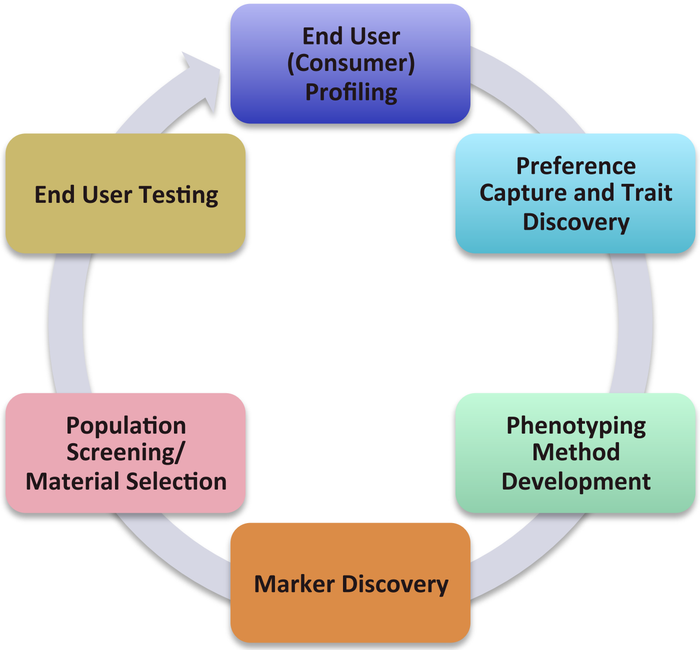






① Meeting Level: Results

- High level technical presentations from all disciplines
- Conclude with “Bridging” presentations
- Build shared process framework: group inputs gaps and opportunities



- End with interdisciplinary groups working on each step

② Project Level: GREAT

Gender-responsive Researchers Equipped for Agricultural Transformation (GREAT)

Cornell - Makerere Certificate Program

Agricultural researchers equipped practical skills and tools to shift from "gender rhetoric" to tangible change on the ground.

② Project Level: Visioning

- Bring together diverse disciplines:
  - gender experts specializing in agriculture,
  - biophysical scientists from crop production, animal science, food science, nutrition, ag. economics and natural resources
- Build interdisciplinary teams that appreciate one another's ontologies, epistemologies, and theoretical perspectives!

② Project Level: Visioning

- Important elements 1: Listening and history

The fishbowl exercise aimed to create groups of similar epistemic communities to share common experiences, and build mutual appreciation of point of departure, priorities, frustrations and incentives between biophysical and social scientists.

② Project Level: Visioning

- Important elements 2: Share experiences

"Gender-responsive agricultural research: Moving from exception to rule"

Expertly moderated by the AWARD Director, Dr. Wanjiru Kamau-Rutenberg, six participants comprising faculty of Makerere University and Cornell University as well as gender experts from sub-Saharan African and the United States, summarized their experience with gender in agricultural research and their understanding of the emerging needs

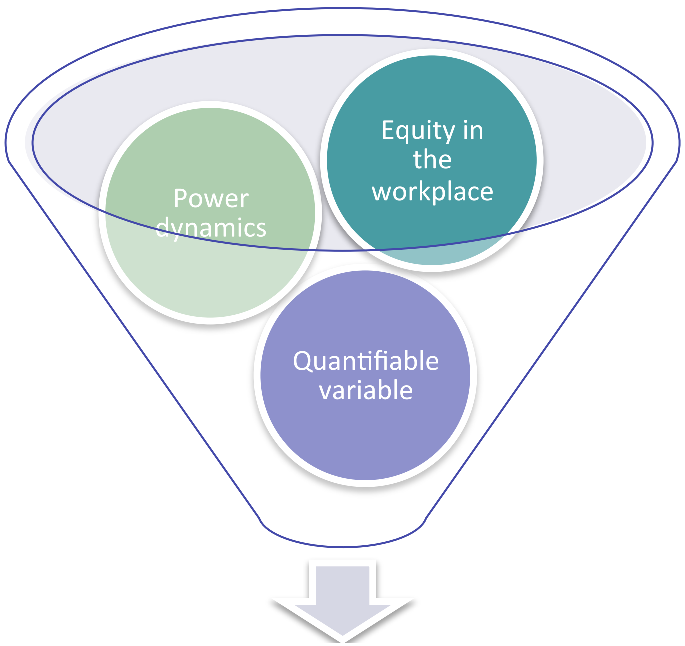
② Project Level: Visioning

- Important elements 3: Leadership buy-in

Dean Kathryn J. Boor of Cornell University's College of Agriculture and Life Sciences welcomes Dean Consolata Kabonesa, of Makerere University's School of Women and Gender Studies to Cornell University.

② Project Level: Visioning

- Important elements 4: Build consensus and agreement around key concepts and actions



Birth of the GREAT idea!

GREAT Idea: Vision

GREAT equips a "critical mass" of agricultural researchers with tools and skills to shift from gender rhetoric to evidence-based gender responsiveness in their field, while capably engaging for transformative change in institutions and national policies.

In the long term:

•Contribute to gender-responsiveness becoming "the norm" in agricultural research design, implementation, and measurement of success.

•Gender training becomes part of agricultural education curricula

•Participant countries develop and implement policies for equitable agricultural development.

•Women smallholder farmers and ag. entrepreneurs across SSA gain substantially from gender-responsive agricultural technologies, interventions, and policies.

GREAT Idea: Scope and Learning Outcomes

Research design phase

- Situational analyses
- Design recognizing impacts on women and men, and relationships
- Identify problems and/or opportunities
- Choose and use frameworks and tools for sex-disaggregated data.

Research implementation phase

- Develop budgets to include gender analysis
- Learn when to ask for help and draft TORs for gender experts
- Analyze, interpret, report and learn from sex-disaggregated data

Research evaluation and communication phase

- Gender-responsive M&E indicators track changes and measure outcomes
- Provide gender-responsive feedback to communities
- Communicate and capably present evidence to different audiences, including policy makers.

GREAT Idea: Structure

- “Blended” model, focused on application
- Tailored to “Themes”:
  - crop improvement
  - nutrition
  - food science
  - natural resource management and climate change
  - animal science
  - extension education
  - markets with a focus on SMEs

Stage	Activities	Duration
Module 1	Formulating gender research question Gender theory, mutual learning, framing Methodology appropriate tools	1 Week
Data collection	Reflection and data collection at home institutions with e-support and mentoring	4-6 Months
Module 2	Social differentiation and gender analysis Community feedback, drafting gender expert TOR Communication and advocacy	1 Week
Post-certificate support	Community of Practice through Resource Hub “Putting evidence to work” country events	

GREAT Idea: E-learning and Support

- Designed by Cornell Academic Technologies Unit
- Searchable using multiple Boolean queries, and systematically catalogued for easy navigation, including short descriptions and keywords.
- Home to community of practice of gender in agricultural research

AWARE

GREAT Idea: Strengthening Institutions

- Train "institutional teams" of multiple individuals from one institution to work as a team during the course, and compete for seed grants

- Team members represent junior and senior researchers, women and men, and include gender focal points where available

- Partner with AWARD to offer **Leadership Program for Agricultural Research & Development with a gender focus** to participants' leadership

- Support "putting evidence to work" **in-country follow-up events** to promote and communicate the need for increased institutional, national, and regional gender-responsiveness to policy makers

GREAT Idea: Next Steps

Pilot GREAT course focused on cassava value chains in Uganda:

Week of 27th July 2015

- Curriculum design in progress
- Sponsored participants welcome!
- Location: Makerere University
- Second week expected November 2015

Conclusions

- Building bridges between STEM fields and gender expertise starts with mutual understanding and sharing experiences
- Developing a shared vision brings the “ two ends of the spectrum” together: we are all working to benefit people!
- Address concerns and viewpoints of all disciplines in action plan and design to secure commitment and agency
- Convincing a community is powerful but to transform the system need leadership to buy-in and drive the change

THANK YOU!

Blog.foreignpolicy.com

② Project Level: Visioning convening outcomes

- Biophysical scientists see the links between research and human use, and shift behavior to prioritize outcomes serving this link.
- Build interdisciplinary teams that understand one another and commit to action together- move beyond rhetoric
- Consensus terminology, vision and expected outputs
- Leadership buy-in to help advance the idea

The Birth of a GREAT idea!