Innovation and Development
Through Transformation of Gender Norms
in Agriculture and Natural Resource Management

A global comparative research initiative

CONCEPT NOTE

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Rationale

Innovation in agriculture and natural resource management is critical to reducing rural poverty. But innovation processes that ignore gender inequality are limited in their impact and risk worsening the poverty, workload and wellbeing of poor rural women and their families (Cornwall & Edwards 2010; Okali 2011, 2012; Fairhead & Leach 2005; Cleaver 2003; Kumar & Quisumbing 2010). Because of deep-seated gender norms — i.e. rules prescribing men’s and women’s expected roles and behaviors in their society — men and women have different capacities to contribute to and take advantage of innovation in agriculture and natural resource management. Resultant gender inequalities in the distribution of the costs and benefits of innovation sometimes result in harmful outcomes (e.g. Dolan 2002, Shiundu & Oniang'o 2007; Okali & Holvoet 2007; Guhathakurta 2008). Yet, how and why this occurs in some circumstances and not others is poorly understood. This lack of understanding of the relationship between gender and innovation limits our capacity to design and scale out agricultural innovations that enable both poor women and men to participate and benefit.

For the CGIAR System to contribute successfully to reducing poverty and improving food security, nutrition and environmentally sustainable livelihoods for the poor, its research programs (CRPs) need to understand and address more fully the ways in which evolving gender relations influence and are influenced by technology development, adoption and sustained use. This knowledge will help formulate context-specific strategies to:

- support poor women and youth to expand their power and capacity for action in technology innovation, uptake and accessing benefits; and
- catalyze changes in the attitudes and practices that entrench inequality and constrain potential among women and men and across different social institutions.

Both of these strategies can create a more inclusive enabling environment, leading to lasting positive change in agricultural development outcomes.

1 Much of the methodological approach discussed in this Concept Note emerged from an intensive week-long study design workshop held in October 2013 in Washington, D.C. with the support of the CG senior gender advisor, Jacqueline Ashby. In addition to helpful external advisors, this workshop included gender specialists representing CGIAR Research Programs from MAIZE, WHEAT, RTB, CCAFS, FTA, AAS, L&F, and Humid Tropics.

2 This January 2015 version was modified slightly to add authors to and update the February 2014 version.
Objectives
Using qualitative methods, the study will generate in-depth understanding of how interaction between gender norms, agency — understood as “the ability to define one’s goals and act upon them” (Kabeer 1999, 438) — and agricultural innovation shapes agricultural development and natural resource management outcomes in CRP target regions. It will do so by identifying and describing the diverse interplay between gender norms, agency and the capacity for innovation in agricultural and natural resource management practices across contexts with different social, economic, agro-ecological, political and cultural features (i.e. levels of commercialization; remoteness; religion...). Through the involvement of a number of CRPs in conducting case studies, this global research initiative will provide a comparative analysis that cuts across world regions, agricultural systems and cultural domains.

The overall study objectives are to:
- Provide robust empirical evidence on the relationship between gender norms, agency and agricultural innovation, and how these interactions support or hinder the achievement of the Intermediate Development Objectives (IDO) across varied contexts.
- Inform CRP theories of change and related research portfolios through identifying the gender-based constraints that need to be overcome in different contexts in order to achieve lasting and equitable improvements in agricultural and natural resource management outcomes.

Benefits
The study results can be used to:
- Improve the targeting and design of agricultural technology and value chain development efforts in order to maximize inclusion; ensure a fair distribution of benefits among poor women and men; and minimize unintended negative impacts on particular population groups, especially poor women and youth.
- Enhance the sustainability of NRM practices through greater inclusiveness and fairer distribution of benefits.
- Design and evaluate approaches that aim to mitigate gender related constraints to equitable agricultural development at scale, thus transforming social systems in ways that unlock the potential of poor women, men and youth to better contribute to and benefit from agricultural technology development and diffusion.
- Inform research priority setting and policy interventions for increased quality, efficiency and impact of agricultural/NRM research for development.

Study concepts and design
Major research questions for this study include:
- How do gender norms and agency advance or impede the capacity to innovate and technology adoption in agriculture and NRM across different contexts?
• How do new agricultural technologies or practices affect gender norms and agency across different contexts? Under what conditions can they do harm to women?

• How are gender norms and women’s and men’s agency changing, and under what conditions do these changes catalyze innovation and lead to desired development outcomes (CGIAR SLOs)? What contextual factors influence this relationship?

To address these questions, we need to conceptualize three key elements of what we call the “opportunity structure” – the resources, institutions, established processes (traditions, moral codes, gender norms), and other enabling factors (Muñoz Boudet et al 2013:13) – and their inter-relationships, which influence and are influenced by agency and innovation in specific contexts. The first element of the opportunity structure comprises the set of available agricultural and NRM resources and technologies in the local setting under study. These include the mix of both natural and physical capital such as plant diversity, agricultural land and irrigation systems inherited from earlier generations as well as newer technologies such as new varieties, soil fertility enhancement techniques and water management practices. The potential to use and adapt these resources and technologies for the benefit of local livelihoods is strongly conditioned on the set of individual and collective capacities for agriculture and NRM among the local population. Whereas within the local setting there are available resources and technologies, these are not necessarily accessible to all members of the local population. Access to and utilization of these resources and technologies are conditioned by social and especially gender norms and by the institutional culture of inclusion and accountability. Gender norms and institutional culture also condition the distribution of and resulting benefits from individual and collective capacities for agriculture and NRM.

We argue that the interactions between these three elements of the opportunity structure shape what different types of people, by gender, class, ethnicity etc., are able to do, own and control. Individual and collective agency and innovation in the system influence and are influenced by the opportunity structure, with the quality and characteristics of these interactions enabling or inhibiting empowerment processes, leading to changes in development outcomes. The study focuses on understanding the interactions between opportunity structure, agency and innovation, and their empowerment and development outcomes, in the context of agriculture and NRM, as well as the contextual factors – such as shifting demographic characteristics and economic transitions, which affect them.

Naila Kabeer (2001, 9) posits that empowerment is “… the expansion in people’s ability to make strategic life choices in a context where this ability was previously denied to them.” The empowerment process involves expansion in individual and/or collective agency, and in Kabeer’s analysis involves the ability to use this expanded agency not only to improve one’s own life, but also to challenge and change the ‘structures of constraint’ underlying inequalities (2012, 6). This conceptualization neatly captures how empowerment emerges from the dynamic relationship between the opportunity structure and agency. For instance, where development interventions enable women to access new resources and develop agricultural and NRM capacities, such as through participatory varietal testing, a change process may be triggered through women gaining confidence in themselves and recognition from others for their new
knowledge and skills. These combined changes in elements of the opportunity structure may enable women to act to challenge their roles and position in the family, as well as to expand their engagement in markets (expanded agency/innovation). Recognition by value chain actors of women’s capacities as farmers may begin to change ideas of what it is acceptable for women to do in the agricultural sector (norms). All of these changes contribute to opening up new ways through which women can contribute to agricultural and wider development outcomes, feeding back to the opportunity structure (Figure 1).

Figure 1. Global study conceptual framework

Munoz Boudet et al (2013) find that the conditions which drive men’s agency can differ significantly from women’s, due to expectations that underpin men’s decision making and provider roles and other gender norms. This study will contribute to this literature by probing into factors shaping poor men’s (as well as women’s) agency and access to and benefits from innovations, and the implications of these processes for the normative environment facing poor women.

Based on the need to understand the complex relationships articulated in the conceptual framework, case study methods are the most appropriate for the global study because they are holistic and enable examination of ‘how’ and ‘why’ questions, contextual conditions and system complexity (Yin 2003; Woolcock 2013; George & Bennett 2005). Furthermore, a large-scale case study approach is the only feasible way of sampling the vast heterogeneity of gender and technology contexts which will influence how different opportunity structures lead to innovation and development outcomes. Within the case study design, qualitative methods will be used to collect hierarchical datasets using different methods at the village, household and intra-household levels. Qualitative methods are appropriate due to the study’s focus on assessing how different sequencings and combinations of factors play out (Ragin 2008).
A key issue in case study research is identifying the case, or object of study. For the global study, the case will be co-terminous with the notion of “site” and refers to a social group living in a single locality that the inhabitants call their village, community, neighborhood (barrio) or hamlet. The principle for defining this unit of analysis is propinquity, - ‘being in the same place at the same time’ (Kadushin 2012:18) – with the high probability that most inhabitants share a common language, culture and history. The global comparative analysis will identify broad patterns and trends across the cases (see Box 1).

BOX 1. Building an evidence base for patterned interactions between gender norms and agricultural innovation

The comparative study of social systems has already revealed various kinds of regularities in gender relations within particular social and geographical spaces. A well-known anthropological study of gender-related social patterns concerns the exchange of goods that accompany marriages in Africa and Eurasia, referred to respectively as bridewealth and dowry (Goody and Tambiah 1973). The original study was primarily aimed at understanding how the institutions of bridewealth and dowry differentially regulate in these regions the transfer of property from parents to male and female children, between families of marrying couples and how these institutions may also involve transfer of rights over women between families. Why in Africa does property move from the family of the groom to that of the bride, whereas in most parts of Eurasia it is the reverse and what are the implications for women? The study, especially when taken together with a follow up paper by Tambiah and others (1989), explores the desire and willingness to pay for control of the children born to a married women by a husband and his lineage in Africa (where the wife’s and children’s agricultural labor is essential) without seeking to control a woman’s sexuality. These circumstances are then contrasted with the situation in (especially upper-caste) Indian families where marriage is a means for joint families to increase their status, alliances and control of resources through guaranteeing the purity and status of the marrying woman. This involves control of both her procreation and her sexuality, often with limited or no contribution to agricultural activities and in some contexts seclusion from an early age.

Out of this work came bold suggestions about the relationship between types of agriculture (long fallow hoe agriculture mostly done by women and children in Africa vs. plough agriculture, mostly done by men on small plots in Eurasia), control of property and gender relations. These have since been revised as further knowledge has become available, especially the identification of more detailed patterns within sub-regions, such as the work of Christine Oppong (1983) in West Africa, and Knight and Ensminger (1998) in Kenya.

Within the work of the CGIAR, we are also aware of patterns in relation to gender norms and different kinds of agriculture, for example the dominant role of men in the vast cereal-based systems of South and East Asia, but the key role of women in the vegetable, rootcrop and livestock sub-systems in China, and South-east Asia, which includes the enormous pig-raising belt running from northern East Asia through South-east Asia and on into the Southern Pacific. We also recognize the pattern of upland and especially highland agriculture in many parts of the
world, the concentration of ethnic minorities in these locations, the key role of women raising root and tuber crops together with livestock, the environmental vulnerability and remoteness from markets. We recognize these patterns, but we are still some way from understanding how gender norms are constraining or supporting agricultural innovation. This is the aim of this project.

Due to the comparative nature of the study, a standardized set of data collection methods will be developed to be applied across sites. The methods will be adapted from those used by the World Bank for a 20-country study of gender norms and agency in economic decision making (Munoz Boudet et. al. 2013), with support from a consultant experienced in the design and application of this methodology. The qualitative tools will enable each case study to obtain detailed, context-specific insight into:

- existing gender norms, attitudes and practices around agriculture, NRM and rural livelihoods, including the division of labor, market access and mobility, village governance and leadership, marriage practices, family structures; decision making and gender-based violence, how they affect agriculture and NRM and how they are changing;
- how and by whom these norms, attitudes and practices are created, maintained, negotiated and sometimes changed, including how and why different women, men and families either conform to or act outside of these normative bounds, and with what effects on gender relations and livelihoods.
- How new agricultural and NRM technologies and practices have been introduced, adapted and used, the relationships involved, the distribution of benefits and how this innovation process is perceived by men and women.

The case studies will be structured to provide a core set of data that can be compared systematically across all cases and provide a basis for analysis across gender, generations, socioeconomic groups, and community and country contexts. The aim of the study is to complete a large number of cases across diverse contexts in the first 18 months. Centralized and regional training of trainers on the study methods will be carried out so that those trained can then train those carrying out the field work through sub-regional cluster training. See Annex 1 for a fuller description and timeline for methods training. The process of identifying and selecting the cases is described next.

**Case selection criteria and process**

The rationale for site selection is guided by principles of maximum diversity sampling. The approach seeks to capture and describe “central themes that cut across a great deal of variation” (Patton 2002, 235). The logic is that if a pattern can be uncovered in a large number of varied places – as if from the same population group – then there is more confidence i) in the finding ii) that unobserved variables are less important; and iii) that similar findings likely exist beyond the research sample (Peters 1998, 36-41).

Drawing on this approach, the study will apply a three stage sampling framework to assure inclusion of diverse cases which provide contrasting socio-cultural, economic and agro-ecological
environments with which to explore relationships between gender norms, agency, and agricultural innovation, including capacity to innovate.

- **Stage 1**: Ensure a good distribution of cases from across the world regions where the CGIAR operates, to introduce important heterogeneity in economic and bio-physical environments and in the socio-cultural contexts that underpin gender roles and relations.
- **Stage 2**: Ensure within region variance.
- **Stage 3**: Village case selection and classification will involve providing information on variation across two dimensions expected to shape interactions between gender norms, agency, and agricultural innovation processes:
  - **Gender gaps in assets and capacities** – a proposed case should aim to provide some qualitative or quantitative information germane to this dimension, such as the share of girls completing primary school compared to boys in the village or its district; the extent to which women hold important leadership positions (civic and political) in local organizations, and the broadly accepted norms in the village about women’s freedom of physical mobility. If this information is hard to obtain for the proposed village, other relevant indicators of gender gaps in assets and capacities can be considered.
  - **Economic dynamism** – a proposed case should aim to provide some information germane to this dimension such as the existence and nature of competition over agriculture or NRM resources important for livelihoods in the village; infrastructure development that indicates change in the local economy such as penetration of roads or connectivity; changes in market orientation; changes in the sophistication of processing technologies for key commodities; the percent distribution of buyers and sellers (sex-disaggregated if information is available) in local input and output markets; changes in on and off-farm employment opportunities; changes in the local diversification of livelihoods or the potential for this diversification.

We expect this information may be partial for any given village when a case is proposed and expect that it can be added to, as the case study progresses. Information is requested on village-level gender and asset gaps and economic dynamism when cases are proposed to facilitate the initial classification and selection of cases. This will ensure the Study includes villages distributed along the continuum from low to high on each dimension.

Additional aspects that will inform the selection of cases include the number of CRPs present in the case study area, proposals for joint CRP research, team capacities to undertake the study, clear plans for using study results, and ability to invest in longitudinal research in the site.

**Work plan**
The study design was completed in quarter 1 of 2014, and data collection will occur on a rolling basis over 2014-5. This model is designed to enable maximum CRP participation, since not all CRPs may have the funds or staff to conduct case studies in 2014.
Global study outputs
Each CRP will specify and deliver its own outputs from the case studies it conducts. Global study outputs are still to be defined, but may include:

- A report of global comparative analysis across cases
- Regional and sub-region synthesis reports (as funds allow)
- Cross-site dataset available for further comparative analysis and reports
- Site-specific datasets that can be used for future longitudinal research
- Guidance notes summarizing key findings and their application to the design and delivery of agricultural innovations
- Publication and outreach, including journal articles, briefs on main findings, blogs.

CRP partners, management structure and roles
The idea for this global study emerged from the 2013 CG Gender Network meeting in Montpellier focused on gender research methods. A group of CRP gender specialists, representing CRPs MAIZE, WHEAT, RTB, CCAFS, FTA, AAS, L&F, Humid Tropics, self-organized and proposed the idea of adapting the World Bank global study *On Norms and Agency* to CGIAR interests. With support from the Consortium gender advisor, they convened a Study Design Group (SDG) which held its first meeting on October 21-25, 2013 in Washington, DC. Since word of the study has been disseminated across all CRPs, additional CRPs have expressed interest in conducting case studies, including A4NH, WLE and Dryland cereals & legumes. In addition, the World Bank has reached out to support a study partnership in two countries of SubSaharan Africa.

A study involving so many CRPs and crossing numerous geographic regions requires a central management structure as well as inputs from consultants with expertise in comparative qualitative gender research. Consultant inputs are needed to provide expertise in tool development, to train trainers in the methods and to contribute to designing the data coding system. A principal investigator (PI) is also needed to maintain study momentum and timelines, manage case selection procedures, ensure data comparability and research quality, oversee central data coding, lead the drafting of regional and global study outputs, and spearhead a strategic outreach program with the study results.

To maintain the momentum built up by the SDG in the October 2013 meeting and facilitate development of the study concept note and tools, a small executive committee was formed out of those attending the meeting. TORs are currently being developed for the ExComm and PI.

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References


