
Community typology framed by normative climate for agricultural innovation, empowerment, and poverty reduction

Patti Petesch¹, Shelley Feldman², Marlène Elias³, Lone Badstue¹, Dina Najjar⁴, Anne Rietveld³, Renee Bullock⁵, Nozomi Kawarazuka⁶, and Joyce Luis⁷

¹International Maize and Wheat Improvement Center, CIMMYT

²Cornell University

³Bioversity International

⁴International Center for Agricultural Research in the Dry Areas, ICARDA

⁵International Institute for Tropical Agriculture, IITA

⁶International Potato Center, CIP

⁷International Rice Research Institute, IRRI

*Corresponding author: Patti@pattipetes.com

Abstract

This paper employs the concepts of gender norms and agency to advance understanding of inclusive agricultural innovation processes and their contributions to empowerment and poverty reduction at the village level. We present a community typology informed by normative influences on how people assess conditions and trends for village women and men to make important decisions (or to exercise agency) and for local households to escape poverty. The typology is comprised of three village types—transforming, climbing and churning—with each type depicting a different normative climate and trajectory of change in agency and poverty levels. Across “transforming” villages with significant increases in people’s agency and poverty reduction, we found a highly inclusive normative climate that is fueling gender equality and agricultural innovation, as well as infrastructural improvements, expanded markets, and male labor migration. The research, part of the GENNOVATE initiative, includes a qualitative comparative methodology and dataset of 79 village cases from 17 countries.

Key words: qualitative comparative research, gender norms, empowerment, agricultural innovation, community development

Introduction

On a figurative five-step ladder, Sonam (pseudonym) estimates that she has moved from step 1 to step 5 over the past decade. Step 5 characterizes the women of her village with great power and freedom to make consequential decisions in their lives—such as about whether and where they will work for pay, or whether to begin or end a relationship with a man. By way of explaining her significant climb up the ladder, Sonam stresses a decision she made five years ago to take a risk and try sharecropping for herself. She’d never endeavored to work for pay before.

Sonam, 40 years old and from a village of India’s Uttar Pradesh, lives with her five sons, ages 14 to 22, two daughters-in-law, and a granddaughter. Sonam reports that she never attended school,

married a cousin at age 14, and endured great hardships that included domestic violence and raising her boys in a dilapidated hut. “When [my husband] lived here, he abused me physically and mentally,” confides Sonam. “I lived like a servant. There was no question of giving my opinion on any matter.”

Yet, Sonam says she turned her life around in 2010 when she first began to sharecrop:

It was my decision to start working since the financial condition of my family was far from good. We could barely manage to eat three meals a day. No one asked me to work. It was my decision. . . . That changed our lives completely for the better.

“[W]ith the money I earned by sharecropping” and support from her family, Sonam replaced their hut with a concrete house in 2011. The following year, a portion of the land received from Sonam’s in-laws at marriage was used as collateral to finance her husband’s transportation to work in Saudi Arabia. Over time, remittances from her husband combined with her own earnings enabled Sonam to “return all the money we had to borrow from people during difficult times.” Sonam also purchased land, and shared, “Now my sons are also working. So we are in a comfortable situation now. There are no problems.”

Sonam’s testimony is part of a dataset of village case studies from Asia, Africa, and Latin America. As we will show, Sonam’s village is a context where many women experience a strong sense of empowerment from assuming a greater decision-making role in their household and in the village’s agricultural economy. Some of the village women with resources are managing commercial farms and using the latest seed technologies and equipment in consultation with their husbands, or independently if widowed or their husbands are in distant jobs. In other villages sampled in Uttar Pradesh, as well as elsewhere in India and beyond, women’s roles are also changing; however, their ratings of shifts in their decision-making capacity typically moves from steps 2 to 3 (out of 5). Most women in our study do not perceive their experiences in their family and community over the last decade to be nearly so empowering as Sonam’s. Most continue to face local gender norms that discourage women from voicing their opinions and that only recognize men as agricultural innovators.

Gender norms comprise the “differential rules of conduct for women and men” (Pearse and Connell 2016, p. 35). The influence of these social rules on women’s roles and decision-making has been a longstanding concern in the gender and agriculture literature (e.g. Boserup, 1970; Doss, 1999; Quisumbing, 1996; Kandyoti, 1998; Quisumbing and Pandolfelli, 2010). Gender norms are challenging to measure, however, due to their contextual and fluid properties: women and men alike uphold, negotiate, withdraw from, and sometimes alter these social rules as they interact with others, manage risks, and pursue goals for bettering their lives (Petesch et al., 2018a; Pearse and Connell, 2016; Sewell, 1999; Jackson, 1999).

Informed by the concepts of agency and gender norms, this paper explores women’s and men’s own assessments of the conditions and trends in their community for taking important decisions and for reducing poverty, and the role of agricultural innovation in these processes. In addition, we draw on these local assessments to build a community typology that expresses three distinct

trajectories of local socioeconomic change. The analysis builds on the GENNOVATE (Enabling Gender Equality in Agricultural and Environmental Innovation) conceptual approach, qualitative comparative field methodology, and dataset of 79 village cases spanning 17 countries of the Global South (Badstue et al. 2018; Petesch et al., 2018).

The objective of this paper is to mobilize GENNOVATE's conceptual approach and unique qualitative comparative dataset in ways that enhance understanding of the local normative conditions associated with inclusive agricultural innovation processes. We begin the paper by discussing the literatures on agency and gender norms that informed our conceptual approach, and then review the study's protocols for sampling, data collection, and analysis. In the section on results, we discuss how we constructed and interpreted our three-part community typology. Each of the three sets of villages in the typology depicts a different trend in how local women and men assessed 10-year changes in their decision-making capacity and local poverty levels. The first set of villages, labeled "transforming" cases, presents local observations of rapid and inclusive social and economic development. The second type, "climbing" cases, presents more moderate processes of favorable change, and the third, "churning" cases, are characterized as stagnating or deteriorating. Transforming cases are distinguished by a highly inclusive and fluid normative climate that encourages both women and men to be effective decision-makers and to innovate in their rural livelihoods. In addition to the comparative findings that informed the typology, three village case studies are presented to illuminate important commonalities as well as contextual differences among the transforming set of cases. Before concluding the paper, we reflect on the normative regularities and differences uncovered by our approach, and the contribution of growing gender equality to agricultural innovation and wider processes of institutional transformation and rural development.

Literature review

GENNOVATE is a large qualitative study that explores and compares, across diverse cultural contexts, how gender norms both shape and are shaped by women's and men's capacities to participate in and benefit from the agricultural innovation processes of their local economy. The study's conceptual framework conceives of the interaction between gender norms and women's and men's engagement with agricultural innovation as dynamics that have the potential to contribute to empowerment and poverty reduction in a village (see Badstue et al., 2018, for further discussion). Here we highlight the literature that informed our understanding of agency, empowerment, and gender norms, and their interactions.

Agency and empowerment

While agency is often conceived of as the capacity to act and take decisions, empowerment refers both to processes and outcomes that result in "the expansion of choice and strengthening of voice through the transformation of power relations, so that women and girls have more control over their lives and futures" (van Eerdewijk et al., 2017, p. 13). Feminist conceptualizations of empowerment have long emphasized the contested character of gender power relations (e.g. Batliwala, 1993; Jackson, 1998; Kabeer, 1999). Batliwala, for example,

defines women's empowerment as "the process of challenging existing power relations, and of gaining greater control over the sources of power" (1993, p. 130).

GENNOVATE's approach builds on Kabeer's (1999) conceptual framework that specifies three dimensions that effect empowerment and transform power relations: resources, agency, and achievements. Razavi (1999, p. 423) usefully summarizes the main attributes of Kabeer's framework, which remains relevant (e.g. review by Donald et al., 2017):

. . . "resources" (not only access, but also future claims, to both material and human and social resources), "agency" (including processes of decision-making as well as manifestations of agency, such as negotiation, deception and manipulation), and "achievements" (or outcomes in wellbeing).

The measurement of agency and empowerment across cultures, however, is a continuing challenge (e.g. Donald et al., 2017; Narayan, 2005). The Women's Empowerment in Agriculture Index (WEAI) has advanced measures that are comparable and multidimensional (Alkire et al., 2013; Malapit et al., 2014). The comparative measures we use are similar to quantitative approaches in that they draw from women's and men's observations about their decision-making capacity, as well as other measures of wellbeing. Nevertheless, as discussed in Badstue et al. (2018), the GENNOVATE methodology differs in that it is guided by theoretical approaches that stress the social embeddedness of agency and the historical and contextual specificities of the factors and processes that enable or hinder empowerment on the ground. This concern for contextual influences on agency and processes that drive more equitable gender power relations calls attention to the role of gender norms (Kabeer, 1999).

Gender norms

Gender norms, such as expectations of women's deference to men, are learned behaviors from a very young age. Many experts on norms emphasize how they are held in place because we believe that others conform to and value these social expectations and perceive that our own social approval hinges on compliance (Bichieri, 2006; Cislighi, Manji, and Heise, 2018; Mackie et al., 2015). Feminist literature on gender norms draws attention to how these social dictates contribute to reproducing the "gender order" and "distinctions between women and men" (Pearse and Connell, 2016, p. 31). However, these same dictates often become subjects of negotiation and resistance when they constrain or no longer hold much relevance for women's and men's day-to-day lives (e.g. Jackson 1998, 1999).

The notion of local normative climate, elaborated further in the empirical section of the paper, focuses attention on the set of norms prevailing in a local context and their fluid qualities—with some gender norms in a community remaining restrictive or perhaps tightening further, while others may be relaxing or disappearing altogether (Petesch et al., 2018a). The relaxation of norms describes local processes, for instance, whereby a few village women successfully negotiate a rule that only men should be present at community meetings and women begin attending the meetings. A gender norm may relax enough to disappear, such as when many women along with men attend community meetings and this becomes widely accepted and normal. While these processes of normative relaxation and change are vital for increasing gender

equality, they remain uneven on the ground: in diverse cultural contexts a woman may still face ostracism or perhaps physical punishment if she interacts independently with a man who is not a relative of her family (Muñoz Boudet, Petesch, and Turk, 2013). Normative fluidity speaks to the uneven and sometimes risky social processes whereby some, or perhaps many, women are finding space to negotiate and contest different normative constraints in their lives, while others in the community continue to uphold and conform to restrictive dictates.

In fact across many sample GENNOVATE villages, women often convey that compared to a decade ago they are encountering more relaxed gender norms and finding it easier, for instance, to express their opinions in family matters, to move in the public spaces of their village, and to earn some income from their own agricultural activities (e.g. Badstue et al., 2017; Petesch et al., 2017; Luis et al., 2018).

Importantly, groups of men also contest and resist norms of masculinity (e.g. Connell, 2003; Pearse and Connell, 2016; Kimmel, 2000). Some local contexts may provide limited pathways for men to achieve or maintain adequate financial independence, a condition widely seen to define manhood in varied cultures around the world. (e.g. Barker and Ricardo, 2015; Amuyunzu-Nyamongo and Francis, 2006). For example, in a GENNOVATE case study of a peri-urban community in western Kenya, where land and jobs are scarce, men perceive themselves to be “squatters” in their own community, and many struggle with heavy drinking and other antisocial vices (Petesch et al., 2018a; Bullock and Tegbaru, under review). The burdens for men who rely on arduous and insecure farm labor are a type of gendered vulnerability, which some men resist (Jackson, 1999). In sum, as women and men go about their daily lives, the relative fluidity of local gender norms set the context for their capacity to take important decisions and engage with agricultural innovation and other opportunities for bettering their lives.

Methodology

Discussion of GENNOVATE’s rationale, objectives, and conceptual approach can be found in Badstue et al. (2018); and Petesch et al. (2018) present a fuller treatment than is possible here of the study’s qualitative comparative field methodology (both papers in this issue). Below we review the main protocols that guided the sampling, data collection, and analysis of the cases and evidence used for this paper.

Our sample includes 79 GENNOVATE village-level case studies:

- *24 cases from Africa*: Burundi (2 cases), Democratic Republic of the Congo (1), Ethiopia (8), Kenya (2), Nigeria (4), Rwanda (1), Tanzania (4), Uganda (2);
- *49 cases from Asia and Central Europe*: Afghanistan (4), Bangladesh (6), India (15), Nepal (6), Pakistan (7), Philippines (3), Uzbekistan (4), Vietnam (4); and
- *6 cases from Latin America*: Mexico (6).¹

Case selection was based on GENNOVATE's global sampling framework, which applied principles of maximum diversity sampling to introduce variance on levels of economic dynamism and of gender gaps in assets and capacities in the individual village cases chosen for the sample.

In each research village, the field team conducted a total of 15 data collection activities with a methodology package of six instruments with semi-structured interview guides (Petesch, Badstue, and Prain, 2018). There were three focus group instruments: the first was conducted separately with poor women and men, the second with middle-class women and men, and the third with young women and men (six groups in each case and 471 in total). The fieldwork also includes nine semi-structured interviews in each case (711 in total) guided by three instruments: i) a community profile to gather background demographic, social, economic, agricultural, and political information about the case (requires key informants of both genders); ii) innovation pathway interviews with local people who are known for trying new things in agriculture (two men, two women); and iii) life story interviews (two men, two women). With strong advance coordination and support from a hired community organizer, most teams completed the fieldwork for a case within one week.

All six focus groups in a village case conduct a variation of a ladder activityⁱⁱ that captures perceptions of trends at the community level on agency or on wellbeing; and it is this data that we use to construct the community typology. Here we describe the different ladder activities in some detail as this is needed to understand the study methods and results to follow.

In each case study, four sex-specific focus groups—two with adult members (ages 25 to 55) drawn from the *middle class* and two with *youth* (ages 15 to 24)—conduct a **Ladder of Power and Freedom** activity as the opening exercise. Rather than refer to the technical terms of agency or empowerment, facilitators use the more commonly known terms of power and freedom (also see Sen, 1999). Indicating the village to be the frame of reference, the facilitator shows a visual of a simple five-step ladder and asks the women's focus group members to consider the ladder step that best exemplifies the power and freedom of most village women (and the men's focus group considers their local men). The facilitator also explains that step 5 of the ladder indicates a significant capacity (and step 1 very limited capacity) to make independent decisions about important affairs in their life, such as “where they will work or whether they will start or end a relationship with the opposite sex.” Each focus group participant is then asked to write privately, on a small slip of paper, the step on the ladder where they believe most individuals of their own gender in the village are located. The facilitator collects and summarizes the ratings, and then guides a discussion on reasons for the steps identified. This is the end of the ladder activity for the two youth focus groups. The two middle-class focus groups engage in a further step of rating and discussing levels of agency 10 years ago. A summary statistic (change in agency = mean step now – mean step 10 years ago) is generated for comparing perceptions of change among the focus groups. A positive summary statistic indicates movements up the ladder and potentially a significant sense of empowerment if climbing a good distance to reach step 3 or higher.

The **Ladder of Wellbeing** activity, conducted with the two focus groups of *poor* women and men (ages 30 to 55) in each study village, explores local perceptions of wellbeing and experiences with moving in and out of poverty. The facilitator begins the activity by asking focus group members to reflect on the characteristics of the “best-off” households in their village. Next, focus group members are directed to the bottom step of the ladder to describe the “worst-off” households. Then the focus group is free to add however many steps to the ladder as needed to capture the different wellbeing groups—and their corresponding traits—that are present in the village. During these testimonies, the facilitator records key traits of each ladder step on a flipchart for the group. Most ladders have three or four steps, although a few have more steps.

Once agreement is reached on the ladder steps and traits, the focus group identifies the step at which local households are no longer considered poor, or their “community poverty line.” Next, the group works together to sort a pile of 20 seeds (provided by the facilitator) across the different steps which are representative of all the households in their community. The sorting exercise is then repeated to indicate the distribution 10 years ago. Following this, the activity turns to discussions about the assets and capacities of farmers at the different steps and the experiences of women and men in their communities with moving up, getting stuck, or falling on their ladder. The findings from sorting the seeds provide the basis for generating a summary statistic [moving out of poverty = (share poor 10 years ago – share poor now) ÷ (share poor 10 years ago)] to enable comparing perceptions of poverty dynamics across the focus groups and case studies. A positive summary statistic indicates perceived poverty reduction.

As explained in the results section, the focus groups’ ladder statistics on agency and wellbeing conditions and trends of their village provide the skeleton for the three-part community typology—with the most favorable statistics depicting the set of transforming cases and the least favorable statistics conveying the churning cases. Yet, the typology’s construction and our interpretation of the different social processes that it registers are informed by GENNOVATE’s conceptual framework, which expresses innovation processes as socially embedded in a local opportunity structure that is comprised of gender norms and other influences on local actors. In addition to the comparative statistics, the ladder method generates narrative data that contributes to a contextual analysis of mobility processes. *As focus group members assess and explain the levels of and trends in perceived agency for their own gender, or the perceived change in poverty levels of their village (depending on the ladder), their narratives reveal some of the expressions of agency and wellbeing that are normative for the women and men in their local context.* Alternatively, focus groups may also attest to perceptions of disempowerment or deepening poverty, depending on the ladder activity and their views. Our analysis of normative influences on local innovation processes and perceptions of wellbeing is also informed by evidence gathered from other modules of the data collections instruments. One module, for instance, engages focus groups in reflecting on and assessing local women’s and men’s experiences with and benefits from new cropping or livestock practices, ways of managing natural resources, and formal and informal agricultural networks and learning opportunities.

Our findings are informed by qualitative comparative analysis that broadly involves working iteratively with two analytic procedures. The first employs “variable-oriented” measures that

engaged the research team in identifying patterns in the numerical and narrative data generated from the ladder modules and other evidence gathered on agency, norms, and agricultural innovation. The second is the contextual “case-oriented” analysis that focuses on a specific village and is linked to analysis and comparison of normative influences on dimensions such as agricultural roles and decision-making (or agency) among the different social groups sampled in the case. We present three case studies that display case-oriented work. Petesch et al. (2018) provide additional discussion of sampling, recall, courtesy bias, translation, data triangulation, research ethics, and other common field research concerns.

We agree with feminist critiques that the variability of gender norms and ingenuity of human agency to overcome constraints on behavior call for significant caution with comparisons or predictions from our evidence (e.g. Kabeer, 1999). Yet, it is possible to compare broad types of change that community members perceive on the Ladder of Power and Freedom, as well as on the Ladder of Wellbeing, and to do this within and across the diverse gender and social groups. However, our interpretations of narratives or ratings remain anchored to their focus group and locality.

Results

This paper employs GENNOVATE’s conceptual approach and qualitative comparative data to build understanding of the normative conditions associated with inclusive agricultural innovation processes. This objective drew us to the ladder data on trends in local perceptions of agency and wellbeing to identify and learn from cases where focus groups consistently registered significant upward mobility on their ladders. How are these cases similar? And how do they differ—when compared with one another as well as with the wider set of cases? In addressing these questions, we uncovered patterns in our evidence that we present through the analytic framework of a three-part community typology.

In most cases, focus groups from the same village observe differences in the agency and poverty trends of their community. To better account for the diversity of views among the different gender and social groups, we offer a community typology that is constituted by the complex and discordant ways that norms and agency typically interact on the ground. As discussed in Petesch et al. (2018a), the narratives generated by the ladder exercises are laced with strong normative dimensions, and when triangulated with other data gathered, enable assessments of the prevailing normative climate and the socially embedded ways by which gender norms interact with other circumstances in the lives of community members to accommodate and, most often, perpetuate existing asymmetries in power and access to opportunities.

Most climbing their ladders

Across the 79 case studies, a large majority of the village women and men who joined the *middle-class* focus groups report movement up their Ladder of Power and Freedom when compared to a decade ago; they now experience greater decision-making capacity over important affairs in their life. Additionally, a large majority of the *poor* focus groups observed households

in their villages moving up and over the community poverty line on the Ladder of Wellbeing. Men's and women's upward movements on the Ladder of Power and Freedom is expected in part due to built-in structural dimensions in the ways in which gender norms and life cycle processes interact with agency (Petesch et al., 2018a). The favorable poverty trends observed by poor focus groups, moreover, parallel the wider positive trend in rural poverty for the Global South.ⁱⁱⁱ

Women indicate greater upward mobility on their Ladders of Power and Freedom than men, but they also often start from a much lower position. On average, across the 79 cases, women place themselves at a median of step 1.88 a decade ago while men rate themselves at step 3. The gender difference in ladder positions in the current period narrows greatly, however, with women rising to step 3 and men 3.6. The more limited climbing by men on their ladders is likely associated with the fact that adult men have been accustomed to making important decisions for generations; reinforcing their perceptions, moreover, is the relative stability of the gender norms that govern men's (agentic and dominant) roles in their household and village. Meanwhile, women's greater climbing on their ladders is seemingly reflective of their growing roles as decision-makers in their households and local economies, and mirrors evidence in the data that indicate an evolution toward more relaxed norms for women's roles than in the past. The *youth* focus groups do not assess trends, but their Power and Freedom Ladders showed limited variability with all medians at or very near step 3 for the current period across regions.

The focus groups with poor women and men report substantial progress on poverty reduction in their communities. The median poverty level observed across the villages differ little by gender, ranging from 60 to 70 percent poor a decade ago and falling to 45 percent in the current period. Overall, estimates of local poverty reduction of 20 percent or more can be found in 62 percent of the men's groups and 56 percent of the women's groups.

The median statistics, nevertheless, mask significant variability in local perceptions of changes in agency and poverty. To provide a flavor of this variability, Tables 1 and 2 divide our cases into two sets. Table 1 presents the maximum, median, and minimum values for the set of ladder statistics from the cases where all six focus groups consistently observe favorable trends; while Table 2 presents this same range of values but from the cases with mixed ladder trends, or where the ratings from one or more of the six focus groups' summary statistics indicate a static or falling ladder trend (or a ladder position below step 2 if youth focus groups). When comparing the same focus groups in Tables 1 and 2, the maximum values are quite similar while the median and minimum values are in most every instance much lower in the set of villages with mixed trends compared to the set of villages with favorable trends.

Table 1. Range of ladder statistics from cases with consistently favorable trends (Maximum, median, and minimum values, 47 cases)

	<i>Ladder of Power & Freedom</i> (Change in agency, 94 middle-class focus groups)		<i>Wellbeing Ladder</i> (Change in poverty, 94 poor focus groups)	
	<i>Men</i>	<i>Women</i>	<i>Men</i>	<i>Women</i>
Maximum value	2.10	3.00	.83	.87
Median	1.00	1.40	.38	.36
Minimum value	-.40	.10	.05	.06

Table 2. Range of ladder statistics from cases with mixed trends (Maximum, median, and minimum values, 32 cases)

	<i>Ladder of Power & Freedom</i> (Change in agency, 64 middle-class focus groups)		<i>Wellbeing Ladder</i> (Change in poverty, 64 poor focus groups)	
	<i>Men</i>	<i>Women</i>	<i>Men</i>	<i>Women</i>
Maximum value	2.30	3.00	.81	.83
Median	.82	.67	.17	0
Minimum value	-2.25	-3.00	-.80	-.67

To ensure meaningful classification into the two sets, we applied fuzzy set logic (Ragin, 2000). With fuzzy sets, researchers apply both theoretical and substantive knowledge about their cases to calibrate the membership of a set and there is scope for ambiguity (or fuzziness) in “whether a case is more in our out of a set” (Ragin, 2008, p. 30). A case from the Morogoro region of Tanzania (Petesch et al., 2017, pp. 13-14), for instance, is included with the favorable set, although members from the men’s middle-class group indicate, on average, a decline of -.40 on their Ladder of Power and Freedom (e.g. the minimum value for the first men’s column in Table 1). Their average ratings indicate a decline from step 4.2 to 3.8 in the decision-making capacity of the village men. By way of explaining their fall on the ladder, some in the focus group express concerns for how local men’s decision-making is being affected by the village women’s growing agency and changing norms that are encouraging women to be more assertive and outspoken in their families. As is common in contexts with fluid norms, however, testimonies from other men in the focus group contest these changes, with one countering, “The whole household waits for me to decide.” Nevertheless, a rating of 3.8 is still quite near step 4 indicating a relatively high level of agency, and most of the other evidence from this case also argued for moving it out of the set with mixed trends. For instance, the middle-class women corroborate reports about their agency trends (from step 1 to step 3) and testify that when local women marry, now “you can plan with your husband.” Poor men and women also observe upward ladder climbs and poverty reduction in this case. In this way, the use of fuzzy sets better enabled us to sort the cases into the set that best represented the prevalence of ladder and other data that we had about the local normative climate and the overall trajectory of a case.

The two tables, in fact, provide hints of how we exploited the variability in the ladder statistics to build and learn from the community typology. Table 2 conveys the stymied trajectories observed by the set of villages in our typology that we refer to as churning cases. A notion of churning comes from the poverty dynamics field, where it is used to convey findings that some households struggle with frequent movements in and out poverty (e.g. Hulme, Moore, and Shepherd, 2001). As elaborated further below, we often find churning cases to be characterized by innovation and

development processes that are excluding or providing very limited opportunities for a substantial segment of the community.

Before completing the ladder specifications for the remaining two types of cases in the typology, we turn first to a case study from one of the eight transforming cases. This village offers valuable insights into the fluid and discordant gender norms that we often find on the ground and their relevance for who can access and benefit from promising local agricultural opportunities. On the one hand, the village's middle-class women speak to the relaxing and disappearing gender norms commonly seen in transforming cases; and yet, on the other, poor women's observations about their lives in this village depict the restrictive and excluding normative climate observed by one or more focus groups in a churning case.

Case study: A ladder for some women, but not others

The centuries-old village of Cheeda in Uttar Pradesh holds a population of 2,500 spread across three hamlets, with farmers cultivating paddy, wheat, and vegetables and tending buffalo and goat. More than half of Cheeda's population comprises smallholder farmers who belong to different castes, such as Kurmi (30 percent) and Baniya (30 percent). They enjoy relatively prosperous lifestyles compared to other social groups in the community who work mainly as agricultural laborers or other casual labor. Key informants report a new preschool and lower secondary school, government business subsidies, and the Mahatma Gandhi National Rural Employment Guarantee Act (MGNREGA).

Sonam, whose story opens this paper, is from Cheeda. When explaining how she reached the top step on the Ladder of Power and Freedom, her testimony reveals how some gender norms relax while others remain restrictive. Sonam boasts about her initiatives with sharecropping, but also reports drawing strength from her five sons—who are now growing up, marrying, and helping to maintain the household, as gender norms prescribe in the village. Similarly, testimonies from the middle-class women's focus group show how their capacity to take decisions in their family has grown. In stark contrast, poor women observe the persistence of numerous vulnerabilities, closely echoing Sonam's reports about her past life and the constraints on her voice and abusive relationship with her husband.

Women of Cheeda's middle-class focus group observe that on average they have climbed up nearly two steps on their Ladder of Power and Freedom to reach step 3.4. Among the 10 women who joined this group, all identify themselves as farmers, four report they are widows and six are married. By way of explaining the change on their ladders, the women refer to how they are now more educated and knowledgeable about their rights, and more assertive in their households. They describe a loosening of household hierarchies as in-laws "don't try to control their daughters-in-law. Earlier this control was very rigid." Changes in women's roles in the village are also influenced by high rates of men's labor migration: "When there are no men in the house then their wives can take certain decisions."

Several women farmers of Cheeda are recognized as active and skilled wheat and paddy farmers who apply the latest seed technologies and hire labor when needed. Key informants estimate 80 percent of the local women farmers use tube wells to irrigate their land, and a quarter of

sharecropping and rental transactions to involve women. Young women report great freedom for both unmarried and married women to move about their village independently and engage in small-scale trade. The women in their youth focus group ranged in ages from 16 to 22, all unmarried, and all but two had completed secondary school or higher. They position themselves on step 3.2 of their Power and Freedom Ladder, explaining, “When our parents decide to send us to school they decided to empower us,” and, “[e]ducation has brought about a revolutionary change—we are wiser and more capable.”

Although they reside in the same village, poor women’s testimonies reveal no such empowering processes in their lives. None of the 10 women in this group had attended school and all identify themselves as farm laborers. In discussions of gender equality, poor women explain that “daughters have freedom, but daughters-in-law don’t.” Conceptions of power and freedom are often conditioned by the ways that an individual’s household, life cycle, and socioeconomic positions intersect and evolve. When considering their role in moving their families out of poverty, a woman in this group reports their lives to be in the hands of their husbands:

Women’s fate is decided when they get married. They live the way their husbands want them to. They don’t have much in their control. They can fight and fight hard but that is all they can do.

By fights, the woman is referring to previous testimonies of the drinking and gambling problems among the village’s poor men—and the deep stress and vulnerability to abuse that this causes for the local women. Yet, somehow amidst family conflict and “back-breaking” farm work or brickmaking, some women in this focus group still report their lives to be improving: “Today every family is able to afford at least one square meal a day,” and, “Now people have all become very hardworking.” They want their daughters to be as educated as their boys, and speak of new lenders extending credit, self-help groups they belong to, and the limited opportunities offered by the 10 days of work annually with MGNREGA.

A community typology framed by village trajectories

The discordant narratives from Cheeda about their normative climate open a window on the differentiated social processes that give rise to and sustain gender and social group inequalities. These same social processes also contribute to the variability in local perceptions of agency and norms. Although poor women’s narratives from Cheeda express many challenges, they still estimate village poverty reduction at 20 percent; and the village’s five other focus groups convey favorable conditions on balance and argue for classifying this case among the transforming communities. By comparison, poor women in the seven other transforming cases observe much better livelihood opportunities for themselves as well as local poverty to be disappearing far more quickly. Thus, while cases like Cheeda, or the one from Tanzania highlighted earlier, indicate the boundaries of the community typology to be fuzzy, the focus groups in each of the transforming cases nevertheless present evidence of a normative climate that is interacting with local opportunities in ways that are enabling a significant share of their village to make progress up their ladders.

To select the set of transforming cases, we set challenging benchmarks that required all six focus groups conducted in a village to observe quite favorable trends (or status if youth). The criteria include:

- i. *both* middle-class focus groups observe a climb of at least one full step up their Ladder of Power and Freedom;
- ii. *both* focus groups with poor villagers observe poverty reduction of at least 20 percent, *and*;
- iii. *both* youth focus groups position themselves on at least step 3 of their Power and Freedom Ladder.^{iv}

Eight of our 79 cases met these criteria for the *transforming* set. The other two sets of villages in our typology comprise 39 *climbing* cases with ladders that all register at least some degree of upward movement (e.g. Table 1 above minus the eight transforming cases), and 32 *churning* cases with mixed ladder trends (Table 2).

Figure 1 provides an overview of the ladder statistics sorted by the three community types. The 10-year observation period captured in our evidence shows rapid change in the lives of women residing in the transforming set. Middle-class women in the eight transforming cases overall observe striking gains in power and freedom of nearly two full steps up their ladder and closing in on step 4; and poor women assess close to 60 percent of their village households moving from below to above the community poverty line on their Wellbeing Ladder. Middle-class men and poor men from transforming cases also consistently report stronger ascents on their ladders relative to the men from climbing and churning cases. At step 3.2, young women from transforming contexts observe a slightly higher median ranking on their Power and Freedom Ladders than all other youth groups. We did not find much variation in the youth ladder statistics, with median rankings of the 155 young men's and women's focus group, respectively, at 3.0 and 3.2 (transforming cases); 3.0 and 2.9 (climbing); 3.0 and 2.7 (churning).

More important than the numerical findings for each type of case, however, are the regularities in the normative conditions that the typology broadly registers. Some Uzbekistan and Vietnam climbing cases very nearly reached the transforming set, for instance. In climbing and churning cases alike, however, the narrative data make evident that different middle-class, poor, and young women are innovating in their rural livelihoods, but varied gender norms, depending on the context and social group, still limit their visibility, decision-making, physical mobility, resource control, and access to information, networks, extension services, and other opportunities. Alternatively, these cases may have men's ladders displaying only limited climbing, or stagnation and descent if a churning case, and this is usually related to economic difficulties or other circumstances affecting many men's perceptions of their authority position, decision-making or provisioning for their families. Gender norms for men have remained relatively stable and weigh heavily on men's sense of agency across the cases.

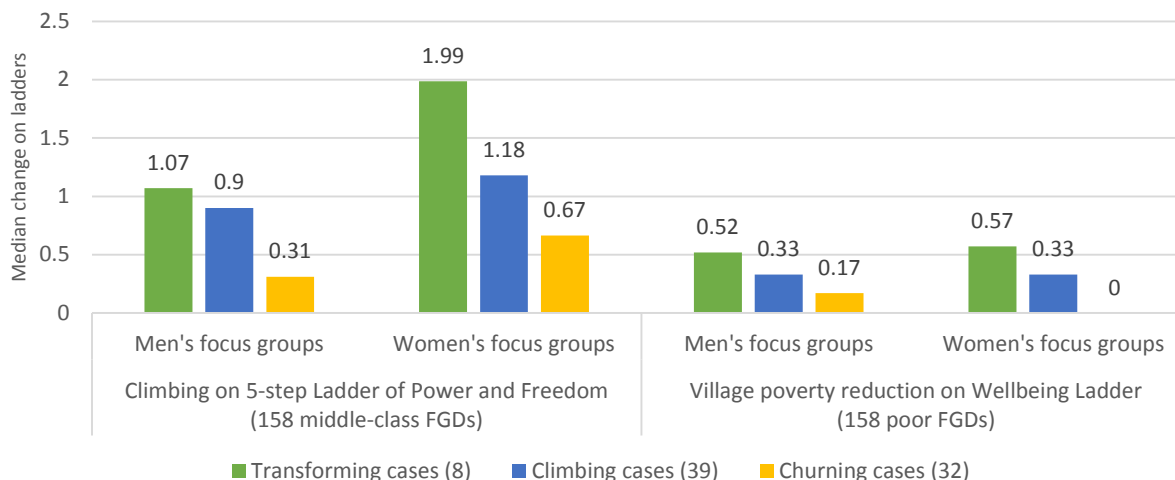


Figure 1. Perceptions of change in power and freedom and poverty reduction, focus group assessments by type of cases (316 focus groups, 79 cases)

Again, the numerical cut offs are not clear-cut; what is more revealing are the regularities in the normative conditions that the typology broadly registers. In Ilu Titun, a climbing village from Nigeria's Oyo State, women are the main vendors of their local weekly market, but they say they can only reach step 2 of their Ladder of Power and Freedom. They report their local market to be hampered by the bad feeder road to the village, and husbands who control their earnings and require them to work on their plots before the women tend to their own plots (Petesch et al., 2018a). Yet, Gbodomu, another research village in Oyo State, presents a transforming case where women's narratives still speak to some confining norms, but poor and middle-class women alike there perceive significant benefits from an expanding village market, and say "everybody is into business now" (poor women's focus group). Additionally, middle-class women report controlling farmland and now making enough money "to allow us to enjoy the freedom to make major decisions." In short, in the climbing cases, women and men are generally perceiving enough normative latitude to exercise agency and take some risks to improve their livelihood activities—and ascend their ladders. In transforming cases, they widely observe numerous normative barriers relaxing and disappearing, leaps in their capacity to take important decisions and risks, and many village families escaping poverty.

Churning contexts

Villagers from churning communities speak to the saying that a chain is as strong as its weakest link. Even though it is frequently just one or two focus groups in a churning case that register falling or no change on their ladders, the remaining ladders from these cases often display more limited gains. These are the contexts where local gender norms and innovation and development processes are interacting in ways that are greatly constraining or disadvantaging a large segment of the village, and this is registering on one or more of the ladders as a descent or stagnation.

Perceptions of stagnant or impoverishing village contexts on the Ladder of Wellbeing should always be cause for concern; however, discouraging trends on the Power and Freedom Ladders also raise red flags because it is much more common for adult focus groups to perceive increased

agency over the course of a decade as discussed above. In some cases, villages may be coping with processes of urbanization and agricultural change. A case from Chiapas, Mexico, for example, features a large town and commercial maize farms, and while women report favorable ladder trends and new opportunities for their entrepreneurship, middle-class men perceive they are stuck at step 3 and poor men observe rising poverty and a decline in job opportunities.

Women's ladder statistics more rarely sorted their communities into the churning set. One case of women expressing hardships, nevertheless, resides in Ethiopia's Oromia region (also see Petesch et al., 2017, p. 27). Poor women in this case display detailed knowledge of new seed technologies, chemical inputs, and cropping practices; however, they also report increased agricultural labor burdens with the new practices, continued domestic violence, failing crops, and rising poverty. Similarly, middle-class women's narratives speak to difficult lives and prevalence of restrictive norms:

In my case when my husband leaves for the field I need to go with him. I have no one to do the household chores. When we return on the way back I need to collect firewood to make the fire and prepare food. If the food is not ready on time he will beat me. He never thinks I was with him the whole day. I also need to fetch water.

Men's narratives from churning cases, moreover, may also be laced with perceptions of powerlessness and despair. According to a 50-year-old farmer and father of eight who joined the Oromia village's poor men's group:

Hopelessness is the most damaging effect that traps people below the poverty line. The community considers them poor, and they are discouraged about changing their life.

Every community has its own culture of inequality, and our sample captured quite a few with bottom steps that crush agency.

To better understand the conditions that enable women and men to escape from the bottom steps of their ladders, this paper casts a spotlight on the transforming cases, where many women and men indicate they are making empowering movements up their ladders and leaving poverty behind. Toward this end, we next present another case study of a transforming context. This time we broaden the spotlight to include narratives from the village men and their vital contributions to agricultural innovation processes that benefit from normative relaxation and greater gender equality.

Case study: A minority village in the throes of good change

Situated in the Vietnamese highlands and home to Thai ethnic minorities, Hom village has been experiencing rapid economic development. In explaining their movements on the ladders, men and women alike express appreciation for improved infrastructure that now better connects the village to the nearest town, electricity, and availability of running water. Work for pay, market activities, and mobility (using motorbikes) also increased for both women and men. Agricultural innovations that mainly include hybrid varieties of maize, but also of rice, longan (a tropical

fruit), mango, and other crops, as well as modern equipment and chemical fertilizer, have considerably increased productivity and profits. Formal education is now the norm for both girls and boys. These changes reflect the Vietnamese government's economic reforms and other policy initiatives since 1986 to promote rural as well as urban development, referred to as *Đổi Mới* (Renovation), which seeks to create a socialist-oriented market economy and open the country to the outside world (Thin, 2009; Knodel et al., 2004).

Middle-class men say they have climbed from step 2 to 3.6 on the Power and Freedom Ladder and speak to recent economic developments that include the knowledge gained through agricultural demonstration sites, training, and workshops led by extension agents and agricultural input companies. These resources, and motorbikes that aid their mobility, enable them to increase their productivity, income, and confidence. Poor men perceive nearly half the village still in poverty but falling from 70 percent a decade ago. They consider that women and men should cooperate to lift their households out of poverty because when the “husband and wife are not united, not working together” households may remain trapped in poverty.

Likewise, middle-class women attribute their quite similar climb from step 1.9 to step 3.6 to their ability to move around with the establishment of the new road, as earlier “women could not ride a motorbike, did not know where to sell products, and depended on their husbands for everything. They could only stay home to do farm work and bring up children.” Hom's women also attribute their increased power and freedom to how they are more educated and aware of their rights, and more assertive in their households. According to poor men and women, domestic violence has decreased in the village due to lower poverty levels, but also to the better implementation of legislation against domestic violence by a local security team and police officers, and to women's greater knowledge of their rights due to television, radio, and newspapers (poor women's group).^v

Middle-class and youth focus groups in Hom village consistently present testimonies that convey men to be good husbands when they “help their wife” with household work and childrearing, and the poor and youth focus groups reflect directly on questions of gender equality and all consider that to be desirable in this case. Their statements resonate with the Vietnamese government's official discourse on gender equality, wherein women's and men's equal participation is central to socialist state development, and their shared responsibilities within the family—including household chores and childcare—are affirmed in the Constitution and in family law (Que 1996; Schuler et al., 2006).

Yet, community members temper their statements about gender equality. All focus groups consider men the “pillar” of the family, head of household, and main decision-makers. It is still “strange for a wife to make more money than her husband” (middle-class women), and women recognize that they have fewer opportunities than men to learn of and take a risk on a new agricultural practice. Nonetheless, despite these expectations, their narratives reveal a normative climate that is fluidly enabling some relaxation and change in women's and men's roles, decision-making, and opportunities within Hom's patriarchal context. In response to a hypothetical scenario about a man's ability to spend his inheritance on a motorbike against his

wife's will, a middle-class man acknowledges his wife's agency and the value of cooperative gender relations:

It's . . . difficult to [spend my inheritance] without my wife's agreement because we are supposed to agree with each other. A motorbike is only worth it when she is on it with me. If I buy it [against her will], she might not ride it with me.

Patterns of resource distribution

In this section, we compare community attributes that are common in each of the community types—transforming, climbing, and churning. Our evidence, from key informants and focus groups, reveals the importance for transforming contexts of public services, expanded markets, and men's labor migration. Central to these processes, however, is a normative climate that is catalyzing greater gender equality and both women's and men's participation in and benefits from their village's agricultural innovation process, as this is the life blood of their economy. Embedded in this macro environment is the evidence we have garnered on community members' perceived power and freedom to be decision-makers and to move their households out of poverty. The transforming communities include two each in India (Rajasthan and Uttar Pradesh) and Uzbekistan, and one each in Mexico, Nigeria, Nepal, and Vietnam. To be sure, India and Uzbekistan are countries that have been experiencing extremely rapid economic growth for more than a decade, while the other four countries have witnessed more moderate growth. Between 2004 and 2014, which is roughly the observation window for the study's recall data on trends, Uzbekistan's Gross National Income (GNI) grew by a median of 8.81 percent, India's by 7.98 percent, Vietnam's 5.72 percent, Nigeria's 5.71 percent, Nepal's 4.42 percent, and Mexico's 3.30 percent (World Development Indicators, 2017).

As shown in Figure 2, compared to the climbing and churning sets, transforming cases are more favorably endowed with various economic, social, and natural resources, such as electricity, daily markets, producer groups, and teenagers in school. Yet, it is important to indicate that in four of the six countries with at least one transforming case, there are also one or more churning cases. For instance, in the previous section we highlighted a case from Chiapas, Mexico that is prosperous compared to most cases but nevertheless sorted into the churning set. While agricultural and other development opportunities may be growing in countries with prospering macroeconomies, our data make evident that these favorable conditions are not necessarily widely shared in their countryside.

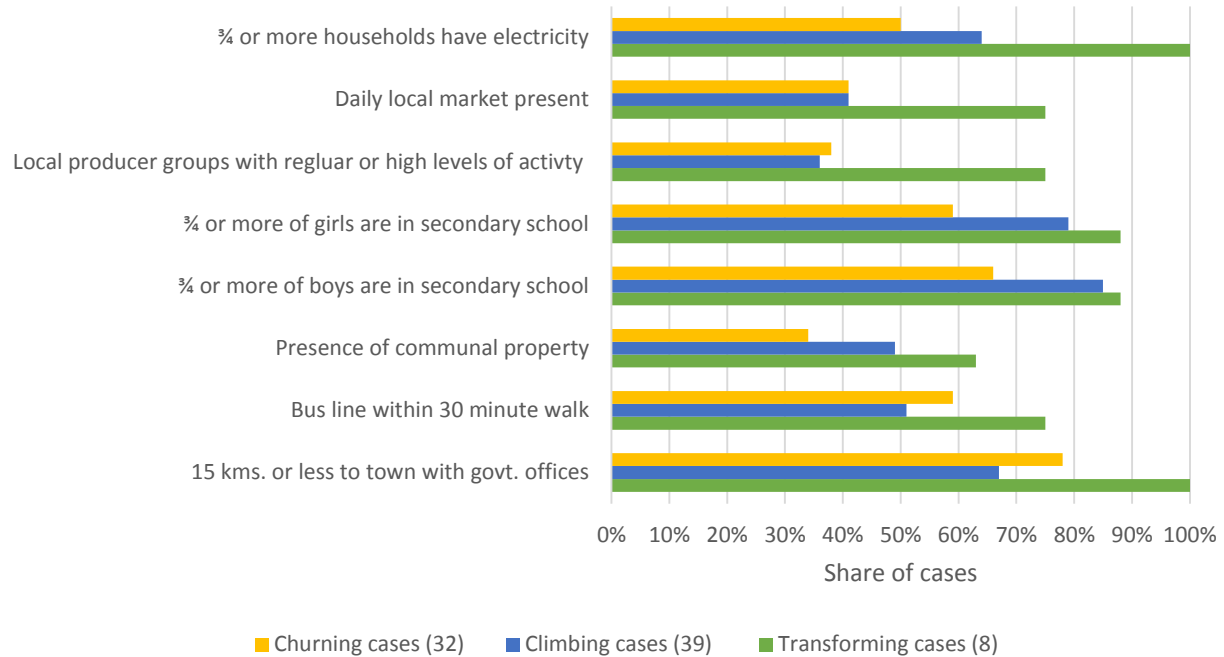


Figure 2. Selected community infrastructure, by type of cases (Key informants, 79 cases)

One way we took stock of local gender norms affecting economic opportunities was to systematically ask poor men's and women's focus groups whether remunerated labor is "common or not common" among four types of women in their village: young unmarried women, young married women, older married women, and widows. Across the transforming cases, focus groups of both men and women largely observe paid work to be common for all classes of women. Among the men and women in the climbing and churning cases, an interesting pattern emerges where it becomes increasingly common for women to work for pay as they move through different life stages. Young married women are indicated to be the least likely to work for pay overall, with men in two-thirds of the churning contexts indicating that this type of woman does *not* work for pay.

We also saw similar patterns of fluidity in norms shaping women's mobility. In a rating exercise, youth focus groups of both sexes from all but one transforming case assess that it is very common for women of their village to move about independently in public (e.g. at least six or more in every 10 local women). Young people report this in about half the climbing and churning villages. Likewise, compared to the other cases, in transforming communities, young people more often report that it is rare to marry before age 18.

Key informant responses to gender-differentiated questions gathered to build community profiles largely corroborate the focus group observations (Figure 2). Key informants from transforming contexts observe that it is common for women of their village (i.e. ≥ 30 percent of local women) to take jobs as agricultural workers. In comparison this is common in only half the cases in climbing communities and less than 40 percent of churning ones. Similarly, in 75 percent of the

transforming communities, key informants estimate that at least half of traders in the local market are women; while this is the case in roughly 40 and 50 percent, respectively, in the climbing and churning cases. Men's and women's temporary labor migration is also higher in the transforming communities compared to the others. Further, heavy male migration creates the need and resources for married women to access commercial farming opportunities, but the impacts of these processes remain variable.^{vi} This links with reports that local women are more likely to have access to irrigation in transforming communities than women elsewhere. Transforming cases are also more likely to have elected women as village leaders.

To better understand how macro-structural changes, such as new government policy initiatives, and new codes of women's behavior operate, we systematically reviewed narrative data from an illustrative sample of focus groups in 22 of the 79 cases, including all eight transforming cases, eight climbing cases, and six churning cases. We selected cases that would provide strong contrasts in regional, country, and local contexts. Women across the transforming communities testify to greater freedoms as well as more diverse outlets to innovate in their rural livelihood activities and describe gaining more authority in the household. Although the historical and current circumstances in the transforming contexts vary, a normative climate which is becoming more inclusive for women and men alike to exercise agency ties them together, as well as greater livelihood innovation, improved public services, growing markets, and men's migration. But for one focus group with poor women in the transforming set, every focus group with middle-class and poor women in the eight cases describe local women engaged in new or increased agricultural and marketing activities and note that this work was both desirable and normatively acceptable. Among climbing and churning cases, these types of testimonies appear but with much less frequency. Even though different types of local women in climbing and churning cases are actively farming and vending, their narratives often associate agricultural innovation and breadwinning with men, and, if they mention women's experience with innovation, often it is accompanied with explanations of their normative role in provisioning food for the family or of different normative constraints that they face with their livelihood activities.

Before moving to a discussion of the findings, we present one more transforming case where especially rapid social and economic change has taken hold. Middle-class women and men from this village position themselves on steps 4.3 and 4.4, respectively, on their Ladders of Power and Freedom—the combined highest levels among our cases. Moreover, poor women and men alike observe very rapid poverty reduction, at 57 and 67 percent, respectively, with poverty now seen to affect perhaps 10 to 15 percent of their village rather than one in three families, as in a decade ago.

Case study: Where new thinking and resources spread widely

Nodira sits in Uzbekistan's Andijan Province. Major market reforms, significant agricultural innovation, infrastructure improvements, and men's migration emerge as important factors in testimonies. The local women's contributions to transforming their village may also reflect the specific history of this region, where, during the Soviet era large numbers of rural women were employed in the public sector, and since then quotas and other measures have supported women's economic participation (e.g. Jayal, 2006).

When describing Nodira's strong and growing farm production and businesses, men and women both highly praise their government's new and simpler business registration procedures, tax incentives for rural businesses, loans for young people, and investments in women's enterprise development and skills. "Simultaneously our thinking has changed," declares a member of Nodira's poor women's focus group. "We understand that success in business depends on us, our skills and experience, and education and access to modern information about new technologies." Middle-class women relate how they sell more farm produce due to new roads and market infrastructure; and a young woman in her focus group declares, "Mostly young girls are busy in our local markets and some girls are working in private bakeries and private mills."

Our key informant, a woman community social worker with the *mahalla* (lowest level of government), estimates that approximately half of the local men continue to take advantage of lucrative temporary work beyond the village, often in Russia or Kazakhstan. As she explains:

We [women] need to work and take matters into our own hands and head our households. This has had a very strong impact on the economic activity of women.

With so many men abroad, the women say they are the ones managing the community's farms, going to their local *mahalla* to "ask about new wheat technologies." They are active in the farming association and securing bank loans, as these help them to "diversify their activities, such as by combining wheat, cotton, livestock, and dairy production," explain members of the middle-class focus group.

These women, much like the women in the other transforming cases, are deeply engaged in their community's innovation processes. Especially insightful testimony about these catalytic processes and the benefits of gender equality for farming communities comes from a poor man in this village of Uzbekistan:

[Women] enjoy the same rights as men do. There is nothing bad about this. It's good. And the longer couples live together, they start to take decisions together related to household. It is also important to diversify household incomes and introduce new practices in crop production, innovations like [new] seedlings which will . . . [mature] much earlier and sell for a higher price; or the combined cropping of legumes with wheat which will increase soil fertility. All in all joint decision-making is good in cushioning some negative effects during unfavorable seasons. This helps the family to better manage available resources and control spending together, which is important in generating savings and creating some assets for buying a cow, building a barn, or even buying a home on mortgage.

These types of close and cooperative gender relations likely have strong roots in many farming households around the world, but we rarely hear men reflect on them in our focus groups with their peers. Such expressions run counter to restrictive normative expectations that entitle men to

control over women. In many cases we see members of men's focus groups aggressively holding one another to account for these norms.

Meanwhile, testimonies from poor women in Nodira suggest that they, like middle-class women of their village, enjoy greater latitude than in most of the research contexts to withdraw from some of the normative expectations constraining their daily lives. They speak of exhaustion and repeat a local saying that they need "40 lives" to manage their responsibilities. But in the transforming communities, men openly acknowledge the importance of women's contributions, and a poor woman can confide in her focus group that in the rare times when her husband is cooking, "It turns out tasty."

Discussion

Knight and Ensminger (1998, p. 105) offer a definition of social norms that calls attention to how they "structure social interactions" and "determine in significant ways the distribution of the benefits of social life." The ladder data from each case study provide a window into these distributional workings of norms and how they differentially color perceptions of opportunities for exercising agency among the different gender, socio-economic and age groups that joined our focus groups. In Nodira, our evidence illuminates a highly beneficial transformation that may arise when an effective program of state decentralization interacts with a local normative climate that is becoming more inclusive and enabling diverse community members to contribute to and benefit from the agricultural innovation process underway in their rural economy.

In climbing villages our evidence reveals an *excluding* normative climate for some populations in the village where, depending on the social group, norms fluidly remain restrictive or relax to accommodate local women's and men's varying day-to-day interests and capacity to take decisions and mobilize resources. Gendered power relations, nevertheless, mean that these complex interactions between norms and agency most often benefit men and operate in ways that slow down or impede local transitions to more equitable gender norms. As discussed earlier, churning contexts typically present evidence of a significant share of a village perceiving exclusion from or being disadvantaged by their local development processes. These difficult circumstances may drive a relaxation of some gender norms, such as those shaping women's agricultural roles, while others remain restrictive.

In transforming contexts, by contrast, we find extensive evidence pointing to a normative climate that is becoming more *inclusive*, enabling both women and men to seek out resources, take risks, try new things, and scale their ladders. Our comparative and contextual work with the transforming cases reveals the relaxation and change of diverse norms governing women's lives. Compared to climbing and churning cases, women and men alike in transforming contexts attest to greater freedoms for women to express their opinions, be mobile in their villages, manage commercial crops, and innovate with agri-processing and other entrepreneurial initiatives. Significantly, in addition to an inclusive normative climate, the agentic capacity of women is simultaneously being buttressed by infrastructure investments, growing markets, and men on the move to better jobs—a challenging mix that helps to explain why these catalytic processes are

not found more widely in our data. Thus, what we can conclude is that the confluence of these favorable conditions appears to unleash broader mechanisms of social change that make local level institutions not only more inclusive but more effective, thereby fueling the accelerated trajectory of increased agency and poverty reduction. These are the transformative local-level social processes expressed at the heart of GENNOVATE's conceptual framework.

Nevertheless, norms do not consistently move together even in our most thriving villages. We often find, for example, women's middle-class focus groups perceiving more scope for negotiating norms and accessing opportunities than poor and young women. In Nodira and Hom, testimonies portray men contributing to housework and care, while this was less apparent in Cheeda. Young people who joined our focus groups are more educated than their parents, and most aspired to professional jobs rather than agricultural futures (Elias et al., 2018; Muñoz Boudet, Petesch, and Turk, 2013). Still, two of the women in Cheeda's youth focus group display a more open mind: "Traditionally men and women have performed different roles in agriculture but that is gradually changing," and, "The younger generation is very keen on adopting new methods and machines." Indeed, our evidence shows that women along with men in the transforming contexts are perceiving significant opportunities in the technological and other changes underway in their village. In Hom, women speak of how new roads and use of motorbikes now enable them to access markets in other villages and towns.

While women and men of climbing and churning cases also testify to using improved seeds that mature quickly, irrigation, chemicals, tractors, motorbikes and mobiles, these technologies have yet to fuel the accelerated development trajectories of the transforming contexts. Across the cases, the fluidity of gender norms poses opportunities as well as barriers to innovation, but our evidence makes clear that the spaces for negotiating and changing norms are greater in the transforming cases.

Before concluding, we reflect briefly on our ladder measures and research collaboration. Instruments that enable local people to assess and reflect together about the trajectory of change in their community provide powerful collaborative learning tools, both for study participants and researchers. To build the wellbeing ladders, focus groups of poor women and of men meaningfully detail and reveal their own gendered understandings of the culture of inequality. They describe processes of upward (or downward) mobility on their ladders that are grounded in "concrete flows of people among clusters, especially clusters that differ significantly in dominance" (Tilly, 2007, p. 55). The ladder tools are also useful because they enable some comparison, while narrative data provides a starting point from which to assess the normative climate that is shaping and being shaped by these flows in women's and men's agency.

Conclusions

Technological and institutional change is vital for agricultural villages to contribute to and benefit sustainably from opportunities in the wider economy (IFAD, 2016). GENNOVATE's concern for normative influences on agency, qualitative comparative methodology, and community typology contribute new approaches to conceptualizing agricultural innovation. By

reaching out to learn from women and men, as well as from different socioeconomic and age groups in a community, we obtained a fresh and valuable perspective on the conditions that enable an accelerated trajectory of inclusive agricultural innovation. In the eight transforming cases, where all six focus groups observed significant empowerment and poverty reduction, we also found evidence of increasing gender equality and agricultural innovation combined with infrastructure improvements, expanded markets, and male migration. Yet, our findings across the wider set of cases align with studies indicating that gender equality does not necessarily improve with economic growth and poverty reduction (Kabeer, 2016; Kabeer and Natali, 2013).

Some experts have long maintained that “poverty is as much a cultural as a material phenomenon in even the poorest societies” (Jackson, 1998, p. 80). However, prevalent conceptualizations of agricultural innovation, as well as of empowerment and poverty dynamics, continue to conceive of the challenge of gender equality as largely one of increasing individual or household assets or meeting basic needs. Our findings support Jackson’s claim that draws attention to the cultural context and suggest that other analytic frameworks, such as GENNOVATE’s, also have much to contribute to better understanding today’s agricultural innovation challenges, as well as other critical development needs.

Acknowledgements:

We wish to extend our deep gratitude to the women and men from villages around the world who joined the GENNOVATE focus groups and interviews and generously shared their time, views, and experiences. The authors also thank the Bill and Melinda Gates Foundation for their generous support, the field teams for excellent data collection, George Williams and Anya Umantseva for valuable research contributions, our two anonymous reviewers for very helpful guidance, and Alice Evans and Vanessa Gray for feedback on earlier versions of the paper.

References

- Alkire, S., Meinzen-Dick, R., Peterman, A., Quisumbing, A. and Seymour, G. (2013) ‘The Women’s Empowerment in Agriculture Index’, *World Development*, 52, pp. 71-91.
- Amuyunzu-Nyamongo, M. and Francis, P. (2006) ‘Collapsing livelihoods and the Crisis of Masculinity in Rural Kenya’, in Bannon, I. and Correia, M.C. (eds.) *The Other Half of Gender: Men's Issues in Development*. Washington, DC: World Bank, pp. 219-244.
- Badstue, L., Petesch, P., Feldman, S., Prain, G., Elias, M., and P. Kantor (2018) ‘Qualitative, Comparative and Collaborative Research at Large Scale: An Introduction to GENNOVATE’, *Journal of Gender, Agriculture and Food Security* 3(1), pp. 1-27.
- Badstue, L., Petesch, P., Williams, G. and Umantseva, A., with Daniela Moctezuma (2017) Gender and innovation processes in wheat-based systems. GENNOVATE Report to the CGIAR Research Program on Wheat. GENNOVATE Research Paper. Mexico, D. F.: CIMMYT.
- Barker, G. and Ricardo, C. (2005) ‘Young men and the construction of masculinity in Sub-Saharan Africa: implications for HIV/AIDS, conflict, and violence’, Social development papers; no. CPR 26. Conflict prevention and reconstruction series. Washington, DC: World Bank.

- Batliwala, S. (1993) 'Empowerment of women in South Asia: concepts and practices', Asian-South Pacific Bureau of Adult Education: Mumbai.
- Bicchieri, C. (2006) *The Grammar of Society*. Cambridge, U.K: Cambridge University Press.
- Boserup, E. (1970) *Woman's role in economic development*. London: George Allen & Unwin.
- Bullock, R. and Tegbaru, A. (Under review) 'Understanding agency in innovation processes: A case study of hybrid maize in Western Kenya', *Geoforum*.
- Cislaghi, B., Manji, K. and Heise, L. (2018) 'Social Norms and Gender-related Harmful Practices', Learning Report 2: Theory in support of better practice. Learning Group on Social Norms and Gender-related Harmful Practices, London School of Hygiene & Tropical Medicine.
- Connell, R.W. (2003) 'Masculinities, Change, and Conflict in Global Society: Thinking about the Future of Men's Studies', *The Journal of Men's Studies* 11(3): 249-266.
- Davis, S. (2007) 'Migration, remittances, and ethnic identity: the experience of the Guatemalan Maya in the United States', in Narayan and Petesch, (eds.) *Moving out of poverty: cross-disciplinary perspectives on mobility*, 1, pp. 333-350.
- Donald, A., Gayatri, K., Annan, J., Falb, K. and Goldstein, M. (2017) 'Measuring Women's Agency', Policy Research Working Paper 8148, Office of the Chief Economist, Africa Region and Development Data Group, World Bank, Washington, D.C.
- Doss, C.R. (1999) *Twenty-five years of research on women farmers in Africa: Lessons and implications for agricultural institutions; with an annotated bibliography*. 1999. CIMMYT Economics Program paper No. 99-02. Mexico D.F.
- Elias, M., Mudege, N., Lopez, D. E., Najjar, D., Kandiwa, V., Luis, J., Yila, J., Tegbaru, A., Ibrahim, G. and Bentaibi, A. (2018) 'Gendered Aspirations and Occupational Trajectories among the Rural Youth: A Cross-regional Perspective', *Journal of Gender, Agriculture and Food Security* 3(1), pp. 82-107.
- Evans, A. (2015) *Urban Social Change and Rural Continuity in Gender Ideologies and Practices*. Working Paper. Department of Geography, University of Cambridge.
- Hall, A. (2007) 'Moving away from poverty: Migrant remittances, livelihoods and development', in Narayan and Petesch, (eds.) *Moving out of poverty: cross-disciplinary perspectives on mobility*, 1, pp. 307-332.
- Hulme, D. Moore, K. and Shepherd, A. (2001) 'Chronic poverty: meanings and analytic frameworks', *CPRC Working Paper 2*, Chronic Poverty Research Centre, ISBN: 1-904049-01-X.
- IFAD (2016) 'Rural Development Report 2016: Fostering inclusive rural transformation', International Fund for Agricultural Development (IFAD), Rome, Italy.
- Jackson, C. (1999) 'Men's work, masculinities and gender divisions of labor', *The Journal of Development Studies*, 36(1), pp. 89-108.
- Jackson, C. (1998) 'Women and poverty or gender and well-being', *Journal of International Affairs*, 52(1), pp. 67-81.
- Jayal, N.G. (2006) 'Engendering local democracy: the impact of quotas for women in India's panchayats', *Democratisation*, 13(1), pp. 15-35.
- Kabeer, N. (1999) 'Resources, agency, achievements: reflections on the measurement of women's empowerment', *Development and Change*, 30(3), pp. 435-64.

- Kabeer, N. (2016) 'Gender equality, economic growth, and women's agency: the "endless variety" and "monotonous similarity" of patriarchal constraints', *Feminist Economics*, 22(1), pp. 295-321.
- Kabeer, N. and Natali, L. (2013) 'Gender equality and economic growth: is there a win-win'? IDS Working Paper 417. Brighton, UK: Institute of Development Studies (IDS).
- Kandiyoti, D. (1988) 'Bargaining with Patriarchy', *Gender and Society*, 2(3), pp. 274-290.
- Kimmel, M. S. (2000) *The Gendered Society*. New York: Oxford University Press.
- Knight, J. and J. Ensminger (1998) 'Conflict over changing social norms: Bargaining, ideology, and enforcement' in Brinton, M.C. and Nee, V. (Eds.), *The new institutionalism in sociology* (pp. 105- 126). Stanford, CA: Stanford University Press.
- Knoedel, J. E., Loi, V.M, Jayakody, R. and Huy, V.T. (2004) "Gender Roles in the Family: Change and Stability in Vietnam." PSC Research Report No. 04-559, Population Studies Center, University of Michigan, Ann Arbor, Michigan.
- Luis, J.S., D. Villanueva and R. Puskur. (2018) Gender and innovation processes in rice-based systems. GENNOVATE Report to the CGIAR Research Program on GRiSP. GENNOVATE Research Paper. IRRI, Philippines.
- Mackie, G., Moneti, F., Shakya, H. and Denny, E. (2015) *What are social norms? How are they measured?* New York: UNICEF and UCSD.
- Malapit, H. J., Sproule, K., Kovarik, C., Meinzen-Dick, R., Quisumbing, A., Ramzan, F., Hogue, E. and Alkire, S. (2014) 'Women's Empowerment in Agriculture Index: Baseline Report', International Food Policy Research Institute, Washington, DC.
- Muñoz Boudet, A.M., Petesch, P. and Turk, C. (2013) *On Norms and Agency: Conversations about Gender Equality with Women and Men in 20 Countries*. Washington, DC: World Bank.
- Narayan, D., ed. (2005) *Measuring Empowerment: Cross-Disciplinary Perspectives*. Washington, DC: World Bank.
- Narayan, D. and Petesch, P. (2005) *Moving Out of Poverty: Understanding Freedom, Democracy, and Growth from the Bottom Up—Methodology Guide*. Washington, DC: Poverty Reduction Group, Poverty Reduction and Economic Management Network, World Bank Group. Available at http://siteresources.worldbank.org/INTMOVOUTPOV/Resources/2104215-1246308425188/MOP_Methodology_Guide.pdf
- Pearse, R. and Connell, R. W. (2016) 'Gender norms and the economy: insights from social research', *Feminist Economics*, 22(1), p. 30-53.
- Petesoch, P., Badstue, L., Camfield, L., Feldman, S., Prain, G. and Kantor, P. (2018) 'Qualitative, comparative and collaborative research at large scale: the GENNOVATE field methodology', *Journal of Gender, Agriculture and Food Security* (3)1, pp. 28-53.
- Petesoch, P., Badstue, L. and Prain, G. (2018) 'Gender norms, agency, and innovation in agriculture and natural resource management: The GENNOVATE methodology', Mexico, D. F.: CIMMYT. Available at http://gender.cgiar.org/wp-content/uploads/2018/02/GENNOVATE-Methodology_Feb2018_FINAL.pdf
- Petesoch, P., Bullock, R., Feldman, S., Badstue, L., Rietveld, A., Bauchspies, W., Kamanzi, A., Tegbaru, A. and Yila, J. (2018a) 'Normative dimensions of agency and agricultural decision-

- making in Sub-Saharan Africa', *Journal of Gender, Agriculture and Food Security*, (3)1, pp. 108-130.
- Petes, P., Badstue, L., Williams, G., Farnworth, C. and Umantseva, A. (2017) *Gender and innovation processes in maize-based systems*. GENNOVATE report to the CGIAR Research Program on Maize. GENNOVATE Research Paper. Mexico, D.F.: CIMMYT.
- Que, Tran Thi (1996). Gender issues in Vietnam's development. In Norlund, I., Gates, C. and Dam., V. C." (Ed.), *Vietnam in a changing world*. Surrey: Curzon, pp. 187-206.
- Quisumbing, A. R. (1996) 'Male-female differences in agricultural productivity: Methodological issues and empirical evidence', *World Development* 24(10): 1579-1595.
- Quisumbing, A.R. and Pandofelli, L. (2010) 'Promising approaches to address the needs of poor female farmers: Resources, constraints and interventions', *World Development* 38(4): 581-92.
- Ragin, C. (2000) *Fuzzy-set social science*. Chicago: The University of Chicago Press.
- Ragin, C. (2008) *Redesigning Social Inquiry: Fuzzy Sets and Beyond*. Chicago: The University of Chicago Press.
- Rasanathan, J. J. K. and Bhushan, A. (2011) 'Gender-based violence in Viet Nam: Strengthening the response by measuring and acting on the social determinants of health', Background Paper WCDH/BCKGRT/4C/2011 Prepared for World Conference on Social Determinants of Health, Rio de Janeiro, Brazil; and Regional Office for the Western Pacific, World Health Organization.
- Razavi, S. (1999) 'Gendered poverty and well-being: an introduction', *Development and Change* 30(1), pp. 409-33.
- Schuler, S. R., Hoang, T. A., Vu, S.H., Tan, H.M., Bui, T.T., and Pham, V.T. (2006) 'Constructions of gender in Vietnam: in pursuit of the "Three Criteria"', *Culture, Health & Sexuality* 8(5), pp. 383-94.
- Sen, A. K. (1999) *Development as Freedom*. New York: Alfred A. Knopf.
- Sewell, Jr., W. H. (1999) 'The concept(s) of culture', in Bonnell, V.E. and Hunt, L. (eds.) *Beyond the cultural turn: new directions in the study of culture and society*. Berkeley and Los Angeles: University of California Press, pp. 35-61.
- Think, H.B. (2009) Rural employment and life: Challenges to gender roles in Vietnam's agriculture at present. Paper presented at the FAO-IFAD-ILO Workshop on Gaps, Trends and Current Research in Gender Dimensions of Agricultural and Rural Employment: Differentiated Pathways out of Poverty, 31 March-2 April 2009, Rome.
- Tilly, C. (2007) 'Poverty and the politics of exclusion', in Narayan, D. and Petesch, P. (eds.) *Moving out of poverty: cross-disciplinary perspectives on mobility*. Vol. 1., New York and Washington, DC: Palgrave Macmillan and World Bank Group.
- Turk, C., Petesch, P. and Muñoz Boudet, A.M. (2010) *Defining Gender in the XXI Century: Methodology Guide*. World Bank: Washington, DC.
- van Eerdewijk, A. Wong, F., Vaast, C., Newton, J., Tyszler, J. and Pennington, A. (2017) White Paper: A Conceptual Model of Women and Girls' Empowerment. Amsterdam: Royal Tropical Institute (KIT).
- World Bank (2017) World Development Indicators. Available at <https://data.worldbank.org/products/wdi>. [Accessed 11 September 2017].

End notes

ⁱ The limited coverage of Latin America reflects regional investment priorities for international agricultural research for development.

ⁱⁱ GENNOVATE's ladders build on approaches and methods developed for the World Bank global qualitative studies, including the *Moving Out of Poverty* study's Ladder of Life (Narayan and Petesch, 2005); and the *On Norms and Agency* study's Ladder of Power and Freedom (Turk, Petesch, and Muñoz Boudet, 2010). In the GENNOVATE methodology package (Petesch, Badstue, and Prain, 2018), the Ladder of Wellbeing is called the Ladder of Life. We substituted Ladder of Wellbeing in the paper to make it easier for the reader to associate the poverty findings with this module.

ⁱⁱⁱ However, urban poverty declines have been far more rapid, and current trends risk further marginalizing rural populations (IFAD, 2016).

^{iv} In two transforming villages (of Vietnam and Uzbekistan), an exception was made to relax the thresholds for young women to 2.9. Among the churning villages, there was but one youth focus group that sorted a case into this set. In this village, from Pakistan, young women position themselves on step 1.6. Middle-class men in this context indicate a modest climb from step 2.3 to 2.5, which is a relatively low level for men; and some of their narratives, such as those about indebtedness and scarce resources for farming, are similar to men's from other churning contexts in that country.

^v This is not to say that domestic violence has disappeared; in fact, it remains an issue in Hom and much of Vietnam (Rasanathan and Bushan, 2011).

^{vi} Evans (2015), Hall (2007), and Davis (2007) are insightful examples from a large literature on processes of normative and other institutional changes associated with rural-to-urban migration domestically and overseas, changes which more often do not filter back into the sending communities.