

**CGIAR GENDER
SCIENCE
EXCHANGE**

*Rooting
for Impact*

12–14 October 2022

Nairobi

Book of abstracts



**GENDER
EQUALITY**



YOUTH

**SOCIAL
INCLUSION**



GENDER Impact
Platform

CGIAR GENDER SCIENCE EXCHANGE

Rooting for Impact

12–14 October 2022, Nairobi

Book of abstracts



GENDER Impact
Platform

TABLE OF CONTENTS

Day 1: Capacity-strengthening sessions

Wednesday, October 12: 11:30–12:30

1.1 Measuring empowerment in agricultural development projects using pro-WEAI p6

1.2 Gender-Based Analysis Plus: A strengthened approach to gender integration and intersectionality p6

Wednesday, October 12: 13:30–15:00

2.1 Can Communities of Practice help us accelerate and improve our gender research? p7

2.2 How does the measurement of youth empowerment differ from women's empowerment? p7

Wednesday, October 12: 15:30–17:00

3.1 Take it from experienced authors! Practical tips for publishing a scientific article p8

3.2 How to use: GenderUp, a conversational method for Gender Responsible Scaling p8

Day 2: Science sessions

Thursday, October 13: 11:00–12:30

1.1 Into the 'black box': Methods and evidence for understanding intrahousehold decision-making p9

Beyond household headship: Examining the decision-making process among wheat growers in Bihar, India p9

Intrahousehold decision-making and sustained use of agricultural crop technologies: Evidence from smallholder women farmers in rural Uganda p9

A mixed-methods research tool for improving measurement and understanding of intrahousehold decision-making p10

Can I speak to the manager? Gender dynamics of maize plot management in Kenya p10

1.2 Intrahousehold consumption patterns and food preferences p10

Analysis of dietary diversity and determinants of fish consumption among women, children and households in Bangladesh p10

Evaluating nutritional knowledge, attitudes and practices among the vulnerable population in selected tribal locations in Telangana, India p11

Gendered mapping and consumer testing of steamed matooke in urban areas of Uganda p11

1.3 Gender in market systems and entrepreneurship p12

Gender in livestock agripreneurship: Implications for inclusive dairy value chain development in Tanzania p12

Exploring gendered entry points in the goat value chain in Senegal p12

Women's participation and empowerment in aquaculture: Mixed-methods evidence in Ghana p13

Women's hidden roles in urban food systems in Dhaka p13

Thursday, October 13: 13:30–15:00

2.1 Masculinities and femininities in farming systems p13

"Empowerment" without transformation? A scoping review on women empowerment, masculinities and social norms in agricultural research in Eastern Africa p13

Understanding the relationship between femininities and women's economic empowerment in rural farming communities of Central Uganda p14

Who is a man? Understanding the local gender normative climate for transformative nutrition-sensitive agricultural interventions in rural farming communities of Central Uganda p14

2.2 Methodological innovations: Indexes, ethics and frameworks for gender research p14

Measuring empowerment across the value chain: The evolution of the project-level Women's Empowerment Index for Market Inclusion (pro-WEAI+MI) p14

Women's empowerment in migration index (WEMI): Conceptual framework and early results from Bangladesh p15

A guide for conducting ethical gender-inclusive research: The gender research Ethics and Standards toolkit p15

Framework for incorporating Gender Equality and Social Inclusion (GESI) elements in Climate Information Services (CIS) p15

2.3 Integrating gender in climate action p16

Smallholder farmers' willingness to pay for crop insurance among women and men in Kenya p16

A gender-responsive approach to designing agricultural risk management bundles p16

Strengthening climate resilience of women farmers through innovative extension approaches p16

Gender analysis in rice-based systems in Mali p17

Thursday, October 13: 15:30–16:45

3.1 Advancing and measuring women's empowerment through/in nutrition interventions p17

Women's empowerment and improved nutrition: An assessment of a project in Bangladesh using an adapted version of pro-WEAI for small-scale fisheries and aquaculture (Pro-WEFI) p17

Women empowerment among ethnic minority communities in northern Vietnam and lessons from a seed system for nutrition intervention p17

Empowering women through a participatory nutrition-sensitive project in Western Kenya p18

3.2 Youth and migration in food systems	p18
Youth transitions and livestock in Kenya	p18
Livelihood aspirations and realities of young people in a Myanmar fishing community.....	p19
Men's rural-to-urban migration in Burundi: Effects on banana farming systems by left behind women	p19
3.3 Updating the FAO State of Food and Agriculture 2010-11 (SOFA) report: Evolution of gender in food systems	p19
Addressing gender inequalities and strengthening women's agency to create more climate resilient and sustainable food systems	p19
Fostering an enabling environment for equality and empowerment in agrifood systems	p20
Beyond crops: Toward gender equality in forestry, fisheries, aquaculture and livestock development	p20

Day 3: Science sessions

Friday, October 14: 9:30–11:00

1.1 Gender mainstreaming and doing gender research	p21
The process to "Gender Expert" in gender and agriculture: Learning from the GREAT model	p21
Doing GREAT: Genesis and evolution of a gender training program for agricultural researchers	p21
Do water, energy and food policies in support of solar irrigation enable gender-transformative changes? Evidence from policy analysis in Bangladesh and Nepal.....	p22
Gender mainstreaming from an institutional perspective: Cases of small and micro irrigation projects in Ethiopia....	p22
1.2 Learnings on women's empowerment	p22
Women's empowerment and livestock vaccination: Evidence from peste des petits ruminants vaccination interventions in northern Ghana	p22
Valuing control over income and workload: A field experiment in Rwanda	p23
An understanding of community perceptions of women empowerment in Kiboga District, Central Uganda	p23
Is women's empowerment bearing fruit? Mapping Women's Empowerment in Agriculture Index (WEAI) results to the Gender and Food Systems Framework	p23
1.3 Gendered impacts of and responses to shocks and stressors	p24
Gender-responsive investments and policies in the agriculture and food security response to the crisis brought about by Russia's war on Ukraine	p24
The gendered impacts of COVID-19 in Kenya, Niger, Rwanda and Uganda: Evidence from phone surveys	p24

Stressors within the cassava value chain in Nigeria: Preliminary evidence to strengthen gender-responsive breeding and inform resilience	p25
Gendered differences in accessing and using climate-smart agricultural technologies in Tanzania.....	p25

Friday, October 14: 13:30–15:00

2.1 Gender norms in food systems	p25
Gender norms and women's empowerment in dairy-related businesses in Tanzania: The case of Kilimanjaro and Tanga regions	p25
Improving inclusion of women in agricultural value chains in Papua New Guinea	p26
Toward a feminist Agroecology.....	p26
Is forum theater a gender-transformative tool? Experience from Bangladesh	p26
2.2 Enhancing adoption through gender-responsive technologies	p27
Understanding gender-specific constraints to agricultural technology adoption: Evidence from cassava farming in Kenya	p27
A systems approach to sustainable and inclusive farmer-led irrigation development: A case analysis from Nepal	p27
Would a gender lens assessment of crop breeding traits improve varietal product profiling? Application of the G+ Tools on the target table potato product profile for Kenya	p27
Gender-based assessment of rice and rice seed production in Niore hub, Senegal	p28
2.3 Collective action, governance and management of collective resources	p28
"Even the goats feel the heat": Gender, livestock rearing, rangeland cultivation and climate change adaptation in Tunisia	p28
Women's voices in civil society organizations: Evidence from a civil society mapping project in Mali	p28
Participatory rangeland management: Understanding women's engagement and implications for social change	p29
What influences women's participation in water governance? Preliminary findings from Bangladesh	p29

Day 1



Capacity-strengthening sessions

Wednesday, October 12: 11:30–12:30

1.1 Measuring empowerment in agricultural development projects using pro-WEAI

Ara Go, IFPRI

This session complements the recently launched distance learning course on the project-level Women's Empowerment in Agriculture Index (pro-WEAI). To ensure that everyone is familiar with the basics of pro-WEAI, all participants will be required to take this free online course in advance of the session (<http://elearning.foodsecurityportal.org/>). During the session, participants will be able to raise questions and go deeper on various aspects of the application of the tool, including survey fieldwork, index construction, qualitative analysis, as well as interpretation of quantitative and qualitative data, focusing on one of the pro-WEAI indicators, Work Balance, as an example. The session will also provide resources for all participants to learn more about how to use pro-WEAI.

This session is designed for CGIAR researchers who are interested in gender, women's empowerment and agriculture, and more specifically how to measure women's empowerment impact of agricultural development projects.

Our session agenda will feature a mix of presentations, breakout discussions and opportunities to ask questions and share ideas. During the breakout sessions, participants will be given a case study with relevant materials and guiding questions to discuss and analyze within their groups. We will use an online polling tool (Slido) to engage participants with live polls and capture and display their inputs in real-time. We also propose to offer "WEAI office hours" during October 13–14 to help those who need further technical assistance on WEAI.

1.2 Gender-Based Analysis Plus: A strengthened approach to gender integration and intersectionality

Miranda Morgan, Alliance of Bioversity-CIAT

The Government of Canada has been using Gender-Based Analysis (GBA) as an analytical tool to support the development of more responsive and inclusive initiatives for over 25 years. The approach has changed over time, moving from GBA to GBA Plus to signify the range of identity factors beyond gender (such as age, race, religion, disability, socioeconomic status, geographical concerns, etc.) that constitute inequality and need to be integrated in analyzes to support more inclusive policies. An even more recent iteration of the GBA Plus approach emphasizes the role of social relations, structures and systems of oppression for producing and maintaining inequalities. Together these changes and the resulting tools are enabling researchers, analysts and policymakers alike to develop and engage with deeper and more intersectional social analyzes.

This session will introduce participants to the strengthened approach to GBA Plus, highlight useful and accessible GBA Plus guidance and tools, and identify ways the GBA Plus approach could support more intersectional and socially inclusive agriculture and food system research and policies. During the session there will be space to discuss the challenges and limitations of using a "gender-first" or additive approach to intersectionality and to highlight an example of how external partners (in this case, Canada's main Indigenous women's organizations) develop and use their own GBA Plus frameworks tailored to their respective contexts.

2.1 Can Communities of Practice help us accelerate and improve our gender research?

Arwen Bailey, Alliance of Bioversity-CIAT

There is often just one gender researcher per project, program team or CGIAR initiative, so gender research can be a lonely and challenging business due to lack of collaborative and critical discussion with fellow researchers. Collaboration helps researchers develop and enrich their theory and practice, and share their experiences, doubts, successes and puzzles or conundrums. Communities of Practice (CoP) are one way to cross organizational boundaries to create overarching learning and knowledge communities, providing spaces for collaborations and conversations throughout a project cycle. CoPs have been described as “a gathering of individuals motivated by the desire to cross organizational boundaries, to relate to one another, and to build a body of actionable knowledge through coordination and collaboration.” (World Bank). But what does it take to make a CoP successful?

OBJECTIVE

In this session, I will offer some tips from research and experience, so that participants can use CoPs better to achieve their own objectives in gender research. I will draw on examples mainly from the Alliance Gender Nexus Enabler (active since 2015) and the CGIAR Gender-Transformative Methodologies (just launched).

WHO WOULD BENEFIT

The session would benefit anyone who is curious about the power of Communities of Practice and thinking of setting one up to exchange experiences and ideas, address challenges and improve their research-for-development practice.

FORMAT

Format will be a presentation of around 30 minutes, then up to an hour to answer your questions. The session will cover:

- Basics of CoP theory
- What research and experience show works to make CoPs successful
- Examples from two Gender CoPs, one old one new

2.2 How does the measurement of youth empowerment differ from women's empowerment?

Esther Njuguna-Mungai, ILRI

It is increasingly clear that as programs design interventions that involve youth in agriculture and food systems with the intention of empowering them, sooner or later, those programs need to show that they are making progress in ‘youth empowerment’. But what tool or index can be used for monitoring and showing progress on youth empowerment across programs? Would the tools/indices used for women’s empowerment be usable in measuring youth empowerment? Would the domains of empowerment for youth be similar to those of women’s empowerment? What would be the alternative? We grapple with these questions as we design activities on the best entry points for youth engagement in livestock feeds and forage value chains under SAPLING. We want to propose a 1.5hr workshop with CGIAR gender scientists working on youth studies as part of their social inclusion research to:

1. Build consensus on what a youth empowerment tool/index would ideally look like
2. Learn from programs on how they are measuring/monitoring youth empowerment
3. Propose a methodology of evidence building around youth empowerment.

The workshop session intends to bring together like-minded CGIAR Gender and Social Inclusion researchers working on youth interventions in their agriculture and food system.

3.1 Take it from experienced authors! Practical tips for publishing a scientific article

Alliances Module, GENDER Platform

Publishing a scientific article is an integral part of what we do as researchers; but it can also be very challenging! In this peer-to-peer learning session, we will hear from gender scientists across CGIAR centers who have experience writing, publishing, and reviewing scientific articles to learn the ins and outs of publishing. Authors will share their personal experiences and strategies for selecting journals, writing and submitting articles, and revising articles based on reviewer and editor comments. Come prepared to ask questions, discuss your challenges, and find practical tips to ease the publication process, as peers and resource persons provide guidance – as well as moral support!

3.2 How to use: GenderUp, a conversational method for Gender Responsible Scaling

Anne Rietveld, Alliance of Bioversity-CIAT

GenderUp is a conversational method for designing responsible scaling strategies in a particular context. It is intended to be used by project teams who want to scale the use of an agricultural innovation in a socially inclusive way and who want to prevent undesirable outcomes. GenderUp supports users to identify gender and other relevant diversity among innovation users, and to improve the scaling strategy by optimizing the inclusion of relevant social groups and anticipating unintended negative consequences for different social groups.

GenderUp is a web-based tool that takes project teams on a journey through the stages of developing or improving a scaling strategy. The journey is facilitated by someone with a background in gender studies who is familiar with the tool. The objective of this capacity building session is to familiarize CGIAR gender researchers with GenderUp. Participants will learn about the objectives and functioning of the tool.

The session is relevant to gender researchers who want to use GenderUp with project teams to embark on a socially inclusive scaling journey. The session will enable them to discover the potential of GenderUp. Participants might become full-fledged GenderUp facilitators themselves. This session is a first step in that direction.*

GenderUp is a conversational method, designed to evoke discussion on relevant social issues that pertain to scaling. The session will discuss and lead participants through the web-based tool.

** To facilitate a GenderUp journey independently we envisage prospective facilitators, apart from this session, to join in on a real application journey and listen in and learn from the facilitator.*

Day 2



Science sessions

Thursday, October 13: 11:00–12:30

1.1 Into the 'black box': Methods and evidence for understanding intrahousehold decision-making

Chair: Dina Najjar, ICARDA

Beyond household headship: Examining the decision-making process among wheat growers in Bihar, India

Hom N. Gartaula, CIMMYT

Agricultural decisions among smallholders are made within the households where, in most cases, husband and wife discuss, contest, negotiate or consent to the decisions they make. Comparing men and women-led households misses these important dynamics of decision-making that are happening inside the households. Likewise, comparing household heads does not consider the role of women who live in men-led households. This study looks beyond who makes which decisions and the binaries of yes and no responses as a measure for gender dynamics. It disentangles the intrahousehold aspect of the decision-making process itself and helps understand the “why” behind decisions among wheat growers in two districts of Bihar—Madhepura and Darbhanga. It uses vignettes, or stories, to survey 420 women and men farmers (210 households) to identify the decision patterns across six key activities of wheat farming covering strategic, operational and financial decisions. The vignettes describe five possible household scenarios by narrating five short stories to individual respondents and showing corresponding graphics for visual aid. Preliminary analysis indicates that patterns between households and gender are not uniform. There are divergent patterns across five vignettes among

households for women and men’s roles. Further, they are found to have different patterns of responses to the same agricultural activities, adding more complexity in the mix. Understanding these dynamics will help design more comprehensive, effective and actionable approaches to gender-intentional interventions in wheat crop management, including breeding and inclusive seed system development, as it feeds to identify entry points for women’s role in agricultural decisions.

Intrahousehold decision-making and sustained use of agricultural crop technologies: Evidence from smallholder women farmers in rural Uganda

Losira Nasirumbi Sanya, GREAT

This research used a mixed-methods approach to examine how intrahousehold decision-making patterns shape sustained use of crop technologies among agricultural rural households in eastern Uganda. We estimate how empowerment in decision-making, measured using indicators drawn from the project-level Women’s Empowerment in Agriculture Index, mediates sustained use of improved crop varieties. Further, spousal differences in decision-making power and technology use are examined. The results indicate that both women and men use diverse improved crop varieties for different purposes. Overall, we observe differential patterns of use of improved crop varieties with a high proportion of women reporting sustained use of food-related crops, while a high proportion of men report income crops. There was a significant association between level of decision-making power and sustained use of improved crops by women and men. Women with higher levels of participation in decision-making power have more sustained use of improved varieties for the main crops grown. Note that a gender gap still exists in access to improved

varieties with men having six years of use on average, as compared to five years for women. We also find significant differences between women and men in the same household in their rating of the distribution and extent of involvement in key decisions, with less agreement (and misattribution) observed among women and men in decision-making scores. Women decision-makers tend to allocate themselves higher scores than was assigned to them by their counterparts. We conclude that women's empowerment in decision-making has potential to contribute to closing the gender gap in sustained use of agricultural technologies. We therefore need to be more intentional about women's participation, decision-making and agency in development interventions if we are to achieve greater impacts in sustained use of agricultural technologies toward better livelihoods.

A mixed-methods research tool for improving measurement and understanding of intrahousehold decision-making

Devis Mwakanyamale, IITA

A key aspect of women's empowerment is participation in important intrahousehold decisions. This paper describes a new mixed-methods emic-informed approach that we developed involving multiple stakeholders to explore intrahousehold decision-making on agriculture- and expenditure-related matters. The tool was piloted in cassava-producing districts in the Kagera and Kigoma Regions of Tanzania. It first comprises a qualitative guide that was used to interview 40 dyads (mostly married couples) who grow, process and/or trade cassava. We conducted thematic content analysis of these interviews and identified seven distinct patterns that dyads used to make decisions. These included: husband shares idea, discusses with wife, then (1) husband makes the final decision; (2) wife makes the final decision; or (3) they make a joint final decision. Alternatively, (4) husband shares idea with his wife before he makes the final decision; or wife shares idea, discusses with husband, then (5) husband makes the final decision; (6) wife makes the final decision; or (7) they make a joint final decision. These patterns informed the development of vignettes that describe intrahousehold decision-making, along with survey questions asking respondents which decision-making vignettes they most identify with and additional questions on why and how decisions are made in their households. Finally, these new modules were included in a multi-topic survey that was administered to around 1300 couples to validate the new decision-making modules. Our approach aims to help us better measure and understand intrahousehold decision-making and its links to household-level economic, food and nutrition security outcomes.

Can I speak to the manager? Gender dynamics of maize plot management in Kenya

Rachel Voss, CIMMYT

Research looking at the gender gap in uptake of agricultural technologies often assumes that women and men make farm management decisions as individuals. In fact, relatively little is understood about the dynamics of agricultural decision-making for plot management within dual-adult households. This study used vignettes to examine decision-making structures related to maize production in over 600 spousal-couple households in Kenya. The results indicate a high degree of joint management of maize plots (55%), although some management decisions—notably those related to purchased inputs—are more often controlled by men, while other decisions—including those related to hiring of labor and deciding how harvested maize will be used—are disproportionately controlled by women. The high prevalence of joint decision-making underscores the importance of ensuring that both men's and women's priorities, needs and constraints are reflected in design and marketing of interventions to support maize production, including those related to breeding, seed systems, capacity building and agricultural extension. Furthermore, evidence that men disproportionately control the decisions that most directly impact maize production potential, and that the rationales behind decision-making structures differ according to respondent gender, point to the relevance of gender-transformative approaches that increase respect for women's knowledge and build their influence over decisions that directly impact production potential.

1.2 Intrahousehold consumption patterns and food preferences

Chair: Rahma Adam, WorldFish

Analysis of dietary diversity and determinants of fish consumption among women, children and households in Bangladesh

Lucy Njogu, WorldFish

Malnutrition in Bangladesh is still a challenge, especially among women and children, partly due to low dietary diversity and discrimination in intrahousehold food allocation. Given the high levels of malnutrition in Bangladesh, and the importance of fish in providing

micronutrients, we sought to understand the dietary diversity levels, patterns and fish consumption determinants in households, and among women and children. We collected data from 2669 households in Rangpur and Rajshahi divisions. The study employs a Household Dietary Diversity (HDD), Individual Dietary Diversity–Women (IDD-W) and Minimum Dietary Diversity (MDD) to analyze the diversity of diets in general households, among women and children, respectively. Results indicate that although the average HDD was relatively high (8.22), the mean IDD-W for women and children was much lower at 4.99 and 4.90, respectively. Dietary diversity scores increased with consumption of fish and number of fish species consumed. Intrahousehold discrimination and substitution of fish and other types of meat in the households, was evident from the results. Households consumed an average of two species and the most commonly consumed fish species were not necessarily the most affordable. Increase in level of education and pond ownership were among the factors that were found to increase fish consumption. Counterintuitively, distance to the market and the price of fish were found to increase fish consumption. We recommend promotion of policies that encourage consumption of nutritious foods, such as fish, among women and children. In addition, we recommend that development organizations consider tastes and preferences in implementing fish related projects.

Evaluating nutritional knowledge, attitudes and practices among the vulnerable population in selected tribal locations in Telangana, India

Padmaja Ravula, ICRISAT

Purpose: Among the tribal populations in Telangana, pregnant women and lactating mothers are more susceptible to undernutrition because of low socioeconomic status, gender norms, market access, dietary habits and practices, and availability of nutritious food. Knowledge, Attitudes and Practices (KAP) studies offer an opportunity to better understand the sociocultural, psychological and behavioral determinants of nutrition, providing evidence for planning knowledge interventions. This paper aims to assess nutrition KAP during pregnancy and lactation in selected locations in Adilabad and Kumaram Bheem-Asifabad districts of Telangana, India.

Methods: A cross-sectional KAP survey was conducted on 536 individuals in the selected locations from February–March 2020. Tablet-based data collection was implemented for pregnant women, lactating mothers, young mothers and functionaries/frontline workers (Anganwadi [rural childcare center in India], schoolteachers and Accredited Social Health Activists

[ASHA] workers). Alongside descriptive statistics, different weightage method was adopted to generate the KAP scores for the respondents.

Results: The results reveal that regarding the three micronutrients (iron, vitamin A and iodine), the knowledge levels of pregnant women, lactating mothers and young mothers were low i.e., less than 50 percent when compared with the functionaries/frontline workers. Pregnant women scored low on attitudes regarding micronutrients compared to lactating mothers, young mothers, and functionaries/frontline workers. Attitudes translate into practices; however, the data revealed that pregnant women, lactating mothers, and young mothers were not adopting appropriate dietary and nutrition practices except for the micronutrient iodine. The inadequate knowledge of all categories of respondents indicates a gap in nutrition literacy and education.

Conclusion: The results point to the urgent need for policy action for nutrition education interventions among the vulnerable population. Some of the impactful policy actions would include (1) all (ICDS) staff operating in the field have to take mandatory nutrition knowledge sessions—potentially developed by ICDS, (2) mandatory training for all ICDS functionaries on maternal and child nutrition and health, and (3) regular training for young mothers to take part in ICDS activities in the anganwadis.

Gendered mapping and consumer testing of steamed matooke in urban areas of Uganda

Susan Ajambo, Alliance of Bioversity-CIAT

This paper explores the attributes of steamed matooke that are (un)desirable for urban consumers in Uganda by gender, age, and income status. Gendered food mapping involving the use of focus group discussions (FGDs) and individual in-depth interviews (IDIs) was conducted, followed by a consumer test with 381 consumers where four steamed matooke samples/cultivars were evaluated (Nakitembe, Kibuzi, Ntika and Mpologoma). Of the cultivars assessed Kibuzi was most preferred during the FGDs and had the highest mean overall liking in the consumer test (7.2). Ntika was least preferred (5.9). However, differences were observed among income classes and gender groups (sex and age). High- and low-income consumers gravitate toward Kibuzi, while for middle income consumers it was Mpologoma. The women (adult and youth) showed more preference for Mpologoma, while the men liked Nakitembe more. The mapping of sensory characteristics showed that the key drivers of overall liking were a yellow color; a nice aroma; attractive looking; sweet (delicious, not sweet like sugar); homogeneous (one color); good taste and soft. Matooke taste proved a key determinant for the

preference of steamed Kibuzi over the other varieties. It is important to undertake a sensory quantitative descriptive analysis and physio-chemical characterization of this attribute, to guide breeding efforts geared toward improving sensory acceptability of matooke cultivars. Differences were observed in preference among different income and gender categories, and breeders need to package products based on the preferences of the various socio-demographic segments, including by gender and income class groupings to enhance new cultivar adoption.

1.3 Gender in market systems and entrepreneurship

Chair: Sarah Mayanja, CIP

Gender in livestock agripreneurship: Implications for inclusive dairy value chain development in Tanzania

Amos Omore, ILRI

Sub-Saharan Africa has the highest rate of entrepreneurship in the world with more women in entrepreneurship. However, women profit about 30 percent less compared to men and are usually less present in profitable non-producer livestock value chain nodes. To inform policy and strategic intervention for inclusive dairy value chain development, it is imperative to understand how men and women and youths thrive as agripreneurs. To assess both economic and non-economic outcomes (mainly empowerment) of men, women and youth's involvement in dairy-related businesses, we use data collected from 92 dairy agripreneurs from Kilimanjaro and Tanga regions of Tanzania. We use partial least squares structural equilibrium model (PLS-SEM), a non-parametric approach that places fewer limitations on sample size and data distribution, to build hypotheses around cause-effect relationships between the outcomes. Though no significant difference was observed in terms of profitability, our results revealed that women and comparatively lowly educated agripreneurs scored significantly lower in business sustainability. Our PLS-SEM results revealed significant relationship between indicators that define business structure and empowerment. Moreover, men and women differed in terms of the indicators that significantly defined empowerment in its relationship with indicators of structure and business performance. For instance, "work-balance" was significant for both men and women, but "autonomy in income" was only significant for men, implying the need for varying

approaches for supporting the empowerment of men and women agripreneurs. The evidence of the relative importance and interdependence of the indicators serves to inform further causal-link research and initial recommendations for designing inclusive interventions.

Exploring gendered entry points in the goat value chain in Senegal

Simone Faas, IFPRI

The goat value chain (VC) plays an important role in household economics and diets throughout sub-Saharan Africa, particularly in Senegal. The resilience of goat production in unpredictable climates suggests the potential for increased importance as climate change effects become more disruptive to traditional food systems and diets. The primary research question of this study is: What is the role of goats and the goat VC for climate resilience, women's empowerment and improved nutrition in Senegal? By conducting interviews and focus group discussions (FGDs) with goat VC actors in urban/peri-urban, agricultural and pastoralist areas of Senegal, this study seeks to identify potential entry points for interventions along the VC, especially for women. In June and July 2022, in collaboration with the IFPRI Gender, Climate Change, and Nutrition Integration Initiative, researchers from the Institut Sénégalais de Recherches Agricoles (ISRA) facilitated 12 FGDs (six with men and six with women) across two regions (Niakhar and Louga) and conducted 30 key informant interviews with various goat VC actors in the regions of Dakar, Niakhar and Louga. Preliminary results indicate that more women are becoming engaged in goat rearing and production, becoming owners of the goats they manage and controlling the goat-related incomes. Women have developed climate-resilient strategies, including storing foraging materials during winter and selling goats to purchase food during the hunger season. Supported by USAID, the findings of this study will inform future interventions that aim to enhance women's engagement in the goat VC, improve household nutrition, and increase women's empowerment.

Women's participation and empowerment in aquaculture: Mixed-methods evidence in Ghana

Sena Amewu, IFPRI

This paper provides empirical evidence on the processes and strategies of encouraging women's entrepreneurship, and the impact of women's entrepreneurship on their empowerment in emerging aquaculture value chains in sub-Saharan Africa. We

do this by analyzing two survey rounds with 500 fish-producing households, A-WEAI, 11 in-depth interviews, and 7 focus group discussions of women in six major producing regions in Ghana.

Baseline data show that 9% of fish farm managers/owners were women, and women contributed 16% of labor days. Gender norms persist around aquaculture as men's work—few women entered aquaculture. Once women entered aquaculture they were, on average, at least as productive and profitable as men.

Women aqua-entrepreneurs were at least as empowered as men aqua-entrepreneurs. Being able to circumvent the gender norm that “aquaculture is men's work” and start and operate their own aquafarms, these women were empowered to begin with. Their experience in aquaculture had benefited them and empowered them more. Most spouses of men aqua-entrepreneurs were not involved in aquaculture, had a lower empowerment score, and were less likely to be empowered than the women and men aqua-entrepreneurs. Most of them indicated that they would like to get involved in aquaculture as it will generate more income. In this paper we discuss opportunities and strategies to involve more women in fish-producing households, and to encourage new women farmers to enter aquaculture and other aspects of the value chains.

Women's hidden roles in urban food systems in Dhaka

Farhana Hussain Ibrahim, CIP

Please note that this abstract is pending revision.

Urban food systems are embedded in highly unequal spaces, with layered hierarchies and divisions by class, gender, religion, generation and other social identities. In Bangladesh, urban food systems and associated policies are mainly developed by men from men's perspectives. Poor women are not excluded but adversely included in the systems as urban food producers, vendors and consumers. Those most marginalized women are hardly seen in the public space in either formal or informal urban food systems, while their voices are muted by the patriarchal system in which the male head of the household is expected to speak on their behalf. This lack of recognition of poor women's experiences in the urban food systems risks reinforcing gender inequality in the ongoing changes such as urbanization, commercialization and the enforcement of food safety regulations. Drawing on observation and in-depth interviews of (unofficial) women food vendors and food producers in Dhaka city, we explore the roles of poor women in sustaining urban food systems. We present key findings and methodological and conceptual implications of including gender into research design on urban food systems.

Thursday, October 13: 13:30–15:00

2.1 Masculinities and femininities in farming systems

Chair: Margaret Mangheni, GREAT

*“Empowerment” without transformation?
A scoping review on women empowerment,
masculinities and social norms in
agricultural research in Eastern Africa*

Amon Mwiine, GREAT

There is an increasing focus on re-thinking women's “empowerment” strategic interventions in order to achieve meaningful transformation in gender norms. This move is increasingly characterized by initiatives that deliberately seek to engage women and men, highlighting not only how women's lives in agricultural

communities are interwoven with men's lives, but also calls for involvement of men in women's empowerment work to address the underlying social norms, attitudes and behaviors that perpetuate gender inequalities. How have social categories “women” and “men”, and notions of empowerment and masculinities, been conceptualized in agricultural research on women's empowerment? How have these concepts been deployed in agricultural research and with what implications? This paper draws from a literature review. Search terms included: women's empowerment, masculinities, gender norms, agency, power relations, rural masculinities and “male involvement in agriculture”. Drawing on literature within agriculture and food systems, seed systems, and nutrition-sensitive agriculture in different regions of Africa and Asia, this paper argues that conceptualization of categories women, men, masculinities and femininities, and the approaches drawn therefrom (the assumptions we work with about women and men), have potential to transform and/or reproduce unequal gender power relations.

Understanding the relationship between femininities and women's economic empowerment in rural farming communities of Central Uganda

Shimali Fred, GREAT

Research has documented how men's behaviors in patriarchal settings affect women's economic empowerment outcomes, while less attention has been paid to how gender identity constructions around femininities influence these outcomes. We define *femininities* as gender-based roles and expected behaviors of women in a given community, and *economic empowerment* as women's decision-making regarding access and control of productive resources and management of income. This paper presents research on how women and men farmers in rural communities of Central Uganda define what it means to be a woman and how those identity constructions influence women's economic empowerment. This qualitative case study is based on focus group discussions conducted with Sasakawa Africa Association intervention farmers (28 women and 25 men) of Kiboga District. Six focus group discussions were conducted: two each with women only, men only, and both women and men. Findings reveal co-existence of traditional and progressive femininities, the latter dubbed "unruly" by men and some women. Traditional femininities were depicted as women complying to community values which deter them from financial decision-making and owning productive resources. Progressive femininities on the other hand are noncompliant to these community values and enjoy more economic empowerment. Men valued economically empowered women because they relieve men of financial responsibilities. Incorporating gender-transformative approaches in women's economic empowerment interventions could decode traditional femininities and increase women's intrinsic agency within the context of economic empowerment.

Who is a man? Understanding the local gender normative climate for transformative nutrition-sensitive agricultural interventions in rural farming communities of Central Uganda

Martha Businge, GREAT

Local gender normative climate refers to how norms in a community interact with women and men's agency—their ability to make strategic life choices. Understanding the normative climate includes unpacking the community's expectations of what it means to be a man or "masculinity norms". Such normative factors interact with and constrain opportunities for women's equitable participation

in agriculture, yet most women's empowerment literature focuses on factors at an individual level. This ongoing study aims to determine masculinity norms that affect women's ability to make strategic choices within the Sasakawa Africa Association's nutrition-sensitive agricultural extension project intervention areas in Kiboga District, Central Uganda. The study utilized an interpretive qualitative case study with data collected from sex-disaggregated focus group discussions with intervention beneficiaries. Findings indicate that the community expectation of who a man should be is informed by family formation and provisioning; dominance in household decision-making and leadership; and community level participation. The normative structures also exempted men from participating in domestic chores and negative sanctions were experienced by men that did so. Gender roles espousing notions like "vegetable growing is a woman's domain" dissuaded men's engagement in this activity. Consequently, domestic chores, on top of additional activities from vegetables growing under the project, present an increased labor burden for women. Inability to make strategic life choices (like attending training that would build their capacities in areas important for their development) curtails their economic investments. This calls for development agents' deliberate efforts to engage both women and men to reframe norms and create new behaviors that will foster gender equality and a harmoniously transformed community.

2.2 Methodological innovations: Indexes, ethics and frameworks for gender research

Chair: Padmaja Ravula, ICRISAT

Measuring empowerment across the value chain: The evolution of the project-level Women's Empowerment Index for Market Inclusion (pro-WEAI+MI)

Greg Seymour, IFPRI

Many development agencies design and implement interventions that aim to reach, benefit and empower rural women across the value chain, ranging from production to processing to marketing. Determining whether and how such interventions empower women, as well as the constraints faced by different value chain actors, requires quantitative and qualitative tools. We describe how we adapted the project-level Women's Empowerment in Agricultural Index (pro-WEAI), a

mixed-methods tool for studying empowerment in development projects, to include aspects of agency relevant for multiple types of value chain actors. The resulting pro-WEAI for market inclusion (pro-WEAI+MI) includes quantitative and qualitative instruments developed during four studies. Studies in Bangladesh (2017), Philippines (2017) and Malawi (2019) were intended to diagnose areas of disempowerment to inform programming, whereas the Benin (2019) study was an impact assessment of an agricultural training program. The pro-WEAI+MI includes the quantitative core pro-WEAI plus a dashboard of complementary indicators, along with recommended qualitative instruments. These tools investigate the empowerment of women in different value chains and nodes and identify barriers to market access and inclusion that may restrict empowerment for different value chain actors. Our findings highlight three lessons. First, the sampling strategy needs to be designed to capture the key actors in a value chain. Second, the market inclusion indicators cannot stand alone; they must be interpreted alongside the core pro-WEAI indicators. Third, not all market inclusion indicators will be relevant for all value chains. Users should rely on contextual knowledge to select which market inclusion indicators to prioritize.

Women's empowerment in migration index (WEMI): Conceptual framework and early results from Bangladesh

Muzna Alvi, IFPRI

In this presentation we describe a conceptual framework and key elements of a Women's Empowerment in Migration Index (WEMI) that aims to measure the multiple dimensions of agency, resources and achievements of women migrants. We build on CGIAR's large body of work in developing women's empowerment metrics. The WEMI tries to unpack empowerment along the entire migration pathway by looking at: women's decision-making about migration and work; control over assets and income; attitude towards employer violence; access to social networks and training; and various aspects of self-efficacy and mental health as a migrant. We supplement this framework with data from a pilot survey with over 1000 returnee migrants in Bangladesh, in districts with high international outmigration of women to West Asian countries. The weighted average of the 3DE score for women in our sample is 0.60, out of a possible maximum of 1. Of the 1018 returnee migrants surveyed, only 14% are found to be empowered using a cut-off score of 0.75. Of those women who were disempowered, mean adequacy score is 0.53, suggesting that they achieve adequacy in only 53% of the indicators. We believe that WEMI will be integral to monitoring progress towards SDG 8.7 on eradicating forced labor, modern slavery and human trafficking.

A guide for conducting ethical gender-inclusive research: The gender research Ethics and Standards toolkit

Ara Go, IFPRI

As gender-inclusive designs assume a more central place in research related to food, land and water systems and donors now routinely require a gender-sensitive lens on research, there is a heightened demand among researchers for a comprehensive resource on the ethical considerations involved in gender research. In response to this growing demand, the CGIAR GENDER Impact Platform's Methods Module team has developed a toolkit titled "Gender Research: An Ethics and Standards Toolkit." This toolkit is aligned with the CGIAR Ethics Framework and the CGIAR Research Ethics Code, and it is intended to serve as a reference guide for researchers within CGIAR and beyond. It provides guidance, recommendations and resources on gender-relevant ethical considerations, as well as additional gender considerations regarding the ethical treatment and protection of human subjects that are applicable to different types of research. The resources and guidance in the toolkit span various stages of a project's lifetime, including project development and design, building research partnerships, project implementation and fieldwork, and data analysis, storage and dissemination. It also includes a practical checklist for research design, data collection and data storage. Importantly, this toolkit is designed as a "living" document which will be periodically updated to reflect new resources and include additional topics of interest.

Framework for incorporating Gender Equality and Social Inclusion (GESI) elements in Climate Information Services (CIS)

Everisto Mapedza, IWMI

This paper proposes the incorporation of a Gender Equality and Social Inclusion (GESI) Framework into Climate Information Services, which is increasingly becoming important due to climate change and climate variability. Our paper understands gender as a socially constructed definition of women and men. Gender inequalities seem to be pervasive in that, even with the introduction of new agricultural and climate information technologies, the gendered fault lines still appear within the new technological settings. Such gendered technological inequalities can be traced back to as early as the 1960s, when it was clear that technological solutions are grounded within the society in which they are embedded. Unless women are intentionally included in the design and development of agricultural technologies, there is a high risk that women will not benefit from

agricultural innovations meant to ameliorate the impact of climate change and climate variability. According to Conway's law, any technology reflects the values of its creator. Therefore, it is of paramount importance to understand the values of those who create technological solutions and innovations. Our proposed framework has five indicators: gender targeting by design; sex-disaggregated data collection; analysis of sex-disaggregated data; dissemination of technological options; and ongoing gender monitoring and empowerment evaluation. The five indicator domains are further complemented by their respective assumptions. The five indicator domains are applied in the context of three development interventions: an agricultural data hub, Climate Information Services Training, and Flood and Drought Indicators, which are all being implemented in Zambia as part of the Accelerating Impacts of CGIAR Climate Research for Africa Project (AICCRA) Project. The framework being applied in Zambia is showing the importance of incorporating gender equality and social inclusion in the design, implementation and evaluation of climate information services.

2.3 Integrating gender in climate action

Chair: Niyati Singaraju, IRRI

Smallholder farmers' willingness to pay for crop insurance among women and men in Kenya

Caroline Waweru, IFPRI

Because of increased incidences of drought due to climate change, it is vital that both women and men farmers can manage production risks. Agricultural insurance has been widely promoted to cushion farmers against adverse weather events, yet its uptake remains low, even more so among women. We therefore elicited incentivized measures of willingness to pay (WTP) for various agricultural insurance bundles offered to smallholder farmers within seven counties in Kenya and analyzed how WTP for the various bundles differs between women and men, and how it correlates with the project-level Women's Empowerment in Agriculture Index (pro-WEAI). We find that WTP is highest when the insurance product makes payouts in respondents' personal mobile money account, with significantly lower WTP when paid into their spouse's account, or into their savings group's (ROSCA) account. This is consistent with the finding that control over use of income and autonomy in decision-making are two of the main contributors to both men's and women's

disempowerment. In conclusion, one of the ways to ensure that agricultural insurance supports women's empowerment is to ensure that insurance contracts purchased by women are registered under their names and payouts are subsequently paid to their accounts, so that they gain control over the use of income from insurance payouts.

A gender-responsive approach to designing agricultural risk management bundles

Subhransu Pattnaik, IFPRI

Smallholder farmers are exposed to various risks, and because of their large risk exposure, agricultural insurance premiums are often too expensive to be affordable to smallholder farmers. In our study context, for instance, commercially viable insurance premiums are so high that the average farmer would be willing to pay only about 8 percent of the premium. Reducing farmers' risk exposure by incentivizing the adoption of risk-reducing practices and technologies, for instance through discounts to low-risk farmers, could offer a significant breakthrough in lowering insurance premiums. At the same time, in the presence of gender differences in existing cultivation practices, there is a chance that women farmers may find these practices and technologies more inaccessible or costly to afford than men, and in that case, incentivizing adoption of risk-reducing practices and technologies could disadvantage women more than men. We therefore quantify gender gaps by interviewing 462 men and 447 women farmers in the state of Odisha, India, on barriers to adopting risk-reducing technologies and cultivation practices. We find that women are more exposed to flood and post-harvest losses than men, and that they face more challenges hiring labor, increasing their labor costs. We conclude that in this context, gender-responsive insurance policies should promote access to and adoption of risk-reducing practices and technologies, that not only minimize exposure to floods and post-harvest losses but also are less labor intensive. The findings of this study will directly inform financial institutions involved in the implementation of an agricultural insurance scheme.

Strengthening climate resilience of women farmers through innovative extension approaches

Kato Edward, IFPRI

There is growing evidence that lack of equal access to information on climate resilience strategies has contributed to sub-optimal adoption of climate-resilient agricultural practices, institutions and technologies. This study rolled out innovative videos of

women-identified practices to women farmers through grassroots women's groups (in India and Kenya) and through the national extension service (Uganda) to more than 35,000 farmers in Gujarat, India, Kenya and Uganda. Practices identified by women farmers through qualitative fieldwork included climate-smart pig and poultry management, integrated pest management, water harvesting, zai pits and conservation agriculture. The presentation will report on changes in awareness, knowledge and adoption, as well as in women's empowerment in response to the intervention in Kenya and Uganda where the endline surveys were completed in early 2022. The findings are relevant to next users of video-based extension approaches, such as NGOs, the government and the private sector, that are interested in reaching, benefiting and empowerment women farmers.

Gender analysis in rice-based systems in Mali

Fatoumata Diabate, AfricaRice

Agriculture and livestock represent the main income-generating activities for women and youth in the rural

areas of Mali. A United Nations report on the roles of women and youth in food security and sustainable development highlights Africa's over-dependence on agriculture and allied sectors, and its resulting vulnerability to the impacts of climate variability. The report mentions yearly increasing of flooding, drought, pest and disease incidence in recent decades.

Based on the assumption that women and youth need information and access to new technologies for climate-smart agriculture, particularly in rice farming, this study analyzes the role of women and their access to resources on climate-smart agriculture (CSA) and climate information services (CIS) in Mali. It targets 800 respondents in 400 households (an equal number of husbands and wives were interviewed separately in each of the 400 households) in Segou, Niono, Sikasso, Baguineda, Diola, San and Selingue—the major rice-growing regions in the country. It is based on the understanding that women are underprivileged, hence they are likely to abandon rice production due to multiple climate-related challenges they face. This study will help to present the situation with clear findings.

Thursday, October 13: 15:30–16:45

3.1 Advancing and measuring women's empowerment through/ in nutrition interventions

Chair: Greg Seymour, IFPRI

Women's empowerment and improved nutrition: An assessment of a project in Bangladesh using an adapted version of pro-WEAI for small-scale fisheries and aquaculture (Pro-WEFI)

Rahma Adam, WorldFish

While inequalities between women and men have long been recognized in development practices, few studies have looked at how socioeconomic interventions have affected women's empowerment in the aquaculture sector. This study explores to what extent, in which ways and for which women, does economic and social

empowerment, and dietary diversity change in relation to aquaculture: increase income, diversify diets, and empower women in Bangladesh project interventions, specifically the encouragement of nutrition-sensitive production, building entrepreneurship capacity and agency of women entrepreneurs, and the financial inclusion interventions? The study uses quantitative household surveys (400), men (8) and women (8) focus group discussions, and in-depth interviews in Rangpur and Rajshahi divisions in Bangladesh.

Women empowerment among ethnic minority communities in northern Vietnam and lessons from a seed system for nutrition intervention

Deborah Nabuuma, Alliance of Bioversity-CIAT

Vegetables are important for nutrition and income in Vietnam's Northern Upland, yet production is constrained by inadequate access to quality seed. In a project investigating impact pathways from seeds to nutrition among Mai Son district and Sa Pa Township

ethnic minorities, a gap was identified regarding the level of women's empowerment and its linkages with project outcomes and potential recommendations. Pro-WEAI quantitative and qualitative methodologies were applied during the endline to explore women empowerment among H'mong, Dao and Thai ethnic minority groups (611 households in 36 villages and 28 FGDs in 14 villages). Empowerment was higher among men than women, in the Thai than other ethnicities, and in Mai Son. Empowerment of women and men in Mai Son was 13% and 45%, and in Sa Pa 4% and 6%, respectively. The average empowerment gap between women without gender parity and men in their households was 39% in Mai Son and 53% in Sa Pa. Across gender, ethnic group and location, all groups were <10% empowered, except Thai men (48%), Hmong men (36%) and Thai women in Mai Son (18%). Main disempowerment drivers included work balance, control over income use and mobility. Qualitative results indicated the project increased in nutrition knowledge and skills but had limited impact on empowerment—this was attributed to food related activities being women's responsibility. Since women's high workload appears to stem from existing gender norms and stereotypes, seed system and nutrition intervention impact can be strengthened by labor-sensitive and accessible innovations, and by addressing location specific barriers.

Empowering women through a participatory nutrition-sensitive project in Western Kenya

Nadia Guettou Djurfeldt, Alliance of Bioversity-CIAT

It is widely recognized that women's empowerment is a crucial pathway to achieving nutrition outcomes. This study is based on a participatory nutrition project that aims to diversify women's and children's diets through traditional and locally available foods in Vihiga County, Kenya.

The objective of this study was to assess how and if the project contributed to women's empowerment along pathways in the agriculture-to-nutrition framework, with a specific focus on pathways: (1) agriculture as a source of food and (2) agriculture as a source of income.

Qualitative data was collected through semi-structured interviews. Thematic analysis was used to determine where along the agriculture-nutrition pathways the project had an impact. To get a more in-depth understanding, a women's empowerment pathway was integrated into pathway one and two.

Throughout the nutrition project, women's time burden decreased due to men's increased involvement in vegetable production, which was previously perceived as a woman's job. Along pathway two, women reported that they have greater decision-making or bargaining power over expenditures, as they now see themselves

as providers and not dependents. Women also reported being independent and relying less on their husbands to provide food for the household. At the same time, some husbands showed reduced responsibility to contribute to food expenditures and women and men remained unaware of what their spouses earned.

The results show that men's behavioral change is linked to women's empowerment. Hence, this research confirms the importance of including men in nutrition-sensitive projects.

3.2 Youth and migration in food systems

Chair: Esther Njuguna-Mungai, ILRI

Youth transitions and livestock in Kenya

Renee Bullock, ILRI

Globally, the youth transition to adulthood is becoming more complex. The relative importance of key milestones that are used to describe the transition from youth to adulthood are culturally embedded and change across generations. So-called critical moments may include completing education, moving from school to the labor force, leaving home, marriage and parenthood. In the global south, sub-Saharan Africa in particular, agricultural and livestock assets are also culturally valued and often critical to supporting major achievements in transitions. What can we learn from youth studies to better understand youth engagement in agriculture and livestock sectors? This work aims to bridge youth and gender studies to explore young women's and men's transitions, and the various ways that livestock feature in the achievement of key milestones. What are young women's and men's values and experiences as they enter adulthood? How does livestock feature in youth transitions and for whom? Recognizing that gender and age intersect to create and constrain youth opportunities and experiences, we undertake a gendered analysis of livestock value chain actors to explore their perspectives on the importance and attainment of milestones. We use a mixed-methods approach that includes 700 market surveys, 38 focus group discussions and 20 key informant interviews in six counties in Kenya that include pastoral, agropastoral and mixed crop systems in both peri-urban and rural settings. We describe the shifts in cultural values across diverse contexts over time and the various roles that livestock play in supporting youth transitions.

Livelihood aspirations and realities of young people in a Myanmar fishing community

Indika Arulingam, IWMI

Youth livelihoods in food-systems are increasingly the focus of development institutions, drawing attention to how the livelihood aspirations of young people shape their engagements with food-systems. This study sought to understand the livelihood aspirations of young people from a historically poor and marginalized fishing community in the Ayeyarwady Delta of Myanmar, and how these aspirations shaped livelihood realities. Data collection was through focus group discussions (seven FGDs) and semi-structured interviews with youth and other household members, from fisher households and others in the village (73 interviews, including 15 female youth 13 male youth from fisher households).

For these youth, the political and economic transitions experienced by Myanmar in the last decade offered aspirations for new desired futures, beyond those associated with poverty and marginalization. However, for many of these young people, due to the realities of their socioeconomic and gendered positioning, aspiring did not involve a straightforward navigation towards futures that were strictly defined. Instead, their aspirations remained broad and vague, and concretized, on strongly gendered terms, based on opportunities encountered in the present. Therefore, while few of their livelihood realities aligned with these desired futures, in a changing environment considered synonymous with progress, these engagements were marked by a sense of temporariness, and a looking to the future for better opportunities to emerge. The study contributes to the growing recognition that the livelihood engagements of many young people and their intersections with food-systems are not marked by complete arrivals or departures, but by a moving in and out of multiple geographies and sectors.

Men's rural-to-urban migration in Burundi: Effects on banana farming systems by left behind women

Francois Iradukunda, Alliance of Bioversity-CIAT

Men's outmigration triggers organizational changes in households and influences household labor expectations, power relations and agricultural practices. It also has important influences on reshaping the family structure and transforming the traditional gender roles in rural societies. This case study draws upon a mixed-methods research design involving 29 semi-structured interviews, 6 focus group discussions, and a household survey (N=180) to shed light on how a "men's crop" is managed by wives in the absence of their outmigrated husbands. While prevailing narratives consider the

banana as a "men's crop", we highlight the significant ways that household structural changes induced by men's outmigration challenge these narratives. In the absence of the outmigrated husbands, the wives become primary decision-makers and have as much interest as men in the banana crop. We find that not having enough land implies not having banana, the main source of income in Burundi, which leads to poverty and men's outmigration. At the same time, migration remittances contribute to the acquisition of land and banana, and the wives of migrants play a key role in that process. However, the negative stereotypes surrounding men's views on women's capabilities to manage the farms, and existing gender-differentiated norms in the household and on the farm, are likely to perpetuate and reinforce existing gender inequalities embedded in the management of cash crops such as banana. This study suggests exploring shifting gender roles and practices in farm management without men (rather than relying on stereotypes) as an entry point to advocate for a gender-transformative approach in agriculture and food systems in Burundi.

3.3 Updating the FAO State of Food and Agriculture 2010-11 (SOFA) report: Evolution of gender in food systems

Chair: Farhana Hussain Ibrahim, CIP

Addressing gender inequalities and strengthening women's agency to create more climate resilient and sustainable food systems

Elizabeth Bryan, IFPRI

Climate change affects every aspect of the food system, including all nodes along agriculture and food value chains—from production to consumption. Women and men often have important contributions to make to address climate challenges within food systems; yet structural inequalities limit women's access to resources, services and agency, and shape the ways in which women and men experience and are impacted by climate change. This background paper for the upcoming FAO Report on The Status of Rural Women in Agri-food Systems 10 Years after the State of Food and Agriculture 2010-11 (SOFA) reviews the literature on gender, climate change and agriculture and food systems. It finds strong evidence

of gender inequalities in exposure and sensitivity to climate change, adaptive capacities, decision-making over alternative adaptive and policy responses, and wellbeing outcomes of climate change. It identifies a set of promising approaches to address these gender inequalities, including financial products tailored to women's needs, climate information services targeted to women and group-based approaches for collective climate action. The review concludes that if climate-smart interventions do not adequately take gender differences into account, they might exacerbate gender inequalities in food systems. At the same time, women's contributions and agency are critical to make food systems more resilient to the negative impacts of climate change, given their specialized knowledge, skills and roles in agriculture and food systems. Thus, increasing the resilience of food systems to climate change requires inclusive approaches that build women's resilience capacities, facilitate women's empowerment and address structural inequalities.

Fostering an enabling environment for equality and empowerment in agrifood systems

Els Lecoutere, CGIAR GENDER Impact Platform

Lasting transformative change in agriculture and food systems, and increased societal benefits, requires fostering an environment that enables women's empowerment and intersectional equality, while reducing existing inequalities in access to and control over productive resources, services and technology, resilience and leadership. Fostering an enabling environment hinges on addressing key structural constraints to equally accessing resources, exercising agency and achieving desirable outcomes across multiple scales in a holistic manner.

This paper discusses the emerging thinking about key structural barriers—at the scales of the state, markets, communities, households and individuals—that are rooted in policy, discriminatory (formal and informal) social and economic institutions (including social norms) and dampened aspirations; and their relevance for transformative change in agriculture and food systems. It shows the trend and current status of key structural constraints, and what has proven effective to relax such constraints. The paper lists key evidence-based recommendations to promote an enabling environment for empowerment and equality in agriculture and food systems.

Beyond crops: Toward gender equality in forestry, fisheries, aquaculture and livestock development

Marlène Elias, Alliance of Bioversity-CIAT

The fisheries, aquaculture, forestry and livestock sectors are critical for sustaining rural livelihoods and achieving global food and nutrition security. Yet each of these sectors have embedded gender and social inequalities, hindering people who rely on these livelihood systems from achieving their full potential. In this background paper for the Report on The Status of Rural Women in Agri-food Systems 10 Years after the State of Food and Agriculture 2010-11 (SOFA), we review the literature to examine gender gaps in relation to each sector, their implications for achieving multiple food system outcomes, what has worked to reduce inequalities, and the potential these sectors hold for advancing gender equality as an outcome in itself. We demonstrate that, despite specificities across sectors, similar gender barriers limit the benefits women receive from fisheries, aquaculture, forestry and livestock. These constraints, which occur at multiple levels, include: the invisibility and undervaluation of rural women's labor and their disproportionately heavy labor burdens, limited and precarious control over resources, norms that hinder women's voice and influence in decision-making and governance, and exclusionary institutions such as resource-user groups and extension and data systems. Drawing on Njuki et al.'s (2021) Gendered Food Systems framework, we demonstrate that, to achieve transformative change in food systems, changes in each sector are required in women's agency, access to and control over resources, gender norms, and policies and governance. Such changes can improve dietary outcomes, gender equality and women's empowerment, economic and livelihood outcomes, and environmental outcomes. To conclude, we argue that closing gender gaps across sectors requires multipronged strategies that simultaneously engage these four change pathways to lift structural barriers to inequality.

Day 3



Science sessions

Friday, October 14: 9:30–11:00

1.1 Gender mainstreaming and doing gender research

Chair: Hom Gartaula, CIMMYT

The process to “Gender Expert” in gender and agriculture: Learning from the GREAT model

Elisabeth Garner, GREAT/CIFOR

The goals of gender equity and the resulting increased attention to and funding for gender mainstreaming have increased the number of gender experts. This is true throughout policy and development organizations, as well as agricultural research institutes as donors and program requirements demand social equity goals. While previous discussions have focused on the experience of gender experts within institutions, there is limited discussion on how gender experts acquire their expertise and whether there are variations among this expertise. The Gender-responsive Researchers Equipped for Agricultural Transformation (GREAT) model provides a unique opportunity to consider the “gender expert” in agriculture and rural development. Using the GREAT model as the context, this paper examines the potential of gender trainings to support the development of gender expertise, and the limitations of that process. The result is an examination of the term “gender expert” and its use given the diversity of knowledge and experience that can fall under its understanding.

Doing GREAT: Genesis and evolution of a gender training program for agricultural researchers

Margaret Najjingo Mangheni, GREAT

Women play a critical role in agriculture, especially in developing countries, despite gender-based constraints which limit their contribution. Women’s empowerment has been strongly linked to achievement of development outcomes thus gaining precedence in global development discussion. While several studies have investigated the notions of empowerment, masculinities and social/gender norms, these thematic areas have been studied in isolation regardless of their linkages. For example, evidence indicates that masculinities and social norms are anchored in sociocultural contexts and are thus bound to vary in different agricultural systems. How do these themes intersect? Using a mixed-methods approach, we interrogated the interconnection of women’s empowerment, masculinities and social norms, and how these influence household food security and women’s income. Qualitative case studies helped understand local constructions of masculinities and femininities, women’s empowerment, and how these in turn influence development outcomes. The findings on masculinities and women empowerment are presented by Businge et al., femininities and women’s economic empowerment by Shimali et al. and community perception of women’s empowerment by Nakyewa et al. (all submitted for this conference). A quantitative survey (to be conducted in July-August 2022) will be used to measure the level and drivers of women’s empowerment and project outcomes, as well as household food security and women’s income, using pro-WEAI with an add-on masculinities module. This paper will present a synthesis of the qualitative and quantitative evidence around the interconnections between women empowerment, masculinities, household food security and women’s income.

Do water, energy and food policies in support of solar irrigation enable gender-transformative changes? Evidence from policy analysis in Bangladesh and Nepal

Manohara Khadka, IWMI

Solar-powered irrigation pumps (SIPs) are emerging as a popular technology to address water, energy and climate change challenges in South Asia, while enhancing livelihoods and food security. SIPs are deemed to be women-friendly renewable energy technology (RETs) because of their design, operation systems and safety. While gender dimensions of natural resources are well documented, the extent to which water, energy and food (WEF) policies—including policies to promote SIP technologies in South Asian countries—conceptualize and operationalize gender equality and social inclusion (GESI) are not well understood. We draw on a gender-transformative analysis approach and rank WEF policies on a continuum ranging from 0–3 (denoting gender blind, gender aware, gender-responsive and gender-transformative). We employ this method to review 37 WEF sectoral policies of Bangladesh and Nepal. We find that while national governments are committed to gender equality and women’s advancement, and enshrine these principles in their Constitution, these higher level aspirational principles are not always adopted in WEF sector policies. We find that WEF policies are aware of the need to include GESI and social equity in sectoral programming, yet operational rules for implementation of these policies often fail to challenge the structural barriers that prevent women and marginalized groups from participating in and benefiting from WEF policies, including the deployment of SIP technologies. This calls for transformation not only in the project implementation, but also in the policymaking processes of the WEF sectors in the South Asia region.

Gender mainstreaming from an institutional perspective: Cases of small and micro irrigation projects in Ethiopia

Likimyelesh Nigussie, IWMI

Achieving gender equality in irrigation can result in greater production, income and job opportunities while building climate resilience in sub-Saharan Africa. To aid integration of gender in the planning and implementation of irrigation programs, national irrigation agencies, donors and researchers have been assisting project implementers to formulate a gender mainstreaming strategy. However, as efforts to close gender gaps in irrigation have been increasing, little is known about how interaction among institutions at different scales determines success of gender

mainstreaming strategies. The study presents a qualitative analysis of how multi-level institutional context shapes the success of gender mainstreaming strategies, by examining nine small and micro irrigation development projects in Ethiopia. Specifically, it analyzed how rules, roles and capacities shape gender mainstreaming strategy in different irrigation development projects. Results show that “rule-based” strategy adopted by small scheme-based irrigation projects, emphasizes policies and rules to ensure equal participation in development and decision-making, and capacity development of individuals and institutions. Results also show “role-based” strategy adopted by projects promoting small and micro irrigation technologies focuses on challenging social norms—to address issues of power and workload imbalance—and developing the capacity of actors, including farmers. Both strategies prescribe certain numbers for women and employ participatory approaches to ensure gender equality. However, negative stereotypes about women held by family, community and the private sector militate against the success of gender mainstreaming. Further, institutional biases and limited capacities reproduce gender inequality by reinforcing gender norms. This implies, enhancing the success of gender mainstreaming strategies call for a holistic approach that facilitate transformative change at different scale through broad based partnership between actors at scale.

1.2 Learnings on women's empowerment

Chair: Dewis Mwakanyamale, IITA

Women's empowerment and livestock vaccination: Evidence from peste des petits ruminants vaccination interventions in northern Ghana

Immaculate Omondi, ILRI

Healthy livestock provide meaningful opportunities to enhance women’s empowerment in low- and middle-income countries. Animal vaccines are important to keep livestock healthy and productive. However, gender-based restrictions limit women’s access to animal health services, thereby affecting the potential of livestock to enhance their empowerment. While growing empirical evidence reveals that women-controlled livestock (for instance, small ruminants) are important for women’s empowerment and support better household nutrition outcomes, little empirical evidence exists from rigorous analyzes of the relationship between women’s empowerment

and animal vaccines for women-controlled livestock species. Our analysis explores the relationship between women's empowerment and involvement with peste des petits ruminants (PPR) vaccination in Ghana. Using the Women's Empowerment in Livestock Index tool, data collected from 465 women and 92 men farmers (who keep goats in northern Ghana) was analyzed using the partial least squares structural equation model. It revealed a significant direct positive association between knowledge about animal health and PPR vaccines, and a significant indirect positive association between access to PPR vaccines and empowerment. A few (not all) indicators of empowerment jointly and significantly explained empowerment of women goat farmers in terms of the relationship between empowerment and vaccine facets. The significant indicators were "asset ownership" and "input into decisions" concerning livestock. These results reveal important considerations in designing effective and equitable livestock vaccine systems.

Valuing control over income and workload: A field experiment in Rwanda

Berber Kramer, IFPRI

Agricultural development programs often aim to enhance women's control over income, but as an unintended negative consequence, these programs may increase women's already heavy work burden. Using a lab-in-the-field experiment with 1,000 women and men in rural Rwanda, we elicit women's and men's valuations of control over income, changes in workload and trade-offs between them. Survey data indicate that women in this setting are less empowered than men. Control over the use of income contributes less to disempowerment than high workloads. Moreover, in the experiment we find that women are willing to sacrifice more household income to gain control over income than their husbands, but both women and men are willing to forgo even more personal and household income with the aim of reducing their workload. This indicates that in the context of the experiment, agricultural development programs that introduce time-saving practices and technologies have potentially greater welfare impacts for both women and men than programs which increase women's control over finances.

An understanding of community perceptions of women empowerment in Kiboga District, Central Uganda

Nakyewa Brenda, GREAT

The concept of women empowerment has been widely embraced in development efforts aimed

at achieving gender equality outcomes. However, intended outcomes are not always achieved due to a disconnect between how the concept of women empowerment is perceived by target communities and development actors. An understanding of how targeted communities perceive women empowerment helps development actors design context-specific women empowerment approaches suited to prevailing social cultural norms and perceptions of women and men. This study therefore aims to understand perceptions of women empowerment of the local communities in rural farming villages of Kiboga District in Central Uganda. A qualitative case study design was used to collect data on community perceptions about women empowerment through key informants and sex-disaggregated focus group discussions. The data were coded using Atlas Ti and analyzed to identify themes. We found that men perceived an empowered woman as un-submissive, and a competitor to men's household head position. To women, an empowered woman was perceived as un-submissive, hardworking and taking over men's culturally assigned household responsibilities. As women become empowered, what do men become, and at what cost to women? Findings indicate that an empowered woman takes over the responsibilities of an "ideal man"; this adds work burden to women and elicits a backlash from men. In order to counter this, development agencies should target women and men, investing in interventions and approaches that transform local gender norms that disempower women. The study is ongoing and further data collection will be completed in August 2022.

Is women's empowerment bearing fruit? Mapping Women's Empowerment in Agriculture Index (WEAI) results to the Gender and Food Systems Framework

Emily Myers, IFPRI

This review examines the relationships between domains of women's empowerment and food system outcomes, as defined by the Gender and Food Systems Framework (Njuki et al. 2022). We reviewed papers that cited both the original WEAI and/or pro-WEAI papers, Alkire et al. (2013) and Malapit et al. (2019), between 2013 and April 2022. The literature search had the following additional inclusion criteria: published in English; published as a journal article or working paper; calculated a WEAI, A-WEAI or pro-WEAI metric and/or indicator; and reported significance level of a food system outcome. We found that women's empowerment is significantly associated with various outcomes, though which aspect of empowerment matters for a particular outcome varies across contexts. Many studies found significant positive associations between women's empowerment and intrahousehold gender equality, with various children's

dietary and nutrition outcomes, household food security and agricultural production indicators. Several studies document significant associations between empowerment indicators and women's dietary diversity scores, but with mixed results. The findings suggest that increasing women's empowerment and closing empowerment gaps contribute to improved dietary and nutrition outcomes, but household wealth, gender norms and country-specific institutions are also critical. Most papers identified associative relationships; future research may investigate these relationships more deeply to determine causal relationships that drive desired food system outcomes. Further, stronger commitments to address structural and institutional barriers to gender equality in policy may enhance food system outcomes.

1.3 Gendered impacts of and responses to shocks and stressors

Chair: Renee Bullock, ILRI

Gender-responsive investments and policies in the agriculture and food security response to the crisis brought about by Russia's war on Ukraine

Claudia Ringler, IFPRI

Following on the heels of the COVID-19 pandemic, the global food crisis resulting from Russia's war on Ukraine is exacerbating existing challenges in many low-income countries, including rising food, fuel and fertilizer costs. These price shocks threaten food security, access to healthy diets and people's ability to rebound from multiple crises, including rebuilding savings and assets that were depleted to cope with the protracted COVID-19 pandemic. Evidence suggests that the impacts of these compounding crises are likely to have differential effects on women and men. To reduce the gender gap in resources to confront these crises and the resulting welfare outcomes will require pro-active, gender-responsive approaches.

Previous research shows that women are more likely to experience food insecurity following food price shocks, demonstrated by their reducing diversity of diets or abstaining from food consumption to make more food available to others in the family. Women also face greater challenges accessing agricultural inputs and resources; higher fertilizer and energy input prices can further constrain women's access to inputs, exacerbating the gender productivity gap. At the same time, changes in production practices due to rising input costs may add to women's already high labor

and time burden; for example, when agrochemicals are replaced by weeding or motorized irrigation is replaced by manual water lifting.

This study uses phone survey data on the impacts of the Ukraine crisis, as well as evidence from other recent food price crises, and a roundtable to identify key gender impacts and measures that can reduce adverse gendered impacts.

The gendered impacts of COVID-19 in Kenya, Niger, Rwanda and Uganda: Evidence from phone surveys

Harriet Mawia, IFPRI

The COVID-19 pandemic had unprecedented effects on the lives and livelihoods of women and men in rural settings, where gender inequalities in access to and control over productive resources and economic opportunities persist. To identify and monitor the differential effects of the pandemic, IFPRI conducted phone surveys in Kenya, Niger, Rwanda and Uganda. The study investigated income disruptions, food insecurity, coping strategies and policy responses by respective governments during the pandemic. A descriptive analysis of the phone survey data was conducted using Stata software, and statistical tests were carried out to show differences between women and men respondents in their experiences with the pandemic and coping responses.

The findings indicate that the COVID-19 pandemic had far-reaching impacts on people living in rural areas of the study countries, including losses in income, depletion of savings and assets, and reduced access to food. While both women and men were affected by the pandemic, the ways women and men experienced and responded to COVID-19 varied. While many respondents reported challenges with food insecurity, few received any social protection. Most gender-sensitive measures and responses were geared toward combating increased incidences of gender-based violence, while far fewer aimed to secure women's livelihoods to help them rebound from pandemic-related income losses. Given context-specific nuances in how the pathways of impact and coping responses play out differently for women and men, interventions should be designed while considering the needs of women and girls through a consultative process with relevant stakeholders.

Stressors within the cassava value chain in Nigeria: Preliminary evidence to strengthen gender-responsive breeding and inform resilience

Deborah Olamide Olaosebikan (IITA/GREAT)
Bela Teeken, IITA (Presenter)

This study investigates gender perspectives on climate change (CC) and conflict stressors within the cassava value chain (VC) in Nigeria.

RESEARCH QUESTION(S): A state of knowledge review identified the need to investigate coping strategies and the preferred stressor-related cassava traits by asking, "In what ways do gender roles and norms influence these factors?"

METHODOLOGY: Data elicited from 187 cassava farmers, 15 key informants and 63 VC focus group participants were analyzed using descriptive and inferential statistics.

KEY FINDINGS: The study validates CC as a key factor in increased conflicts. Farmer-herder clashes, communal clashes and land disputes exacerbate the emergence of farm burning and theft, and influence the kind of cassava food product made. This shapes stressor-related trait preferences like early re-emergence of leaves after grazing, short stem, ratooning potential and stem-longevity among women and men farmers, and multi-purpose suitability of roots among mainly women processors/marketers. Coping mechanisms include relocating farms, migration and fragmented farming among men, and choosing food with less processing steps, backyard farming, forcing daughters' premature marriage, and dependence on remittances from husbands among women. Resilience capacity is generally low, but men have a higher overall resilience capacity ($t = 5.45$) and level of access to assets ($t =$

6.698) which facilitate coping strategies like relocating farms, migration and fragmented farming.

Relevance and implication of findings: Results present gendered coping strategies, corresponding stressor-related traits, as additional aspects important when evaluating the gender impact of breeding strategies concerning the positive benefits for, and possible harm to, cassava users (especially women) engaged in cassava VC activities.

Gendered differences in accessing and using climate-smart agricultural technologies in Tanzania

Eileen Bogweh Nchanji, Alliance of Bioversity-CIAT

This study assessed gender differences in the use of climate-smart agriculture among bean farmers in Tanzania. Descriptive and multivariate probit models were used to analyze data collected from 357 randomly selected bean farmers from Mbeya Rural and Mbozi districts. Results revealed gender differences in farmers' vulnerability to production shocks, with higher frequencies of women and young farmers reporting climate change-related constraints than men. Adverse effects of climate change were more pronounced and gender-differentiated at the production level than at post-harvest and marketing levels, where significantly more women and young farmers were more affected than men. Men dominated climate-adaptation decision-making processes at the household level because of their ownership and control over access to land, and access to agricultural support services. Enhancing inclusive gender access to land and group-based approaches to information dissemination would be relevant in enabling men, women and young farmers to effectively respond to the effects of climate change.

Friday, October 14: 13:30–15:00

2.1 Gender norms in food systems

Chair: Miranda Morgan, Alliance of Bioversity-CIAT

Gender norms and women's empowerment in dairy-related businesses in Tanzania: The case of Kilimanjaro and Tanga regions

Esther Leah Achandi, ILRI

Although women play a major role in the dairy subsector in Tanzania, they still face several barriers to accessing and benefiting from marketing of livestock and livestock-related products. In particular, gender norms affect their participation and access to benefits from livestock value chains. This study uses a qualitative methodology to explore gender norms that affect women's engagement in dairy-related businesses and the local conceptualization of empowerment.

Initial findings indicate that in the past, a woman's role was to take care of her husband, children and cows; therefore, women often worked from home. Men do not sell milk in the market and do not cut fodder for sale except fodder for their own cattle (in Moshi, Kilimanjaro)

thus such activities were therefore mainly done by women. Traditionally, a man was responsible for external matters and men were thus more mobile and better networked than women. A woman is a pambo la nyumba (household decoration) and cannot take care of the children and cows at the same time (in Muhweza, Tanga); therefore, few women engaged in dairy-related businesses. A woman should not take a cow to mate with a bull nor engage in cattle artificial insemination and because of this norm, businesses providing such services were predominantly owned by men.

Women's engagement in livestock-related businesses is greatly hinged on existing norms, as is their empowerment. Therefore, interventions seeking to engage with women's empowerment ought to take gender norms into consideration.

Improving inclusion of women in agricultural value chains in Papua New Guinea

Lucia Carrillo, IFPRI

In this study, we analyzed three key value chains in Papua New Guinea (poultry, sweet potato and fresh vegetables) aiming to draw out information on women's involvement in various nodes within each value chain, as well as the barriers women typically face to benefiting fully from participation at various nodes. Using the 2018 Papua New Guinea Rural Household Survey on Food Systems (RSFS) datasets, we then investigate whether and how particular norms related to women's economic participation are influencing their employment and entrepreneurship outcomes. Our strategic review of the literature reveals that women are heavily involved in all three value chains, but more so in production and sales than in (often lucrative) mid-stream nodes—often due to barriers to education and skills, mobility and access to market information. Empirical analysis suggests that women's economic participation (especially their operation of non-farm enterprises [NFEs] and engagement in sales jobs and commercial farming) is associated with greater participation of women in household decision-making and improvements in household welfare. Gender norms opposing women's economic participation, however, decrease the likelihood of women informing household decision-making—particularly for the case of women's ownership of NFEs. The results provide a strong business case for alleviating norms that keep women out of certain activities and, more generally, for expanding opportunities for women's participation in key value chains in the agriculture and livestock sectors in Papua New Guinea. This study means to guide policymakers and stakeholders toward ways of improving economic opportunities and inclusiveness in the agriculture and livestock sectors.

Toward a feminist Agroecology

Haley Zaremba, Alliance of Bioversity-CIAT

Agroecology is gaining ground as a movement, science and set of practices, designed to advance a food systems transformation which subverts the patterns of farmer exploitation currently entrenched in dominant agricultural models. For agroecology to achieve its espoused twin aims of social and ecological well-being, women and other historically marginalized stakeholders must be empowered and centered as the movement's protagonists. The importance of gender and social considerations is not limited to patently social aspects of the agroecological agenda but bears relevance in every dimension of agroecology. Yet, issues related to gender have commanded relatively little attention in the agroecological literature. This presentation reviews HLPE's 13 defining principles of agroecology through a feminist lens to demonstrate how human dimensions and power dynamics are interwoven in every principle. Through this analysis, we demonstrate that a feminist approach is instrumental to establish a socially just and ecologically sustainable agroecological transition.

Is forum theater a gender-transformative tool? Experience from Bangladesh

S M Faridul Haque, WorldFish

Social norms, values and practices, in most cases, create barriers to women's involvement in income-generating activities. The aquaculture sector is one example of such a field, where women's limited participation is determined by a set of sociocultural factors. Forum theater could be an effective tool to break these barriers due to its participatory and bottom-up nature. This paper focuses on the effectiveness of forum theater as a tool of a gender-transformative approach. It examines the efficiency of forum theater to enable people to identify and adopt alternatives to the existing gender-biased practices. A qualitative study was conducted in March 2022 with 30 women and 30 men in northwestern Bangladesh. The findings show that forum theater creates an enabling environment of peer learning and hence offers the opportunity for people to accept new practices. This article illustrates the importance of forum theater as a gender-transformative tool to ensure women's participation and benefit from the aquaculture sector.

2.2 Enhancing adoption through gender-responsive technologies

Chair: Everisto Mapedza, IWMI

Understanding gender-specific constraints to agricultural technology adoption: Evidence from cassava farming in Kenya

Carly Trachtman, IFPRI

Women subsistence farmers in developing countries often have lower levels of agricultural productivity than men, partially due to lower adoption rates of agricultural technologies. These lower adoption rates may be due to lack of physical access to new technologies or lack of access to information about new technologies, among other explanations. In this study, we consider these two classes of explanations of low technology use among women and test the relative impacts of interventions designed to combat each. Specifically, we consider adoption of a climate-resistant, early maturing cassava variety by women farmers. Using a randomized control trial with a 2x2 matrix treatment design, we plan to test the effects of two interventions on cassava adoption by women farmers: delivering cassava seeds to women farmers at their homes (improved access), and hiring women “lead farmers” to diffuse information about cassava seeds (improved information access). Results from a small pilot in six villages suggest that (1) men lead farmers are less likely than women lead farmers to train women household members during a household visit (despite all lead farmers being explicitly instructed to train women), and (2) women farmers almost unanimously prefer to receive training from a woman lead farmer. Pilot results also provide insights on ways that the treatments can be improved, such as lead farmers providing follow-up training visits. These preliminary findings support the viability and importance of employing women trainers in teaching women farmers about new agricultural technologies.

A systems approach to sustainable and inclusive farmer-led irrigation development: A case analysis from Nepal

Labisha Uprety, IWMI

Farmer-led irrigation development (FLID) in Nepal has been mostly synonymous with farmer-managed surface irrigation rather than broadly encompassing all farmer-led decisions, including small-scale choices. Many of the elements that affect farmer’s adoption of social, technological or institutional innovations in irrigation and agriculture are interconnected and need systemic

examination to present a thorough analysis. This paper presents a systemic analysis to better understand opportunities and barriers to farmer-led irrigation development in Nepal, especially for smallholders and women farmers. This is done by characterizing systemic barriers and opportunities shaped by policy environments, agricultural value chains, irrigation supply chains, private-public interventions, gender equality and social inclusion (GESI) and new drivers such as COVID-19. The focus is on their intrinsic connections and mapping the ecosystem in which FLID is embedded. This paper is based on extensive qualitative literature and policy review, coupled with primary data obtained through telephone interviews analyzing socioeconomic policies, institutions, markets, and GESI-related barriers and opportunities in Nepal. The outcome is a comprehensive framework for sustainable and inclusive FLID.

Would a gender lens assessment of crop breeding traits improve varietal product profiling? Application of the G+ Tools on the target table potato product profile for Kenya

Sarah Mayanja, CIP

In sub-Saharan Africa, low adoption of improved varieties has been linked to breeding programs failing to consider end-user trait preferences and the interplay with gender. Recently, efforts have commenced assessing the gender responsiveness of product profile proposals during variety development, testing and dissemination. The study uses a multi-stage approach to examine the gender responsiveness of Kenya’s target table potato product profile. First, the G+ product profile tool was employed to examine the likelihood of the selected traits exacerbating gender disparity across four domains: unpaid labor, access to farm and external resources, and control over benefits based on a literature review. Key informant interviews and a multi-stakeholder workshop followed, to build consensus on the gendered assessment.

Findings show that tuber yield is associated with increased demand for women’s unpaid labor during harvesting and sorting, and greater requirement for inputs—to which women have limited access. Respondents in the multi-stakeholder workshop highlighted the potential of dry matter to increase women’s unpaid labor due to increased preparation time. Moreover, the trait may increase marketability, thus attracting men and displacing women processors from income-generating nodes. We therefore recommend that gender-responsive techniques designed by a multidisciplinary team (and complementary technologies) accompany the dissemination and promotion of the resultant variety. This would minimize gender inequalities and stimulate equal benefits for women and men.

Gender-based assessment of rice and rice seed production in Nioro hub, Senegal

Maimouna Ndour, AfricaRice

In the central part of Senegal, farmers are threatened by abiotic stressors such as salinity and toxicity, such that farmers abandoned rice farming in some areas. The pressures to sustain the farmers' livelihood sources are intense, involving land hire in the less-affected areas. From a gender perspective, these conditions are particularly worrying because they compromise the essential role of the woman in the household; rice-growing for food in the lowland fields is a traditional activity of the woman, the man is involved in cash crop production in upland ecology (groundnut and millet). Hence producing rice is the woman's contribution to the household's food consumption, noting that men are involved in growing upland rice, with the introduction of suitable varieties. This study investigated the women- and men-specific seed needs, challenges and opportunities to make rice (and rice seed production) more beneficial to women, by providing them with stress-tolerant varieties for lowlands and identifying sustainable business model adoption and dissemination. We conducted focus groups in three villages with separate groups of women, men and young people, and quantitative data collection with a sample of 60 farmers in each village to identify the constraints to rice farming and assess producers' awareness of improved varieties. The abiotic stressors decimated the crops, and then stress-tolerant varieties and production of seeds sparked a new interest in rice cultivation in this region. Additional efforts are required to implement sustainable business models for seed production.

2.3 Collective action, governance and management of collective resources

Chair: Manohara Khadka, IWMI

"Even the goats feel the heat": Gender, livestock rearing, rangeland cultivation and climate change adaptation in Tunisia

Dina Najjar, ICARDA

Women's contributions to rangeland cultivation in Tunisia and the effects of climate change upon their livelihoods are both policy blind spots. To make women's contributions to rangeland cultivation more visible and to provide policy inputs based on women's needs and priorities into the reforms currently being made in

Tunisia, we conducted fieldwork in three governorates. We conducted focus groups and interviews with a total of 289 individuals. We found that women and men are negatively affected by rangeland degradation and water scarcity, but women are additionally disadvantaged by their inability to own land and access credit, and by drought-mitigation and rangeland rehabilitation training that only targets men. Our findings reveal that women are involved in livestock grazing and rearing activities to a greater extent than is widely assumed, but in different ways than the men in the same households and communities. Understanding how women use rangelands is a necessary first step to ensuring that they benefit from rangeland management on par with men. Women's feedback and priorities should be considered critical for the sustainable and equitable use and management of rangelands. Women's growing involvement in livestock rearing and agricultural production must be supported with commensurate social and economic policy interventions. As an example, it is crucial that women gain access to drought management and adaptation training on par with men. Providing women and men farmers with appropriate support to optimize rangeland cultivation and productivity is particularly urgent in the context of resource degradation accelerated by climate change.

Women's voices in civil society organizations: Evidence from a civil society mapping project in Mali

Katrina Kosec, IFPRI

How does women's engagement in civil society organizations (CSOs) differ from that of men, and what factors predict women's willingness to hold the state accountable? We analyze these questions in the context of rural and urban Mali, leveraging face-to-face data collected as part of a civil society mapping project during February–March 2020 and December 2020; and an in-depth survey conducted with leaders from a randomly selected subset of these CSOs during January–March 2021. First, we explore the characteristics of women's groups compared to other CSOs. Second, we explore their likelihood of sanctioning a hypothetical corrupt mayor. We use an embedded survey experiment to try to understand these groups' willingness to report on the mayor. We find that women in Mali are often highly organized at the local level with greater mobilization capacity than men—frequently in self-help groups or organizations related to gendered economic activities. However, they are not typically recognized by outside actors; their strong networks and group infrastructure represent untapped social capital. CSOs comprised of women have lower informational and technical capacity, including lower levels of political knowledge, and incur a higher cost of sanctioning public officials. Women are generally less willing to sanction corruption

than men, but are more likely to when their CSO is less hierarchical, when their technical capacity is higher and when their political knowledge is greater. However, priming their importance as a CSO (by telling them they were identified by well-connected citizens as influential) reduces sanctioning, perhaps by making them fear reprisals from recommenders.

Participatory rangeland management: Understanding women's engagement and implications for social change

Philip Miriti, ILRI

Participatory Rangeland Management (PRM) works with customary institutions in dryland pastoral settings to strengthen communities' abilities to manage their rangelands. The process includes the creation of management committees that develop plans to manage resources that support resilience to climate change, such as restoring grazing areas. This study describes the process of women's engagement in PRM and what it means for women's participation in decision-making processes in resource management and broader gender relations in the community and household. The study takes place in four communities in Baringo County, Kenya; an area severely affected by climate change effects such as drought. We use a mixed-methods approach and draw upon 56 intrahousehold interviews, 34 key informant interviews and 8 FGDs. We first contextualize social change in pastoral settings, which includes describing the influence of gender sensitization efforts of development organizations and increasing numbers of women assuming leadership positions. Women actively participate in PRM committees through negotiating and advocating for the protection of resources, notably those that they frequently use, such as water sources. Women also earn income from PRM related activities, which garners more support from their spouses to attend meetings. Women have also taken up so-called men's activities such as beekeeping. PRM processes—that are part of wider social, economic and environmental change—bolster women's participation in decision-making processes across multiple domains. Constraints however persist and limit women's potential to lead groups that include men, attend seminars, and source labor to manage domestic tasks while they participate in civic activities. These findings contribute to empirical research concerning the governance of rangelands, to understanding the potential of existing frameworks to measure women's participation and provide practical lessons regarding gender-responsive development.

What influences women's participation in water governance? Preliminary findings from Bangladesh

Niyati Singaraju, IRRI

The Bangladesh polder zones cover 1.2 million hectares of agricultural land and are home to around eight million people, with women playing a critical role in agriculture and food systems. With limited access to and control over productive resources and incomes, women are disproportionately vulnerable to climatic risks. Their ability to make important decisions can have positive outcomes on the governance of natural resources, agricultural productivity and livelihoods. Using a mixed-methods approach, this study aims to examine the extent and level of women's participation in water management groups (WMGs) and analyze the sociocultural, political, economic and biophysical contexts which influence participation. A structured-questionnaire survey of 720 households was conducted from April–June 2022 in four polders of the Khulna Division. Focus group discussions with women and men household members were conducted to reflect on the factors that influence women's participation in WMGs. Results reveal that while men contributed most to decisions on structure/equipment investment and the release and distribution of water that directly affected agriculture production, women were more involved in enlisting participants for training on homestead gardening, livestock and poultry, and leadership development. Both women and men highlighted that participation in WMGs resulted in access to innovations that improved crop productivity and incomes. Women members opined that participation gave them social recognition in the community. Despite these perceived benefits, more than 60% of women respondents believed that their participation in meetings and decisions in WMGs is constrained by unpaid domestic work and restrictive social norms. The preliminary findings highlight that tackling restrictive gender norms to redistribute the unpaid domestic work burden of women is one way of enabling effective participation in water governance.



SOCIAL
INCLUSION



YOUTH



GENDER
EQUALITY



GENDER Impact
Platform

The CGIAR GENDER Impact Platform works across CGIAR, synthesizing and amplifying research, filling gaps, building capacity and setting directions to enable maximum impact on gender equality, opportunities for youth and social inclusion in agriculture and food systems.

gender.cgiar.org

 @CGIARgender

Photos: ©Trong Chinh/Alliance of Bioversity International and CIAT, ©Yuichi Ishida/UNDP, Vu Ngoc Dung/ILRI, ©Neil Palmer/CIAT, ©Hugh Rutherford/CIP, ©C. Schubert/CCAFS