Out of the theory & into the field
An InclusiveVT Initiative of Outreach and International Affairs at Virginia Tech

February 28 - March 1, 2019
The Inn at Virginia Tech
Blacksburg, VA
Women and Gender in Development Conference 2019
Out of the theory & into the field

THURSDAY, FEBRUARY 28

11:00 - 12:30 PM
Registration & Poster Set Up, Light Refreshments

12:30 - 12:45 PM
Welcome, Opening Remarks & Introduction
Dr. Guru Ghosh, Vice President for Outreach and International Affairs, Virginia Tech & Dr. Maria Elisa Christie, Director, Women and Gender in International Development (WGD), Center for International Research, Education, and Development (CIRED), Virginia Tech

12:50 - 2:00 PM
Keynote Address
The SDG gender equality agenda and the distribution of land: Research challenges - Dr. Carmen Diana Deere, Distinguished Professor Emerita of Latin American Studies and Food & Resource Economics, University of Florida

2:00 - 3:35 PM
Power, Positionality & Intersectionality - an interactive panel
Moderator: Dr. Maria Elisa Christie, Director, Women and Gender in International Development, CIRED, Virginia Tech

Critical feminist reflexivity & the politics of whiteness in the ‘field’ - Dr. Caroline Faria, Assistant Professor, Department of Geography and the Environment, The University of Texas at Austin

Engaging men & transforming masculinities for gender equality: What we know - Jane Kato-Wallace, Director of Programs, Promundo

Misinterpreting women’s empowerment?: How a feminist postcolonial lens can reveal new dimensions of change in women’s lives - Dr. Emily Van Houweling, Assistant Professor, Masters in Development Practice, Regis University.

3:35 - 3:50 PM
Break, Light refreshments

3:50 - 4:50 PM
Shift and Share: Lessons from the Field

Mung beans in Senegal: A nutritious crop for women? - Dr. Ozzie Abaye, Professor, School of Plant and Environmental Sciences, Virginia Tech

Developing the potential of girls & boys: Gender issues in Positive Youth Development programs in Senegal - Bineta Guisse, National Director, Feed the Future Youth in Agriculture Project, Virginia Tech in Senegal

Digital media, literacy, & design for empowerment of rural women in India - Dr. Akshay Sharma, Chair of the ISDA Design, Associate Professor Industrial Design Program, College of Architecture & Urban Studies, Virginia Tech

When technology meets culture: Learning to listen to community voices while designing ‘baby pods’ to keep infants warm in Malawi - Ashley Taylor, Director, Pathways for Future Engineers, Center for Enhancement of Engineering Diversity, Ph.D. Candidate, Department of Engineering Education, College of Engineering, Virginia Tech

4:50 - 5:00 PM
Transition break

5:00 - 7:00 PM
Poster session & Reception

@wgdconf #intothefield
**KEYNOTE SPEAKERS**

Dr. Agnes Quisumbing is a Senior Research Fellow at the International Food Policy Research Institute, Washington DC, and leads the cross-cutting research theme on gender. She received her Ph.D. and M.A. in economics from the University of the Philippines, Quezon City, and was a Fulbright-Hays Fellow at the Massachusetts Institute of Technology, a Visiting Fellow at the Economic Growth Center, Yale University, and an economist at the World Bank. She has published widely on gender, intra-household allocation, property rights, poverty, and economic mobility, and has done field work in Bangladesh, Ethiopia, Ghana, Indonesia, and the Philippines. She is undertaking impact evaluations of nutrition-sensitive agricultural development programs in South Asia and Sub-Saharan Africa, focusing on their impacts on women's empowerment and gender asset inequality. She is co-developer of the Women's Empowerment in Agriculture Index (WEAI) and is co-editor of Gender in agriculture and food security: Closing the knowledge gap.

Dr. Carmen Diana Deere is Distinguished Professor Emerita of Latin American Studies and Food and Resource Economics at the University of Florida, and Honorary Professor Emerita at the Latin American Faculty of Social Sciences (FLACSO), Quito, where she teaches periodically. She holds a Ph.D. in Agricultural Economics from the University of California, Berkeley, and M.A. in Development Studies from The Fletcher School of Law and Diplomacy. Deere is co-author of Empowering Women: Land and Property Rights in Latin America (University of Pittsburgh Press, 2001) as well as several other books and many articles. Her recent research is on how gender inequality in asset ownership affects household outcomes such as decision-making and intimate partner violence, and on the factors that shape women's ability to accumulate assets, including property regimes and the role of remittances, savings, and access to credit.

---

**FRIDAY, MARCH 1**

<table>
<thead>
<tr>
<th>Time</th>
<th>Event</th>
</tr>
</thead>
<tbody>
<tr>
<td>7:30 - 8:40 AM</td>
<td>Registration &amp; Continental Breakfast</td>
</tr>
<tr>
<td>8:40 - 8:50 AM</td>
<td>Welcome Back</td>
</tr>
<tr>
<td>8:50 - 10:00 AM</td>
<td><strong>Keynote Address</strong></td>
</tr>
<tr>
<td></td>
<td>Gender, equity &amp; empowerment: Harnessing agricultural research for better nutrition outcomes - Dr. Agnes Quisumbing, Senior Research Fellow, Food Consumption and Nutrition Division, International Food Policy Research Institute (IFPRI)</td>
</tr>
<tr>
<td>10:00 - 10:15 AM</td>
<td>Break, Light refreshments</td>
</tr>
<tr>
<td>10:15 - 11:50 AM</td>
<td><strong>Gender &amp; Nutrition-Responsive Agriculture - an interactive panel</strong></td>
</tr>
<tr>
<td></td>
<td>Moderator: Dr. George Norton, Professor, Agricultural and Applied Economics, Virginia Tech</td>
</tr>
<tr>
<td></td>
<td>Strengthening women's economic empowerment through agricultural extension: What it could look like - Dr. Deborah Rubin, Co-Director, Cultural Practice, LLC</td>
</tr>
<tr>
<td></td>
<td>One Health: Animal health, human health &amp; social empowerment - Dr. Beth Miller, Instructor of Biology, University of Arkansas Pulaski Technical College</td>
</tr>
<tr>
<td></td>
<td>Gender, crops &amp; animals: How women's choices are critical for nutritional health - Dr. Cornelia Flora, Curtiss Distinguished Sociology Professor Emeritus, Iowa State University</td>
</tr>
<tr>
<td>12:00 - 1:45 PM</td>
<td><strong>Lunch, Career Panel - Q&amp;A session with speakers</strong></td>
</tr>
<tr>
<td></td>
<td>Moderator: Dr. Donna Westfall-Rudd, Associate Professor, Department of Agricultural, Leadership, and Community Education (ALCE), Virginia Tech</td>
</tr>
<tr>
<td>1:55 - 3:05 PM</td>
<td><strong>Access: Markets, &amp; the Gendering of Environmental Systems - an interactive panel</strong></td>
</tr>
<tr>
<td></td>
<td>Moderator: Dr. Ralph Hall, Associate Professor, Urban Affairs and Planning (UAP) program and Director of the Undergraduate Program, School of Public and International Affairs (SPIA), Virginia Tech</td>
</tr>
<tr>
<td></td>
<td>Rural livelihoods strategies &amp; globalized markets: An analysis of women's participation among Quinoa producers in the Southern Bolivian Highlands - Dr. Elizabeth Jimenez, Development Economist, Professor, CIDES UMSA, The Graduate School, Interdisciplinary Social Sciences, Universidad Mayor de San Andres, Bolivia</td>
</tr>
<tr>
<td></td>
<td>Human-environment genderscapes in South Asia: Suffering for water, suffering from disasters - Dr. Luke Juran, Assistant Professor, Department of Geography, Assistant Professor, Virginia Water Resources Research Center, College of Natural Resources and Environment, Virginia Tech</td>
</tr>
</tbody>
</table>
3:05 - 3:15 PM  
**Transition Break, Light refreshments**

3:15 - 4:45 PM  
**Concurrent Workshops**
- **LATHAM BALLROOM**  
  **Community engagement in feminist participatory research methods** - Dr. Ann Oberhauser, Professor of Sociology, Director of Women's and Gender Studies, Iowa State University

- **DUCK POND ROOM**  
  **Gender equality in Monitoring, Evaluation & Learning (MEL)** - Dr. Jennifer Himmelstein, Corporate Analyst, ACDI/VOCA, Daniel Sumner, Assistant Director, Women and Gender in International Development, CIRED, Virginia Tech

- **DRILL FIELD ROOM**  
  **Being-in-the-field: A conversation on discrimination, sexual harassment & other challenges** - Caitlin Nordehn, Technical Associate, Cultural Practice, LLC, Christine Dennis Smith, Co-director, Women's Center, Virginia Tech

4:45 - 5:00 PM  
**Break, Light refreshments**

5:00 - 5:45 PM  
**Closing Address**
- **Gender in food security programs: Take-away for moving towards more inclusive systems** - Dr. Krista Jacobs, Senior Gender Advisor, USAID/Bureau for Food Security

5:00 - 6:00 PM  
**Taking it to the field: Share your thoughts**

---

**Dr. Krista Jacobs** is the Senior Gender Advisor in USAID’s Bureau for Food Security, which coordinates the US government’s Feed the Future programming. She is a development economist whose work focuses on gender, food security, and assets. Current and recent work includes advising agricultural projects on gender integration, program evaluation, developing methods to measure women’s and men’s land and asset rights, building gender capacity of community-based programs, and building the monitoring and evaluation capacity of local civil-society organizations. Her work has focused in East and West Africa. Dr. Jacobs holds a Ph.D. in Agricultural and Resource Economics from the University of California, Davis.

---

**Sponsored By:**
- Office of the Executive Vice-President and Provost, Virginia Tech
- The Graduate School, Virginia Tech
- College of Agriculture and Life Sciences Academic Programs
- College of Agriculture and Life Sciences Global Programs
- Department of Agricultural, Leadership, and Community Education, College of Agriculture and Life Sciences
- Student Affairs, Virginia Tech
- AdvanceVT
- Virginia-Maryland College of Veterinary Medicine
- Office for Inclusion and Diversity, Virginia Tech

**With Support From:**
- Pamplin College of Business, Howard Feiertag Department of Hospitality and Tourism Management
- College of Natural Resources and Environment
- University Libraries, Virginia Tech
- Women’s Center at Virginia Tech
- Women and Minority Artists and Scholars Lecture Series of Virginia Tech
- Women and Gender Studies, College of Liberal Arts and Human Sciences, Virginia Tech
- Africana Studies, Virginia Tech
- School of Public and International Affairs, Virginia Tech
- Department of Geography, Virginia Tech

---

* *Thursday Lactation Room - Smithfield Room (second floor) *Friday Lactation Room - Huckleberry Room (second floor)*
Keynote Abstracts

Dr. Carmen Diana Deere (Distinguished Professor Emerita of Latin American Studies and Food & Resource Economics, University of Florida)

The SDG gender equality agenda and the distribution of land: Research challenges

Among the advances in the 2030 Sustainable Development agenda is that the goal to achieve gender equality and empower women now has nine specific targets. These cover many of the root causes of gender inequality, including women’s unequal access to economic resources. This presentation focuses on women’s ownership and control over land in Africa, Asia and Latin America and why its distribution remains a pressing development concern. Moreover, the lack of data on women’s land ownership until recently has stymied research on a number of critical questions, for example, the relationship between land ownership and agricultural decision-making and whether it makes a difference if women own land individually or jointly with their spouse. Similarly, whether land ownership or off-farm employment contribute more to enhance women’s intra-household bargaining power and better outcomes for women and children. The SDG gender equality indicators on land provide a timely opportunity to advance feminist research, but require a strong lobbying effort to assure compliance.

Dr. Agnes Quisumbing (Senior Research Fellow, Food Consumption and Nutrition Division, International Food Policy Research Institute)

Gender, equity, and empowerment: Harnessing agricultural research for better nutrition outcomes

Large disparities in nutrition and health outcomes exist between different social groups, and resources and processes related to these outcomes are often distributed inequitably. These differences between groups intersect with gender, the socially determined roles of men and women, in some cases compounding gender differences, and in others, offsetting them. How can paying attention to gender, equity, and empowerment issues enable agricultural research to be more effective in achieving better nutritional outcomes? How can nutrition-sensitive agricultural projects be designed to be gender-sensitive? What metrics do we need to make sure that nutrition-sensitive agricultural projects not only reach and benefit women, but also empower them?

The presentation will begin with an overview of agriculture-nutrition linkages, identifying linkages where gender dynamics play a key role, and where disparities in wealth, caste, ethnicity (among others) may interact with these differences. Drawing on a widely-used classification of nutrition-sensitive agricultural interventions (Ruel and Alderman 2013), the presentation will pose the challenge of evaluating these interventions for their impacts on empowerment and gender equity. It will use the “reach, benefit, empower” framework to illustrate the types of indicators to use in evaluating nutrition-sensitive agricultural projects and discuss the family of indicators based on the Women’s Empowerment in Agriculture Index (WEAI). It will then illustrate how nutrition-sensitive agricultural projects can use these indicators to assess projects’ impacts on empowerment. It will also discuss how these indicators can be decomposed to examine other factors that underly inequities such as age, caste, or ethnicity. The intent is to challenge the audience to think more broadly about: (1) agricultural research, not only as a means for improving
nutrition, but also as a way to empower women and men; and (2) how the "reach, benefit, empower" framework can be extended to other social categories beyond gender, to diagnose and understand other processes that underlie persistent inequities in nutrition and health, so that appropriate solutions may be proposed.

**Closing Address Abstract**

**Dr. Krista Jacobs** (Senior Gender Advisor, Bureau for Food Security, United States Agency for International Development)

*Gender in food security programs: Take-away for moving towards more inclusive systems*

Development researchers and practitioners have an opportunity and responsibility to create processes where the experiences of the different populations where we work inform the design and implementation of programs and research. The conference has highlighted gender-responsive and community-centered approaches in agriculture, health, and natural resources.

Integrating gender equality and women's empowerment into Feed the Future, the U.S. Government’s global hunger and food security initiative, is an ongoing effort of clarifying aims and expectations amongst ourselves and with our partners and of building gender capacity across technical staff and leadership. The Global Food Security Strategy and the accompanying Research Strategy mark (1) a shift to using an agricultural and food systems approach - which necessarily involves a greater variety of populations and actors, including the private sector; (2) an emphasis on building communities’ resilience to threats to food security; and (3) human impacts of Feed the Future’s research and programs. We expect to be thinking more about fostering gender equality and women’s empowerment in agricultural systems beyond smallholder production; balancing the needs for intersectional analysis and approaches with efficient data collection and use; and understanding gendered use of and benefit from agricultural technologies.

Lessons learned and questions arising from Feed the Future and the wider field have implications for how gender equity and women’s empowerment are measured and for the capacities needed to conduct research and programming in agricultural and food systems.
Panel Speaker Abstracts

Panel One: Power, Positionality, & Intersectionality

Dr. Caroline Faria (Assistant Professor, Department of Geography and the Environment, The University of Texas at Austin)

Critical feminist reflexivity and the politics of whiteness in the “field”

Feminist geographic commonsense suggests that power shapes knowledge production, prompting the long-standing reflexive turn. Yet, often such reflexivity fixes racial power and elides more nuanced operations of difference – moves feminist scholars have, in fact, long problematized. To counter this, we revisit Kobayashi’s (1994) ‘Coloring the Field’ [‘Coloring the Field: Gender, “Race”, and the Politics of Fieldwork,’ Professional Geographer 46 (1): 73–90]. Twenty years on, and grounded in our fieldwork in South Sudan and Honduras, we highlight how colonial and gender ideologies are interwoven through emotion. Decentering a concern with guilt, we focus on the way whiteness may inspire awe while scholars of color evoke disdain among participants. Conversely, bodies associated with colonizing pasts or presents can prompt suspicion, an emotive reaction to whiteness not always fixed to white bodies. These feelings have significant repercussions for the authority, legitimacy, and access afforded to researchers. Our efforts thus disrupt notions that we, as researchers, always wield power over our participants. Instead we argue that the positioning of ‘subjects of color’ in the global south, racially and in their relationships with us, is historically produced and socioculturally and geographically contingent. Rethinking the field in this way, as a site of messy, affective, and contingent racialized power, demonstrates the insights offered by bringing together feminist postcolonial and emotional geographies.

Jane Kato-Wallace (Director of Programs, Promundo)

Engaging men and transforming masculinities for gender equality: What we know

This presentation will provide a synthesis about “what we know” about men and masculinities presenting research from the International Men and Gender Equality Survey (IMAGES) co-developed by Promundo and the International Center for Research on Women and applied in over 45 countries. It will highlight the global trends, opportunities, and implications for practice. It will also present best practices in working with men and boys in ending violence against women and girls, promoting women’s economic empowerment, and caregiving based on 20 years of programmatic work.
**Misinterpreting women’s empowerment?: How a feminist postcolonial lens can reveal new dimensions of change in women’s lives**

Women’s empowerment is a goal of many development programs and dozens of tools have been developed to measure and analyze empowerment. Yet, these goals and tools neglect many important aspects of positive change valued by women. Based on findings from an ethnographic exploration of a rural water project in Mozambique, I point to several key dimensions that emerged from interviews with water collectors, which complicate western empowerment frameworks. Using a postcolonial framework I argue that emotions, subjectivities, tradeoffs, and marital relations deserve more attention in understanding change in women’s lives.

**Panel Two: Gender & Nutrition-Responsive Agriculture**

**Dr. Deborah Rubin** (Co-Director, Cultural Practice, LLC)

*Strengthening women’s economic empowerment through agricultural extension: What it could look like*

The past ten years have witnessed enormous change on two themes of gender and agricultural development work that were not previously considered together: women’s economic empowerment and agricultural extension and advisory services. A historical review reveals that much of the research and writing on women’s economic empowerment has focused on non-agricultural work, whether in wage employment or entrepreneurship, while agricultural extension systems for much of their 100-year existence have directed production and marketing information primarily to farmers who were men. What does this work suggest about the capacity of agricultural extension systems to strengthen women’s empowerment? This presentation reviews emerging work on strengthening women’s economic empowerment through agricultural activities and on agricultural extension programming efforts that have sought to be more intentional in their work with women farmers and agripreneurs. Building on these examples, the presentation suggests opportunities for how extension systems can more deliberately choose approaches to achieve a more inclusive market-oriented agricultural system.

**Dr. Beth Miller** (Instructor of Biology, University of Arkansas - PTC, Agricultural consultant, and President of the International Goat Association)

*One Health: Animal health, human health and social empowerment*

One Health is the intentional linking of human, animal and environmental health interventions to improve outcomes. Although the logic and evidence for comprehensive approaches to health and environment quality are strong, the practical implications are challenging, due to long established institutional cultures that resist collaboration. Livestock are an especially impactful asset for women, especially in areas where women’s social status is significantly lower than their male counterparts. Women can own and manage livestock, especially small ruminants and poultry even in cultures where land ownership is difficult or unattainable. However, women continue to be overlooked as livestock managers, by men in their own families, as well as male veterinarians and
other livestock professionals. Yet women in many places interact with human health services more than men because of their involvement in child health care. Therefore, intentionally linking animal and human health programs can bring knowledge and resources to women livestock-keepers, while also improving human health outcomes, and raising women’s social status.

**Dr. Cornelia Flora** (Curtiss Distinguished Sociology Professor Emeritus, Iowa State University)

*Gender, crops and animals: How women’s choices are critical for nutritional health*

Women’s role in agriculture, nutrition and health has long been viewed as either non-existent or needing remediation to learn to serve enriched foods. But lack of attention to women’s knowledge and practice has hurt the nutritional status of many populations around the world and led to a linear model of the relation of agriculture to nutrition in health. By building on what women currently do in terms of utilizing and enhancing community capitals -- natural, cultural, human, social, political and built -- as they raise, utilize and process crops and livestock, health status can be improved through eating more nutritious food throughout the agricultural cycle.

**Panel Three: Access: Markets & the Gendering of Environmental Systems**

**Dr. Elizabeth Jimenez** (Development Economist, Professor at CIDES UMSA, the Graduate School in Interdisciplinary Social Sciences of the Universidad Mayor de San Andres, Bolivia)

*Rural livelihoods strategies and globalized markets: An analysis of women’s participation among Quinoa producers in the Southern Bolivian Highlands*

The objective of this paper is to identify and analyze changes in women’s participation in agricultural production and commercialization of Quinoa among small-scale agricultural producers in the Southern Bolivian Highlands. While Quinoa is a traditional crop produced in this region for generations, the recent rise of Quinoa international prices has led to significant changes; both in terms of expanding the use of land to increase production levels, as well as shifting to more capital intensive technologies and the use of waged labour (Laguna, 2016). In the process, local institutions (rules and regulations) aimed at the management of access and use of land and the organization of commercialization have also changed with different implications for Quinoa producing communities. Special emphasis is given to identify and explore different livelihood strategies among Quinoa producers, the extent into which women’s participation in production and commercialization varies across different livelihoods and the implications that such differences might have on economic and environmental sustainability. How does export lead agriculture shape women’s participation in the production and commercialization of Quinoa? What capitals (e.g., human, natural, economic and social, among others) become highly instrumental for households to cope with market related uncertainty and risk? To what extent and under what circumstances can export-led agricultural become an opportunity for small-scale agricultural producers to ensure long-run sustainable livelihood strategies? And specifically, to what extend does export lead agriculture lead to changes in women’s participation in the production and commercialization of Quinoa and in the large process of women’s empowerment? Overall, this
study aims at exploring the impact of highly volatile and globalized markets on the livelihood strategies of small-scale agricultural producers such as the Quinoa producers of this study, and specifically in the participation and possible empowerment of women agricultural producers.

**Dr. Luke Juran** (Assistant Professor, Department of Geography, Assistant Professor, Virginia Water Resources Research Center, College of Natural Resources and Environment, Virginia Tech)

*Human-environment genderscapes in South Asia: Suffering for water, suffering from disasters*

Women and men interact differently with both water and disasters, ultimately leading to a ‘gendered terrain’ of natural resources and environmental processes. South Asia is a region where this confluence is particularly evident. In terms of water, women are subjected to gender roles in water collection, household water treatment, management of scarce resources, as well as greater exposure to waterborne diseases and unique water-related health issues. This gendering of water resources has been explicitly recognized in models for water resources management (e.g., IWRM). In terms of disasters, data will be presented to demonstrate that women are more vulnerable than men before, during, and after disasters. The biological variable of being female (sex) fails to fully account for gaps in disaster morbidity and mortality—rather socially constructed variables (gender) are responsible for such disparities.

**Shift & Share Abstracts**

**Dr. Ozzie Abaye** (Professor, School of Plant and Environmental Sciences, Virginia Tech)

*Mung beans in Senegal: A nutritious crop for women?*

Mungbean (*Vigna radiata* (L.) Wilczek) is one of the most important food legume crops in Asia, where 90 percent of global production currently occurs. It is also cultivated in United States, Canada, Australia as well as Africa (especially East Africa) and South America. This ancient crop believed to have been domesticated in India, from where it spread to other countries. It is well adapted to warm, dry climate and is drought tolerant and can withstand adverse environmental conditions. In 2012, USAID-ERA, through linkages between research, education, and outreach, began investigating the potential utilization of mung bean as a new crop with a nutrition-led agriculture focus, recognizing that acceptance and consumption of mung bean may simultaneously address malnutrition and food insecurity in Senegal. Mung bean is a greater source of protein and fiber when compared to its cultural counterpart, cowpeas, and other staple grains. Qualitative data obtained by Vashro, 2017 revealed the multidimensional benefits of mung bean in women’s health status, finances, and agricultural production. The qualitative data also identified the surveyed Senegalese women’s perceived need for sustainable community resources in the form of skills focused education, access to water, community gardens, and processing machinery.

**Bineta Guisse** (National Director, Feed the Future Senegal Youth in Agriculture Project Virginia Tech –Senegal)
Developing the potential of girls and boys: Gender issues in Positive Youth Development programs in Senegal

Senegal’s population is over fifty-percent youth with eight-five percent of the population deriving their income from Agriculture. To support current and future economic development in Senegal 4-H Positive Youth Development has been implemented through a pilot project. In a male dominated culture and environment, we observed changes in youth agriculture knowledge, leadership and unexplored potential for both girls and boys Additionally, an unforeseen outcome has been that adults are having a changing view of youth capabilities.

Dr. Akshay Sharma (Virginia Tech, Chair of the IDSA Design/ Associate Professor Industrial Design Program, College of Architecture & Urban Studies, Virginia Tech)

Digital media, literacy and design for empowerment of rural women in India

Micro-financing has impacted millions of lives globally. One challenge that most new members face is their inability to read and write. It translates into lack of understanding of the process as well as limited participation. IaXmi a financial literacy education system engages with new members through a simulated experience of a micro financing enterprise. It helps in understanding of the rules, process and the long term impact of savings and investing.

Ashley R. Taylor (MSME, MPH, Director, Pathways for Future Engineers, Center for Enhancement of Engineering Diversity, Ph.D. Candidate, Department of Engineering Education, College of Engineering, Virginia Tech)

When technology meets culture: Learning to listen to community voices while designing "baby pods" to keep infants warm in Malawi

At the intersection of community, development, and technology lies the story of “baby pod”, a device designed to prevent neonatal hypothermia in Malawi. Designed for use in both in rural hospitals and during ambulance transport, “baby pod” designers worked closely with Malawian collaborators to identify community assets and local resources, ultimately working towards a sustainable device design. This session will discuss critical lessons learned during this project. The most salient lesson learned to date is the importance of considering who is—and importantly, who is not—at the table in participatory design processes. Other theory-to-field insights include the importance of incorporating culture into technology-based efforts and the ever-present challenge of learning to listen to community stakeholders when designing technology and broader solutions.

Workshop Abstracts

Community engagement in feminist participatory research methods (Dr. Ann Oberhauser, Director, Women’s and Gender Studies / Professor, Sociology, Iowa State University)

In recent decades, participatory research has become more diversified in terms of the types of approaches and applications in the development arena. Feminist and gender studies continue to
interrogate the complex and often contested dimensions of participatory research by focusing on the power relations that comprise different aspects of the research process. This workshop draws from feminist perspectives on participatory research, addressing sustainable community development, gender and other inequality, rapid rural appraisal, and specific techniques and goals of these methods.

Participatory research grew out of development approaches that challenge conventional, top-down, and modernist development projects and research. Participatory approaches focus on perspectives that are grounded in community-based knowledge, shifting locations of power, transformation, and shared outcomes in the research process. Feminist research examines gender inequalities that are manifest in the cultural norms, economic status, and political institutions of the field.

This workshop explores dynamic and critical research that contributes to both participatory and feminist approaches in diverse geographical contexts. Topics that will be addressed in the workshop include techniques and thematic issues such as natural resource access, mobility patterns, household dynamics, sustainable development, and gender-based violence. Participants are asked to bring their own ideas about and experiences using participatory research to the workshop. We will engage in activities and focused discussions about how to effective apply feminist participatory methods in our research.

**Gender equality in Monitoring, Evaluation, and Learning (MEL)** (Daniel Sumner, Assistant Director, Women and Gender in International Development, Virginia Tech and Dr. Jennifer Himmelstein, Director of Corporate Analysis & Technical Assurance, ACDI/VOCA)

Increasingly, development practitioners, partners, and funders are promoting the need for information to more appropriately assess and respond to the size and scope of social, economic, and environmental challenges. This application of data-driven development extends to efforts promoting gender equality and women's empowerment. However, despite the call for increased focus on understanding how development interventions reduce gender-based constraints or improve the wellbeing of women and men, Monitoring, Evaluation, & Learning (MEL) activities are frequently done without taking gender into account, focusing alone on quantitative sex-disaggregated data or including analysis and learning that neglect intended or unintended impacts on men's and women's wellbeing.

The purpose of this workshop is to introduce current approaches and challenges linked to documenting how program interventions affect men and women. While this workshop will only scratch the surface of these topics, we hope that participants will leave with a greater understanding of how a variety of qualitative and quantitative approaches can be utilized to implement a gender-responsive MEL strategy. We ask that participants come ready to share their experiences and questions linked to gender equality and MEL.
Being-in-the field: a conversation on discrimination, sexual harassment and other challenges (Caitlin Nordehn, Technical Associate, Cultural Practice, LLC and Christine Dennis Smith, Co-director, Women’s Center, Virginia Tech)

Piggybacking on the momentum of the #MeToo movement, the international development and humanitarian communities have recently increased their attention to and approaches for addressing challenges around sexual assault and harassment, discrimination, and other related challenges in workspaces including headquarters and field offices and within targeted communities. This movement has been referred to as #AidToo.

This workshop session has two main components related to this topic. First, it will provide an overview of the current issues and challenges women and men face in the field around discrimination, sexual harassment and other challenges drawing on current evidence and trends in the #AidToo movement. This will be complemented by discussion from Caitlin Nordehn, a gender specialist and international development practitioner from Cultural Practice, LLC, who will share some of her own observations and experiences working in West Africa, Asia, and the U.S. Secondly, Christine Dennis Smith, Co-Director of the Women’s Center at Virginia Tech, will co-facilitate a participatory session on strategies different types of actors can take to address discrimination, sexual harassment, and other related challenges in international development workspaces.

Poster Presenters

Graduate Student Competition

Habiba Abdelaal (Ohio University)

The Arab spring and the sexual violence movement in Egypt: From social movements to NGOization

Key Words: Egypt, NGOization, grassroot organizations, anti-sexual movement, Arab spring

This research paper traces the development of the new anti-sexual violence movement after the Arab spring by analyzing different research papers, articles, and organizational reports with particular attention to what called the ‘NGO-isation’ (Jad, 2004) of the social movement. To highlight this process, the paper will examine the changing structures and discourses of Egyptian sexual violence movements. The growing number of Egyptian NGOs in general and women’s NGOs, in particular, must be seen in the context of a broader development drift that views NGOs as an important channel for social change. This paper will argue that NGO as a form is different in various ways from other kinds of organizations aimed at social change, namely social movements. This is not to say that the role of NGOs is not beneficial but rather to differentiate between the ideology of the grassroots organizations and transforming it into a donor-driven NGOs. That will be shown using a case study of a volunteer-based initiative that started as a reaction to fight different sexual assaults incidents during the uprising and later became a registered NGO (Basma, Imprint).

Elizabeth Abraham (University of Minnesota)

Entrepreneurial self-efficacy of tribal women farmers in Nagaland, India
Entrepreneurial self-efficacy (ESE), which is the confidence a person has in their ability to successfully launch and manage an entrepreneurial venture (McGee, Peterson, Mueller & Sequeira, 2009), is widely accepted to be an important predictor of entrepreneurial behavior (Chen, Greene, & Crick, 1998). Women are attributed to having lower levels of ESE in comparison to men (Kelly et al., 2012), due to the fewer opportunities for early mastery experiences, social support, or role models among females (Dyer, 1994). The objective of this comparative case study is to understand how women tribal entrepreneurs with higher ESE’s were developing it. In this study that was conducted in the state of Nagaland, in India, four woman tribal entrepreneurs with high ESE (based on the responses of an ESE questionnaire) were randomly selected from a single district in Nagaland. All four of the entrepreneurs were given surveys to gather their demographics and then interviewed using questions developed based on Bandura's (1997) theory of self-efficacy. Although all four of the cases had diverse socio-economic and educational backgrounds, there were similarities on how they developed their ESE. Three of the four cases had developed their ESE through hands-on subject specific mastery experiences gathered through formal training or informal childhood experiences. And in the fourth case, verbal persuasion or positive reinforcement was the primary source of ESE. These results reiterate the importance of hands-on training experiences and positive reinforcements in developing the confidence of tribal women to express entrepreneurial intentions and behavior.

Maria Kristina G. Alinsunurin (Nagoya University)

Governmentality and gendered outcomes: Experiences from the Philippines’ Cash Transfer Program

Key Words: Conditional cash transfers, gender, governmentality, women empowerment

Conditional cash transfers (CCT) have provided opportunities for improvement to those who have been sidelined especially on state protection (Tabbush, 2010). CCT seeks to address its objectives through a social contract between the household and the state: families, represented by the mothers, are co-responsible to meet education and health conditions. However, on a critical perspective, conditions are anchored on the concept of governmentality, which pertains to barely visible processes of the state governing towards prosperity, but also as a form of exercising power to configure habits and beliefs of the population (Foucault, 1991). This research argues that conditions may have done less to change the overall development process, especially for women. CCTs continue to rely on normative gender assumptions to devolve responsibilities to women. More so, non-compliance to program conditions produces another scenario of exclusion, which will lead to the worsening of the well-being of these women and their family. This research investigates gendered outcomes of cash transfer programs anchored on perspectives of program processes of shaping household choices towards intended development outcomes. Using the standpoint theory as a methodological approach, the research situates itself on the experience of women participating in CCTs, and mechanisms of control which may have continued to marginalize them. Initial field results show the duality of life among the women beneficiaries: on the public sphere living on the concept of responsible motherhood, as set by the state; but in their realm, voicing their need for autonomy in the household and the community.

Safia Amiry (Ohio University)
Gender mainstreaming for women’s empowerment post-Taliban period in Afghanistan

Key Words: Gender mainstreaming, equality, Taliban, Afghanistan, Women's empowerment

After decades of war, Afghanistan has been struggling with the issues of gender injustice and inequality in different aspects. This resulted in the exclusion of women from the reconstruction process, which can affect the development programs and furthermore, discourage women's rights. Post-Taliban Period, gender mainstreaming has been identified as a strategy by the Afghan government and the International Community to promote equality and reintegrate women in the society and workforce. This strategy is also considered to equip women with the right skills and capability to reclaim their agencies and to be an active part of the society, but to look at the implementation of these programs; they are facing challenges, which are impacting their efficiencies. Different factors are causing these challenges such as the patriarchal structure of the society, and social norms practiced illiteracy, poverty and many more. This paper aims to explore the implementation and practice of gender mainstreaming and its impact on the inclusion of women in the workforce so far. The paper is also looking at progress and the shortcomings of this program and the reason behind these limitations to examine if gender mainstreaming is the right strategy and enough to address gender inequality in Afghanistan.

Junior Beauvais (Virginia Tech)

The impact of women’s health issues on agricultural production in Fondwa

Co-author: Donna Westfall-Rudd

Key Words: Women, health, agriculture, Haiti, economics

Agriculture is the backbone of the Haitian economy and employs 80% of the Haitian population. In rural areas, both men and women participate in agricultural production. Unlike developed countries, Haiti’s agricultural system relies on farmers using their hands rather than machines to produce crops. Women play a vital role in everything from land preparation to crop sales. This research purposed to investigate the impact of women health issues on agricultural production. A qualitative case study was used to investigate the work and lives of ten women farmers in the Fondwa community, a small farming area in the southwest part of Haiti. An interview questionnaire was used for data collection. Findings of the study indicated that women’s contribution to farming is vital for agricultural production, and they face health issues that are linked to the environment and water pollution. They suffered minor health problems as well as critical conditions such as fever, cholera, and cancer. Healthcare services are difficult to access due to the conditions of roads, healthcare facilities, and the lack of healthcare providers. Women's health problems influence agricultural production in the Fondwa area by preventing them from doing their agricultural activities. The loss of time producing crops has a direct impact on family and country’s income. Despite these challenges, the Fondwa women farmers remain strong actors in the farming efforts. These women play multiple functions in their family. They provide mentorship to their family by educating their children, and they participate in the family decision.

Sumac Elisa Cárdenas Oleas (Iowa State University)

Understanding Indigenous women’s empowerment when producing quinoa in the Andes of Ecuador
Gender inequality and ethnic discrimination in the rural Global South has limited many people’s ability to fully benefit from agricultural production as their major source of employment and income. Gender inequality restricts women from acquiring knowledge and inputs to increase their productivity, and ethnic discrimination isolates people, which decreases their access to valuable resources in postcolonial nations. While many projects focus on agricultural productivity and efficiency to reduce poverty in the Global South, research on Latin America is limited, mainly on indigenous women, a highly vulnerable and poor rural group in Latin America and Ecuador. This study aims to fill a gap in the literature on agricultural development in Latin America by examining both gender dynamics and indigenous identity as influencing factors to indigenous women’s empowerment when producing quinoa in Ecuador. This study will use NVivo Software to analyze qualitative data from interviews, focus groups, and field observations, to understand indigenous women’s intersecting dual identities, as women and indigenous people. The study uses two domains of empowerment (production and resources) from the Women’s Empowerment in Agriculture Index (WEAI) to analyze indigenous women’s empowerment. This poster presentation will overview preliminary findings, but will specifically cover experiences, issues, and lessons learned from the field data collection and how culture, particularly indigenous culture and gender dynamics, influenced the data collection process.

Allegra Argent Beal Cohen (University of Florida)

Modeling gender inequity in household decision-making

Co-authors: Dr. Gregory Kiker, Dr. Paul R. Cohen

Key Words: Agent-based modeling, gender norms, evolutionary game theory, women in agriculture

Few quantitative models account for gender violence in agricultural communities, but this is a vital step in developing effective mitigation strategies. We use an agent-based model to quantify gender violence and inequality in agricultural systems. Agent-based models are good tools for understanding complex systems with emergent properties. For example, the Axtell, Epstein and Young (AEY) model (2000) generates equity and inequity norms between groups of tagged agents, mimicking existing societal prejudices. Our model incorporates theories on household and community bargaining into the AEY model to quantify gender violence and understand how inequity norms can form and be dismantled. We reproduce gender dynamics in diverse agricultural settings, and assess the potential of intervention strategies intended to empower women.

Lindsey Coleman (Texas A&M University)

Policy implications for a female empowerment NGO in rural Uganda

Co-author: Darienne Davis

Key Words: Uganda, policy, empowerment, education

Introduction Adolescent girls are among the most marginalized populations in the world (Unicef, 2013). The Just Like My Child Foundation (JLMC) fights against gender based violence in Luwero, Uganda through the Girl Power Project (GPP) a female empowerment program. JLMC partners with communities and local leaders who advocate for girls in the community. In the summer of 2018, JLMC contracted four graduate students who assessed the community level impact of the GPP.
Methods To assess the impact at the community level, the researchers conducted semi-structured interviews and observed seven stakeholder groups in the communities. Results Overall, 143 community members were interviewed. Thirty-five percent (n=50) reported an increased in school attendance and a decrease in dropout rates among girls in the community. Forty percent (n=55) encouraged their children to attend school. While the community understood the importance of education, there was an observed lack of commitment to teach among some of the primary school teachers. Policy Implications Because of the community’s increased regard for education, Uganda should implement policies that provide incentives for teacher attendance and success and prioritize the job of primary school teachers. Additionally, JLMC needs to develop income generating strategies for their organization. One policy they could adopt is an agreement with the schools allowing a portion of the teacher’s salary to be paid to JLMC when they facilitate the GPP. Because the regular school teacher does not teach during a GPP workshop in their school, they could allocate a portion of their salary to JLMC.

Garland Mason (Virginia Tech)

Chiapas women’s participation, empowerment, and critical consciousness in NGO-led community development

Co-author: Kim Niewolny

Key Words: Empowerment, Conscientization, Participation, Community Development, Mexico

Machismo culture dominates gender dynamics in rural Chiapas, Mexico. Rigid gender roles influence how women engage in community development, which has implications for women’s participation, empowerment, and conscientization. Motivated by the pervasive use of participatory approaches in development and unexamined associations with empowerment, this research critically centers on questions of whether and how participatory development serves participants’ interests. Drawing upon 30 semi-structured interviews and three months of embedded participant observation, this ethnographic case study examined the linkages between participation, empowerment, and critical consciousness within the work of a small Chiapas-based non-governmental organization (NGO). The NGO’s approach and facilitation of participatory learning and development served as the context for the research. Interview findings illustrate women’s perspectives on their emotional and economic development as a result of their participation in the NGO’s Gestalt therapy workshops and microcredit programs. The inquiry revealed that female participants, whose experience has been informed by their marginalization within machismo culture, were less likely than their male counterparts to associate their participation with processes related to conscientization. Further, both male and female participants who had less prior experience with or exposure to political organizing, emphasized technical learning over changes in consciousness as a result of their participation. These findings problematize claims of empowerment within participatory community development; they demonstrate that all participants do not experience power shifts or processes of conscientization in the same way. This disparity emphasizes the importance of examining micropolitics that govern participation and conscientization, and holds gender-related implications for claims of participant empowerment.

Aakash Gautam (Virginia Tech)

Crafting and building social connections: Supporting trafficking survivors in Nepal
Our research work engages with sex-trafficking survivors and anti-trafficking organizations in Nepal. As part of the work, we conducted an initial ethnography study with survivors in a protected living situation. The study uncovered power differences between the organization, the survivors, and the researchers. We adapted a photo-elicitation method to help overcome these power differences in such a way as to better hear the survivors' voices. I also identified limited but valuable social capital among the survivors. This has led to on-going design work intended to support the survivors as they move out of protected living situations into their future lives.

Raj Kumar G.C. (Virginia Tech)

Women empowerment resulting from development of rural water systems in rural villages in Nepal

Co-authors: A. L. Tom Hammett, Ralph P. Hall

Recent research conducted in ten small farming villages located in the mid-hills of Nepal demonstrate that water developments in these communities have led to shifting gender roles with women becoming entrepreneurial and involved in water management decisions. Field research, including a focus on how women benefited from the rural water systems, was conducted between September 2017 and June 2018. The research included structured interviews with 202 households (43% Male, 57% Female), key informant interviews, and focus group discussions with the users of water systems. The availability of piped water has enabled subsequent development of small-plot vegetable cultivation, livestock production, alcohol production, and the selling of dairy products. These small enterprises have increased the mean annual income of surveyed households by NPR. 43,500 (USD 435), a significant income for a rural family. Small plots of cultivating land, along with micro-irrigation technologies, and access to inputs and rural markets enabled women to assume a dominant role in vegetable production and marketing while controlling the resulting income. Women have been widely recognized for making the water system productive. These female-driven developments have accelerated a gradual shift from subsistence farming to commercial agriculture. The survey showed that 45% of women were represented in water user groups, including leadership positions, due to their increased awareness of community affairs, a collaborative water system development process, and opportunities aided by male out-migration. A majority of the respondents (55%, n=195) reported that women have become empowered to undertake system construction and management decisions. The research revealed that water systems improve quality of life due to less time required to carry water, saving an average of 48 minutes per day (12.25 days per year). The time saved has been used for farming (52%, n=190), rest (43%, n=191), taking care of children (32%, n=190), socializing (33%, n=190), households chores (60%, n=190), and education (18%, n=191). Women were the ones who benefited the most from the time saved. In summary, the water systems provided multiple opportunities for the empowerment of women. This empowerment is gradually breaking strict traditional divisions between the roles of men and women. However, women need to become more involved in the design, repair, and maintenance of water systems to ensure their sustainability.

Lauren Howe (University of California, Davis)
From supo to chimney dryer: a pilot project to improve drying of fruits and vegetables for women farmers in Dadeldhura, Nepal

Co-authors: Bidhya Bhusal, Ganesh Raj Giri, Marjorie Haskell, Amanda Crump, Elizabeth Mitcham

Key Words: Post-harvest, nutrition, horticulture, technology, extension

Nepal is one of the lowest-income countries in the world with critical levels of malnutrition. This project focuses on addressing food insecurity and low dietary diversity, especially for women and children, through drying fruits and vegetables. Fruits and vegetables have great potential to ameliorate undernutrition and provide needed income to farming families. However, postharvest losses of fruits and vegetables are also exceedingly high in Nepal. Fortunately, reducing postharvest losses of fresh produce through solar drying is a promising solution to address food losses and increase availability, especially for women and children. This process has traditionally been done in Nepal using nanglo, or woven mats, that are placed on the ground and exposed to the elements and pest contamination. Drying can also be done using the chimney solar dryer, an efficient, improved model designed by UC Davis that is small-scale, affordable, and can be made from local materials. This project is piloting the chimney dryer in Dadeldhura district in far western Nepal, in partnership with Helen Keller International and Vijaya Development Resource Centre. The project will train NGO staff, local carpenters, female Village Model Farmers (VMFs), and “1,000 days mother-farmers” on dryer construction, usage, preparation and storage methods, and nutritional benefits of dried produce. To explore the gender implications and social impact of the dryer, in terms of women’s workload, time, and income generation, the focus group discussions, key informant interviews, and training evaluation are informed by the USAID Integrating Gender and Nutrition within Agricultural Extension Services (INGENAES) technology assessment toolkit.

Souvanneary Huot (Pennsylvania State University)

Gender and leadership in agricultural cooperatives: The case of Cambodia

Key Words: Gender, leadership, agriculture, cooperative, Cambodia

Gender inequality in the agriculture sector remains a concern among local governments, national institutions and global development actors. There is increasing evidence that gender equality can help reduce poverty and enhance food security. Having women in leadership roles is critical to foster gender equity. Because women are less hierarchical, more cooperative and collaborative, and more likely than men to advocate for policy changes to promote interests of women, children, and families, their leadership is essential. However, the representation of women in leadership and decision-making positions in Cambodia is limited at every level, including at the grass-roots level. This research explores and documents the barriers to women’s participation in farmer organizations, and offers strategic recommendations to empower women farmers and improve their leadership opportunities and roles. This research is anchored around a comparative case study of two cooperatives in Cambodia. One cooperative is the Tasey Samaki Agricultural Cooperative (TSAC) located in Battambang (BTB) province. The second is the Khom Khat Samaki Rong Reung Agricultural Cooperative (KKSRAC) located at Siem Reap (SR) province. The study found that in both cooperatives, women are encouraged and given opportunity to participate in leadership positions. However, there are some barriers for participating. First, women are busy with household chores, taking care of children, cooking, and tending to home gardens. Second, there is limited capacity and levels of education among female farmers in the communities. Finally, there is inadequate compensation for the taking on leadership roles. Indeed, committee work and other
efforts on behalf of the cooperatives is viewed as a kind of volunteer work. They do not get any allowance besides a token return from annual profits (10% for TSAC-BTB, and $36 for KKSRAAC), which they claim is very little. Efforts to enhance women's participation as leaders need to contend with the interrelated problems of time, capacity, and compensation. Our paper concludes with consideration of possible strategies in this regard.

**Cori Hyde** (Iowa State University)

*Impact evaluation of self-help international women's empowerment micro-credit program*

Key Words: Women's empowerment, micro-credit, evaluation, NGO

Women's empowerment is a critical topic in the discussion of international development. Government agencies and NGOs alike have developed programs and initiatives to help foster empowerment for women in developing countries (Cornwall & Edwards, 2010). In the context of development, women's empowerment can be a useful tool. When economic improvement is the goal of many development agencies, investing in girls and women to stimulate growth is 'smart economics.' Women make up half the population and providing support and opportunities to women will improve economic development (Chant, 2016). Microcredit lending is a popular program used to target women's empowerment by providing access to funds for entrepreneurial endeavors or investments in businesses. Based on some research, when women have control over finances, they will reinvest in their family’s health, education and households, which will begin to alleviate the burden of poverty. Women are also likely to invest in their communities. They become more involved in leadership roles, and gain status among community members, which contribute to empowerment (Chant, 2016). The objective of this paper is to examine the impact of women's empowerment on economic development, and the framework for evaluating micro-credit lending programs for women's empowerment.

**Madhulika Khanna** (Georgetown University)

*The Precocious Period: Impact of menarche on school enrollment in India*

Key Words: School enrollment, education, social norms, gender, India

Adolescence is an important period of formative biological and social change, but little is known about the importance of adolescence experiences, especially in developing countries. Using longitudinal data on children from India, this paper investigates the impact of a definitive event in every girl's life, menarche, on outcomes related to her education and her marriage. Double-difference estimates are computed to estimate the impact of menarche on school enrollment. Early menarche causes a stark 12.8% decrease in enrollment rate. Healthier girls both start menstruating sooner and also have higher initial learning outcomes. The initial health advantage they have over other girls in their cohort disappears, potentially because that advantage causes an earlier onset of menstruation. Girls are more likely to drop out of school after menarche if they reside in communities that are perceived to be unsafe. This suggests that parents’ concerns regarding their daughter’s safety increases overnight with menarche. However, decreases in enrollment induced by menarche are smaller in those communities that have higher expected wages for female dominated professions- teaching and nursing. Taken together, these results indicate that although
collectively held, social norms that interact with education are reinforced by individual decisions, taking girls out of school after menarche in this case. When we situate these results in the context of India’s rapid economic growth, it is encouraging that the norms that act as barriers to educational advancements are not intransigent to the concurrent progress.

Steven Lam (University of Guelph)

How are international development evaluations considering gender?

Co-authors: Warren Dodd, Jane Whynot, Kelly Skinner

Key Words: Program evaluation, gender, meta-evaluation, systematic review methodology, international development

Gender equity is an increasingly discussed priority and cross-cutting theme within international development programs and policies. However, it is unclear whether advances being made in evaluating the outcomes in this area are reflected in the scholarly literature. In this context, a fundamental question is: How is gender being addressed in international development evaluation? To answer this question, we conducted a meta-evaluation to identify, synthesize, and assess published evaluation studies in international development with a focus on gender. We searched the Web of Science™ Core Collection database along with nine evaluation-focused journals using variations of the terms ‘program evaluation’ and ‘gender’. A total of 2027 studies were identified, of which 70 met a priori inclusion criteria. Of the reviewed evaluations, most focused on the health sector (73%) and targeted gender-specific programs (63%), specifically women. While the number of studies that report on gender is growing, and nearly all studies included gender-disaggregated data, often only outcomes by ‘women’ and ‘men’ were considered without going further to raise larger questions of gender equity. For evaluation to contribute to gender transformative changes, we suggest that future evaluation studies provide data on diverse groups of genders, engage with evaluation stakeholders, consider the larger socio-cultural-political context of programming, encourage the use of evaluation findings, and provide actionable recommendations.

Amy Margolies (Johns Hopkins University)

Burdens of participation: A mixed-methods study of the effects of a nutrition-sensitive agriculture program on female caregiver time use in Malawi

Co-authors: Elizabeth Colantuoni, Laura Caulfield, Rosemary Morgan

Key Words: Time use, caregiving, nutrition, agriculture

Background: Development programs often rely on women’s participation for their success. However, programs do not adequately consider the opportunity costs of women’s volunteerism. We tested this hypothesis on a participatory nutrition-sensitive agriculture program delivered through community-based preschools in Malawi to examine whether the program increased women’s care burdens, and how additional time was perceived. Methods: The mixed-methods study was conducted over a year of program implementation using data from a randomized control trial. A longitudinal binomial regression model was used to estimate the average minutes spent caregiving at baseline and then separately for each treatment group at 6-months and 1-year post-randomization. Two rounds of 38 qualitative in-depth interviews were conducted. Interviews explored perceptions of time use, program activities and attitudes about gender. Integration of data
strands was conducted by exploring the interrelationship of qualitative nodes to quantitative trends. Results: The program significantly increased caregiving time for participating women, however, this effect was only found during the lean season during preschool scale-up. The increase in minutes of care was small (~30 minutes) and voluntary work was not considered burdensome. Voluntary contributions were qualitatively important to participants as investments in their children’s development. Conclusion: These findings provide first evidence on whether women’s participation in a nutrition-sensitive agriculture program added to the burden of care. Although the program caused a modest increase in caregiving during the lean season, additional time was considered well spent. Evaluations of participatory development programs should track the gendered time investments of participation to avoid doing harm.

Katie McNamara (University of Florida)

Decolonizing the community voice: How participatory visual methods can open new possibilities to addressing nutrition in Nepal

Key Words: Nutrition, empowerment, post-development pathways, gender

For almost two decades, the gender and development (GAD) approach has placed empowerment centerstage among efforts to address complex global health challenges, including malnutrition. However, as postcolonial critiques of GAD have made its weaknesses increasingly apparent, researchers and practitioners must now critically reexamine the empowerment approach and its potential socioecological and health consequences. Decades of women’s-only initiatives framed by western concepts of empowerment have simultaneously ignored the diverse conceptualizations that exist among women and marginalized the equally diverse voices of men. Far beyond risking the effectiveness of the interventions, disregard of these critical perspectives reproduces neocolonial oppression, exacerbates power dynamics, and reinforces gendered stereotypes as empowerment and nutrition become cemented as “women’s issues.” Key to addressing these challenges is to radically reimagine empowerment according to local men and women. This presentation shares the findings from fieldwork conducted in Nepal which used participatory visual methods and focus group discussions to explore how community members can drive the reconstruction of “development’s empowerment” on their own terms. Our research looked closely at community-identified intersections of nutrition and empowerment as a means of identifying postcolonial pathways to improved nutrition. This research revealed that local concepts of empowerment combine both Nepali and western worldviews, often as contradictory priorities, values, and norms. We raise questions about the positioning of communities’ vision of their future alongside the vision of development organizations. Ultimately, our findings suggest that misalignment between these two parties undermines the communities’ ability to identify and attain their own ideals for nutrition and empowerment.

Lipon Mondal (Virginia Tech)

Gendered laws of the land: Women’s unequal access to landownership in Bangladesh

Key Words: Women, Land, Unequal Access, Patriarchy, Bangladesh.

Men in South Asia have historically monopolized Landownership while women’s right to land has been systematically denied. Religious scripts and various inheritance laws show that women have been experiencing unequal access to ownership and control over land from the Hindu Kingdom to
Muslim Sultanate to British Colonial Rule to postcolonial South Asia. Although India recently repeals a law that had been prohibited women's access to ownership on land, no other country has taken any major initiative to promote equal rights to the property. In postcolonial Bangladesh, women rarely own land. The Food and Agricultural Organisation of the UN shows that Bangladeshi women owned no more than 3.5 percent of the country's agricultural land in 1993, which further shrunk to 2 percent in 2013. Considering these facts the paper examines how patriarchal values, customary practices, and property laws of inheritance systematically exclude women from land ownership in Bangladesh. This presentation argues that women historically experience oppression and subjugation in society and remain outside of the power structure due to the limited or no access to land. This paper uses empirical evidence (e.g., life histories and a land use survey) collected from a neighborhood of Dhaka, Bangladesh, which shows that less than one percent women independently own land while 4.67 percent women share landownership with men (9 plots out of 1,007 plots, and 47 shared-plots). Findings also show that women landlords are more susceptible to lose their land due to land grabbers' predatory and aggressive patriarchal views.

Maria Okyere Addo (University of Bergen)

Balancing motherhood and work in the formal sector in Ghana: A qualitative, comparative Study of women who work and women who gave up their career

Key Words: career, motherhood, balance, Ghana, formal sector

Responsibilities of motherhood and climbing the career development ladder is daunting because it entails a wide range of duties, including attending conference meetings, supervising wards' assignments, sending and picking children to and from school, among others (Sarpong, 2017). I find it unfortunate that educated women, who have risen high on their career ladders are confronted with gender-role conflict, causing some to quit or consider quitting their jobs. Are women being trained to spend so much time in school, earn a good job and quit mid-way because they must have and raise children? This is what the career of some Ghanaian women have been reduced to. Some are left with no choice than to sacrifice their careers, since child bearing is of extreme importance in the Ghanaian society. As a researcher, my anticipation of how I will combine my future career and family role has sparked my curiosity regarding the experiences of working mothers. This narrative study interviewed eight women: four working mothers and four mothers who quit their jobs in the formal sector. Using snowballing, respondents were selected from similar socio-economic background in Accra. The results showed that, working mothers experienced some form of stress in integrating work and family roles, however, there was fulfilment in being able to balance both roles. Their major challenge was the insufficient time they had with their children because of work. Respondents suggested that, the formal working environment, existing organizational and governmental policies needed amendments, since they are not conducive for mothers.

Andrea Padilla Herrera (Ohio University)

Communication, alliances & legislation: Women's fight to legalize abortion in Latin America through political participation and social movements

Key Words: Abortion, Latin America, political participation, reproductive rights, social movements
The creation of social movements has constituted a mechanism through which women have been able to join their efforts to claim rights that often create gender conflicts in a society. Within the contested gender conflict of reproductive rights, the legalization of abortion has been one of the most debated issues worldwide because it includes the question of who has the legitimate control over the decision of ending a pregnancy or not. As a result of defending gender sensitive needs such as the right to legally abort, organized groups of women have involved themselves in the political arena to make their voices heard at a governmental level. Due to the existence of highly restrictive and criminalizing abortion laws in Latin America, the purpose of this research is to show how the political participation of women in Mexico City, Uruguay, and Argentina has increased because of the formation of feminist groups in favor of legal and safe abortion. This paper further looks at the importance of three main strategies that women’s movements have used in the aforementioned countries to influence public policy regarding abortion. These strategies include the establishment of common goals, alliances, communicational tactics and drafting bill proposals. This research draws upon primary resources such as women’s movements reports and secondary sources like scholarly articles. Future investigations are suggested to study the influence of progressive or conservative governments and the influence of the Catholic Church as impediments or not for women’s movements to attain the legalization of abortion in their countries.

Liliane Poicon (University of Florida)

Standing apart: The good + the bad of women-only farmers’ associations in Haiti

Key Words: Gender, Haiti, development, empowerment, food production

This research is part of the broader project of extension experiment in Haiti that is seeking for the best model of technology transfer to use for teaching members of farmers’ associations in Haiti. It involves six women-only farmers’ associations, located in a municipality near Port-au-Prince, that collaborate with the Project “Appui à la Recherche et au Développement Agricole” (AREA) implemented by the University of Florida and funded by the US Agency for International Development (USAID). This work is relevant because of the roles that Farmers’ organizations play globally and in Haiti in providing opportunities to Farmers by connecting them to larger institutions such as Public institutions and non-governmental organizations (NGOs) and because of the historical roles of women in agriculture in Haiti both in marketing and in production (Bernard and Spielman, 2009; Fuller-Wimbush and Fils-Aimé, 2014; MARNDR, 2010; Sangole et al., 2014). In Haiti, farmers’ groups can be all male, all female or they can mixed-genders (Swisher, 2016). In each association, we picked randomly 20 women. We used an index and a semi-structured interview for data collection. The interview explored the groups’ dynamics of those associations. The findings we will report for this poster will focus on the advantages and the disadvantages for women in Haiti to be part of a women-only farmers’ association instead of a mixed-gender association.

Hannah Russell (Texas A&M University)

Filling knowledge gaps in the FANH sciences: A gendered lens

Co-author: Manuel Piña

Key Words: Holistic, Micro-level, Development, University, Curriculum

Filling Knowledge Gaps in Food, Agriculture, Nutrition, and Human (FANH) Sciences: A Gendered Lens, is a curriculum development project striving to educate undergraduate and graduate students...
about holistic development at the micro-level. Women’s role in development can elevate the standing of women around the world and is often not addressed in the university classroom. Traditional gender roles and stereotypes can derail development - students must understand how women contribute to food security, poverty alleviation, and social progress. The objectives of this curriculum are to: 1) Increase awareness and understanding of the vital connection between gender and development; 2) Create an innovative, educational practice within the FANH sciences; 3) Increase the number and diversity of students who will pursue and complete a postsecondary degree in the FANH sciences; 4) Better equip the nation’s food and agricultural scientific and professional workforce. To do this the following method will be used, a climate assessment will determine a baseline data from undergraduate and graduate students- assessing perceptions regarding women’s role in development and rights. The course utilizes a pre- and post- test to evaluate the quality of education and learning outcomes. The methods carried out throughout this project consist of: curriculum development, hands-on learning opportunities, qualitative and quantitative data collection and analyses, volunteer opportunities, team-building activities, interdisciplinary educational experiences, and reflection. Dissemination will ensue throughout every phase of the project through conference presentations, paper publications, networking events, seminars, workshops and faculty meetings. A long-term goal is to see this curriculum adopted by universities abroad.

Mou Rani Sarker (University of the Philippines Los Baños)

Gender equality and economic development: The case of Bangladesh

Co-authors: Abdur Rouf Sarkar, Ranjitha Puskur

Key Words: Gender equality, economic development, female labor force, women employment

Bangladesh has again topped South Asia in terms of gender equality. Though Bangladesh women making progress in some key areas such as health, education, economy and politics but still gender inequality is increasing. Do existing gender inequality hamper the economic development in Bangladesh? This paper investigates the extent to which the persistence of gender inequality might have constrained growth and productivity in Bangladesh. After the examination of sectoral labor productivity data and female employment structure we found that women contributing less to the structural transformation of the economy. They trapped in informal and low productivity sectors that are characterized by lower returns, greater insecurity, and generally unfavorable working conditions. The unpaid work of women is about 76.8% of GDP. Female labor force participation is increasing but still remained lower than male participation. Existing unfavorable terms of women’s engagement in the labor market are reducing GDP growth rate in Bangladesh. Study also found that gender inequality is typically larger in rural areas where they involve in agriculture as compared to urban areas. By analyzing the challenges women faced we argue that it is necessary to given women the opportunities they need for broader economic development in Bangladesh. By guaranteeing the rights of women and giving them opportunities to reach their full potential is important for not only for attaining gender equality, but also for economic growth. The active and continuous policy support is very necessary to bring about equality between men and women in Bangladesh.
Women, water and wellness: A case study of Guatemala’s Ixil Triangle

Co-authors: Katie Klein, Linda Xiong

Key Words: women, water, wellness, Guatemala, community-driven

According to UN Water, the responsibility of water management and use of household water supply falls primarily on women and girls in developing countries (UN Water, 2018). This has proven true in Guatemala’s Ixil Triangle, where the need to secure water precludes participation in education and the workforce. Engineers without Borders at University of Wisconsin-Milwaukee (EWB@UWM), in partnership with Guatemalan NGO, Associacion de Comités Comunitarios Medio Ambiental de la Región Ixil (ACCMARI)*, has been constructing water systems in Guatemala’s Ixil Triangle for thirteen years. While many correlations have been made between improved access to water and increased governance participation, financial security and education, there had not been a study specifically dedicated to the impact of EWB@UWM’s water systems on women in the Ixil Triangle. Through door-to-door interviews and women’s meetings in eight communities in Guatemala’s Ixil Triangle, this study examined the impact (or anticipated impact) of newly constructed water systems on women who reside in these communities. Specifically, this study examined how improved access to water affected the likelihood of children to attend school, the mental health of women, women’s participation in decision-making regarding water, and the experience of women gathering and using water in their daily lives.

Socio-cultural practices that impact Sukuma Women Farmers’ Land Ownership: A qualitative study

Co-authors: Rick Rudd, Amon Mattee, Donna Westfall-Rudd, Tom Archibald

Key Words: Sukum women farmers, land, Tanzania

Tanzania faces the challenge of unequal resource distribution between men and women, especially land. The constitution ensures the equal right to sell, own, buy or transfer resources to all citizens; nevertheless, women are less privileged compared to men. Tanzania has statutory and customary laws; as for customary laws, they differ depending on the region and clan. National Land Policy of 1995 and Land Act of 1999 recognize customary and statutory rights of occupancy and provided divisions that give women land ownership rights. They both acknowledge that under customary law, women’s access to land was insecure and indirect; therefore, it provided women with the right to acquire land of their own through purchase and allocation (Myenzi, 2010). With differing cultural norms, traditions and beliefs in Tanzania, this study intended to identify social and cultural patterns, beliefs, practices that strongly impact Sukuma women farmers’ access to and control over land. The study utilized Fishbein & Ajzen’s (2010) The Reasoned Action Approach and Behavior Change framework to understand the intention, attitude, perception and control behavior of the Sukuma community towards women farmers land ownership. From the analysis, six themes emerged. Researchers recommend that high confidentiality is paramount for people to feel secure when buying, selling, registering, or transferring land. Both men and women must be a part of cultural changes to improve this situation (IFAD, 2010). In villages where men are advocates at the village
level, norms change more rapidly in favor of women’s right to own and manage agricultural land (Myenzi, 2010).

**Audrey Smith (University of Florida)**

*Maternal and child health in a changing climate: A spatio-temporal analysis of NDVI and under-five stunting in Zambia*

Co-authors: Jane Southworth, Sadie Ryan, Peter Waylen

Key Words: Maternal health, stunting, climate variability and change, NDVI, sub-Saharan Africa

Climate variability and change intensifies the complex relationships that exist between the environment, food security and human health. Sub-Saharan Africa is identified as one of the most vulnerable regions to the impacts of climate change due to multiple stressors including endemic poverty, weak institutions, and reliance natural resource-based livelihoods. Climatic shocks can result in poor agricultural production and loss of livelihoods, exacerbating widespread food insecurity and undernutrition. Pregnant women and young children are at the greatest risk as the effects of climate variability and change are likely to worsen poor maternal health and undernourishment of infants. In the southern Africa country of Zambia, increasing frequency and intensity of floods and droughts and lower agricultural yields have already resulted in increased food insecurity and undernutrition with 45% of under-five children stunted. Satellite-derived vegetation indices such as the Normalized Difference Vegetation Index (NDVI) provide spatially explicit estimates of vegetation health and biomass and have been widely used to monitor climate-driven environmental change. This research uses multi-temporal imagery from NASA’s MODIS satellite and Demographic and Health Surveys (DHS) data to investigate relationships between climate-driven environmental variability- as measured by NDVI- and maternal and child nutritional status- measured by mother’s BMI and prevalence of under-five stunting. Multiple linear regression models showed a positive correlation between greener vegetation and prevalence of stunting at the alpha $\alpha 0.05$ significance level, but no significant correlation was detected between mothers’ BMI and NDVI. Variation in the relationship between trends in vegetation rigor and stunting between urban versus rural residence were observed. This study highlights the need for interdisciplinary research that seeks to understand the spatially heterogeneous and inherently complex relationships that exists between the environment and maternal and child nutritional status in less developed countries, especially in the face of climate variability and change.

**Kelly Summers (Virginia Tech)**

*"Without a phone and without communication:" Mobile phones and the gatekeepers to gender equality*

Co-authors: Timothy Baird, Emily Woodhouse, Maria Elisa Christie

Key Words: Maasai, agro-pastoralist, gender, mobile phones, empowerment
Throughout the developing world, mobile phones have been heralded as a tool that can empower women and lift them out of vulnerable situations. While many scholars and development professionals believe that phones can support gender equality, some contend that phones may also amplify inequalities for people who are not well-positioned in society. This leads us to ask, how has the diffusion of mobile phones in strongly patriarchal societies affected women? Grounded in perspectives from scholarship on rural livelihoods, women’s empowerment, and social relations, we address this question by examining the effect of mobile phones on gender-based inequalities in agro-pastoralist Maasai communities in northern Tanzania. We conducted semi-structured interviews and household surveys in the summers of 2017 and 2018 to identify women’s perspectives on gendered phone-access, intrahousehold dynamics, and agency surrounding social relations at various institutional levels. Through inductive and deductive qualitative content analyses, our findings indicate that phone access for women is fluid. Access varies considerably and is not only a function of a woman’s personal agency, but often more importantly the social relations her husband controls. These results help us show how paths towards greater gender equality in patriarchal societies, which may be afforded by new technologies, are guarded by men and subject to their discretions. This highlights the importance of engaging men and women in discussions of and interventions surrounding women’s empowerment.

Dareen Tadros (Ohio University)

*Palestinian women access to specialized healthcare as a human right*

Key Words: Women's health, access to healthcare, human rights, Palestinian women, women's well-being

The violations of human rights and dehumanizing occurring in Palestine impact the well-being of the population. The violation to right to movement is creating challenges to the access of specialized healthcare. Women tend to be one of the most vulnerable groups of the population struggling with this violation to their human rights. This paper assesses the challenges and limitations women face to access and to provide specialized healthcare living in Palestine. The research consists of in-depth, semi-structured interviews with Palestinian female medical staff and healthcare beneficiaries. The participants are from different geographical areas and have different socio-economic status. Specialized Palestinian healthcare institutions are located in Jerusalem due to historical and political context. The results show Palestinian women from different cities have political and economic challenges to access specialized healthcare. Their right to health is violated in addition to violations of right to movement, which is affecting their access of these centers and health services. The development of the healthcare is limited due to the political context. In addition, this paper provides potential solutions to overcome these challenges and limitations. The paper presents tools and suggestions to empower women and to protect their human rights mainly right to health with the objective of improving Palestinian women well-being.

Sue Telingator (University of Massachusetts, Boston)

*Catalyzing stagnant norms: Female parliamentarians’ creative impact on weary public institutions in Senegal and South Africa*

Co-author: Dr. Sindiso Mnisi Weeks

Key Words: Representation, governance, parliamentarians, Senegal, South Africa
An ever-growing number of studies show that diversity increases the creativity of an institution. Largely dominated by men, political institutions are often among the most enervating, especially when it comes to socio-economic transformation for women. The increase in the numbers of women in political office in some countries seems to hold promise for positive transformation of weary public institutions in Africa. This poster, therefore, explores the following questions: What is the impact of women’s increased participation in political office in Africa on transforming stagnant political institutions? How do women play a role in maintaining the status quo versus changing established norms? Do women see themselves as changemakers? If so, what sorts of creative approaches do they use to challenge established norms in government institutions? By means of a meta-analysis of secondary sources from the period of 2010 until the present and original qualitative research, we compared Senegal, where a 2010 gender parity law has increased the female representation in the National Assembly to 43%, and South Africa, where female representation is at 42%. Our objective was to understand how increasing women’s representation in Parliament may challenge traditional norms and thereby render public institutions more creative and, hence, resilient.

Maria Van Der Maaten (Iowa State University)

Collective development projects: Overcoming precarious access to capitals through collaboration in rural Guatemala

Key Words: Capitals, collective action, niche market, livelihood strategy, Guatemala

How does access to capitals influence smallholder farmers’ ability to grow a niche crop, participate in the local market, and subsequently reinvest in their crop to develop a sustainable rural livelihood strategy? This research examines how access to capitals, not just the accumulation of capitals, influences a group’s ability to sell pine and cypress seedlings in the local market in San Martín Jilotepeque, Chimaltenango, Guatemala. Of nearly 60 groups participating in the collective nursery project, only one group started seedlings, sold them in the market, and reinvested the profits in the project. I examine the group’s access to capitals and explore how they were able to turn the nursery project into a sustainable rural livelihood strategy. Through participant observation, interviews, and focus group discussions with project participants and staff I use the Capitals and Capabilities Framework to analyze qualitative data collected in 2016. I find that the group’s ability to access different types of capitals improved both its ability to sell seedlings in the local market and its entrepreneurial efforts to reinvest in the nursery project. For projects designed to support sustainable rural livelihood strategies, such as local market participation, understanding the role of access to capitals and removing barriers to access is critical for project participants’ success. I argue that by collaborating, project participants can access more capitals, which influences how they decide to sell in the market and whether to reinvest in the project in the future.

Mary Vasilesvsky (University of Florida)

Meeting practitioners in the field: Collaborative online gender tool-kit

Co-authors: Angela Melidosian, Sandra Russo, Renata Serra

Key Words: Open-source, capacity, learning, perspectives, communication

Building capacity for gender mainstreaming in development projects is a self-reflective process where practitioners must consider gender constructions by integrating their social positions,
identities, intersectionalities, and motivations, as well as analyzing these constructions at the local, contextual level. To develop more relevant and effective approaches to gender in development, practitioners must themselves integrate an understanding of a gender perspective and apply to practice self-reflexivity. At the University of Florida, an interdisciplinary group of practitioners, researchers, faculty, students, and community members collaborate in the Gender and Development Working Group. At the group, we recognize that in order to prioritize gender, we must share stories, literature, raise awareness, visualize these realities. For this, we created the Collaborative Online Gender Toolbox. Our toolbox is an open source collection of lessons learned, anecdotes, reviewed literature, and resources of gender work in development projects that is organized and structured to facilitate learning and practice. The purpose of this toolbox is to make information available and accessible; to strengthen the capacity of everyone beyond gender studies to understand and integrate gender perspectives in their work and in their lives. Our initiative seeks to meet practitioners in the field, at any point of knowledge so that we can expand, build, and share, ultimately creating and strengthening our capacities.

Kelly Robyn Wilson (Ohio State University)

Do women reap the benefits? Exploring access and social exclusion among village chicken producers in Kenya

Co-authors: Mary T. Rodriguez, Scott Scheer

Key Words: Village chicken production, gender, agricultural extension, social exclusion

While there is no easy solution to food insecurity, low-input agricultural products can make important contributions to household livelihoods. A growing trend is to focus on “women’s products”, agricultural products typically managed by women in developing countries. In Kenya, village chicken (VC) production is commonly linked to women. These small-scale flocks are raised on minimal inputs but offer crucial contributions towards household nutrition, livelihoods, and are of socio-cultural importance. Unfortunately, studies find that VC producers in Kenya lack access to information and technologies that could drastically reduce the risk of disease and improve productivity. Further, while women are hailed as the owners of village chickens, mechanisms of social exclusion limit their access to and ability to use resources. Lacking awareness of the socio-cultural processes surrounding VC production presents barriers to help producers. This purpose of this qualitative research study was to explore VC producer challenges through Kabeer’s (2000) analysis of social exclusion. Research activities included focus group discussions with female and male VC producers and interviews with agricultural extension agents in Kitui and Embu Counties. Findings highlight mechanisms of social exclusion. Mobilization of institutional bias was evident as stakeholder groups reported that government funding consistently overlooks VC production. Participants also reported women’s social closure from market access and authority over products. Gender-inclusive programming is recommended for VC producers. To empower and lend authority to producers, social acknowledgement of chicken production through policy and programming is critical.

Undergraduate Student Competition

Ozzie Abaye (Virginia Tech)

Community Garden: A safe space for gender specific conversations
Co-authors: Dana Mulligan, Reagan Wampler, Bella Maletesta, Naima Dido

Key Words: Gender, garden, space, Tostan

Seed Programs International Abstract: A group of students from Virginia Tech was involved in service learning projects through Seed Programs International. Seed Programs International (SPI) provides quality seeds and critically needed expertise to impoverished communities in developing countries. Seed Programs International in collaboration with Tostan, a nonprofit organization that uses community education to bring about positive social change have used community garden as a platform to bring about social changes, physical, and mental health. Tostan’s research and outreach data had shown that community gardens have a significant role in building social capital, particularly in culturally diverse communities. We (students) through SPI, examined the role of community gardens as a sustainable and reliable food and income source but also a safe space for women empowerment. In many societies, women are subjected to increased physical and mental abuses like. Female genital mutilation (FGM). “Female genital mutilation (FGM), also known as female genital cutting and female circumcision, is the ritual cutting or removal of some or all of the external female genitalia.” This culturally driven practice can cause young women irreversible psychological and physical damage and has become a human right issue. Community gardens and space is being used to empower women to fight against the brutal treatment of women that is FGM and gain access to their fundamental human rights. The garden also provides a safe place for women to share their experiences, which can be therapeutic and help change societal norms. We (the students) through weekly meetings with Naima Dido SPI), learned how the Safe Space Garden Program and Tostan modules are developed on a specific focus like education, FGM prevention, mental and physical health, and human rights.

Michelle Corinaldi (Virginia Tech)

Motherhood in the workplace: A sociological exploration into the negative performance standards and evaluations of full-time working mothers

Key Words: Sociology, labor, employment, gender, motherhood

This research, entitled "Motherhood in the Workplace: A Sociological Exploration into the Negative Performance Standards, and Evaluations of Full-time Working Mothers", examines the conscious and unconscious presumptions that are made regarding the nature of pregnancy, and by extension about women and motherhood, in the domain of employment. Colloquially coined as “motherhood penalties”, these characterizations are biases and suppositions made about a woman’s commitment to her individual occupation and the workplace as a whole. The penalizations - whether it be immediate financial repercussions or distant career stagnation - are placed onto a woman’s presumed responsibilities beyond her present occupation, perpetuating negative judgments as well as different, and often unfair, standards to which a woman can, and have the ability to, achieve professional success. For women, it is historically perceived that being “inside the home” comes primarily and being “outside the home” comes secondarily, producing the resulting uncredited - and unpaid - ‘double burden’ of responsibilities for today’s full-time working mothers. Utilizing a theoretical framework of the status characteristics theory, cultural tension between an “ideal worker” vs. “good mother”, and the second shift theory, this research seeks to sociologically examine the implicit and explicit devaluation of motherhood in the workplace. The extensive lifelong and generational repercussions contributes to the larger, interlocking structures of sexism, burdening working women, and by extension, penalizing contemporary womanhood. These scholarly conclusions can meaningfully add to the broader understanding of the gendered social
barriers imposed onto working women, and thus inform the meaningful cultural changes needed for a more equal, and equitable, labor workforce.

William Glynn (Virginia Tech)

A Sustainable Clean Water Solution for Rwanda

Co-authors: Connor Moulton, Isabella Isacco, Rajah Singhal, Smriti Kandel, Andrew Douglass, Alexander Wu, Brianna Friedman, David Moore

Key Words: Water, Rwanda, sanitation, sustainability, low-resource

Women and girls in developing countries spend up to 6 hours a day collecting water for their households. In the community of Rilima, Rwanda, water is acquired by walking 35 minutes round-trip to a nearby lake and carrying water back in jerrycans. Then, the water is boiled to purify it for consumption. After interviewing a family of 4, it was determined that they use 40-80 L of water per day, which requires 2-4 trips to the lake and consumes over 2 hours of their time. This time commitment to obtain water prevents women from pursuing careers and girls from attending school [2]. Our design team aims to create an autonomous water supply for the community, which would free women and children of this burden and gives them the opportunity to take control of their own futures. To provide this autonomy, the team has proposed a design that would both transport and filter drinkable water to a communal tank in the center of Rilima. All of the components in the design are locally sourced and chosen to minimize cost and maintenance, saving the community both time and money. Our pipeline design incorporates a filtration system that will remove both physical sediment and bacterial matter, and a solar-powered pump with enough strength to transport the water from the lake to the center of the community. The design will also include a mechanical backup such that if power is lost, the community will not lose water access in the time needed for repairs to be completed. The solution proposed by the team will provide the people of the community with greater independence to pursue careers and education.

Angeline Letourneau (University of Alberta)

Mining Gender: Social justice issues for Canadian mining companies in Latin America

Co-author: Naomi Krogman

Key Words: Mining, Canada, gender equality, Latin America, human rights

The Canadian government has refocused its international policy on gender equality with initiatives such as the 2017 Feminist International Assistance Policy and the proposed Impact Assessment Act. To gain a better understanding of the current state of the Canadian mining sector, this project explores the impacts of the Canadian mining industry in Latin America. The Canadian mining industry represents a significant number of the mining companies that are operating in Latin America, compromising approximately 70% of the mining operations on the continent. Due to poor reporting and the misrepresentation of facts, the full extent of Canadian mining companies’ impact on local populations is not fully understood. These companies have been associated with significant environmental damage to communities, disruption to community and indigenous ways of life, as well as the suppression of protests and resistance against mining activities. This research will explore how women are disproportionately impacted by the effects of mining on their communities.
and on the natural environment. It will emphasize why it is particularly important to focus on differences of gender when exploring issues with mining and other development projects.
Other Poster Presenters

Stacy Armbruster (Colorado State University)

Women’s time use and implications for their participation in cacao value chains: Evidence from VRAEM, Peru

Key Words: Gender and diversity, labor and livelihoods, poverty reduction, agriculture, aid effectiveness

Bringing inclusion into value chain development requires interventions that account for gender-based constraints and opportunities. Key determinants of women’s capacity to participate are their availability and access to interventions. Twenty-four hour recall surveys with 53 women from households engaged in a cacao expansion intervention in Peru found women with a strong interest in cacao; however, participation was thwarted by household responsibilities and exclusion from trainings. Findings emphasize the need to actively engage women in intervention design, and monitor and evaluate their time use, recognizing the unintended consequences of increased time investments, and hence the unexpected impacts of these development interventions.

Ramesh B. Balayar (Iowa State University)

Women’s decision-making roles in vegetable production and marketing in rural hills of Nepal

Co-author: Robert E. Mazur

Key Words: Cultural practices, rural women, decision making roles, commercial vegetable farming

Women’s increased decision-making roles and active engagement in income-generating programs in smallholder farming households can contribute to their enhanced freedom and choices in life. Traditionally, cultural norms favor men in income earning activities. Women in Nepal’s remote rural hill communities are increasingly interested in the production and marketing of vegetables to earn income. In the prevailing patriarchal socio-cultural context, such innovative behavior is still relatively rare. Using qualitative research methods, we found that realization of income from vegetable production, program subsidies, training, exposure visits, peer learning, and women’s group activities positively influence women to negotiate with their husbands and extended family members to initiate commercial vegetable farming and seek more decision-making roles. Despite initial challenges, their contributions are gradually acknowledged. Young women with higher levels of education more commonly contest restrictive cultural practices and become involved in all types of important decisions. Most of these women manage household cash, have more freedom to spend income, and feel a strong sense of dignity and empowerment. Women entrusted with important decision-making roles significantly contribute to household income and family wellbeing. However, some women still rely on their husbands for important decisions and are hesitant to travel to markets and take part in training and exposure visits outside their districts. Continued support from husbands, extended family, and community members, women’s groups, government agencies and development organizations is crucial for enhancing women’s decision-making roles and mitigating restrictive cultural practices.

Meerim Bolotbaeva (United Nations Development Programme - Kyrgyzstan)

Bride kidnapping in Kyrgyzstan: Yesterday, Today and Tomorrow
Kyrgyzstan is a small country in Central Asia with a population of 6,000,000. Kyrgyzstan is included in the list of countries with a low income. Poverty is marked as a cause for child marriage by 18% of population. Many child marriage and polygamy are unregistered customary unions which are entered into through religious ceremonies. Girls who forced child marriage tend to meet domestic violence (e.g. neglect of health, subsistence needs) in the family. 13.9% of girls (15-19 yrs) are married in KR. The chain of domestic violence over generation is common. Despite the legal prohibition of bride-kidnapping, only a few cases are prosecuted. Still 20% of all marriage in KR are bride-kidnapping 60% in Talas 45% in Issyk-kul 28-31% in Jalal-Abad and Naryn. Just recently a 20 old girl called Burulai was kidnapped and after unsuccessful attempt was killed in the police office by her kidnapper. A portrait of Burulai Turdalieva, appeared on the facade of the dormitory of the Bishkek Medical College in Bishkek. Everyone knows the tragic fate of this beautiful girl. The aim of the portrait is to draw public attention to the problem of gender-based violence, in particular violence against women and girls, and to call on society to eradicate the pernicious practice of abducting women and girls for marriage. I would like to show short film in memory of Burulai during poster presentation.

Maria Elisa Christie (Virginia Tech)

Participatory mapping in gender and development research: Presenting counterhegemonic possibilities

Co-authors: Mary Parks, Megan Puhl, Kaitlyn Spangler, Daniel Sumner, Emily Van Houweling, Laura Zseleczky, Kellyn Montgomery

Participatory, hand-drawn maps can be a powerful platform for engagement between scientists and farmers and create opportunities for two-way exchange of technical information that can lead to improved practices and recognition of local—including women’s—knowledge. In cases where women have lower literacy rates than men and are less accustomed to speaking in public, they can increase women’s participation in research and create opportunities for understanding their perspectives and priorities. This poster reflects on participatory research experiences of a faculty and graduate students from Virginia Tech with farmers in Asia, Africa, and Latin America including over 300 hand-drawn or sketch maps. These explored gendered space and livelihoods; gendered access to and control over resources; and local knowledge, beliefs and perceptions. Specific topics included mobility and access to information; pesticides and Integrated Pest Management (IPM); soil quality; agricultural value chains; and food safety and aflatoxin management. Working in women-only and men-only focus groups, and with men and women separately at the household level, is a strategy for collecting sex-disaggregated spatial data that lends itself to gender analysis. While the maps sometimes contain interesting data—often because of the differences in men’s and women’s maps—the processes of mapping and labeling are particularly useful for guiding semi-structured individual or group interviews, and leading the researcher to unexpected findings and new questions. In addition, presenting and discussing them allows their makers to speak their truths orally and visually, offering counterhegemonic possibilities even within the confines of Western-defined and dominated development projects.
Unexpected Conversations: Students and Instructor Reactions on Classroom Discussions of Disability in International Agricultural Development

Amanda Crump (University of California, Davis)

Key Words: Postsecondary education, international agricultural development, case study, people with disabilities, Critical Disability Theory

University coursework in international agricultural development includes education on the inclusion of disadvantaged groups in international agricultural programs, with an emphasis on including women in development projects. We began including a class period devoted to working with people living with a disability in my undergraduate introduction to international agricultural development undergraduate course because people living with a disability account for 15 percent of the global population but 20 percent of the world's poor. Dissatisfied with the lecture format we had chosen for this class period, we redesigned the class period on disability to include an activity, a video, a Socratic seminar-style small-group discussion, a whole-class discussion, and an individual reflection. To assess the way that this redesigned class period addressed diversity and inclusion, we conducted a case study of class activities. Our examination of the data indicated that students drew on their own experience and had critical conversations about the inclusion of people with disabilities within their small-group discussions. However, in whole-group discussions, the class discourse shifted to the idea that inclusion is not cost-effective. Here, we provide data from the class period to highlight missed opportunities with the intention of helping other instructors meet success when they address inclusion of people living with disabilities in their international agricultural development undergraduate courses.

Addressing gender inequality: Reports from women farmers in Bangladesh, Burkina Faso, Cambodia and Ethiopia

Paula E. Faulkner (North Carolina Agricultural and Technical State University)

Co-authors: Kenrett Jefferson-Moore, Shahana Begum, Socheath Ong, Valerie Bougouma-Yameogo, Fentanesh Abate

Key Words: Sustainable Intensification, Gender-sensitive Participation, Women Farmers, Agricultural Mechanization, Gender inequity

There is a need for gender training to prepare women farmers to use appropriate-scale mechanization to advance sustainable intensification (SI) for farming systems. Inclusive SI approaches include training in integrated pest management, conservation farming, crop rotation, agro-forestry, and sustainable intensification, which requires timely field operations, accurate planting, precise and timely weeding, and efficient crop harvest and storage. Sustainable intensification must be based on an understanding of the seasonal sequence of field operations and their effect on subsequent tasks. In many cases, the management practices associated with sustainable practices can require significant demands on labor and management expertise, which is normally performed by males. However, with more women involved in farming for their family while males work away from the home, Gender equality must be addressed. The purpose of this study is to address the need for gender-sensitive participation of women farmers. The study was conducted from June 2017-December 2018 in Bangladesh, Burkina Faso, and Cambodia with the use of focus groups, trainings and demonstrations. It was found that most women farmers felt low empowerment and a need to change the traditional beliefs and attitudes toward gender inequity. It
was concluded women farmers have a desire to receive knowledge to address their farming needs. This approach will foster trust in agricultural research and address issues of greatest importance to the communities, and aid in the translation of research results into useful practice.

Marie Gloria Gahimbare (International Network for equal Gender Opportunities - Burundi)

Promote fair opportunities for all

Key Words: Sustainable Intensification, Gender-sensitive Participation, Women Farmers, Agricultural Mechanization, Gender inequity

Today, women's economic development is widely recognized as an essential aspect of gender equality because it enables women to realize their potential and assert their rights. It is also an effective strategy for reducing poverty, ensuring economic growth in developing countries and improving the overall health and well-being of populations. Indeed, it is known that women tend to invest more in their families than men. Women with access to jobs and economic opportunities enable their children to access quality services and education, which helps to break the cycle of poverty. In addition, women leaders become models for young girls who aspire to a better life. In Burundi, as elsewhere in Africa, poverty and poor living conditions affect everyone, men and women, young and old. However, the most affected are girls and women. The causes of their poverty include social inequalities between women and men. As a result, women have limited access to economic opportunities with very low income, which in turn hinders their abilities to act and fully contribute to the empowerment of their families and communities. This is what, after analysis, motivated a group of young girls and women and had the idea of creating the network company called INGO s.a. in order to promote women and girls. International Network for equal Gender Opportunities, INGO s.a. is more than just a company. Rather, it is a network that aims to strengthen women's economic power. INGO s.a. reaffirms its commitment to defend and promote women's rights through inclusive, equitable and sustainable development that transforms unequal relationships between men and women, boys and girls in Burundi, in the region, across the continent and why not in the world. In any case, this is our dream that we are transforming into reality by launching INGO s.a. We have joined our efforts and meagre financial resources to stand up and show that women have also skills need to do great job and are also capable of creating reliable companies and contribute to the development of countries as men. The long and hard mission we have given ourselves is, in the short, medium and long term, equity between women and men, as much as possible through the economic empowerment of women. We are committed to fight all forms of gender-based discrimination within our field of action (economic, social and cultural).

Siddharth Hari (Virginia Tech)

Women in STEM: The role of role models

Co-authors: Sudipta Sarangi, Marcos Agurto

Key Words: STEM, gender, role models

Gender disparities in STEM fields remain large and systematic. In this study, set in the context of developing country, we use a randomized control trial to study the effects of role models on the decisions of high school students to choose STEM fields as their choice of major in college. Our treatment involves short talks provided by female students currently enrolled in STEM majors in
some selected high schools, whereas other schools act as the control group. These talks will provide students information about engineering as a career, as well as discuss the experiences of women in STEM classrooms. We compare the differences in STEM field participation rates across our treatment and control groups, and uncover the underlying mechanisms.

**Sara Hendery** (Integrated Pest Management Innovation Lab/Virginia Tech)

*Promoting inclusive pest management solutions: Ensuring men's and women's problems, priorities, and preferences are at the forefront of pest management*

Co-authors: Daniel Sumner, Maria Elisa Christie

Key Words: IPM, gender-responsive research for development, access, labor, income

Since its inception in 1993, the Feed the Future Innovation Lab for Integrated Pest Management (IPM IL) has been working globally to reduce crop losses from pests, decrease dependence on chemical pesticide use, increase farmer income, and improve pest monitoring. Through program-wide and project-level approaches, the IPM IL explores the gendered components of pest management by using a number of methods to address two broad questions: 1) How do gender relations, norms, and attitudes affect the impact and outcomes of IPM IL research activities? 2) How do IPM IL research activities affect gender relations, norms, and attitudes at the household and community level? This poster discusses how the IPM IL integrates gender analysis when developing pest management practices and technologies so that women’s and men’s priorities, problems, and concerns are at the forefront. A better understanding of the complexities regarding pest management, for example, understanding how invasive weed management has had a disproportionate effect on women’s labor burden, and identifying the ways gender norms, beliefs, and attitudes can restrict women’s mobility, has allowed the IPM IL to reconsider strategies and implement more comprehensive approaches that support the inclusion of women, men, and youth in all IPM IL research and outreach activities. Likewise, while IPM IL researchers and implementing partners increasingly design their activities based upon contextual understandings of the gendered dimensions of pest management, many issues remain. The IPM IL continues to work through its network of researchers and partners to understand how the dissemination and application of IPM practices can increase the well-being of women and men, but also promote the ability of women to make decisions associated with knowledge acquired through IPM IL programs and activities.

**Maria Jones** (University of Illinois at Urbana-Champaign)

*Assessing early-stage agricultural technologies for gender sensitivity*

Key Words: Gender assessments; agricultural technologies; technology adoption

The use of agricultural technologies can improve economic productivity and reduce time spent in agricultural production, processing, and transporting. While men and women have similar propensities to use these beneficial technologies, women are less likely to have access to them compared to men. Ensuring women farmers have better access to agricultural technology, inputs, and information can help lessen the gender gap in agricultural productivity (FAO 2011). The USAID funded Appropriate Scale Mechanization Consortium (ASMC) is utilizing an assessment tool to identify gender barriers and enablers in access to and adoption of early-stage technologies. The assessment tool derived from Cultural Practice’s Technology Assessment Toolkit (Manfre, Rubin,
and Nordehn 2017) and IFPRI’s Gender Toolkit for Small Scale Irrigation Technologies (Theis et al. 2018) has been tested in Burkina Faso, Cambodia and Bangladesh. Early findings are helping local teams apply simple design and dissemination solutions to address gender constraints. For example, in Burkina Faso the ASMC-developed draft animal powered Planter was designed to be run with oxen. In assessing the technology for gender sensitivity, initial findings indicated that women farmers did not have access to oxen. This has resulted in ASMC currently testing the Planter with donkeys, a commonly available draft animal. Implications from using the assessment tool highlights the need for technology developers to consider women farmers’ roles, agency, and needs in every stage of the technology design and dissemination process, thereby ensuring that women and men farmers equally benefit from agricultural mechanization.

Isabel Krakoff (George Washington University)

School-related gender-based violence in West and Central Africa: Problems and prevention

Key Words: School-related GBV, violence, policy

Countries in West and Central African have ratified many of the international frameworks that protect children’s rights to education such as CEDAW, the UN Convention on the Rights of the Child, and the African Charter on the Rights and Welfare of the Child. Often, however, there is limited ability for countries to adequately implement these frameworks, providing children with quality, violence-free education. This is further exacerbated by the region’s history of violent civil wars and regional conflict. It is important to understand that this school violence is inherently gendered because much of the violence that takes place in and around schools is perpetrated as a result of unequal power dynamics that reinforce gender-related stereotypes and attitudes. This poster explores the three main, often overlapping, types of school-related gender-based violence (SRGBV)—psychological, physical, and sexual— as they are perpetuated in the region, and highlights recommendations for how SRGBV can be more effectively addressed in the region.

Jennifer C. Langill (McGill University)

On the record, but out of scope? A reflection on positionality and negotiating women’s experiences beyond the research focus

Key Words: positionality; fieldwork; researcher responsibility; gender-based violence; female researchers

Feminist scholarship has complicated our understanding of how researchers negotiate positionality as ‘insiders’ or ‘outsiders’ (Dowling 2016) in recognition that there is no singular landscape of power where we can identify the location of each actor, whether researcher or participant (Rose, 1997). While in theory we often critique ideas of ‘sameness’ between researcher and researched, this does not always translate into the field. Drawing upon my fieldwork in Southeast Asia and the Amazon, I discuss experiences of women sharing gendered issues with female researchers that are beyond the scope of study, where the ‘outsider’ assumes a role of ‘confidante’. I ask: How do we engage with experiences that are presented to us, yet beyond what is included in our research analysis and dissemination? Particularly when these confidences are related to gender equality, gender-based violence, and women’s empowerment, what responsibilities do we have in what we learn from, and represent of, our participants? I argue that while we pursue critical and reflexive discussions of researcher positionality, we simultaneously need dialogue surrounding gendered realities shared with us that are beyond the scope of our research focus.
Nargiza Ludgate (University of Florida)

**Gender roles in household water resource management in water-scarce countries: Does greywater treatment technology empower rural women in Jordan?**

Key Words: Empowerment, water-saving, greywater, women, Jordan

The Hashemite Kingdom of Jordan is one of the driest countries in the world struggling to cope with limited freshwater resources to meet the growing demand from the economy and the domestic sector, while striving to balance the environmental considerations of sustainability. To cope with continuous water shortages, the Government of Jordan examines various cost-effective strategies for water supply and demand management, including the improvement of water-use efficiency through greywater reuse in the rural households. A number of international organizations, including the International Center for Agricultural Research in the Dry Areas and International Fund for Agricultural Development, in collaboration with Jordan’s National Center for Agricultural Research and Extension, have implemented community-based water interventions that tested 27 and installed more than 400 constructed wetland systems to treat greywater within household compounds in eight governorates in Jordan. While most greywater treatment studies focused on the technical aspects of treatment technology, this research explores the social aspects of technology implication and contributes to the literature by 1) evaluating the impact of GWT technology use on gender roles and relations in intra-household water resource allocation and 2) using supplemental water provided by the GWT technology determining what contributes to women's decision-making agency within rural Jordanian households. The fieldwork compared data between technology users and non-users, males and females. The key findings of this research are: 1) There is a positive shift in the gendered division of labor in households. More household tasks are being shared with couples or all household members in managing water resources and home garden production. 2) Women’s command over the GWT technology is likely to lead to joint-decision making in the water and home garden management. Finally, 3) Broader socio-economic and household relations including household composition, age, education, and women’s social capital are important determinants of rural women’s agency in Jordan. By combining a mixed-method approach and collecting sex-disaggregated data, the research directly examined the relationship between how men and women make decisions and intra-household resources are distributed between them in rural Jordan.

Elena Martinez (International Food Policy Research Institute)

**Who is empowered? An analysis of predictors of empowerment in six countries in Africa and Asia**

Co-authors: Hazel Malapit, Ruth Meinzen-Dick, Audrey Pereira, Agnes Quisumbing, Dee Rubin, Greg Seymour

Key Words: Empowerment, agency, resources, women, WEAI

Naila Kabeer (1999) conceptualizes empowerment as a process of change across three interrelated dimensions: resources, agency, and achievements. Resources are the human, social, and material resources that enhance a person’s ability to make choices; agency is the ability to make decisions in one’s best interest; and achievements are improvements in one’s life such as better health and nutrition. In this paper, we use this framework to examine the relationship between resources and agency in the agricultural sector. What causes a woman or man to lack the agency to make decisions about their life? To what extent can a lack of agency be traced to gender
inequality in intrahousehold relations versus individual access to human, social, and material resources? We use data from population-based Feed the Future surveys in Bangladesh, Cambodia, Ghana, Nepal, Mozambique, and Tanzania to assess associations between individual- and household-level characteristics and agency. Agency is measured using individual-level indicators derived from the Women’s Empowerment in Agriculture Index (WEAI), including empowerment status (weighted average of achievements across 10 component indicators of agency) and 10 component indicators of agency (input in productive decisions, autonomy in production, ownership of assets, rights over assets, access to and decisions on credit, control over use of income, group membership, speaking in public, workload, and leisure). Individual and household characteristics include age, literacy, education, caste, marital status, intrahousehold inequality (difference between male and female empowerment in the same household), household wealth quintile, household size, household dependency ratio, and geographic region. We estimate predictors of empowerment separately for men and women in each country. To our knowledge, this is the first cross-country analysis of predictors of women’s and men’s agency.

Domnic Misolo (Ekklesia Foundation for Gender Education, Kenya)

**Sexuality & Reproductive Health Rights for Women**

Key Words: Reproductive health, women’s rights

Sex talk and open display of affection is frowned upon in many African setting, and that includes the African Christian communities which also view sex essentially for procreation. Traditionally, females are not expected to express sexual desire or indicate they have pleasure in sex, thus practices like Female genital mutilation (FGM). As a result many underage girls get pregnant and drops out of school, more girls dies while giving birth, and child marriages takes place. We seek to conduct a research on sexuality and reproductive health rights for women in the context of faith community within western Kenya. We propose to use a descriptive survey design and quantitative and qualitative methods for data collection and analysis. A multistage sampling technique will be used and first purposive non probability sampling will be used.

Church’s response is a refusal to admit the silences and taboos around sex that seem not to be working. Expected outcome is to determine the causes and extent of teenage pregnancies in schools, to assess the impact of religious teaching on views about sexuality among teenage girls, and finally to provide sex education that empower the young women to grow into empowered women in society and bridge the gap of gender inequality.

Hannah Nyamekye (ZOKMAC Consult - Ghana)

**Access to agriculture production resources by women translates into improved household food security**

Key Words: Smallholder, women farmers, food security, production resources, maize production

The study examined access to agriculture production resources and its effect on household food security of women smallholder maize farmers in the Techiman Municipality and Offinso North District of Ghana. The study was a descriptive correlation research with a sample size of 300 women. Data was analyzed using Independent T-test and Chi-Square test. The major findings were that farmer’s level of access to agricultural production resources required for maize production was
in the "low access" and "moderate access" categories for Offinso North District and Techiman Municipality respectively. The study further revealed a positive significant relationship between access to agriculture production resources and the household food security of respondents.

**Grace Palacios** (University of Florida/German Agency for International Cooperation)

*Kichwa Lamas Indigenous Women's role in the Conservation of Community Forests (CMF) and their participation in the Conditional Direct Transfers (TDC) mechanism*

Co-author: Richard Stepp

Key Words: Indigenous women, Kichwa Lamas, gender complementarity, Community Forest Conservation, Conditional Direct Transfers (TDC)

This research was carried out in collaboration with the GIZ project “Community Forests Conservation – CBCII”, which provides technical assistance to the National Program Forest Conservation in the Conditional Direct Transfers mechanism – TDC. I conducted this research in three indigenous communities: Chirikyacu, Chunchiwi, and Chirik Sacha located in Lamas, and El Dorado provinces, respectively (San Martin, Peru). The three communities are affiliated with the National Program of Forest Conservation for Climate Change Mitigation, of the Peruvian Ministry of Environment. They have approved the implementation of the Conditional Direct Transfers (TDC) mechanism in their communities as a financial instrument for community forest conservation. This research seeks to assess the role of indigenous women in the conservation of community forests along with the implementation of the TDC mechanism. The field work phase of this research was divided into two parts: the first part identifies the current situation of women’s involvement and gender roles, and the second part reports on the effects of their contribution and what measures might be taken to expand their involvement and the benefits they receive from their participation.

I began this project by identifying all the activities, related to Bosques Program, where Kichwa Lamas women are involved. I conducted this through a review of existing documents and semi-structured interviews with the women. Interviews with the women were via participant observation and mixed focus groups. For the second phase, I analyzed the results of the literature review that were elaborated by Bosques along the project’s intervention (progress reports), and semi-structured interviews to identify the changes in the community. I also conducted participatory workshops which allowed me to validate all the collected data. Lastly, the combination of these methods lead to a final synthesis of identifying opportunities for women to expand their participation and contribute to the continuity of forest conservation in their communities.

**Mary Parks** (Virginia Tech)

*Gendered soil knowledge, practices, and access to assets in CAPS: Student research in the gender CCRA*

Co-authors: Maria Elisa Christie, Keri Agriesti, Daniel Sumner, Rubén Botello, Isidra Bagares, Jun Mercado, Victor Ella, Manny Reyes, and Jeff Alwang

Key Words: Gender, conservation agriculture, mixed methods, Philippines, Cambodia

This poster reflects on case studies that identified gender-based constraints and opportunities for Conservation Agriculture Production Systems (CAPS) across multiple countries. These studies were a part of the Gender Cross Cutting Research Activity (Gender CCRA) of the Sustainable
Agriculture and Natural Resource Management Collaborative Research Support Program (SANREM CRSP) carried out by Women and Gender in International Development at Virginia Tech. One of the goals was to make recommendations on gender-based practices and policies to improve the success of CAPS across sites. A common methodology was used in all studies that incorporated both qualitative and quantitative methods to explore gendered soils knowledge, practices, and access to assets. Graduate students were an essential component in conducting research for the Gender CCRA in Bolivia, the Philippines, and Cambodia. They conducted the fieldwork in smallholder farming communities using mixed methods to better understand the challenges and prospects that men and women may face when adopting CAPS. This poster summarizes the approach of the CCRA and presents findings from their individual projects.

Francisco Reyes Rocha (Pennsylvania State University/Zamorano)

**Women in Ag Network (WAgN) Honduras: Integrate gender through farmer field schools**

Co-authors: Hazel Guadalupe Velasco Palacios, Paige Castellanos, Arie Sanders

Key Words: Empowerment, Lencas, Education, Gender, Norms

Farmer Field Schools are intended to provide smallholder farmers with technical knowledge and information related to agriculture production, implemented through participatory pedagogical methods. We use the Farmer Field School model to address gender inequities, intrahousehold dynamics, and women's empowerment in western Honduras. The Women in Agriculture Network (WAgN): Honduras project, funded by USAID's Feed the Future Initiative as part of UC Davis' Horticulture Innovation Lab, developed and delivered a gender-integrated Farmer Field school focused on biointensive gardens, gender and nutrition. Researchers at Penn State and Zamorano Panamerican Agricultural School (Honduras) partnered with a local non-government organization, Asociación de Mujeres Intibucanas Renovadas (AMIR) to conduct a 16-week program for Lenca women and their families. The Lencas are an ethnic minority group in Honduras whose primary economic activity is agriculture. The Lenca community presents the lowest human development indexes in the country and are affected by malnutrition due to the lack of food security. Through qualitative pre- and post-evaluations, we investigated the gendered participation in the FFS, its impact on household decision making and agriculture production, as well as the potential to empower both men and women and improve their levels of food security. The proposed poster presents our gender-integrated Farmer Field School and key findings from the implementation and evaluation related to gender norms in the Honduran context.

Sofia Rincon Gallardo (Virginia Tech)

**Virginia Tech's Women and Gender in International Development Program: A University and global resource focused on investigating the gendered impacts of development**

Co-authors: Maria Elisa Christie, Daniel Sumner, Jessica Agnew

Key Words: Women, Gender, International Development

The Women and Gender in International Development (WGD) program at the Center for International Research, Education and Development (CIRED) works towards gender equality in
development by promoting gender responsive approaches in every CIRED project, conducting interdisciplinary research on gender issues, and ensuring that women benefit from funded projects. We believe that development is achieved most effectively when it is inclusive, equitable, and based on the priorities of local groups. As a learning community and academic resource, the WGD program seeks to build the capacity of students, researchers, and development professionals to address gender disparities in the areas of agriculture, natural resource management, education, food security, health and nutrition, and water. The WGD program works collaboratively with VT faculty and students, partner organizations around the world, and other stakeholders to increase opportunities for women while achieving the technical goals of Virginia Tech projects.

Dalia Saad (University of South Africa)

*Engendering science: Rethinking gender*

Key Words: gender mainstreaming, women, sustainability

Considering the potential of both men and women in Science, Innovation, Technology and Engineering (SITE) policy making is crucial for socio-economic and sustainable development in Africa. It is very important to apply a gender lens in analyzing, designing and implementing STEM policies. As a result, initiatives and programmes have now been established to promote women's participation in scientific leadership, while raising awareness to decision makers on gender dimensions in various sectors such as agriculture, education, health and sustainable management. Despite these facts, gender is not yet mainstreamed into STEM. There is still a misunderstanding on the concept of gender mainstreaming and the difference between gender equality and women's empowerment. This paper reviews how gender is present in scientific research. It discusses how addressing the interests, needs and concerns of both women and men is crucial for practicing good science and for producing rich and inclusive knowledge. Gender mainstreaming in science and technology is only achievable through the involvement of women as researchers and as research respondents and ensuring equality of women with men in both contributing to science and in sharing its benefits. Moreover, gender equality in the scientific community enables women to reach their full potential in the world of research, science and technology and hence contribute to the economy growth and sustainable development. On the other hand, gender inequalities and bias in scientific community limits the science creativity, excellence, and benefits to society. Applying gender lens in research provides more effective and more sustainable outcomes and offers new perspectives, challenges for researchers.

Ann Tickamyer (Pennsylvania State University)

*True GRIT: Examining the impacts of the collaborative Gender Research and Integrated Training Program at Penn State*

Co-authors: Maria del Rosario Castro, Mary Barbercheck, Ty Butler, Elisabeth Garner

Key Words: Gender training, gender and development, interdisciplinary research

The Gender Research and Integrated Training Program (GRIT) conducted by Penn State faculty in collaboration with the CGIAR gender platform has trained over 45 post docs and scholars from across the CG system over a three-year period from 2015 through 2018. GRIT provides an example of a successful program to enhance both gender research capacity and professional development throughout the system. The specific objectives of the program were to “strengthen research
capacity on gender, enhance the quality of gender research in CGIAR, provide strategies for interdisciplinary collaboration, and increase publication in high quality journals with the ultimate goals of providing benefits to poor rural women and men and empowering women and girls." Over the course of this period there were annual in-depth workshops conducted at Penn State by the GRIT faculty and guest presenters lasting 2-3 weeks and featuring immersion in topics and tools for integrating gender into agricultural, climate change, and development primary research as well as developing mentoring relationships between faculty and CG postdocs. In the last year, a condensed workshop was given in Addis Ababa, Ethiopia in conjunction with the CG Gender Platform meeting. Other activities included on-site visits between mentors and mentees, webinars organized by the CG gender platform, and other presentations at the CG Gender Platform annual meetings. The poster will outline the process by which the program came into existence, highlight the curriculum and program implementation, key conclusions about best practices of gender-integrated research training and how to go forward in the future.

**Sounkoura Sidbe Adetonah** (International Institute of Tropical Agriculture - Benin)

*Gender analysis of cassava production and processing into gari in Central and Southern Benin*

Co-authors: Dominique Dufour, Genevieve Fliedel, Vodouhe Gbelidji

Key Words: Gender, market, cassava value chains, Southern and Central Benin

Cassava (Manihot esculenta Crantz) contributes to household food security, particularly when the time of cereal harvests are delayed and imported food is too expensive in Benin. However, there are only few studies that include a gender analysis, despite numerous studies demonstrating the importance of gender relations in agricultural, along with the importance of women's contributions in particular. The objective is this study aim to analyze the fresh cassava value chains related to the roles of women and men, the access and control of resources and constraints of opportunities Benin. The study is led in Southern Eastern and Central of Benin that are part of main cassava and gari processing and marketing zones in Benin. A mixed focus group composed of both of women and men. Structured individual interviews were carried out with cassava producers and processors who are male or female household members. A total of 152 producers and 317 processors were interviewed including men and women. The maximum age of producers is 90 years old and 72 years old in Ikpinlé and Savalou respectively and the illiteracy rate is very high in woman than in man in both regions. Women are responsible for the cassava processing into gari and slightly more so in relation to fresh cassava because women make mostly the 4/6th (without grating and pressing) of the cassava processing activities. Globally, the situation is benefit for men and women, except only women do not make decisions about storage and conservation and plant health treatment equipment. The reason is that men mainly own to land, and decide how to use it. The analysis of control over income of men and women revealed that only very few women do not keep the income in their hands because the husband owns inputs (land, cash, equipment) and women help their husbands. Results showed that cassava processing in gari is a profitable activity for women and men but men have a high net margin. Even some opportunities exist as cassava varieties diversity, availability of market flow, main constraints of actors are the health issues, financial constraints and lack of training. In conclusion, the study has highlighted the gender analysis focusing on men and women in the cassava production and processing. Main suggestions of this study are to facilitate the access to land through the involvement of land and to organize the participative training of men and women on the best bet agricultural practices, IPM, in two regions.
Melva Treviso Peña (University of Rhode Island)

Unexpected outcomes: Cultural shifts and gendered impacts from shrimp aquaculture development in southern Esmeraldas province, Ecuador

Key Words: Mangroves, shrimp aquaculture, feminist political ecology, Ecuador

Development agendas for the Global South promote the growth of productive sectors through the integration of peripheral lands into national and international markets. In coastal Ecuador, this transpired through the introduction of shrimp aquaculture. The growth of this economic activity occurred at the expense of the environment – particularly mangrove forests – and the cultural integrity and well-being of coastal communities. These developments then not only had ecological implications, but also ensued complex social effects. Informed by the framework of feminist political ecology, ethnographic data was collected in Bolivar – a community in southern Esmeraldas province. The findings of this research indicate that gender largely informs how people are affected by the shrimp aquaculture industry. Emergent employment opportunities within the sector disproportionately benefited male populations. With limited access to paid labor, women developed a dependence on traditional mangrove resource extraction practices to sustain their livelihoods, specifically gathering mangrove cockles. This is a traditionally female productive activity among the mangrove pueblos of Esmeraldas. The decline of mangrove forests meant a loss of already limited work opportunities for women, directly and indirectly. First, the replacing mangroves with shrimp ponds reduced female livelihood spaces. Furthermore, environmental transformations ensued by the aquaculture sector resulted in a decline of traditional male livelihood activities. Faced with decreasing employment prospects, men had to resort to enter the mangroves to gather cockles. For men to do this, it meant that the community had to reconceptualize how they perceive and utilize mangrove forests and the livelihood practices traditionally tied to those spaces.

Elizabeth Wood (University of Florida)

Addressing domestic violence as it relates to livelihoods in rural Tajikistan

Co-authors: Nargiza Ludgate, Camilla Mamadnazarova

Key Words: Tajikistan, violence, empowerment, gender

This study investigates patterns of rural livelihoods in Khatlon Province, Tajikistan, as it relates to gender roles and responsibilities. Many women and adolescent girls in rural Tajikistan have a limited ability to leave home, and may only have contact with family members and neighbors due to social stigma. A troubling number of women in Khatlon Province believe that gender-based violence (GBV) is deserved and warranted. This study used qualitative methods to determine the perception and prevalence of GBV within households. This included a workshop in the train-the-trainer format for community home extension economists to implement a GBV participatory workshop among village women and men exploring the different types of violence within a household. Key informant interviews were performed to collect information about the perceptions of violence amongst village households as well as individual semi-structured interviews with participants of the participatory workshops. Analysis included ethnographic content analysis using NVivo 12 software to extract salient themes within the interviews and workshops. Results concluded that education and employment were essential in building empowerment among women in the villages. These
findings were disseminated and shared with local partners to address gaps and create gender-transformative interventions that will target violence in the home.

Leigh Wynne (FHI 360)

Hidden GEM: the power of male engagement in SRH

Co-authors: Patrick Olsen, Ramadhan Kirunda, Elise Healy

Key Words: Gender Equity, Male Engagement, Family Planning, Sexual and Reproductive Health

FHI 360 developed and piloted Emanzi intervention – meaning ‘male role model’ in the local language - promotes positive gender norms, healthy relationships, and the benefits of family planning (FP) and couple communication. Emanzi, designed for scale-up, consists of nine one-hour sessions and is led by a pair of male community health workers (CHWs) for groups of 10-14 men. A quantitative evaluation of Emanzi was conducted in seven communities in Kasese district with approximately 250 men and their partners. They were followed over a period of nine months in 2016-2017. Using the gender equitable men (GEM) scale to measure gender norms, men were asked a series of questions related to gender norms, gender based violence, sexuality, masculinities, and reproductive health. The GEM scale measured items on a 3-point Likert scale (agree, partially agree, disagree) and was scored so that a greater score was equal to more support for gender equitable beliefs. The mean predicted value of GEM score was 2.23 at baseline (pre-intervention) and increased an average of 0.41 points between baseline and post-intervention/interim (p<0.001; 95% CI: [0.36, 0.46]). The GEM scores continued to increase after the intervention, as evidenced by an average 0.08 increase from interim and endline (~6 months post-intervention) (p<0.001; 95% CI [0.02, 0.14]). This statistically significant finding demonstrates men retained the information learned through the Emanzi and had lasting improvements in gender equitable attitudes. The success of Emanzi reaffirms the importance of small group engagement approaches to achieve social norm change. FHI 360 has implemented Emanzi in three districts of Uganda for more than 3,000 men and 40 Emanzi groups have continued meeting post-intervention and started income generating activities. Additionally, the intervention has been packaged and used by other bi-lateral partners working in Uganda.