

**Development of a Feminist Literature Supported Continuum for Food Safety Research In
Developing Nations**

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Introduction/Need for Innovation or idea

Through Feed the Future Innovation Labs and other research initiatives, the U.S. Government's Global Hunger & Food Security Initiative, a sector of the United States Agency for International Development (USAID) aims to catalyze ongoing scientific innovation in agriculture and promote evidence-based research (Feed the Future, 2020). Research projects being conducted through USAID need to address cross-cutting themes such as environmental health, emerging pandemic threats, and gender equality. Falling under gender equality, is the advancement of women and youth within these systems. Around the world, women are the backbone of the rural economy in the developing countries (Raney et al., 2011). Women also play an important role in food safety, because women tend to share more reproductive labor in their household (Duffy, 2007). Currently, there are varying levels of quality, integration of gender, and findings that relate to the cross cutting themes. There is a wide array of analytical tools and research methods used, ranging from consumer preference surveys and market demand surveys, to agricultural labor profiles and household surveys. The gender integrated data and research collected did not readily translate to interventions, practice shifts, or ways to overcome bias and perpetuate success of women in the workforce. There is a lack of consistency in evaluation and criteria for grant funded USAID projects that aim to promote gender and social equitable agricultural innovations. Many projects included a gendered component but did not fully integrate gender data into the larger project. In other words, research teams rarely use gender disaggregated data to structure their core natural/physical sciences research. Integrating gender aspects into project seemed as an almost afterthought or a way to fill the need for a USAID cross-cutting theme.

Additionally, when reviewing innovative food safety proposed projects that are seeking USAID funding, lack of consistency in evaluation and criteria for gender and feminine research is also a critical issue. This issue has challenged the reviewers to judge the quality of the proposed projects. For example, many proposed projects featured superficial integration of women stating "51% of intern recruitment will be female" or "females recruitment will be a priority before male recruitment". Other proposed projects that aimed to research women often included methods that may not be appropriate such as "survey of how many women are involved in production" or "survey of how many female poultry producers there are". While it is important that women are serving roles in the research teams through interns, or data is collected to determine needs, many of these methods are superficial and lack methods that are appropriate for researching women in these roles (Brisolara et al. 2014). As the projects are typically headed by biological or natural scientists, there is disconnect on how to meaningfully integrate gendered studies, such as those conducted within social science. Typically, their goals for social science based research questions lacked depth and literature supported methods, especially in relation to the inclusion of women. As these findings align with findings from USIAD (Mulema et al., 2019), a continuum for meaningful gender integration was developed.

How it works/Methodology/Program phase/Steps

The developing continuum was created as a backbone with the intent to deliver a tailored version citing specific examples from each USAID Food Safety Innovate Lab research proposal. It's generalizable nature allows it to be used currently for the proposals that are being assessed.

The continuum is divided into three major sections: methodology, deliverable and integration. The methodology section has two sub-topics, technical and gender sensitive. The deliverable section has four subtopics, education outreach programs, education outreach materials, evaluation & research tools, and publications. The third section is a combination of sections one and two, integration, or how well their methodology and deliverable sections were integrated for their intended outcome. This section is subdivided into to topics gender and culture. Each section is supported by literature in both feminist fields of study, and agriculture, food science and safety, and related fields. The continuum is broken down into stages which allow us to help the researchers and gender specialist in their research developments. The first stage is underdeveloped or absent, which indicates that there are improvements that can be made in that area whether it be implementation or methodology. The second stage is present and needs improvement, which indicates that there is suggestions of support or further specific improvements are needed. The final stage is further developments, this stage is moving into an “above and beyond space”.

Results to date/Implications

The table below, demonstrates a sample of the continuum. The proposals were reviewed and assigned a stage on the continuum. Throughout the project implementation, teams will work together to more advanced stages, creating more meaningful and rounded research. At the close of the first year, the continuum will be revisited with the gender specialists and technical experts. Revisions and additional stages will be added to the continuum to ensure relevancy throughout the project.

Table 1. *Sample of the Continuum for Implementation Teams*

Topic	Sub-topic		Stage 1	Stage 2	Stage 3	N/A
Integration of methodology and deliverables	Integration —Efficacy	Culture	Culture was not taken into consideration	Culture was present but not well integrated or played a small part	Culture was well integrated	
		Appropriate for gender/women	Gender was not taken into consideration	Gender was integrated or played a small part	Gender was well integrated	

Future Plans

The continuum is limited by three stages but has potential to be developed further as the research is a part of a multi-year project. As the research grows and develops, further stages could be designed and implemented. The continuum could also be utilized in other areas of research in STEM or agriculture such as areas in agricultural education, extension or communication with few modifications. The continuum integrates women and culture, which will hopefully encourage and guide new research in spaces where limited. As program development is highlighted in the continuum extension programs and other educational programs would be an ideal fit. By creating a publishable continuum, more meaningful integration and research can be conducted, avoiding the inclusion of women through numbers or quantitative methods, but rather those that encompass the female experience in a given setting.

References

- Brisolara, S., Seigart, D., & SenGupta, S. (Eds.). (2014). *Feminist evaluation and research: Theory and practice*. Guilford Publications.
- Duffy, M. (2007). Doing the dirty work: Gender, race, and reproductive labor in historical perspective. *Gender & Society*. <https://doi.org/10.1177/0891243207300764>
- Feed the Future Innovation Lab for Food Safety. (2020, November 19). Retrieved December 06, 2020, from <https://ag.purdue.edu/food-safety-innovation-lab/>
- Mulema, Annet A., W. Jogo, E. Damtew, K. Mekonnen & P. Thorne (2019). Women farmers' participation in the agricultural research process: implications for agricultural sustainability in Ethiopia, *International Journal of Agricultural Sustainability*. <https://doi.org/10.1080/14735903.2019.1569578>
- Raney, T., Anriquez, G., Croppenstedt, A., Gerosa, S., Lowder, S. K., Matuschke, I., & Skoet, J. (2011). The role of women in agriculture. The Food and Agriculture Organization of The United Nations. 10.22004/ag.econ.289018
- Slocum, R. (2011). Race in the study of food. *Progress in Human Geography*, 35(3), 303-327.
- Thompson, M. S. (2019). Cultivating 'new' gendered food producers: intersections of power and identity in the postcolonial nation of Trinidad. *Review of International Political Economy*, 1-27.