

Progress report of GLDC-FP4-1.9 - Gendered analysis of traits, preferences and frameworks for gender responsive variety development from July to Dec. 2018

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INTRODUCTION

Activity FP4-1.9 was designed with the purpose of understanding the trait preferences of male and female farmers and improve the integration of gender component in the breeding program so that the design and breeding plan is informed by the understanding of gendered preferences. Given that farmers (men and women) are the beneficiaries or end-users of the products, there is a growing need to include them in order to develop varieties that are preferred by and meet the needs/demands of farmers.

Two studies were carried under Act FP4-1.9. The first study - *Gendered analysis of traits preferences for gender responsive variety development*, was conducted to understand the history of ICRISAT plant breeding programs in WCA; identify gender issues along the breeding cycle and identify critical gaps and areas for improvement to ensure inclusiveness and development of suitable and preferred varieties. Methods used to obtain data includes literature review, qualitative (focus group discussions and key informant interviews and observations) and quantitative (individual interviews) data collection methods. This activity is linked to the Post Doctoral Fellowship under the last CRP.

The second study- *Understanding social structures in cowpea varietal demands for women and men farmers in Segou Region, Mali*. The purpose of this study is to understand the dynamics of social structures in cowpea trait identification and choices by farmers and to evaluate the identified traits in order to ensure their consideration in the development of new breeding materials by IER breeding program based in Cinzana, Mali. This study is a result of the collaboration between ICRISAT and GREAT training. Breeders and gender Scientists are involved in the development of breeding material (product profiles) and to familiarize the breeders with gender analysis so that the materials that will be developed will have the voice of and great impact on the farmers and end-users of products.

MAIN ACHIEVEMENTS IN 2018

Both research studies were carried out in collaboration with the breeding program of ICRISAT and NARs in West and Central Africa (WCA). The research has produced preliminary findings that would feed into a framework being developed for gender-responsive participatory plant breeding in West and Central Africa. A cowpea breeder and ICRISAT scientific Officer attended the GREAT training in Kampala, Uganda. ICRISAT's gender Scientist and Visiting Scientist that served as the PDF under the CRP supported post doc fellowship are supervising the implementation of the research activity on dynamics of social structures for cowpea trait identification by farmers in Mali. Other achievements from this activity are:

- Development of data collection tools for both qualitative and quantitative studies (FGD checklist, KII's guide and survey form).
- Two students, female in soil fertility and a male student in geography departments who have never conducted surveys with tablets were trained and have collected data in eleven villages of the commune of Cinzana.

- On-going strong collaboration and team work between biophysical and social scientists both in ICRISAT and NARs

SPECIFIC GENDER RELEVANCE

To minimize social and gender based constraints which limit women's voices and hinder their engagement in breeding activities and adoption of improved varieties, gender differentiated concerns need to be identified and considered as an integral part of breeding design throughout the breeding stages. This is being achieved through ensuring the integration of gender sensitive voices in the breeding program. Through this activity, both a multi-disciplinary team- breeders and social scientists are working together to unravel and understand the nuances limiting gender integration in plant breeding processes and varietal adoption. These include setting breeding objectives, generating genetic variability, selecting variable populations to develop experimental varieties, evaluating experimental varieties, variety release, information diffusion and dissemination and seed production. The final output, a gender integration framework, would therefore describe the basis for gender integration into plant breeding activities aimed at achieving the following gender responsive goals:

- Promote inclusiveness and sustainability by strengthening gender integration in breeding program and breeding activities.
- Determine when and under what conditions gender and social inclusiveness is necessary in breeding activities to maximize opportunities for higher adoption of improved varieties.
- Assist and facilitate the integration of gender into breeding activities by supporting breeders' and NARs collaborators' capacity.

SPECIFIC CAPACITY DEVELOPMENT RELEVANCE

The project provided an opportunity that is strengthening the research collaborative skills of ICRISAT's Scientists and NARs partners. Through this activity, the post-doctoral fellow attended the HarvestPlus Biofortification-Pearl-millet and Sorghum conference and made a presentation titled "Towards a more Gender-responsive Participatory Plant Breeding in WCA". Although this work is in its early stage, it is the basis of a fruitful collaboration in the analysis and profiling of traits of preference and breeding materials for growers and consumers alike.

A Scientific Officer in ICRISAT and a breeder in IER both attended the GREAT training and as a result developed a proposal and a data collection tool for the second research work under this activity.

MAIN GAP ANALYSIS

- Farmers' active engagement in the breeding cycle is at the stages of identifying desirable traits through participatory varietal selection and seed multiplication.
- In general, few individual women farmers are involved in seed multiplication compared to men due to limited resources e.g. required land space for seed production.
- Breeding programs however engage mostly farmer groups/associations (women groups inclusive).

- Intersectionality is not considered in the breeding because breeders' consideration gender is often limited to sex disaggregation.
- Extension service has limited knowledge on gender and often, tend to favor a particular segment of the population over another. This either due to lack of awareness or the result of social relationships influence within the communities.
- Poor adoption of improved varieties of cowpea by both men and women is due to poor awareness and access to improved varieties
- Although cowpea is a gender-neutral cowpea, cultivated by men and women of different social status, land's access and its sustainable utilization is a real constraint on women who cultivate it.

CHALLENGES RELATED TO PARTNERSHIP MANAGEMENT

There is no challenge related to partnership, since all scientists involved in this project are aware of the significance of bridging fruitful collaboration in the designing of breeding materials which fit the needs of female and male growers, and consumers.

MEASURE TAKEN AND ADJUSTMENT PROPOSED/RECOMMENDED

- Continuous awareness raising and sensitization of breeding programs on the importance of gender integration through communication, collaboration either virtual or physical etc. By this, the breeders would remember including gender as often they are more focus on the technical breeding perspectives.
- Need for further defining and refining of traits to ensure deeper understanding of gendered trait preferences to facilitate the development of product profiles.
- The social context in which breeding activities are conducted and the relationships between men and women (farmers) within households is important as it may influence the breeding agenda positively or negatively. Understanding the context would identify entry points, opportunities as well as barriers to breeding activities.