How the Genetic Innovation Science Group is addressing gender integration through the portfolio work and interactions with the Gender Platform

Update for System Council members May 2023

1. Genetic Innovation Gender Strategy

In close collaboration with the Gender Impact Platform, the Genetic Innovation has developed a draft (2024-2028) Gender Strategy that defines objectives and priorities for gender research and mainstreaming across the portfolio of initiatives to achieve gender intentionality in breeding processes. The draft strategy is currently under review.

The objective of the Gender Strategy is to provide a road map for developing and using gender research in market intelligence to produce gender-informed product profiles, breeding pipelines, investment cases and seed systems; which contribute to the development and deployment of new crop varieties that are adopted by an increased number of women and men end-users, in ways that improve inclusion and gender equity in varietal change and its benefits.

The strategy was developed with input from multiple actors and sources of information. Furthermore, to ensure the strategy incorporates learning from external actors, GI in collaboration with the Gender Platform issued a <u>Call for Cases</u> and documented 14 experiences of integration of gender into breeding processes, structures and objectives. Lessons from these experiences have been incorporated to shape the strategy.

2. Gender Focal Point

The Genetic Innovation Action Area and Science Group has appointed Dr Vivian Polar as Gender Focal Point and Gender Champion. Dr Polar works across the full GI space (market intelligence, genebanks, crop breeding, seed systems) to improve our ability to achieve results at scale in the impact area of gender, youth and social inclusion.

3. Research priorities

The main priorities for gender research in Genetic Innovation include:

- a. Gender mapping of market segments
 - A cross-crop and cross-market meta-analysis of key gender parameters, such as sexdisaggregated differences in adoption levels, seed access, poverty, trait preferences.
 - Define "Gender-hotspots" where GI and partners can leverage positive impact where gender inequalities are acute. Including for example the identification of populations, crops and areas with:
 - high poverty incidence

- \circ high proportion of women growers lagging behind in access to quality seed
- o low adoption of new varieties
- high presence of gender-scaling partners
- b. Comparative analysis of sex-disaggregated trait preferences across market segments and crops, will enable searches for recurrent trait and seed quality preferences.
 Systematization of gendered trait and seed quality preference data is:
 - an essential input for screening Target Product Profiles for gender implications
 - a component of gender mapping
 - "Gender hotspots" will have acute unmet demand for one or more traits highly valued by women or an obvious undesirable trait causing low acceptance of new varieties.
- c. Prospecting for candidate gender-intentional varieties among already advanced materials. This includes, but is not limited to:
 - Prospecting in late stages of breeding pipelines e.g., potential entries for regional and national trials, for desirable but undervalued advanced materials. E.g. Gendered citizen science (TRICOT); PVS+gender
 - Review trial selection, screening and release criteria
 - Mobilize local partners
- d. Drivers of gender equality: address the question "How much does gender matter?"
- e. Leveraging gender equality in welfare and environmental impacts of new varieties.

4. Strategic distribution across interconnected GI initiatives

Gender Research and mainstreaming is concentrated in the Market Intelligence and Seed Equal Initiatives. However, there are some elements of gender also embedded in models and strategies for late and on-farm testing of varieties.

5. Engagement with partners

Two main streams of work are being developed with partners:

- a. Documenting experiences on gender and breeding:
 - Call for cases issued: Integrating gender into breeding objectives and decisions what works, where and why?
 - 14 experiences documented by/with partners
 - Frontiers Special issue under development: "Gender Intentional Crop Breeding: From Integration to Institutional Innovation"
- b. Diagnosis of social science capacity
 - In collaboration with the Accelerated Breeding team, a diagnosis of social sciences capacity (with special emphasis on gender) will be conducted with national partners

• Design of new institutional arrangements to facilitate the incorporation of gender in key decision points across the breeding cycle

6. Measurement of progress

To measure progress on the Gender Strategy implementation a traffic light system will be established to spotlight key dimensions of gender equality that need to change and require monitoring. For example:

- a. Equality in varietal design/ choice:
- Women as well as men growers gain real choice in deciding what varieties to use and agency in conveying to breeders what a desirable variety should be like (influence the design).
- Real choice for the user means some of the varieties on offer have preferred traits of high value to the user.
- Agency requires inclusive stakeholder consultation on variety design and release.

b. Equality in seed literacy:

- Women and men growers have equal opportunity to learn about and gain equal knowledge of seed of GI-bred varieties (alone or in technology packages such as climate-smart technologies).
 - c. Equality in seed access:
- Women and men gain equal chances of obtaining, producing, and marketing seed of GI-bred varieties. How seed is accessed, produced, and marketed (including private sector seed businesses) promotes equal use. A seed system may use different strategies for women in order to reach men and women equally
 - d. Equality in varietal adoption:
- An equal proportion of women and men growers trial, adopt and make sustained use of preferred varieties. Achieving gender equality in adoption may require a larger number of women to adopt at a faster rate than men, in order to level-up unequal, baseline adoption levels and rates.
 - e. Equality in benefits:
- Once adopted, preferred varieties contribute directly or indirectly to improving women's welfare as well as men's. Gender-equalizing welfare effects may be different in type as well as magnitude for women than for men.