

The "must-have" features of genderresponsive plant or animal breeding

Workshop Summary

CGIAR Gender and Agriculture Research Network Coordination Team

The "must-have" features of gender-responsive plant or animal breeding: workshop summary

While many plant and animal breeders are aware of the significance of genderdifferentiated trait preferences for adoption and eventual impact, there are no clear guidelines on how to factor considerations of gender into their research.

The workshop

Important deficits in evidence and a lack of practical guidelines are holding back breeding programs from becoming more gender-responsive. This knowledge gap was the impetus for the Gender, Breeding and Genomics workshop organized by the CGIAR Gender and Agriculture Research Network in Nairobi from October 18-21, 2016.

The workshop aimed to stimulate active cross-fertilization of ideas from different breeding, genomics and social science perspectives and experiences to produce some clearly expressed ideas that constitute the 'must-have' features of gender-responsive plant or animal breeding,¹ and provide practical ideas on **what needs to be done** and **how**, to ensure that breeding programs are more gender responsive.

The purposeful design to cross fertilize different disciplinary perspectives, coupled with a competitive open call for case studies and experience in applying gender analysis to breeding resulted in a mix of participants that included both quantitative and qualitative social scientists, breeders and experts in genomics.

Analysis in the workshop was built around the breeding cycle to ask:

Q1: What are the entry points in the breeding cycle where breeders could make use of information about gender relations?

Q2: When is it useful to consider the different preferences, needs and objectives of men and women end-users?

The process

Close examination of 12 case studies demonstrated what had been done by breeding programs that took gender into account and was complemented by foundational inputs from breeding, genomics, social sciences and the private sector.

Discussion groups then developed a set of ideas for the "must-have" features of genderresponsive plant or animal breeding framed around the question, "How would a genderresponsive breeding program operate?" (see Figure 1).

¹ Gender, breeding and genomics workshop program. October 2016. https://gender.cgiar.org/gender-breeding-and-genomics-workshop/

Figure 1: The "must-have" features of gender-responsive plant or animal breeding



Adapted from ideas discussed by workshop participants.

How would a gender-responsive breeding program operate?

An essential feature of a gender responsive-breeding program is the capacity for strategic assessment of

- (1) "Who are we breeding for?" and
- (2) "What is the economically, culturally and socially important demand for genderdifferentiated traits and products that breeders can realistically develop?"

Analysis of the case studies, the commissioned literature review and expert contributions clarified the inadequate and patchy nature of the evidence base for deciding what important gender-differentiated trait preferences breeding programs should work on.

During breakout discussions at the workshop, participants concluded that interdisciplinary decision-making in a team is vital at key points of the process to inform targeting, priority-setting, implementation, dissemination, and monitoring and impact assessment about the "who and the "what."

A gender-responsive breeding program needs a multi-disciplinary or even trans-disciplinary team to enable a well-targeted definition of breeding objectives, plant ideotypes, trait characterization and selection as well as field testing and release.

Whilst there can be a willingness in the scientific community to adopt a more gender responsive approach to breeding, institutional change and buy-in from leadership are essential for the reform of performance incentives needed for real change to occur. An appropriate rewards system for breeders also needs to be developed and implemented for the recommended approach to function effectively.

Moving towards gender-responsive breeding programs therefore requires:

(1) an improved evidence base -- in particular with regards to its geographical coverage and representation -- about gendered trait preferences and the underlying gender gaps these express, to provide reliable information for decision making

(2) buy-in from senior research management to incentivize interdisciplinary teamwork and

(3) development of a cadre of researchers from breeding and social sciences who are equipped for gender-responsive breeding.

Next steps agreed by the participants include disseminating the proposals and recommendations from the workshop to CGAR Research programs, and engagement with the new, cross-cutting platforms on breeding, big data and gender.

More detailed information on the workshop, including a synopsis slide talk and related resources can be found on gender.cgiar.org