

MALE AND FEMALE FARMERS SELECTING VARIETIES. A GENDER PROSPECT

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ABSTRACT. With the purpose of analyzing farmers' gender in those groups taking part at the Participatory Plant Breeding Project, as a complementary strategy in Cuba, men and women's prospect was studied in two bean diversity fairs: one was organized by researchers and technicians at the National Institute of Agricultural Sciences (INCA) whereas the other at a farmer-researcher's farm in La Palma. Concerning maize, other fairs were held in La Palma, Pinar del Río, Batabanó and San Antonio de los Baños, Havana, in which women had less participation than men. In general, gender relationship helps men and there still prevail productive roles for men meanwhile in most cases women assume the reproductive roles.

Key words: social participation, varieties, selection, role of women, gender

RESUMEN. Con el objetivo de realizar un análisis de género en los grupos campesinos participantes en el proyecto de Fitomejoramiento Participativo como estrategia complementaria en Cuba, se estudió la perspectiva de hombres y mujeres que participaron en dos ferias de diversidad en el cultivo de frijol: una en el Instituto Nacional de Ciencias Agrícolas (INCA), la cual fue preparada por investigadores y técnicos y la otra en la finca de un campesino-investigador en La Palma. En cuanto al maíz, se desarrollaron en las localidades de La Palma, Pinar del Río, y en Batabanó y San Antonio de los Baños, La Habana, apreciándose que la participación de la mujer respecto al hombre es menor. En general, se constata que la realización de género existente favorece a los hombres, resaltando que aún prevalecen los roles productivos para los hombres, mientras que las mujeres asumen los roles reproductivos en la mayor parte de los casos.

Palabras clave: participación social, variedades, selección, papel de la mujer, género

INTRODUCTION

Gender prospect is an adequate assistant tool to document and understand men and women in their different roles, priorities and responsibilities with regard to the use and benefits of natural resources (particularly the seed), since they live and share every different reality, even though their living and working conditions are apparently the same (1, 2).

When analyzing differences between men and women, in Cuba, the analysis should include some other factors, such as private or cooperative production systems, management of farmers' resources and within another level of analysis, the difference between farm researchers and the ones who are simply farmers' wives or daughters.

Another indispensable element that should be taken into account in the analysis of gender at the participatory plant breeding activity is the social economic context of women and men's realities; thus, women play a very important role in managing biodiversity (3).

The Cuban Revolution willing to benefit women has become it a substantial aspect of its politics by changing structures and ways of thinking not only in working institutions, families but also in social, political and mass organizations and the whole people.

Under these conditions, female farmers have shown remarkable advances of their social role, for instance, in agricultural activities, community tasks or being promoted as directors.

However, there are still subjective barriers which make evident the existence of "gaps" between men and women which have to be taken into consideration (4). Therefore, gender prospect analysis must be focused on:

- men and women's participation in diversity fairs
- different men and women's selection criteria in diversity fairs
- women's performance on farm experimentation and diversity in Batabanó
- analyzing women's discussion within a farm research group from El Tejar-La Jocuma, La Palma, Pinar del Río.

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MATERIALS AND METHODS

To fulfill 2002 and 2003 goals, two bean and three maize diversity fairs were celebrated in La Palma (Pinar del Río), San Antonio de los Baños and Batabanó (Havana); in every case, fairs were arranged and developed in farmers' own lands (5). A wide diversity of both species was put at the participants' disposal to select a limited amount of varieties and explain their selective criteria to make up the following indicators:

- **Varietal voting coefficient (VVC):** total number of actual votes/(amount of farmers) (amount of eligible varieties). Each farmer is allowed to select as many as five or six varieties. This indicator shows their interest to broaden varietal spectrum.
- **Effective diversity coefficient (EDC) in participatory plant breeding (PPB):** total number of varieties selected (at least once)/number of varieties presented. It determines the right diversity level incorporated to the system.
- **Criterion-stating coefficients (CEC):** the amount of real criteria expressed/number of possible predetermined criteria. It shows PPB selective criteria spectrum.

In order to evaluate women's performance faced with diversity and experimentation, several areas were visited with the aim of interviewing women participating in the project, also to understand their decision-making process at "28 de Septiembre" Agricultural Production Cooperative (APC) and "Deris García" service & credit cooperative (CSC) in Batabanó. On the other hand, to deepen on this purpose, it was suitable to live together with them in the zone and make an inventory of every men and women's activity schedule.

To analyze women taking part of farm research group discussion, some information is basically recorded in workshops with all farmers.

RESULTS AND DISCUSSION

Men and women participating in diversity fairs. This kind of fairs significantly presented such differences. Through bean and maize fairs celebrated, women's participation in communities was evidently less than men's (Table I), which confirms her role at home rather than in other activities out of this environment (6).

Table I. Amount of women and men selecting varieties in diversity fairs

Crop	Fair place	Date	Women	Men	Total	Women (%)
Bean	INCA	April, 2001	17	27	44	38.6
	La Palma	February, 2002	11	48	59	18.6
Maize	San Antonio	May, 2001	12	21	33	36.4
	Batabanó	August, 2002	1	32	33	3.03
	La Palma	August, 2002	23	64	87	26.4
Total			86	222	308	27.9

Variations between men and women's selection criteria in diversity fairs. At the second bean fair, women selected a higher percentage of varieties than in the fair from the research center, which is proved by VVC; however, a predetermined group of varieties was given to them. On the other hand, men keeps a similar level in both fairs, which proves a growing social interest on women's side for diversity (Figure 1). Similar differences have been recorded in PPB programs with maize crop in Oaxaca, Mexico, where a nonidentical men and women's voting was appreciated (7).

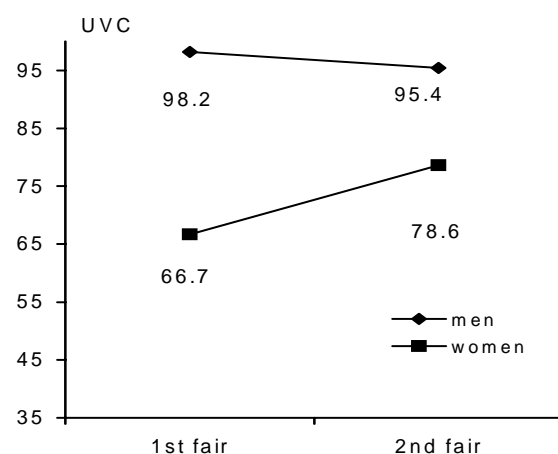


Figure 1. Varietal voting coefficient per sex in two bean fairs

Women selected less varieties than men, which is proved by EDC, whereas men incorporated more diversity to the system, increasing almost 20 % different varieties from one land to another (Figure 2).

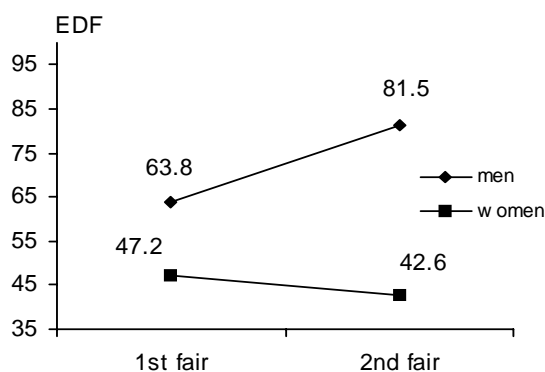


Figure 2. Effective diversity coefficient per sex in two bean fairs

Total women's criteria also increased considerably (CEC) from one fair to another; however, in case of men, it was kept similarly, which proves that women widen their varietal-evaluative prospects.

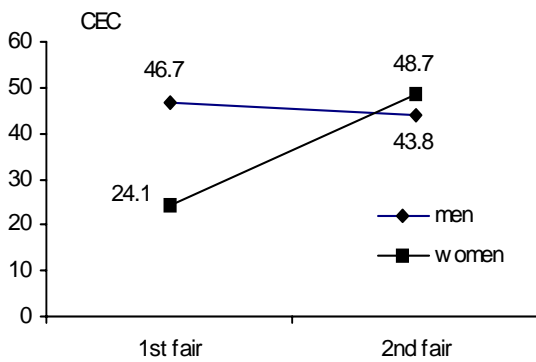


Figure 3. Criterium-stating coefficient per sex in two bean fairs

In case of women's selected varieties on farm experimentation, it was appreciated that their choice was later considered in investigations outlined by farmers from La Palma and Havana (Figure 4).



Figure 4. Women's selection in a bean diversity fair

Women's performance facing the access to diversity and farm experimentation in Batabanó, Havana. Two farm women from a CSC played an active role in the idea, fulfilment and control of each crop production phase¹. Differences between men and women are mainly related to soil preparation practices, since they are completely conducted by men. Women have a direct participation on postharvest evaluation of varieties concerning maize fair; they also played a decisive role on its arrangement. In other fairs, they were also interested in varietal selection.

There is a group of women at "28 de Septiembre" APC carrying out daily activities outlined by the director of the cooperative and coordinated with the corresponding farm chief.

This must have been the most important reason of experiment failure to which women from Batabanó were

¹ A maize diversity fair was celebrated in August and sisters' role was decisive, not only to arrange and develop all activities but for harvesting cobs previously selected during the fair. The farmer approved to deliver this material to all growers who had participated in the fair without charge. However, women denied when saying "...If you have taken them away, how can we feed our animals?". Finally, their criteria were ultimate and made evident women's decision making status in activities and productive resources.

involved. Whenever we got together and discussed about soils from the experimental area, the use of control treatment was hanging from a further discussion between the farm chief and cooperative director. So, we later noticed their participation had been decided at seeding time, since participatory analysis was lacking; consequently, other women's possibilities were restrained just to cooperative tasks assigned by the director.

Another reason could be these women are agricultural workers from the cooperative without knowing or developing abilities, just earning a daily salary, so they are neither interested nor needed in experimenting, obtaining and developing new varieties which do encourage private women.

Autonomy levels concerning "28 de Septiembre" APC and private women are also observed; however, women of both are in charge of household tasks. The former is more affected by work schedule, since she can not prioritize activities but fulfill a working time and the conditions established by the cooperative. In the case of men, there are differences regarding autonomy levels and crop management according to the kind of productive relations. When compared to women, men have more participation in decision making and number of productive activities than women. However, men had less household participation and family reproduction than women.

Analysis of women's participation at farm group discussions from El Tejar-La Jocuma, La Palma, Pinar del Río. Farmers' research group was composed by 10 members at the beginning, but in practice, it has become into a familiar meeting and the number of women and young participants has increased. It is interesting to observe how women has gradually entered the group as economic aspects related to seed management have reached a predominant place. Farmers' discussion and evidences of men's interest in this community to broaden genetic diversity and of women to obtain economic benefits on seed management has led to the following hypothesis: "differently from most Mesoamerican countries, where the woman is in charge of widening diversity and the man of developing the economic thought, in El Tejar-La Jocuma, La Palma, Pinar del Río, occurs quite the reverse".

The main weakness detected by farmers' experimentation states that, even though farmers are happy for their contribution to the community, they have important economic losses in diversity fairs. In those workshops aimed at finding solutions to such problems, women proved to have a more acute economic thought. These solutions denote their capacity for visualizing a local organization of seeds, it bringing economic profits as a way of multiplying participatory plant breeding process at town level. Therefore, it makes women's empowerment easy towards this direction, which would be an important point of entry for the economic sustainability of farmer experimentation.

In general, by implementing PPB project either at CSC located in El Tejar-La Jocuma, La Palma, or on Raúl Hernández's farm, belonging to «Deris García» CSC,

Batabanó, Havana, there was a positive impact for women in terms of their growing capacity for decision making soon after they enter the group of farmer experimentation, workshops and project fair. This project has strengthened their argument, innovation and local recognition.

Likewise, for every region of CSC, APC and community participants, PPB has paved the way to recognize women's varietal selection; also, it has brought some space to exchange and strengthen their self-esteem. The fact that women reckon with a PPB space allows both, the varieties and women's criteria, to be incorporated to the local establishment of their selected varieties.

CONCLUSIONS

- Gender relationships proved to favor men, which is shown by women's subordinate position when participating in productive activities, direction positions and power relations. However, when a woman adopts any task, her level of fulfilment is recognized as well as the quality, responsibility and efficiency of her work.
- Women's participation in local or community levels is conditioned by her insertion to private or cooperative production.
- Men perform productive activities whereas women mainly play reproductive roles.
- Men's participation in reproductive task is quite null meanwhile women perform several productive activities, such as animal raising, crop seeding and harvesting, seed preservation and storage, among others.

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