



Gender mainstreaming in governance and Local Agricultural innovation. A challenge from the agricultural sciences

Transversalización de género en la gobernanza e innovación Agropecuaria Local. Desafío desde las ciencias agrícolas

¹ **Bárbara Benítez Fernández**, ² **Anaisa Crespo Morales**, ² **Rodobaldo Ortiz Pérez**,
¹ **Rosa Acosta Roca**, ¹ **Regla M. Cárdenas Travieso**, ¹ **Elein Terry Alfonso**,
² **Graciela Morales Pacheco**, ² **Yuneidys González Espinosa**

¹Instituto Nacional de Ciencias Agrícolas, Carretera a Tapaste, km 3 ½, San José de las Lajas, Mayabeque, Cuba. CP 32700, Gaveta Posta 1.

²Universidad Autónoma de República Dominicana (UNAPEC). Av. Máximo Gómez 72, Santo Domingo 10100, República Dominicana.

ABSTRACT: Equality between women and men is an essential prerequisite for achieving true human development that effectively improves the lives and opportunities of individuals and their families. The work was based on the Participatory Diagnosis with a Gender Approach (DPEG, according to its acronyms in Spanish) methodology, which was implemented in three phases: The first, based on the execution of Pilot Projects in four provinces of the country. (2007-2011); a second, where the gender approach becomes a transversal axis of the project (2013-2016), and a third (2017-2021). The work was carried out in twelve provinces and 75 municipalities in the country. For the implementation of the methodology, mainstreaming processes are carried out directed towards the gender focal points; the empowerment and leadership of the gender coordinators at the provincial and national levels and work was done on the visualization strategy of women as agents of change and the line of gender mainstreaming aimed at women and men in the productive scenarios. As a result, favorable changes are obtained in the participation of women in the definition of policies, processes and programs, through the articulation of actors such as: the FMC, Cuban Women Federation; MINAG and municipal governments; in the execution of budgets for capacity building actions and new economic undertakings, as well as in knowledge management processes and in the sociocultural. All of this favored the generation of new jobs, income, women's leadership and coordinated work with institutions and governments.

Key words: equity, empowerment, leadership, gender approach.

RESUMEN: La igualdad entre mujeres y hombres es un prerequisite indispensable para lograr un verdadero desarrollo humano que mejore efectivamente la vida y las oportunidades de las personas y sus familias. El trabajo tuvo como base la metodología de Diagnóstico Participativo con Enfoque de Género (DPEG), la cual fue implementada en tres fases una primera, basada en la ejecución de Proyectos Pilotos en cuatro provincias del país (2007-2011); una segunda, donde el enfoque de género se convierte en un eje transversal del proyecto (2013-2016), y una tercera (2017-2021) de consolidación de fases anteriores. El trabajo se desarrolló en doce provincias y 75 municipios del país. Para la implementación de la metodología, se realizan procesos de transversalización dirigidos hacia los puntos focales de género; el empoderamiento y liderazgo de las coordinadoras de género a nivel provincial y nacional y se trabajó en la estrategia de visualización de la mujer como agente de cambio y la línea de transversalización de género dirigido a mujeres y hombres de los escenarios productivos. Como resultado se obtuvieron cambios favorables en la participación de las mujeres en la definición de políticas, procesos y programas, a través de la articulación de actores como: la FMC, MINAG y gobiernos municipales; en la ejecución de presupuestos, acciones de formación de capacidades y de nuevos emprendimientos económicos; así como en los procesos de gestión del conocimiento y cambios positivos en la dimensión sociocultural. Todo ello favoreció la generación de nuevos empleos, ingresos, liderazgo femenino y trabajo articulado con instituciones y gobiernos.

Palabras clave: equidad, empoderamiento, liderazgo, enfoque de género.

*Author for correspondence: bbenitez@inca.edu.cu

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INTRODUCTION

Equality between women and men is an indispensable prerequisite for achieving true human development that effectively improves lives and opportunities of individuals and their families. This implies the full and universal right of men and women to the enjoyment of citizenship, not only political but also civil and social, and the means to achieve this is gender equity, understood as justice in the treatment of women and men according to their respective specific needs.

This conviction has motivated the historical struggle of women's and feminist organizations in the last century. The creation of the concept of gender in the 1970s by feminist scholars meant an unprecedented epistemological shift, and led to the creation of a broad set of theories, approaches and tools. Consequently, the implementation of Declarations, Conventions and International Conferences held within the United Nations, has made it possible to find answers to the problem of gender and development (1).

Essentially, the IV World Conference on Women, held in Beijing in 1995, brought about new advances by ensuring that the international community expressed its commitment to achieving equal rights for women and men. To this end, two strategies were identified: mainstreaming or gender mainstreaming in all decision-making processes and in the execution of policies, and the strategy of women's empowerment. Working in this direction also provides a historical overview of the progress achieved in public policies for equity and the exact approaches of the various academic positions on the subject. The ultimate goal of mainstreaming is to achieve gender equity, but this cannot be achieved without first empowering women, which is achieved by strengthening their capacities and protagonism (2).

The 2030 Agenda for Sustainable Development has provided additional impetus, clear targets and in it, member states recognized that gender equality and the empowerment of women and girls would contribute crucially to the achievement of all the Sustainable Development Goals and that the systematic incorporation of a gender perspective in the implementation of the Agenda was essential for success (3). On the other hand, it is stated that female empowerment is the key to combating the gender gap and to achieving economic growth, which is promoted by laws and State policies (4).

In this sense, in Cuba, women's participation is more active, compared to other areas of the Third World, where gender equity has experienced substantial progress in the country in terms of policies and attitudes that favor the balance of roles between men and women in economic activities, as well as domestic and care activities in the home. This complex problem, with historical bases and a strong patriarchal culture, is still far from being considered overcome. In the Cuban reality, which has advantages over many countries, there are several factors that negatively influence the situation of women (5).

In the country there is a great political will aimed at benefiting women, breaking with structures and ways of

thinking in labor institutions, the family, political and mass social organizations and in the population in general (6). An example of this is the policies related to gender equality in the Cuban context. Recent studies corroborate that the study of inequalities is framed in the period of updating processes of the economic model, due to the set of economic and political transformations implemented, which among its most significant challenges has been social inequalities for the last decades (7).

The work experience has shown that developing strategies with governmental structures and institutions is essential for the development of local development and in this sense women play a fundamental role. These results corroborate those found by other authors, who state that innovation at the local level was implemented by expanding and facilitating citizens' access to key governance variables such as information, transparency and accountability, empowering them with a voice and effective participation in the various stages of the public policy management cycle at the territorial level (8).

With the Triumph of the Revolution, the legal bases and objective and subjective conditions were created for the development of an inclusive model, based on equality and social justice, the full emancipation of women and unrestricted adherence to the principles of sovereignty and self-determination. In the year 2021, the "National Program for the Advancement of Women (PAM, according its acronyms in Spanish) was approved, which promotes actions aimed at achieving greater comprehensiveness and effectiveness in the prevention and elimination of manifestations of discrimination against women, as well as strengthening the mechanisms and professional capacity of public officials and civil servants to incorporate gender issues in the development of policies, programs and service delivery (9).

Other institutions and organizations also promote and implement gender strategies that favor these processes, such as the Ministry of Agriculture (MINAG, according its acronyms in Spanish), the National Association of Small Farmers (ANAP, according its acronyms in Spanish) and projects that focus on equity. On the other hand, university curricula include subjects that have the gender approach to agricultural development as a cross-cutting theme. However, in the agricultural sector, there are still gaps in which we must continue to emphasize, especially in favor of women, who are the least benefited in this area, which is masculinized due to the strong patriarchal culture that is rooted in the communities. Also, the need to train women in productive activities is evidenced by: deficient information regarding the gender approach, little knowledge regarding the characteristics of the crops and varieties to be planted and their management, lack of information regarding the management of the flow and conservation of agricultural products (10).

Given these disparities in the country's agricultural sector, it is necessary to establish gender policies that focus on equitable relations between women and men.

The National Institute of Agricultural Sciences and the "Project to Strengthen a System of Innovation in Local Agricultural Development" (PIAL) have implemented a gender mainstreaming strategy with the objective of offering new opportunities for the development of Cuban women and in other international contexts.

MATERIALS AND METHODS

The work was conducted in 12 provinces of the country, the Isla de la Juventud Special Municipality and in 75 other municipalities, with the participation of women and men from the selected scenarios. In the first stage, work was carried out in four provinces (Havana, Pinar del Río, Villa Clara and Holguín); in the second stage, seven new scenarios were added: Sancti Spiritus, Cienfuegos, Matanzas, Las Tunas, Granma and two new provinces were incorporated: Artemisa and Mayabeque (former Havana province). In the IV phase of the project, two new provinces were added: Ciego de Avila and Guantánamo and the special municipality Isla de la Juventud.

The methodology was implemented in three phases: the first, based on the implementation of preliminary small-scale study in four provinces of the country (2007-2011); a second, where the gender approach becomes a transversal axis of the project in the period from 2013-2016, and a third (2017-2021), where more than 3000 producers participated, representing 31 % of women, at the end of the research. In these phases, emphasis is placed on the institutionalization of good practices of the Local Agricultural Innovation System, from a participatory and social equity approach.

The work presented in all phases of the study used the methodology of Participatory Diagnosis with a Gender Approach (DPEG, according its acronyms in Spanish), which consists of a systematic process that serves to recognize a certain situation and the reason for its existence, where the construction of knowledge is done with the intervention and differentiated opinions of the people involved in that situation (11), to achieve favorable changes in gender equity in work scenarios of the Local Agricultural Innovation Program (PIAL, according its acronyms in Spanish), through the strengthening of local agricultural systems in an equitable manner, thus contributing to the well-being of the surrounding families and community social progress.

This was accompanied by a participatory methodological basis in PIAL, which was based on the permanent search for horizontal relations between technicians and producers from a perspective of dialogue of knowledge, which has an impact on the presence of peasants in national and international events on an equal footing with experts.

The gender analysis was implemented, taking into account aspects such as: gender roles, the position and condition of men and women separately, interests, needs, gender gaps, aspirations and experiences related to access and control of resources and current levels of participation in family decision making and productive activities and in community organizations (formal and informal). Work was carried out with families in each province and municipality where the project operates.

The participant observation techniques used also made it possible to learn about the work context and community realities; all through horizontal communication between the facilitators and the social actors involved, subsequently confronting the points of view of both in order to evaluate with a gender perspective from a collective construction and learning by doing (12).

RESULTS AND DISCUSSION

Actions for gender mainstreaming

These actions for gender mainstreaming were constructed in two directions, one directed towards the focal points of the institutions (people who were to facilitate the work) and the other towards the women and men of the contexts under study, represented by one person in each province associated with the project.

Gender mainstreaming aimed at focal points

The actions for gender mainstreaming in the program consisted of three stages:

1. **Training - Sensitization of gender focal points.** The objective was to provide theoretical and methodological tools to the people selected in each of the work territories, through shared spaces that contributed to the implementation of the strategy. Work was carried out to raise awareness and build capacities on topics such as gender analysis, mainstreaming, indicators, monitoring, evaluation and budgeting, taught by national and international specialists, under the learning-by-doing methodology.
2. **Empowerment and leadership of PIAL's provincial coordinators and national gender coordinator.** The activity consisted mainly of capacity building to address the gender issue. Four fundamental workshops were held, which formed the basis for the empowerment of the focal points, mainly those related to: "Participatory diagnosis with a gender perspective; Workshop for the Construction of Indicators with a gender perspective"; Workshop on Gender-Sensitive Budgeting"; and Workshop for the "Strengthening of gender in the processes of the Cooperation Office in Cuba" (CORAHB), all given by a global gender advisor. In this case, 10 provincial representatives and the National Coordinator were trained.

This training was also provided at different stages of the project as new provinces and municipalities joined the project and new focal points were incorporated to carry out the gender strategy. Sixty-two gender focal points were trained at the municipal level, divided into several regional workshops.

This process provided personnel with the tools to work with the Participatory Appraisal Methodology with a Gender Approach. Once the provincial focal points were trained, they transferred their knowledge to their counterparts for work in the municipalities, which had a positive impact on the work of the gender axis.

A key element for the empowerment of the focal points was the presence of a decentralized gender-sensitive budget, which allowed the delivery of resources for affirmative actions for women, providing better opportunities and creating the conditions to raise the levels of women's participation in the activities planned in the work scenarios and in national and international events. Another key element was the selection of a National Coordinator and her insertion as a member of the National team, where gender mainstreaming became a permanent focus of the project's work.

3. Women as agents of change. The strategy consisted of visualizing women's work from a "Women in Development" (WID) approach, through specific affirmative actions that allowed women producers personal growth and greater access to decision-making; facilitated training in topics related to their interests, opportunities to access the benefits of development programs; contributed to increasing the incorporation of women into extra-domestic work and study, as well as stimulating a discreet male participation in the project's actions.

Gender mainstreaming in the program, aimed at women and men in the productive scenarios under study

Four fundamental stages formed the basis for developing gender mainstreaming actions in the productive scenarios.

- Characterization of the communities and their members in terms of socioeconomic and productive aspects. To this end, the communities were characterized at the municipal level, i.e., each gender referent, accompanied by the provincial referent, was responsible for characterizing each community under study.
- Diagnosis of the interests, motivations and needs for development and training of community members on different topics, using DPEG tools, in scenarios selected by provinces and municipalities. Once the communities were characterized, the DPEG was started in each work scenario, led by the municipal referents and supervised by the provincial gender referent. Once the diagnosis was obtained, awareness-raising and training actions were carried out to reverse the situation focused on inequalities in power relations within the families and the perceptions of women and men found in the diagnosis, which did not allow women to change their life paradigm. This situation was reversed by the intervention of the work teams through training on topics related to self-esteem, hegemonic masculinities, gender violence in rural and peri-urban areas, among other topics of interest to participating women and men.
- Activities for capacity building, through: Awareness-raising workshops; training workshops on topics requested in the appraisal and workshops for the exchange of experiences between male and female producers that show successful

experiences. The training was based on the practical needs of women and men and the workshops were organized according to these felt needs. Women and men from the provinces and municipalities involved in the project participated. This activity made it possible to reverse the patriarchal canons that were underlying in the families under study.

- Evaluation of the results. The results were evaluated by grouping them into gender dimensions such as: Knowledge Management, Economic and Productive Dimension and Sociocultural Dimension. To evaluate the results, a table of indicators was made by provinces where aspects such as: Linkage between actors with a gender approach, education and training, methodologies with a gender approach, innovative ideas, relations between genders and income were evaluated. As a result, it can be observed that, in this stage of the project, changes in favor of gender equity were produced, which enhanced women's participation, taking into account that the project worked with a Women in Development approach and with a gender-sensitive budget execution (13).

The effectiveness of the mainstreaming strategy of the first stage, constituted an opportunity to continue deepening the study in a second stage, which was comprised between the years 2013-2016, where a new gender perspective is positioned, based on the "Gender in Development" (GED) approach, which allowed understanding and evaluating the changes in power and gender relations within the families; forming capacities in women and men on issues such as: hegemonic masculinities, self-esteem and gender violence and aspects on social and solidarity economy (Figure 1).

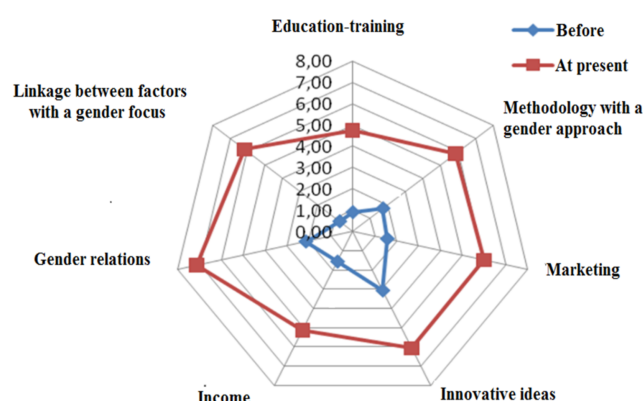


Figure 1. Gender indicators evaluated in different Local Agricultural Innovation Centers (CLIAs, according its acronyms in Spanish), grouped by dimensions, at the beginning of the study (2007) and at the end of the first stage in 2012

In this sense, satisfactory results are obtained in the study provinces with a change in favor of more equitable power relations and the importance of offering opportunities to women and men in productive scenarios. To this end, a group of indicators are evaluated that show the changes towards gender equity in the work scenarios.

Table 1 shows the changes in attitudes and practices that have led to greater female participation in agricultural innovation processes, which facilitated a significant increase in economic opportunities and autonomy for the participating women, since it generated a greater number of women with access to employment, who in turn contribute more to the family economy; they are no longer ignored; and they can make their own decisions. In addition, there is a greater leadership of women in the coordination of women's groups, in the management of seeds, in multi-stakeholder platforms and in the management of productive units. Mayabeque, Pinar del Río, Holguín and Las Tunas provinces stand out, with indicators above 50 % related to women's leadership.

Taking into account the results achieved in the first two stages, a new one was continued, comprised between 2017-2022; based on the good practices identified in the project related to the sensitization of actors, as well as in the updating and implementation of the existing gender strategy, which is currently mainstreamed in the scaling of a Local Agricultural Innovation System (SIAL) in institutions, agencies and municipal governments, which have accompanied the initiative as strategic allies, with the objective that they recognize and use these tools of the system as part of their work strategies.

At this stage, the capacity-building activity stands out, with more than 10,000 people trained, 31 % of them women; more than 350 women and men are trained in the SIAL Diploma, including 50 government officials; 52 % of women are trained in the SIAL Specialty, in the first edition; in 42 municipalities the platforms are managed and led locally with the participation of their governments (31 % women's leadership) and 22 micro-grants or micro-subsidies were developed with 86.4 % led by women; 68 % of women have access to new enterprises and others strengthen them; women and men acquire new knowledge through exchanges of national and international experiences and knowledge networks were created for women and men in the twelve provinces of the country.

In relation to the economic-productive dimension, the following was achieved in this stage of the work: : women and men were directly benefited by increased employment, income, access to training, advice, equipment and inputs (38 % of women), 46 % of the GIALs, led by women, identified and implemented initiatives aimed at generating specific job opportunities; 25% of the Local Seed Banks (LSB)

are led by women; 60 % of new species and varieties are introduced; and yards and plots in three provinces diversify their production, 31 % of which are led by women and generate new jobs and income in 2022.

Related to the impacts from the socio-cultural dimension, changes are achieved in the subjectivity of the family members; women become leaders in their communities, changes in roles, changes in attitude and new behaviors are visualized, resulting in entrepreneurship; The quality of life and lifestyles of women and men are improved, the agrarian culture is recovered and the work with the new generations is increased (coexistence, creation and strengthening of circles of interest), new spaces for innovation are created and the issues of gender violence are visualized as safe spaces for intergenerational equity.

Impacts achieved toward agricultural innovation with a gender approach and governance

Socioeconomic development is a process of economic growth and structural change that leads to an improvement in the standard of population living (14). Gender mainstreaming in agricultural innovation offered possible ways forward, including making rights central to governance and generating political will for change, which has shaped perceptions in governance institutions about the roles that women and men play in society, as well as determining their access to rights and resources, enabling them to be sensitive to the different needs and situations of both women and men and to contribute to gender equality.

Thus, women's equal participation in governance has been an important end in itself from the SIAL approach, a recognition of their rights to speak and be heard. More broadly, it has been a means to social transformation. This in turn has made it easier to involve women in the definition of policies and processes, generate changes in favor of participation, empowerment, and social recognition, enhance self-esteem, and generate new opportunities for women and men in agricultural contexts. To cite just a few examples, it is possible to institutionalize good practices contributed from the gender perspective in scientific and higher education institutions.

In this regard, working in coordination with MINAG and the FMC (Cuban Women Federation) has been a pillar for developing a strategy focused on the gender approach from the standpoint of innovation and governance. Starting in 2019, due to the situation that the country is going through,

Table 1. Indicators of women's participation in agricultural innovation in 7 Cuban provinces

Indicator	Pinar del Río	Artemisa	Maya-beque	S. Spiritus	Las Tunas	Granma	Holguín
No. GIALs women	4	53	56	13	5	15	34
% GIALs led by women	30.8%	37%	27%	100%	100%	40%	100%
% of women leading multi-stakeholder management platforms (MSPs)	42%	67%	50%	3%	71%	57%	25%
Women handling seeds in their conservation, processing and commercialization.	71	35	9	12	24	30	29
Women leaders in productive units	22	5	67	9	5	96	210

related to the COVID-19 pandemic, changes in the actions of the project are being developed, due to the urgent need to seek alternatives for food production, where women and men in rural and urban contexts play a leading role. To this end, a national strategy was designed to carry out concrete actions to promote the development of family agriculture in women's backyards and plots in three provinces of Cuba, with the aim of producing vegetables, medicinal plants and condiments that will help alleviate the shortage of these resources in the national market.

As a result, at least 35 municipalities carried out gender-specific actions accompanied by the governments; where training and technical support allowed an increase in crop diversity, the introduction of new varieties and a more effective use of bioproducts; women's leadership at the head of innovation groups and in local seed certification committees. The role of women in the execution of budgets earmarked for the development of capacity-building actions and strengthening of economic initiatives is also noteworthy, with 47 % participation in relation to men. A particularly important aspect was the linkage of these actions with the lessons learned from strategic planning with a gender perspective received by specialists.

A distinctive element in this study is the implementation of methodologies based on agroecological foundations to produce healthy food, through the articulation with the Movement of Urban, Suburban and Family Agriculture (MAUSF, according to its acronyms in Spanish), which allowed the enhancement of food production in backyards and plots of land. This allowed the promotion of food production in backyards and plots, corresponding to 194 families and state institutions (primary schools, children's circles, food processing center for boys and girls, National Botanical Garden, Enrique José Varona Higher Polytechnic Institute, among others), where 52 of them adopt specific gender actions, accompanied by local governments.

In this regard, work was carried out in 194 backyards, plots and state institutions, 24 % of which are led by women; these actions strengthened at least 6 vegetable sales points. On the other hand, the delivery of two houses for the production of seedlings allowed the production of more than 72 000 vegetable seedlings obtained with environmentally friendly technologies, that is, with organic substrates and the use of bioproducts of natural origin. These productions were shared with women and men who lead vegetable gardens in the people's council and others were destined for commercialization. All these actions facilitated an increase in the diversity of species in yards and plots, which had an impact on the quality of life of the families involved in the study. The results obtained corroborate that working on food production with friendly technologies makes it possible to have healthy and safe products for human consumption. When evaluating the results, it can be seen that food production in urban and peri-urban conditions by agroecological methods is a very current trend worldwide,

which FAO has approved and promoted since 2010 as an alternative for a healthy and diverse food supply (15).

All this places women in a position of advantage in society, which denotes discrete changes of roles, both in women and men; the incorporation of other family members and a recognition of the Federation of Cuban Women to women incorporated into food production.

Impacts from Knowledge Management

Capacity building was a key element for the development of participation actions in the innovation spaces. An example of this is the awareness-raising workshops for both producers and policy makers. Exchanges of national and international experiences were also a vehicle for capacity building, as well as the presentation of results at national and international events and participation in the Science and Technology Forums convened by ANAP, with the support of members of the facilitation teams.

Other actions for capacity building that have resulted from the plurality of actors participating in these processes of innovation and governance have been the access to academic spaces through the Diploma and Specialty SIAL, with the participation of 174 new officials of municipal governments and institutions providing services, where women represent 84.48 % of the total.

Another means of access to knowledge is the synergy established with the Municipal University Centers (CUM, according to its acronyms in Spanish); the universities of the country where the project is inserted and the training in more than ten subjects, which has favored the position and condition of Cuban women.

The expansion of the innovation system to new territories was also a key element in visualizing the role of women in agricultural innovation in scenarios in three provinces of the Dominican Republic, in coordination with the Ministry of Women and the governments of the studied localities.

Economic Dimension

Economic and productive results

According to studies carried out, food production in urban and peri-urban conditions on agroecological bases is a very current trend worldwide, which FAO has approved and promoted since 2010 as an alternative for a healthy and diverse diet; within which, studies reveal that the production of regulatory foods such as fruits and vegetables play a decisive role (15).

The joint work with organizations and institutions allowed the introduction of several technologies such as: food preservation, production of dry condiments, handicrafts, production of flowers and ornamental plants, use of bioproducts, increase of new species and varieties, production of wines, vinegars, and cheeses. More than 100 economic initiatives are strengthened in the twelve provinces of the country and the special municipality of Isla de la Juventud; 35 % of them are led by women who participate in the innovation processes.

More than 60 % of new species and varieties are introduced, which has resulted in an increase in agricultural diversity, leading to an increase in the average monthly salary of 3000.00-6000.00 CUP and the generation of new jobs, 60 % of which benefit women. According to studies, food production in urban and peri-urban conditions by agroecological methods is a current of great relevance worldwide, which FAO since 2010 has approved and promoted as an alternative for a healthy and diverse food; within which, studies reveal that the production of regulatory foods such as fruits and vegetables, play a decisive role (15).

Developing capacities in women and men focused on Strategic Planning with a Gender Approach offered the opportunity to develop economic initiatives, where women represented 48.6 % of the total. When evaluating the results, 20 new economic initiatives were developed in the last stage; new jobs for women and an average annual income of over 109 000 CUP per family was obtained; changes in the women's subjectivity were also noted when they stated that they felt motivated and benefited from the knowledge acquired and the opportunity to start a business or strengthen the one they were already running.

Studies show that 68 % of the women surveyed have started a business out of necessity and opportunity, while men show a more balanced distribution: 30 % out of necessity, 38 % out of opportunity and 30 % out of both. However, what all the women are looking for is to increase their personal income, when 54 % of them had average incomes before starting a business, which were evidently not enough for them, it is very likely that some of them may be heads of households with total material responsibility for their families (16).

Socio-cultural dimension

Although the insertion of women in the productive scenarios has been favored up to 31%, national statistics reveal the masculinization of the agricultural sector and this causes the minority presence of women in productive work and in management positions; aspects on which work must continue. A recent study in Matanzas province confirms the invisibility of women in the rural context and the gender barriers to strengthening food sovereignty in Cuba (17).

As part of the gender strategy, changes are conditioned from the subjectivity of women and men, which provoke new behaviors and perceptions from the individual to the social level.

As a result, significant changes are seen in family relationships, women's self-esteem, participation and leadership, as well as greater independence. Men show changes in their perceptions related to productive and reproductive roles, and results in favor of gender equity are achieved.

An example of this is the criteria expressed by the protagonists themselves when they say: Not only have working conditions improved, but also household conditions have improved with new household appliances and employment opportunities have increased. On the other

hand, the young people emphasize the coincidence in the improvement of relations with the community and favorable changes in the relations between men and women: "Men have changed a lot, because women already work in the fields and we work in the house". My husband has changed, he cooperates in household chores", "my family has changed because of the blessed PIAL", "Men's minds have changed, we are freer. Likewise, men say that life on the farm has changed since women have joined the agricultural work, explaining the advances in the introduction of environmentally friendly technologies based on their different perceptions and the organization and diversification of crops, through the exchange between male and female producers. On the other hand, families in the province of Artemisa, are examples of changes in roles, where men are involved in the reproductive roles of family care, so that women are incorporated into the activities of capacity building, exchange of experiences and innovation spaces, which denotes progress related to the patriarchal canons of families in the western and eastern provinces of the country.

There are dissimilar examples of families where power relations have changed in favor of gender equity in the homes of peasant families taken from interviews with producers in the provinces studied.

The innovation spaces generated from the gender axis (innovation fairs, culinary festivals, expo-sales, flower fairs on special dates) have also been a good practice, where women, men and young people have been motivated, achieving an effective social inclusion and motivation for citizen participation.

CONCLUSIONS

- Having a strategy aimed at social equity has been a strength of the Local Agricultural Innovation System, which has had an impact on the dimensions of sustainability.
- Working together with governments, social institutions, organizations and agencies has been a strength to achieve the proposed objectives.

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