

Gender-focused analysis in rural agricultural producers in Los Rios, Ecuador

David Gortaire Díaz¹, Yete Jiménez Vera², Migdalia Díaz Chong³,
Elma Romero Ramírez⁴, Byron Reasco Garzón

¹*Master in Rural Development. Professor and Researcher of Universidad Técnica de Babahoyo. Babahoyo, Ecuador*

²*Bachelor's Degree in Social Sciences and Education in Computing. Teacher of 29 de Agosto High School. Babahoyo, Ecuador*

³*Master in Teaching and Curriculum. Professor and Researcher of Universidad Técnica de Babahoyo. Babahoyo, Ecuador*

⁴*Master in Business Administration. Professor and Researcher of Universidad Técnica de Babahoyo. Babahoyo, Ecuador*

⁵*Master in Inclusive and Intercultural Education. Professor and Researcher of Universidad Técnica de Babahoyo. Babahoyo, Ecuador*

Abstract: This article aims to explore the producers' vision about gender in Los Rios rural communities and the access of women to equal resources, services, and products in the agriculture area. A survey was carried using a simple probabilistic sample of 130 producers among men and women inside different agriculture associations. The data were analyzed using descriptive statistics. The study confirms that women and men do not work on similar conditions regarding access to resources, training and extension services, access and property of land and inputs, although there is not a gap between women and men on a socioeconomic level. We highly recommend promoting public policies that could benefit women and promote a gender-neutral policy where decision-makers need to move to address the structural causes of inequalities, starting at the intra-household and community level.

Keywords: Gender; Inequality; Women; Property, Extension services.

1. Introduction

This research seeks to analyze gender equality, through a social and economic comparison for men and women that work in the agricultural sector of the province of Los Ríos, Ecuador. According to the FAO (2009), it points out that rural women are systematically discriminated against concerning access to the necessary resources for socio-economic development in this economic area. Generally, the provision of credit, extension, inputs, and seed services to cover the needs of households.

That is why the factors that influence gender inequality in the agricultural sector in the province of Los Ríos will be taken into account, whose challenge includes the labor field, the income relationship, and decision-making. According to the United Nations, gender equality refers to "the equal rights, responsibilities, and opportunities of women and men, and girls and boys". Therefore, the sex they are born with will never determine the rights, opportunities, and responsibilities that we may have throughout our lives[2].

Gender equality is, therefore, a universal legal principle, while gender equity also introduces an ethical component to ensure real equality that in some way compensates for the historical inequality that the female gender drags in terms of political representation or the labor market, among others. Equity must be applied in gender as it applies in other areas, such as in the tax system, where each person pays more or less depending on what they have.

In that information about what is gender inequality and what happens in the agricultural sector is where the basis of the project is, that is where the reason for which it is carried out is, it is expected that they are informed about what that happens in this labor field of Los Ríos, and the situation that women go through at work is analyzed.

We assess whether there are gendered differences in the impacts of the productive activity and innovative extension model that provided to women, and the diagnostic and information services to smallholder farmers in the country. In particular, we examine whether male and female farmers accrue similar benefits from participating

in associations and communities while working as producers in rural areas[3].

2. Literature Review

Despite significant work to enhance women's empowerment in agriculture, women remain marginalized across the globe[4]. In many countries, women form a substantial part of the agricultural labor force. They constitute about 30 to 80% of the rural agrarian labor force and contribute to about 60% - 80% of the total food production[5]. A clear example of gender inequality in the agricultural sector is also presented, which is as follows: In the case of coffee, women need most of the labor in the early stages of production, including care of the plant, the harvest, and its processing. Jobs such as the collection of beans and their classification have a direct impact on the quality of the coffee and the price that can be charged for the sale. Women excel in these tasks and their contribution, therefore, directly influences the income of coffee marketers. Their role, however, is rarely seen in agricultural supply chains - they earn less than men.

Aside from the social and administrative bias against women, they are also denied equal access to education, training, extension contacts, and information, which in turn, worsen their plights as women[6]. On the other hand, gendered institutional, information and knowledge-related constraints also contribute to women's limited uptake of agricultural technologies. Management and the operation of irrigation equipment require adequate knowledge and skills training. However, women smallholders in Ethiopia have little access to extension and training as a result of gendered institutional biases[7]. Agricultural extension services are provided primarily to men, and female-headed households receive less extension advice than male-headed households[8].

Many agricultural development interventions aim to empower women alongside goals to improve agricultural productivity and income; reduce poverty, hunger, and undernutrition; and improve health outcomes. Despite this growing commitment to gender equality and women's empowerment among funders and implementers of agricultural development projects and the proliferation of women's empowerment measures, consistent approaches for measuring women's empowerment in agricultural development projects are lacking. Appropriate metrics are needed to assess whether these projects are achieving their goals[9].

Women's contribution to agriculture keeps escalating, estimated to be more than half of all agricultural outputs and forming about 80% across agricultural countries [10]. Yield gaps and production inefficiencies confronting smallholder farmers can be traced partially to unequal access and distribution of agricultural resources. This notwithstanding, current interventions remain handicapped in addressing unequal access and control over essential agricultural resources and inputs[11].

Bridging this gender gap is vital for accelerated agricultural development. Gender differences affect the distribution of agricultural resources. Food security and household welfare constitute critical indicators of human development. Ironically, they are negatively affected by differential inter and intra-household gender relations[12].

3. Methods

This research is predominantly descriptive with the objective of support the main hypothesis presented at the beginning of this research.

Peer-reviewed articles were conducted in a systematic method in April 2021 in Science Direct which was used to retrieve documents through hand search, mostly for related articles when carrying the lecture of the articles. Initially, search syntax was developed using the following key search terms "inequality AND agriculture AND gender". This search protocol yielded cases from the academic (e.g., scientific journal articles, dissertations) and gray (e.g., project reports) literature. It did not include non-scholarly materials (e.g., blogs, newspaper or magazine articles, pamphlets).

A semi-structured questionnaire was used to gather information about the investigation of farmer entrepreneurial types. The survey was conducted in the households of the participant's prior request for written consent. These data were obtained from a survey conducted across the agriculture producers in Los Rios, which included items based on qualitative interviews. The sample was a simple random probability sampling of 133 surveyed farmers (with confidence: 90% and error: 7%), where the primary purpose of the survey was to investigate attitudes towards the production activity (farm size and products) and farmer characteristics (demographics).

For statistical analysis, after tabulating the information, the aim is to present the results of the main survey information using descriptive statistics. As the study is qualitative and quantitative-based, different types of variables are studied, such as quantitative: (number of hectares, production), dichotomous (demographics, accounting-related), scalar (agrees with... decision making, participation), and binomials (gender, association). It was planned to carry out a structured analysis of the information obtained, to generate an explanatory model appropriate to the reality of small-scale producers in the province.

4. Results

A quantitative and qualitative analysis was developed using descriptive statistics to explain the results obtained from the study population. Mainly, the aim was to support the hypothesis with the data collected in a synthesized method. This study managed to collect data in 10 different cities of the province, reaching 78 communities, where small-scale agricultural producers are concentrated, as can be seen in Figure 1:

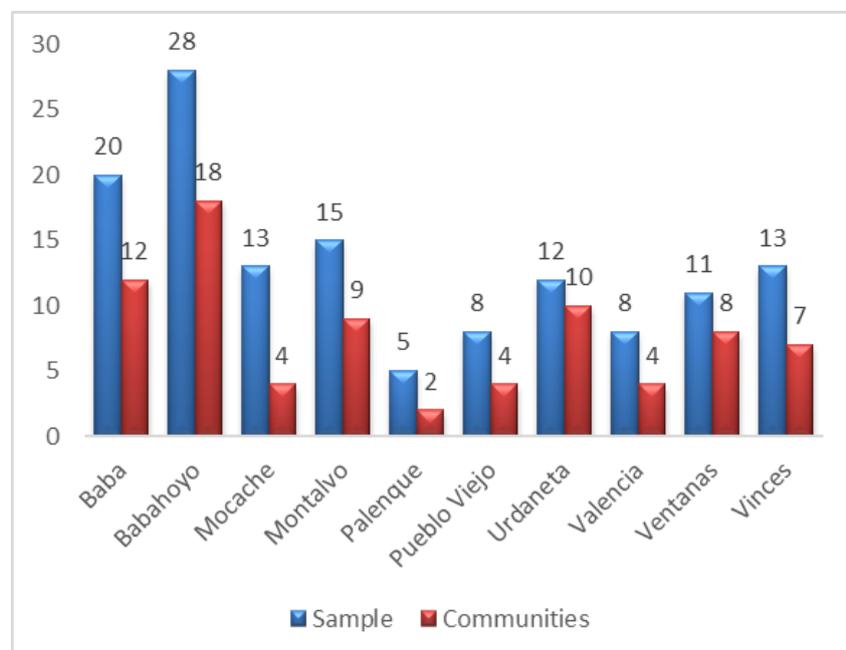


Figure 1: Sampled communities in Los Ríos

Initially, we presented some demographic information regarding the surveyed producers which represents approximately Male = 82.31% and Female = 17.69%. In Table 1, we aimed to detail the participation of women, mainly producers couple, and daughters that intervened in the production processes.

Table 1: Family members intervened in production processes

Education Level	Male (n= 82.3%)	Female (n= 17.7%)
Couple	72.5%	18.5%
Sons	82.5%	75.6%
Daughters	64.5%	72.8%
Parents	12.5%	9.4%
Single producers	5,0%	56,0%

We could infer women's participation in the production process and also, in the agriculture value chain is high. They have no property, but they are equally responsible for the production process as men. Mostly, men in Los Ríos get an additional job, while women oversee the crops. This is not institutionalized, mostly men figure as the main role in agriculture, resting importance to the woman's effort. Table 2 will help us to identify the role of women in their local community.

Table 2: Role of women in associations and community

Indicator	Agree		Undecided		Disagree	
	Male	Female	Male	Female	Male	Female
Active Participation in Associations	69,0%	75,0%	21,0%	25,0%	10,0%	0,0%
Decision Making in Associations	66,0%	25,0%	24,0%	75,0%	10,0%	0,0%

Decision Making in Community	40,0%	55,0%	60,0%	35,0%	0,0%	10,0%
Legal Member of Association	76,0%	17,0%	14,0%	6,0%	10,0%	0,0%

As male as female producers were questioned about the role of women inside their associations and communities. Most associations don't have many women as legal members. However, they comply an important role in the right performance. Men consider that women have active participation and decision-making in the associations, however, women consider they can participate but they can't participate as much in the decision-making. Equally important, men consider they have enough female members in their associations, but females consider they can't be part of it easily. While the decision-making in the communities, women can partly participate in it. Those are situations that must change in order to reach a better level of development in equal conditions.

Finally, we built a demographic table that presented the economic and educational situation of men and women in those communities.

Table 4: Top livestock products produced and consumed

Education	Male (n= 82.3%)	Female (n= 17.7%)
Complete School	27%	22%
Incomplete School	16%	11%
Complete High School	23%	44%
Incomplete High School	17%	17%
Complete University	10%	0%
Incomplete University	11%	6%
Postgraduate	1%	0%
Income		
Poverty Line	10%	0%
Minimum Salary	51%	61%
Basic Family Basket	23%	17%
Higher than Family Basket	16%	22%
Agriculture and Property		
Leaseholder	16%	17%
In charge	2%	6%
Lent by relative	2%	11%
Owner with title	31%	56%
Owner without a title	8%	11%
Owner with right of possession	9%	0%

Agricultural producers in Los Rios are developed in similar economic and social conditions, where they can cover mostly a minimum salary to feed their owns. Regarding education as many males as women have similar education levels, and also regarding income where most producers are in the line of a basic salary. Regarding property women have more property in percentage but not in real numbers. Only 13 of 23 women surveyed have land to make their production, while 33 producers are men. The inequality is presented in this province, where if the access and resources were similar for men and women, women would participate more actively in this area and could generate more benefits for their houses.

5. Discussion

The investigation demonstrates what has been conceptualized in the contested agronomy framework women do have not similar access to resources and land as it was explained before in the literature review [8]. This study shows that different marriage systems affect women's access to agricultural inputs and rural institutional services. Women in monogamous marriages possess limited access and decision-making rights over agricultural inputs and land as they work under the supervision of their husband, who is acknowledged as the household head[7].

Results indicate that our hypothesis that men would be more likely to have access and agency over agricultural resources was mostly correct in that gender does impact local smallholder farmer access and agency[13][4]. Participation and decision-making are low for women than men, and women are not even legally institutionalized in their agriculture associations.

6. Conclusions

In this empirical study, the gendered constraints that have a greater effect on women's smallholders' uptake have been investigated. Lack of access to credit, extension services, land, skills training, information, limited membership in cooperatives was identified as significant gendered constraints with a greater effect on women smallholders' use compared to men users.

Cooperatives should directly involve women in male-headed households as input buyers so that they can identify their input needs. Limited access to land harms women farmers' uptake of technologies, as customary laws deny them user rights and inheritance of farmland. Although legal documents allow women to access or use agricultural land, they do not enjoy recognition in practice. Changing customary laws would require the engagement of rural, regional and national organizations[7].

Future research could be essential to study better ways for giving access and resources to women. It's important to increase both women's and men's empowerment, raised the prevalence of households achieving gender parity and led to small improvements in the gender attitudes of both women and men[14]

Many policies, including in the agriculture sector, tend to neglect the historical, cultural, and social discriminatory legacies that affect women. It is important to build public policies integrating gender and equality consistently throughout the years. Some researchers are claiming that most agricultural development efforts have been gender-neutral, but we need more action taking for the government side.

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Authors' Profile



David Gortaire received a B.S. degree in International Business and M.S. degree in Rural Development from Escuela Superior Politécnica del Litoral in 2012 and 2020, respectively. During 2012-2018, he was part of SGS Groupas Regional Project Manager of Central & South America, in 2018 he works for DOLE Group as Third-Party Certification Advisor. From 2017 to 2019, he held research projects as part of the International Master Program in Rural Development from ESPOL, participating in the Rural Research Center and the Public Policy Center. Since 2019, David is a full-time professor and Researcher of the Universidad Técnica de Babahoyo.



Yete Violeta Jiménez Vera obtained a degree in SOCIAL AND EDUCATIONAL SCIENCES, IN COMPUTERS in 2003 she is currently studying a Master's Degree in Education since 2019. She has experience in teaching since 2009 at the Educational Unit August 29.



Migdalia Díaz received a B.S. degree in Education Science and master's degree in teaching and Curriculum from University of Babahoyo, in 1995 and 2008, respectively. She has complementary studies in Education Planning and Management. She has more than twenty years of experience in High Schools and University Teaching and Direction. Migdalia is a part-time Professor and Researcher of the Universidad Técnica de Babahoyo.



Elma Ramírez Romero received a B.S. degree in Economics in Business Management (ESPOL), a diploma in Finance and Stock Market, and a Master's degree in Business Administration from ESPAE Graduate School of Management in 2004 and 2008, respectively. She has complementary studies in Strategic Planning at INCAE Business School in Costa Rica. She has more than ten years of experience holding managerial positions as a Consultant in Organizational Design, Planning, and University Teaching. Experience as a trainer in the CAF-ESPOL Program, Leadership for transformation, 2010-2012, Junior Achievement Foundation - Movistar, Business and Innovation Model, 2017 and 2018. Elma is a full-time professor and Researcher of the Universidad Técnica de Babahoyo.



Byron Reasco Garzón was graduated in Languages with a mention in English - French in 2016 at the Technical University of Babahoyo. He has more than 8 years of teaching experience, working in some public and private institutions in the province of Los Ríos. In 2018-2019 he completed a Master in Inclusive and Intercultural Education at the International University of La Rioja - UNIR of Spain. Byron is a full-time professor at the Language Center of the Technical University of Babahoyo and is currently pursuing a doctoral program in Education at the Benito Juárez University of Mexico.