Biobusiness Ecuador
Sustainability of native biodiversity

Quinoa in the Hands of Women

Economic Contribution in the Value Chain

Case Study: Bio Taita Chimborazo Producers and Marketers Corporation (COPROBICH)

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CAF BANCO DE DESARROLLO DE AMÉRICA LATINA Y EL CARIBE
HEIFER INTERNATIONAL
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Biobusiness Ecuador: Sustainability of Native Biodiversity Project

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1 Introduction

The Biobusinesses Ecuador: Sustainability of Native Biodiversity project is an initiative of the Ministry of Environment and Energy, implemented by the Heifer Ecuador Foundation, with CAF - Development Bank of Latin America and the Caribbean - as the implementing entity, and funded by the Global Environment Facility (GEF). Together, we are working to ensure that biobusinesses that protect and utilize our native biodiversity develop fairly and profitably, with women and communities as the true protagonists.

Along this path, and together with the community-based Bio Taita Chimborazo Producers and Marketers Corporation (COPROBICH), we present this booklet on the contribution of women to the quinoa value chain.

What will you find here?
A simple, accessible booklet filled with the real voices of women and men from local communities in Ecuador. We gathered their stories, their experiences, their efforts, and their dreams to show how much they contribute –both in the work that is seen and paid, and in the unseen and unrecognized work– to the harvesting of nutritious quinoa.

What will it do for you?

- To help you clearly see how work is divided between women and men and why women's work is often overlooked.
- To understand how traditional roles limit women's recognition and opportunities.
- To discover practical ideas that help women have a stronger voice, more decision-making power, greater empowerment, and higher incomes through biobusinesses.

Why is it important?
When we understand the reality, we can change it. This material is a tool for conversations within families, communities, organizations, and institutions. It serves to build more equitable paths together where women's work is valued, fairly compensated, and celebrated, and where everyone finds opportunities to become entrepreneurs through the use of natural resources, while also protecting nature and strengthening the quality of life in rural areas.
This booklet is yours! Use it, share it, discuss it, and add your own ideas. Because change begins when we talk, reflect, and act together.

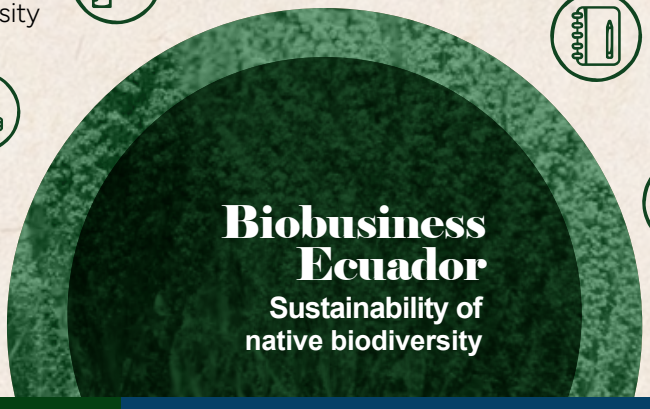
Biobusiness Ecuador: Sustainability of Native Biodiversity

Led by: Ministry of Environment and Energy

Funded by: Global Environment Facility (GEF)

Project implemented by: Heifer Foundation Ecuador. With the participation of COPROBICH as a demonstration chain.

Implementing agency: CAF - Development Bank of Latin America and the Caribbean.



What is **quinoa?**

Quinoa is an Andean plant that has been cultivated for thousands of years. Although it is not a cereal like wheat or corn, it is called a “pseudocereal” because of its shape and culinary uses. It is very nutritious, containing many proteins and amino acids that help strengthen the body, especially in areas with limited access to other foods.

This plant is resilient and well adapted to harsh conditions. It grows in poor soils, in harsh climates, and at altitudes of up to 4,000 meters above sea level. It is planted between September and January and is part of the daily work of many farming families who cultivate the land with wisdom.

In recent years, quinoa has once again gained recognition for its high nutritional value. Today, it is considered a key food to face climate change and food sovereignty, ensuring that everyone has access to healthy food.

Who **participated?** 2

This analysis of women's work in the quinoa value chain is based on the experience of the community-based Bio Taita Chimborazo Producers and Marketers Corporation (COPROBICH), a community-based organization that unites farming families from the cantons of Colta, Guamote, and Riobamba in the province of Chimborazo.

COPROBICH was founded in 2003 as an association of farmers committed to organic agriculture and fair trade. Today, it has 541 members, out of which 57% are Puruhá Indigenous women from 56 communities who cultivate the land with respect and ancestral wisdom.

Thanks to their collective effort, COPROBICH has achieved national and international certifications that recognize its clean and fair practices. This has opened doors to markets in countries such as France and the Netherlands, proving that it is possible to produce high-quality products in the Ecuadorian countryside, protect biodiversity, and generate opportunities for everyone.

This study seeks to highlight the economic, social, and community contributions of women at every stage of the process: from planting to trading, recognizing their role as leaders, workers, and guardians of quinoa.

The demographic data for the study area are presented below.

Sociodemographic Data of the **Colta Canton, Chimborazo Province**

CHIMBORAZO PROVINCE

471.933
People

Men	Women	Indigenous
47.3%	52.7%	37.9%

COLTA CANTON

30.468
People

Men	Women	Indigenous
47.3%	52.7%	89.6%

Population of boys and girls (0-11 years) and adolescents (12-17 years)

CHIMBORAZO	COLTA
29.9 %	26.8 %

Young adults (18-29) and adults (30-64)

CHIMBORAZO	COLTA
58.8 %	54.1 %

ILLITERACY RATE

CHIMBORAZO	COLTA
8.4 %	21.5 %

NET BASIC EDUCATION ATTENDANCE RATE

CHIMBORAZO	COLTA
93.9 %	92.9 %

Chronic Child Malnutrition < 5 years old

CHIMBORAZO **33.5 %**

Chronic Child Malnutrition < 5 years old quintile 1

CHIMBORAZO **44.9 %**

Poverty as per income

CHIMBORAZO **31.5 %**

Extreme Poverty as per income

CHIMBORAZO **13 %**

Women who have experienced gender-based violence in the last 12 months

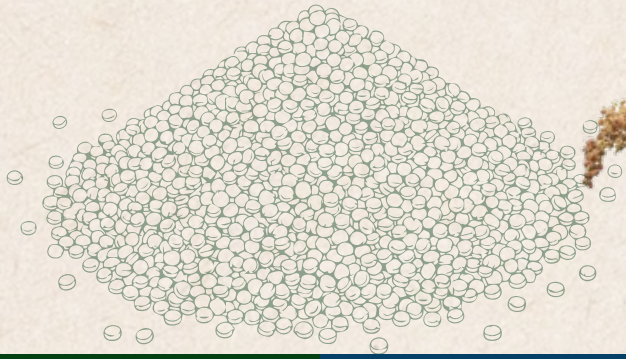
CHIMBORAZO **16.4 %**

Women who have experienced gender-based violence in the last 12 months in the workplace

CHIMBORAZO **1.7 %**

Average Labor Income (USD)

CHIMBORAZO **$354.3**



What concepts **did we use?**

One of the methodological approaches used was the theory of change, which generated mechanisms to strengthen women's empowerment. This theory seeks to enhance family well-being through a transformation in the definition of roles and responsibilities at the family and community levels, allowing for greater access to resources, benefits, opportunities, participation, and decision-making power for women (Heifer Ecuador, 2020).

For the Heifer Ecuador Foundation, women's participation on equal terms throughout the various links of the value chain is a determining factor for their economic empowerment and the strengthening of their agency. This agency is understood as the capacity to act and redefine, from their own spaces and territories, the standards that produce inequalities, through everyday, strategic, and intercultural practices.

From a feminist economics perspective, work is understood as a category that unfolds into paid (productive) and unpaid (reproductive) activity. Work performed through activities within the sphere of production and circulation is compensated with a wage. At the same time, paid work is accompanied by unpaid work. The latter is primarily performed by women, due to social and cultural patterns established by patriarchal society, which consists of the reproduction of the workforce and its care, an economic activity whereby no wage is received (Girón, 2016).

In this regard, productive and reproductive work, paid and unpaid – that is, monetized and non-monetized, respectively – which is essential for differentiating between production and reproduction, establishes a conceptual framework for understanding the nature and role of social reproduction within the economic system (Benaría, 2006).

4 How did we **conduct the work?**

1 INTERVIEWS

To understand women's contribution to the quinoa value chain, we applied qualitative and quantitative research methods, including in-depth semi-structured interviews, participatory workshops, surveys, secondary data collection, and data analysis. This work was carried out between January and February 2024.

As part of the participatory process, we conducted interviews with key personnel from COPROBICH and the quinoa processing plant. In addition, we held workshops with the members of the aforementioned corporation and administered surveys to residents of the Colta canton. Finally, we held workshops to share the results with the participants in the process.

2 PARTICIPATORY WORKSHOPS

3 SURVEYS

4 SECONDARY INFORMATION

5 DATA ANALYSIS

What did we find **in this assessment?**

5

Women are present at every stage of quinoa production, as a value chain. From initial soil preparation to final grain collection, their effort, technique, and knowledge sustain the entire production process.

During planting, they assume a leading role, preparing the land: patiently weeding, breaking up clods with their own hands or simple tools, and leveling the surface to ensure the soil is loose and even. Then they select the seeds, sow them precisely in the furrows, and cover them with a light layer of soil. They are also responsible for drying the quinoa in sacks and ensuring that each step is carried out with the care that such a valuable crop requires. In this phase, their participation is predominant.

During the quinoa harvest and storage, women work alongside men in similar proportions, sharing responsibilities, techniques, and inherited knowledge.

Their work guarantees food for families, sustains the local economy, and strengthens the community fabric.

QUINOA IN THE HANDS OF WOMEN

PLANTING

HARVESTING

WOMEN ACTIVELY PARTICIPATE in all steps that make up the quinoa value chain.

COLLECTION

TRADE

How do women participate in the quinoa value chain?

Working with quinoa is collective and diverse, but women bear the brunt of the work. Throughout the entire value chain, they represent 56% of the participation, while men account for 37%. Boys, girls and youth participate at 7%, accompanying and learning alongside their families.

56 %

PARTICIPATION IN THE ENTIRE QUINOA VALUE CHAIN

37 %

- In planting, women take the lead: they carry out 62% of the activities, from preparing the soil to sowing and drying the seeds. Men participate at 28%, while boys, girls and youth account for 10%.
- During the harvest, the work is divided equally between women and men (45% each), although the physical burden of handling the grain is usually borne by men. Boys, girls and young people participate at a rate of 10%.

These data show that women's work in agriculture is constant and essential. Recognizing this is the first step in valuing their efforts, strengthening their leadership, and building more just communities.

QUINOA IN THE HANDS OF WOMEN

To understand how women participate in quinoa production, it's important to discuss gender roles. These roles are societal constructs about what men and women "should" do, and they vary according to culture, location, and historical moment. Therefore, women and men often behave differently, not due to nature, but because of what is expected of them.

In the quinoa value chain, women typically handle tasks considered "light" or requiring precision, such as selecting and drying the grain at the collection point. They also participate in marketing and negotiations with COPROBICH, demonstrating their capacity for leadership, empowerment, and decision-making.

On the other hand, men perform activities that demand more physical strength, such as polishing and carrying the quinoa. This division of labor, based on traditional roles, makes many women dependent on the technical knowledge and physical strength of their male counterparts, limiting their access to certain tools, skills, and training opportunities.

Recognizing these differences is key to moving toward more equitable participation, where everyone, regardless of gender, can learn, make decisions, and contribute on equal terms.

Time Use in the Participation of Activities

When we analyze how women and men use their time on a daily basis, we discover differences that go beyond tasks, revealing how resources, responsibilities, and even power are distributed within families and communities.

IN THIS CONTEXT

Men dedicate more time to paid productive activities, 17% more than women. In contrast, **women dedicate significantly more time to unpaid family care,** 156% more than men. This equates to 5.13 hours per day, compared to 2 hours for men.

In unpaid farm work, such as planting or tending crops without pay, women also work more: 1.77 hours per day compared to 1.25 hours for men.

63% of women assume household chores as their sole responsibility. Only 27% share these tasks with other family members.

Meanwhile, men have twice as much free time or leisure: 2.3 hours per day, compared to 1.04 hours for women.

This data shows that women's work doesn't end in the fields; it continues at home, in caregiving, and in the community. Recognizing this is the first step toward building fairer relationships, where time, effort, and rest are shared equitably.

6 What is the economic contribution **of women in the quinoa value chain?**

To understand the economic contributions of women and men in quinoa production, it was necessary to examine the entire production cycle, which lasts between seven and eight months.

The time they dedicate was also considered, comparing it to a standard 160-hour work month, and reference values were applied to calculate the economic contribution of agricultural, domestic, and community activities. This allowed for the calculation of the total value of the work, including unpaid labor that sustains the lives and well-being of families.

Economic Contribution by Gender in the Quinoa Value Chain

Gender	PAID					UNPAID			
	Productive				Total Paid Productive (e)=(a+b+c+d)	Unpaid Productive	Reproductive	Community	Total Economic Contribution (i)=(e+f+g+h)
	Labor (a)	Quinoa (b)	*Chakra* (c)	Business (d)		*Chakra* (f)	Care (g)	(h)	
Women	-	102.92	44.11	-	147.02	102.13	294.69	85.25	629.10
Men	311.20	55.42	23.75	100.00	490.36	72.13	115.00	80.15	757.64

Prepared by: Biobusiness Ecuador Project, based on consulting by Diego Valencia (2024).
Source: Participatory Workshop on the Quinoa Value Chain (EPAEM, 2024) and Ministerial Agreement No. MDT-2023-180, published in Official Gazette No. 465, December 27, 2023.

- In this value chain, women's paid work (USD 629.10) is less than men's (USD 757.64), in contrast to unpaid work – on the farm, at home, and in the community – which has a much higher value: USD 482.07 compared to USD 267.28.
- In caregiving tasks, women contribute USD 294.69, while men contribute only USD 115.00. This demonstrates that women's work sustains both the family and community life. Recognizing this is fundamental to moving toward a more just society, where every effort has value.
- If we consider both paid and unpaid work (on the farm, at home, and in the community), the monthly well-being[1] of families depends 46% more on care and reproductive activities. To achieve this level of well-being, women contribute 2.1 times more than men.
- Unpaid productive, reproductive, and community work represents 76.6% of women's total economic contribution. In the case of men, this type of work represents only 35.2%. That is, women's economic effort is more than double.
- If we look only at the dollar value of care, community, and reproductive work, women contribute 2.56 times more than men. Unpaid work also sustains life. **Recognizing this is a necessary step toward building more just communities.**

Results of the Quinoa Value Chain

Women contribute 2.1 times more to the quinoa value chain than men.

The monthly well-being of families depends 46% on reproductive activities.

If the value of reproductive and care work is translated into monetary terms, women's economic contribution would be 2.56 times greater than men's, amounting to USD 482.07.

1 Economic contribution of paid production work and unpaid reproductive and care work.

7 What are **the conclusions?**

The study shows that the monthly well-being of quinoa-producing families depends largely on care and reproductive labor, which represents 46% of that well-being. To reach this level, women contribute 2.1 times more than men, with an estimated value of $482.07.

It is urgent to transform gender stereotypes that limit equal access to opportunities, decision-making, and recognition. Promoting new forms of masculinity, based on respect, care, and shared responsibility, is key to the economic, social, and political empowerment of farming families and to the development of sustainable biobusinesses in Ecuador.

Recognizing and making visible the work of women –in the fields, at home, and in the community– dignifies their efforts and fosters genuine transformation in local communities. Empowering women strengthens the community fabric, opens paths to equality, and sows hope for future generations.

“This document reveals, in technical terms, the economic contribution of women in representative biobusiness value chains in the country. The findings aim to spark dialogue and collective reflection to promote measures for change that will foster a fairer balance in recognizing the value of women’s work compared to men’s and a more equitable sharing of the benefits derived from biodiversity. This study is part of a larger initiative by the Biobusiness Ecuador project, which seeks to gather lessons learned and experiences regarding the role of women in biodiversity-based businesses.”

8 A Call **to Action**

> **It's time to invest in equality that sows the seeds of the future.** Let's recognize the invisible work of women in the quinoa value chain and promote gender-sensitive public policies so that, through their participation, they become drivers of sustainable development for local communities and economies.

The time to act is now!

> **Identifying the value of women's work** in biobusiness production chains is an important element in building social justice in the rural sector.

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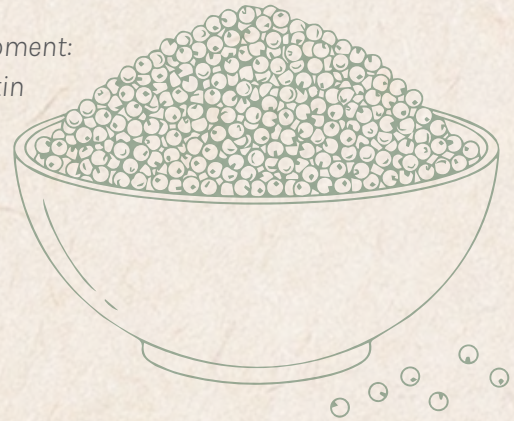

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