

# Analysis of the social perception of the importance of food security in the Santa Rita farm, El Pescador, San Vicente del Caguán, Caquetá, Colombia

## Análisis de la percepción social acerca de la importancia de tener seguridad alimentaria en la finca Santa Rita, vereda el Pescador, San Vicente del Caguán, Caquetá, Colombia

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### ABSTRACT

The practice of home gardening arises as a necessity in the face of the reality of rural life, which involves different problems faced by farmers every day. It is important to know the perception that these producers have of the state of food security in which they find themselves in order to understand the dynamics that are generated around this and the degree of participation and appropriation of this productive idea. In this sense, this diagnostic study was carried out in the department of Caquetá, in the village of El Pescador in the municipality of San Vicente del Caguán, Santa Rita farm, with a family of cattle and vegetable producers. The results allowed determining that, although the farm carries out other types of production such as cattle raising, the implementation of the vegetable garden is considered an activity of great importance for the food security of the family and that it generates an improvement in the economic aspect by making their production a business opportunity by commercializing it.

### KEYWORDS

Food Security, Marketing, Crops, Consumption.

### RESUMEN

La práctica de huerto casero surge como una necesidad ante la realidad que se vive en el campo rural, en la cual están inmersas distintas problemáticas a las que se enfrentan todos los días los campesinos. Conocer la percepción que tienen dichos productores frente al estado de seguridad alimentaria en el que se encuentran es importante para entender las dinámicas que se generan en torno a esta y el grado de participación y apropiación de esta idea productiva. En tal sentido, el presente trabajo de tipo diagnóstico se realizó en el departamento del Caquetá, vereda el Pescador del municipio de San Vicente del Caguán, finca Santa Rita, con una familia ganadera y productora de hortalizas. Los resultados permitieron determinar que, aunque dentro de la finca se lleva a cabo otro tipo de producción como la ganadería, la implementación del huerto es considerada una actividad de gran importancia para la seguridad alimentaria de la familia y que les genera una mejora en el aspecto económico al hacer de su producción una oportunidad de negocio comercializándola.

### PALABRAS CLAVE

Seguridad Alimentaria, Comercialización, Cultivos, Consumo.

## INTRODUCTION

*“La agricultura no es solo un medio de vida; es el reflejo de la historia y la cultura de una nación”. - Indira Gandhi*

In rural areas of Colombia, agriculture not only represents a source of livelihood but is also an integral part of the cultural identity and heritage of local communities. In this context, home gardens have become an important agricultural practice that not only provides fresh and healthy food but also plays an important role in community food security. This study focuses on the village of El Pescador, located in San Vicente del Caguán, Caquetá, a region with a rich agricultural and cultural heritage.

The family garden, as a concrete manifestation of the symbiotic relationship between humans and the land, has attracted the attention of researchers and the community. This study investigates the complex web of interactions between the villagers of El Pescador and the home garden by exploring how this ancient practice directly impacts the food security of the community.

In a world increasingly concerned about food availability and quality, it is important to understand how local agricultural practices can play a critical role in ensuring adequate and sustainable nutrition for current and future generations.

Through careful analysis, this paper aims to reveal, beyond the numbers and data, the cultural, social, and economic significance of these practices that are rooted in local communities. By studying the analysis of the impact of home gardens on food security in this region, we hope not only to contribute to academic knowledge but also to highlight the vitality and resilience of rural communities that continue to rely on the land for their livelihoods and well-being.

### Food in the world

Food security proposes that people have physical and economic access to the different foods they require within their life development, ensuring that there is production according to the consumption that exists in the world in order to have sufficient and nutritious food at all times (Sanchez & Szpak, 2016).

According to Alvarez et al. (2006), in reference to famine in the world, the Food and Agriculture Organization of the United Nations (FAO) estimated that in the period 2000-2002, “there were worldwide 852 million undernourished people; of these, 815 million lived in developing countries, 28 million in countries in transition and nine million in developed countries.”

A strategy to strengthen food security processes worldwide is family farming; this emerges as a viable alternative, taking into account that, from this, in the different countries, basic food would be produced depending on each territory, with which the food needs required by the population would be supplied and added to this, the dependence of the countries on imports would be minimized (Friedrich, 2014).

### The food issue in Colombia

In the case of Colombia, the issue of food security is considered, as well as issues such as food availability and accessibility for Colombian families, in addition to the high costs of the products in the family food basket. The consequences of such problems in health and nutrition issues for the population, especially in children, are noticeable in the school environment and adults during working hours (Guzmán, 2017).

A viable alternative to be developed in the country is the increase of agricultural production, through which it is possible to reduce hunger in the country; the vast majority of the population classified as extreme poverty depends on activities associated with agriculture (Lissbrant, 2015).

According to Hodson et al. (2017), In terms of worldwide figures, Colombia ranks tenth in the Food Sustainability Index. It ranks ninth worldwide in sustainable agriculture, and the percentage of chronic malnutrition in children under five years of age is 13.2%. at the overall national level, the indigenous population, with 42.7%, presents food security.

“Colombia ranks tenth in the world in the Food Sustainability Index and ninth in the world in sustainable agriculture. About 13.2% of children under five years of age in Colombia are chronically malnourished. In general, 42.7% of the indigenous population in the country lives in conditions of food insecurity” (p.224).

### Food insecurity in the department of Caquetá

According to Gómez and Aguirre (2023), the department of Caquetá has 16 municipalities and an estimated population for 2022 of 421,797 inhabitants, and its contribution to the Colombian state’s GDP is 0.37%. Likewise,

the Incidence of Multidimensional Poverty by Department ranks 22nd in the period 2021 -2022. According to Mejía and Londoño (2023), mitigating climate change, global warming, deforestation, pollution, biodiversity loss, overexploitation of resources, food insecurity, hunger, malnutrition, and poverty, among others, account for erroneous anthropic actions in meeting present human needs.

Food sovereignty has emerged as an alternative that allows the rural sector to produce food for self-consumption. The Santa Rita farm, Vereda El Pescador, San Vicente del Caguán, Caquetá, Colombia, has an area of 180 ha, of which 80 ha are used for cattle and the rest is a mountain, with no direct access roads to the farm; this reason, a rural vegetable garden is implemented there, where different species are harvested to support the family living there. However, although these foods are produced, it is not clear how much the production of these foods contributes to the food security of the family; there is no certainty as to which of these foods are eaten and how much is actually produced; hence, the need to analyze in more depth what is the contribution of this garden to the food security of the family.

In accordance with what has been previously established, the following research question has been posed: What is the contribution of home gardens to food security in the Santa Rita farm, El Pescador, San Vicente del Caguán, Caquetá, Colombia?

In light of the above, this manuscript focuses on analyzing the social perception of the importance of having food security on the Santa Rita farm, vereda el Pescador, in the municipality of San Vicente del Caguán, Caquetá, Colombia.

## METHOD

This research is based on the following analytical, empirical research paradigm, as it seeks to observe and measure phenomena in order to establish cause-effect relationships and produce conclusions based on empirical evidence. According to Mardones (1991), the analytical, empirical research paradigm is a methodology in which quantitative and qualitative methods are combined to study a social phenomenon. Unlike theoretical research, in which prior hypotheses are postulated on the basis of existing theory, analytical empirical research uses observational and experimental methods to discover and understand the study phenomenon.

### Location and population

The work was carried out in the village of El Pescador in the municipality of San Vicente del Caguán Caquetá; we worked with a farmer and cattle producer who has an area within his property for planting and food production; the property has a total of 180 hectares of which he has 1 hectare for the home garden.

The target population of the study consisted of 1 farmer, who carries out his agricultural activity in the company of his family, composed of 4 people.

### The method used

1. Survey application: 1 survey was applied, with social variables regarding productive processes within the farm. This information was audio-recorded and later written in text format using Microsoft Word.
2. Qualitative data analysis: using ATLAS.ti software.
3. Text analysis: Based on the survey data, using the word cloud, the most repeated words in the survey were identified, and those that were not of interest to the research were eliminated.
4. Grouping of the information: According to the data obtained in the survey, the most important topics were grouped by quotations, and a word was assigned to summarize the meaning of the selected paragraph.
5. Coding of the information: The quotations were grouped by code.
6. Categorization of the information: Each code, depending on its essence, was grouped into categories. Based on this categorization, the information was organized by means of networks for each category.
7. Data flow: The Sankey graph shows the data flows between the organized categories.

## RESULTS AND DISCUSSION

The word cloud shows the most repeated terms in the survey.

### Network - socio-family

Specifically, among the aspects immersed in the network of socio-family activities are the families, who, from their point of view as producers, make available their knowledge, customs, and skills that materialize in the implementation of home gardens. According to García and Rodríguez (2020), home gardens offer small farmers

the opportunity to increase their agricultural knowledge and skills, allowing them to be more self-sufficient by producing and having a source of fresh and healthy food at home.



Figure 1. Word clouds.

Another aspect immersed in the socio-family component is the sense of generating environmental awareness from a collective perspective, in which knowledge is exchanged with the community, thus allowing the generation of skills in the rural environment from the awareness of food planting, Montiel et al. (2021), The connection between rural gardens and education is essential to encourage learning and raise awareness in communities by acquiring knowledge about growing food, environmental care and the importance of healthy eating.

Similarly, within the socio-family aspect, in addition to food production and community sharing within a rural community, home gardens promote family participation in the productive dynamics of the same and contribute to improving the quality of life of producers by generating a dynamic of sharing and strengthening relationships between members of the producer’s family. According to Dompé et al. (2021), these rural gardens encourage the participation of families in planting, caring for, and harvesting food, thus allowing the sharing of knowledge and experiences, which contributes to improving their quality of life and strengthening social relations.

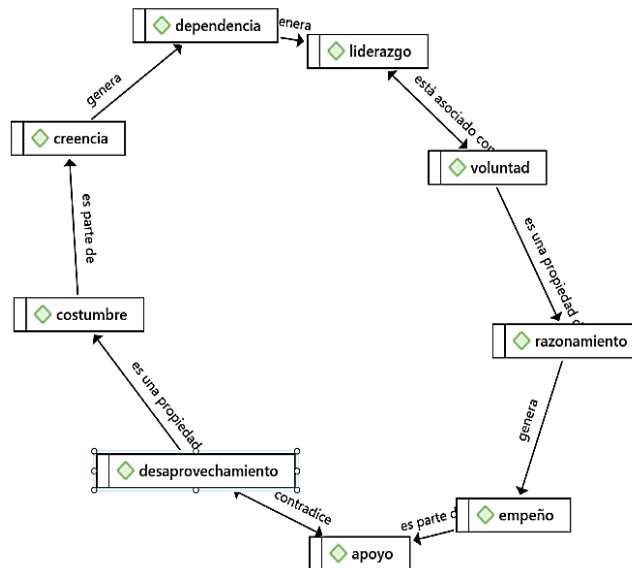


Figure 2. Network of socio-family activities.

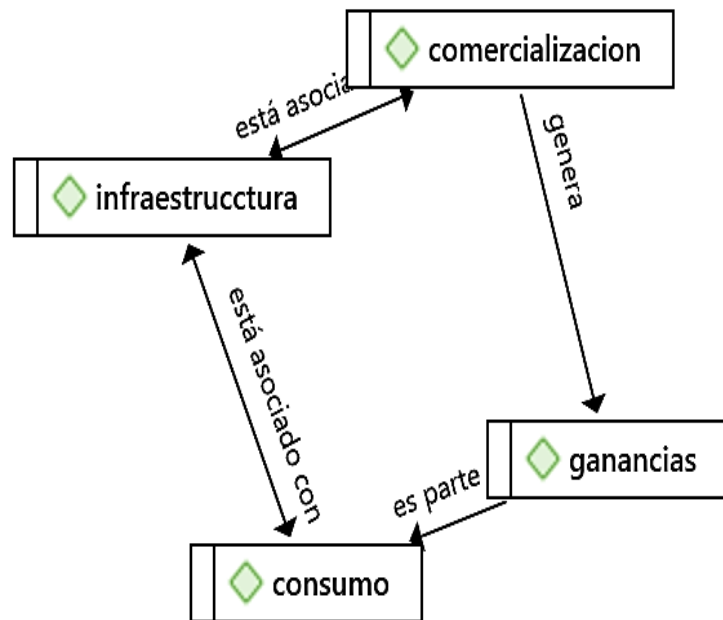
This graph shows the distribution of the contribution of home gardens to food security at the socio-family and community levels. It highlights the different categories of actors involved, their interactions, and the results obtained. It is important to bear in mind that the contribution of home gardens to food security also faces various social, economic, and environmental problems; these problems can generate inequalities, negatively affect the environment, and hinder access to natural resources; therefore, it is essential to consider in the research how home gardens can contribute to solving these problems and, at the same time, strengthen the community’s food security.

**Network – economy**

Within the aspects immersed in the network **economics**, some processes generate rural home gardens from which producers benefit, taking into account that, although they are not large-scale production systems, they generate economic gains. Garcia (2016) affirms that most farmers in the world have small production systems where they conserve resources while increasing yields in their crops without using agrochemicals and thus providing ecological services.

In addition to the above, it is important to note that the production of the same food that is needed for the consumption of the farmer’s family represents a saving that translates into an economic gain. At the same time, some of these products are also marketed, which further increases the benefits obtained by the producers of these products. According to Hernández (2022), a well-established orchard represents an important saving. The sale of some of the orchard’s products contributes to improving the family’s income, which can be used to purchase other inputs.

Similarly, according to Barrios (2022), home gardens are sustainable agroecosystems whose importance lies in their contribution to the peasant family economy, food, and nutritional security, thus contributing to the daily consumption of products for the food diet. In this way, rural home gardens are seen as a means of livelihood from which a rural family can subsist, starting from its productive proposal and including care and management.



**Figure 3.** Network economy

This graph provides a complete overview of the analysis of the contribution of home gardens to food security, showing how they contribute to the economic value of the food and productive sector and contribute to the satisfaction of the country’s food needs.

It can be divided into four main sections: the distribution of the added value of home gardens in the food sector, the proportion of home garden categories in the total number of home gardens, the consumption of home garden products in relation to total food consumption and the economic impact of home gardens on the commercial activity of the food sector, thus providing an opportunity to improve infrastructure conditions such as access roads to the farm.

**SANKEY Graph**

It allows us to visualize and effectively the data flow between different categories. In this case, the graph represents the analysis of the contribution of home gardens to food security. The contributions of home gardens to food security can be observed; these contributions can be Self-sustainable food, Balanced food, Self-sufficiency, Affordability.



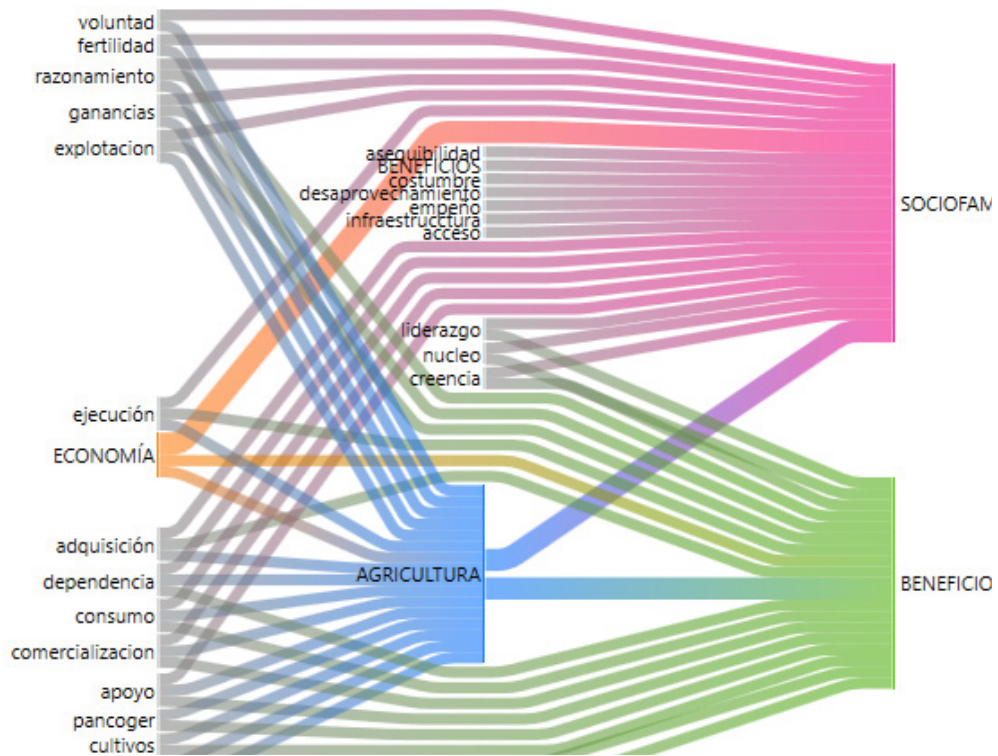


Figure 4. SANKEY graph



Figure 5. Location of Santa Rita property. Santa Rita farm, Vereda El Pescador, San Vicente del Caguán, Caquetá, Colombia. Google Maps, ok 2023



**Figure 6.** Plantain cultivation in a rural home garden.



**Figure 7.** Cultivation of cassava in rural home garden



**Figure 8.** Corn cultivation in a rural home garden



## CONCLUSIONS

The rural home garden implemented on the Santa Rita farm represents not only a livelihood for the members of the family but also a business opportunity since the marketing of their products generates a profit that allows them to meet their basic daily needs. In addition, the implementation of this type of production has an impact on the social environment since, within the rural community, it is a productive reference, taking into account that in this area, extensive livestock production is practiced exclusively.

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## CONFLICT OF INTEREST

The authors declare that there is no conflict of interest.

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