

Empowerment of Rural Women in Colombian Agriculture: Methodological Challenges and Lessons Towards Gender Equity

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Introduction

Systematising research in rural contexts is a strategic practice for generating contextualised knowledge and informing initiatives that promote gender equity and sustainable development in territories historically affected by geographic and structural marginalisation ((United Nations Educational, Scientific and Cultural Organization [UNESCO], 2025; Belay et al., 2025). Documenting lessons learned enables evidence-based decision-making rooted in local realities, strengthening collective learning and the adaptation of strategies to invisible contexts.

In African and Asian regions, systematisation has proven useful to reveal gender gaps and improve women's economic autonomy through inclusive agricultural policies and microcredit access (Abdu et al., 2022; Adebayo & Worth, 2024; Kirkwood et al., 2021). In Latin America, studies highlight the relevance of recording gender-sensitive practices to ensure replicability and impact (Barrios et al., 2020). Colombian experiences confirm that this methodological approach supports rural women's leadership, autonomy, and productive inclusion (Finke et al., 2021; Yoshioka et al., 2023; Gómez & Gómez, 2022).

This chapter systematises the doctoral project "Assessment of the Empowerment of Rural Women in Agriculture: Personal, Relational and Environmental Analysis in Colombia", addressing methodological challenges in adapting instruments, selecting representative samples, and integrating variables related to production, legal awareness, and community participation. Aligned with SDG 4 (Quality Education), SDG 5 (Gender Equality and Rural Women's Empowerment), SDG 8 (Decent Work and Economic Growth), SDG 10 (Reduced Inequalities), and SDG 17 (Partnerships for the Goals), this study contributes to advancing strategies that promote rural women's participation and agency. The guiding research question was: How is the empowerment of rural women in peasant agriculture in Colombia manifested from a personal, relational, and environmental perspective?

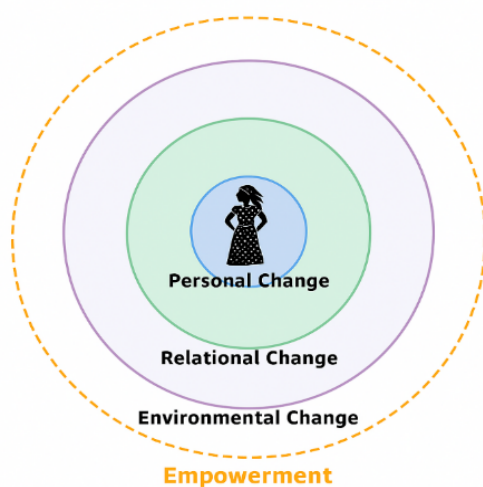
Expressions of Women's Empowerment: Individual, Collective, and Structural Transformations

Rural women face persistent structural barriers across global, national, and local contexts, including precarious employment, limited access to education, and gender-based violence—conditions intensified in Colombia by armed conflict and exclusion from decision-making spaces (UNESCO, 2023; Ministry of Agriculture and Rural Development [MADR], 2022). These inequalities restrict their economic autonomy and reinforce their marginalisation within territorial and social structures (National Administrative Department of Statistics [DANE], 2020; ONU Women, 2023). Empowerment in agriculture emerges as a contextual and historical process grounded in rural women's lived

experiences and daily practices. It is defined as the capacity to recognise and exercise power individually and collectively, rooted in local knowledge and solidarity (Martínez-Daza, 2024; Chen & Barcus, 2024). Since 1994, interest in this topic has grown within academia and institutions, especially regarding the need to design culturally sensitive strategies that strengthen women's leadership without detaching them from their territories (Martínez-Daza & Guzmán, 2024).

Despite international efforts such as SDG 5, gender gaps persist in rural areas, particularly in economic decision-making, land ownership, and political participation (Bryan *et al.*, 2024; Tanzile *et al.*, 2023). Nonetheless, Colombian cases show that participation in agroecological and environmental projects enhances women's control over natural resources and fosters sustainable community engagement (Chávez *et al.*, 2022; Pachón, 2022). From a theoretical standpoint, empowerment is multidimensional and operates on three interrelated levels: personal, relational, and environmental (VeneKlasen & Miller, 2002; Lombardini *et al.*, 2017), as illustrated in Figure 1. Personal empowerment refers to self-esteem, autonomy, and decision-making, often enhanced by access to technical training and entrepreneurship programmes (Finke *et al.*, 2021; Zuñiga & Pineda, 2022). Relational empowerment involves participation in cooperatives, leadership roles, and joint decision-making within households and organisations (Basak & Roy, 2023). Finally, environmental empowerment addresses safety, mobility, and access to public spaces, all of which are fundamental for fostering rural women's social and economic inclusion (Goel & Ravishankar, 2021). Understanding empowerment from this perspective allows for the development of differentiated, context-sensitive strategies that contribute to equitable and sustainable rural development (Díaz & Pachón, 2024).

Figure 1. women's empowerment three interconnected levels



Note. This concentric diagram illustrates the three levels of change: personal, relational, and environmental. Each circle encapsulates and relates to the next, culminating in the level of empowerment. The Personal Change (light blue) represents individual transformation and is associated with introspection, confidence, and calmness. The colour blue symbolises internal development and self-perception, which are key elements in personal growth. **Relational Change** (light green) symbolises relationships and connections with others, such as family and the community. Green, representing growth, harmony, and support, highlights the importance of relationships and community ties in the change process. Environmental Change (light lavender or purple) encompasses the social context and cultural norms. Purple is associated with transformation and social sensitivity, which are appropriate for a level that interacts with cultural and societal environments. Empowerment (orange, dotted line) is the outermost circle, surrounding and encapsulating all previous levels. It symbolises the ultimate goal of the process. The dotted line suggests that empowerment is dynamic and expanding, without rigid boundaries, and is continuously influenced by changes at the other levels. The colour orange

conveys energy, motivation, and determination—essential qualities for empowerment and positive transformation.

In this phase, the WEAI was adapted to the Colombian context of Family and Community Peasant Agriculture (ACFC). The resulting instrument was structured into four components: (1) sociodemographic and productive profile, (2) personal empowerment (power within/power to), (3) relational empowerment (power with/power over), and (4) environmental empowerment (structural factors). A purposive sample of 60 rural women engaged in ACFC was selected, applying a characterisation form and subsequently the adapted index. This process enabled the identification of empowerment levels across the personal, relational, and environmental dimensions.

Table 1. Components for Understanding the Empowerment of Women in Agriculture

Components	Dimensions	Indicators
Sociodemographic characteristics		Age – Department and municipality of residence – Marital status – Educational attainment – Household composition – Activities related to Family and Community Peasant Agriculture (ACFC)
Personal Empowerment Index	Power within	Self-esteem and self-efficacy – Women’s economic role – Non-acceptance of gender-based violence
	Power to	Individual capacity – Personal autonomy – Decision-making
Relational Empowerment Index	Power with	Group participation – Leadership and influence within community groups – Control over household assets
	Power over	Women’s participation in household decision-making – Contribution to household income – Time use and workload – Experiences of gender-based violence
Environmental Empowerment Index		Freedom of movement – Social norms and stereotypes regarding women’s economic role

Note. Prepared based on the practical guide for measuring women’s empowerment by Lombardini et al. (2017).

In this final phase responded to the identified need to strengthen both personal and collective capacities among participating women. A participatory workshop titled “*Women’s Empowerment for Planned Change Management*” was designed, structured into four stages: institutional introduction, conceptual understanding, theoretical exploration, and self-assessment with reflection. Conceived as a situated pedagogical strategy, the workshop aimed to foster awareness, strengthen internal power, and promote solidarity-based empowerment. It supported transformations across personal, relational, and environmental levels, using participatory methods and self-evaluation tools to encourage critical thinking, collective learning, and leadership development among rural women in agriculture.

The systematisation of the research project “Empowerment of Rural Women in Agriculture: Personal, Relational, and Environmental Analysis in Colombia” enabled the identification of methodological challenges, contextual adaptation strategies, and findings regarding the manifestations of empowerment among rural women involved in Family and Community Peasant Agriculture (ACFC). One of the main methodological challenges was the contextualisation of the measurement instrument. The literature review facilitated its adaptation to the Colombian context, incorporating dimensions and categories sensitive to the realities of the participants. At the personal level, items related to legal rights knowledge, such as child custody, alimony, and access to justice, were included. This allowed for the identification of the relationship between the participants’ understanding of legal frameworks and their ability to make autonomous and informed decisions in exercising their rights. This level was structured through six questions that assessed various aspects of personal autonomy.

At the relational level, the categories of group participation and community leadership were strengthened in order to evaluate the formal presence of women in organisational networks and their capacity to influence local decision-making processes. Additionally, an inventory of household assets was included, encompassing both agricultural and non-agricultural goods. This made it possible to analyse how property ownership and access to productive resources influence rural women's economic autonomy. Activities such as rural tourism, agricultural product transformation, and artisanal production emerged as key sources of income generation and social recognition within their communities. This level was structured around fourteen questions designed to assess different dimensions of relational empowerment.

Another significant challenge was the heterogeneity of ACFC activities in Colombia. This diversity—ranging from agricultural and livestock production to agro-industrial processing, associative models, solidarity economies, local markets, environmental conservation practices, and multifunctional complementary activities—required specific adjustments. It was necessary to adapt the instrument to reflect the territorial and productive characteristics of each region, ensuring the relevance of the indicators. These needs became apparent during the validation process of the measurement tool, which was conducted through a collaborative pilot involving postgraduate students who served as research assistants. Regarding the role of the research assistants, one challenge was ensuring a proper understanding of the instrument despite the initial training provided. In particular, difficulties emerged in interpreting the logic of some questions, which led to imprecise phrasing during the pilot implementation of the empowerment index. This situation required personalised support in several cases, and in others, the pilot had to be repeated due to errors in the initial application, with some results having to be discarded. Although this extended the timeline, it was crucial to ensure data quality and the appropriateness of methodological adjustments. The pilot helped identify necessary improvements in item wording, enhancing clarity and reinforcing the instrument's applicability to rural contexts.

Another major methodological challenge was ensuring sample representativeness. Geographic dispersion and limited access to certain communities required differentiated selection strategies, resulting in the inclusion of women with diverse trajectories within ACFC. While this approach made it possible to gather a wide range of experiences related to the personal, relational, and environmental dimensions of empowerment, it also meant that the study took on a more general character. Furthermore, during the application of the empowerment index, especially among participants with low educational attainment or limited literacy skills, continuous support from trained research assistants was essential. This situation not only increased implementation time but also required procedural adaptations to ensure the quality and consistency of the data collected.

The study's findings revealed specific expressions of empowerment among rural women in the context of Family and Community Peasant Agriculture. These presented several methodological challenges for analysis. For example, in indicators such as self-esteem, confidence, economic role, non-acceptance of gender-based violence, and decision-making capacity, the main challenge was to foster a safe and trusting environment. This was achieved through respectful, clear, and motivational communication that encouraged participants to share their personal and everyday experiences. This approach enabled an understanding of personal and relational empowerment without influencing responses or compromising their authenticity. However, this strategy also required a greater time investment in both data collection and analysis. An additional challenge involved administrative procedures and logistical management necessary to implement the methodological proposal through networks or collectives of rural women. Despite efforts to establish contact and disseminate invitations for participation, many organisations did not respond, which limited the initial scope of the fieldwork. This situation required the reformulation of engagement strategies and reliance on individual contacts, which demanded more time, resources, and coordination. It also highlighted the need to strengthen institutional channels to facilitate the involvement of intermediary organisations between researchers