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RURAL EXTENSION AS A LOCAL DEVELOPMENT INSTRUMENT: A STUDY WITH FAMILY FARMERS IN SERRA BRANCA – PB

EXTENSÃO RURAL COMO INSTRUMENTO DE DESENVOLVIMENTO LOCAL: ESTUDO COM AGRICULTORES FAMILIARES EM SERRA BRANCA – PB

EXTENSIÓN RURAL COMO INSTRUMENTO DE DESARROLLO LOCAL: ESTUDIO CON AGRICULTORES FAMILIARES EN SERRA BRANCA – PB

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Abstract: This study aims to analyze the perception of family farmers from two rural communities in the municipality of Serra Branca, Paraíba, about the performance of Technical Assistance and Rural Extension (ATER) services. The research was conducted with the rural associations Cantinho and Feijão, through a descriptive and exploratory case study. The results showed that farmers recognize the importance of ATER for strengthening family farming and improving the quality of life in the countryside. However, they highlight the need to increase the number of technicians and the frequency of visits, as well as to better adapt the actions to local realities. The study underscores rural extension as a pivotal public

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policy for sustainable rural development, emphasizing the need for tailored technical assistance.
Keywords: Agriculture, Sustainability, Public Policies.

Resumo: O presente trabalho tem como objetivo analisar a percepção de agricultores familiares de duas comunidades rurais do município de Serra Branca – PB sobre a atuação dos serviços de Assistência Técnica e Extensão Rural (ATER). A pesquisa foi realizada junto às associações rurais Cantinho e Feijão, por meio de estudo de caso de caráter descritivo e exploratório. Os resultados demonstraram que os agricultores reconhecem a importância da ATER para o fortalecimento da agricultura familiar e melhoria da qualidade de vida no campo. Contudo, evidenciam a necessidade de ampliação do número de técnicos e da frequência de visitas, bem como de maior adequação das ações às realidades locais. A pesquisa reforça a relevância da extensão rural como política pública essencial para o desenvolvimento sustentável do meio rural.
Palavras-chave: Agricultura, Sustentabilidade, Políticas Públicas.

Resumen: El presente estudio tiene como objetivo analizar la percepción de agricultores familiares de dos comunidades rurales del municipio de Serra Branca – PB sobre la actuación de los servicios de Asistencia Técnica y Extensión Rural (ATER). La investigación se llevó a cabo con las asociaciones rurales Cantinho y Feijão, mediante un estudio de caso de carácter descriptivo y exploratorio. Los resultados demostraron que los agricultores reconocen la importancia de la ATER para el fortalecimiento de la agricultura familiar y la mejora de la calidad de vida en el campo. No obstante, señalan la necesidad de ampliar el número de técnicos, aumentar la frecuencia de visitas técnicas y adaptar mejor las acciones a las realidades locales. El estudio refuerza la relevancia de la extensión rural como política pública esencial para el desarrollo sostenible del medio rural.
Palabras clave: Agricultura, Sostenibilidad, Políticas públicas.

INTRODUCTION

Technical Assistance and Rural Extension (ATER) plays a fundamental role in the articulation between agricultural research centers and rural communities, contributing significantly to sustainable local development. In Brazil, since the 1940s, extension actions have been conceived from the perspective of rural modernization, associating the use of

productive technologies with social progress. However, this initial approach disregarded the traditional knowledge of family farmers, assuming a verticalized posture of knowledge transmission (PIRES, 2003).

Over the decades, especially after the 1990s, the appreciation of family farming as a strategic axis for generating income, employment and environmental sustainability began to reconfigure the role of rural extension. Studies indicate that family farming accounts for a significant portion of national agricultural production, contributes ~33% of the sector's Gross Domestic Product (GDP), in addition to generating a higher density of jobs per production unit (FRANCIS; BERNARDO, 2000; ONU, 2013).

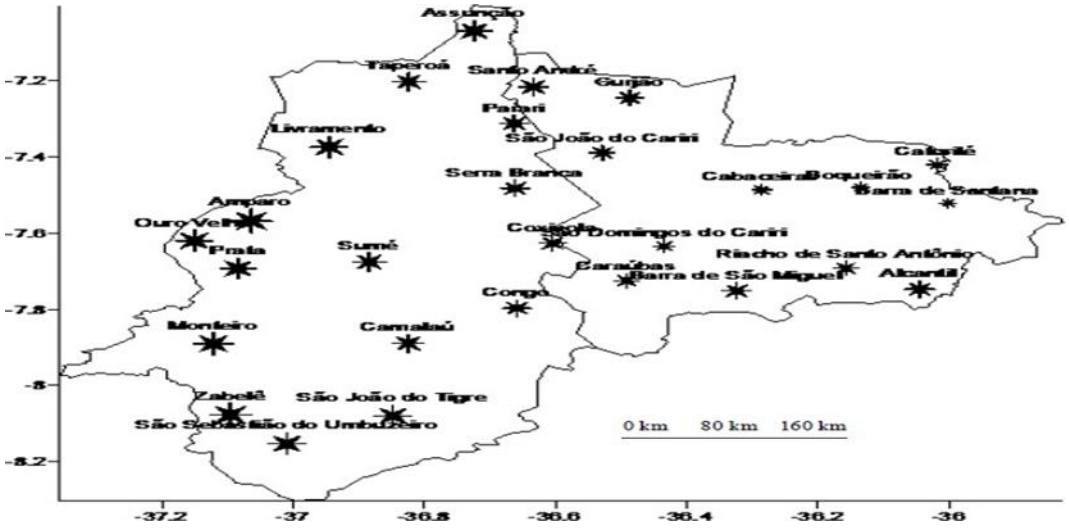
In this new scenario, ATER begins to value sustainable and socially appropriate sociotechnical practices, such as the use of local resources and rainwater harvesting, respecting the cultural values of rural communities. In view of this, this study aims to analyze the perception of family farmers from two rural communities in Serra Branca, Paraíba, regarding extension actions, seeking to understand the role of rural extension, its potential, and the conservation practices disseminated in the communities studied.

MATERIALS AND METHODS

The study was conducted with family farmers from the Cantinho and Feijão Associations, in the municipality of Serra Branca, located in the microregion of Cariri Ocidental, 226 km from the capital João Pessoa. It is situated between 650 and 1,000 meters above sea level, with the geographic coordinates of the municipality Latitude: 7° 29' 14" South Longitude: 36° 39' 51" West. The estimated population of the municipality is 13,101 inhabitants, distributed over an area of 738 km² (IBGE, 2012).

The Western Cariri region is made up of 17 municipalities and the Eastern Cariri region is made up of 12. This subdivision is based on certain intra-regional differences in the physical and economic specificities that characterize these lands. In general, the average rainfall is lower (400 to 500 mm/year), the relief has a gently undulating to undulating topography and the economy is predominantly pastoral in the Eastern Cariri region. In the Western Cariri region, the average rainfall is slightly higher (500 to 600 mm/year), the relief has a more pronounced topography and the economy is more dynamic, both in agriculture and livestock farming.

Figure 1 - Spatiality of the municipalities in the Cariri region of Paraíba.



Source: Nascimento e Alves (2008).

To carry out the research, a bibliographic review was initially carried out as a way of ensuring different thoughts on the topic in question. According to (FREITAS, 2013 *apud* Bêrni, 2002), he argues that the bibliographic review allows for a better contextualization of the subject, helping to define the factors that guided the development of the work.

This qualitative case study (da Silva Schröederi et al., 2005) combined semi-structured interviews and participatory observation to analyze farmers' perceptions, which according to Gil (1994), is when the characteristics of certain populations are described. Its peculiarity lies in the use of standardized data collection techniques, such as questionnaires and systematic observation.

RESULTS

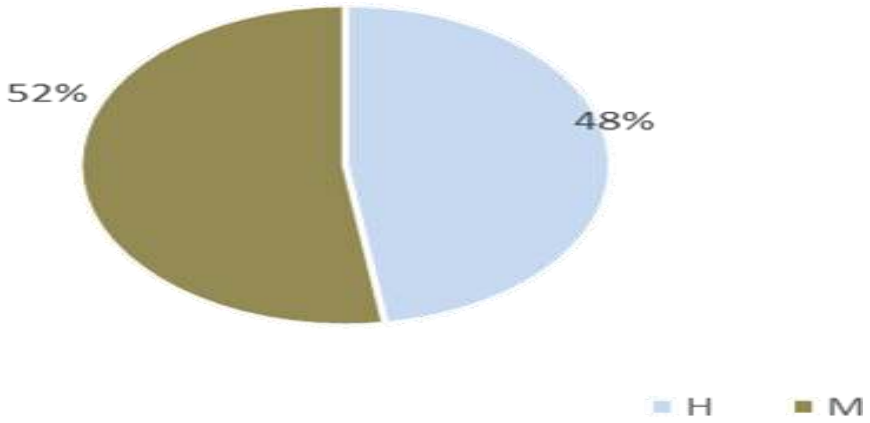
Socioeconomic profile is the social, economic and cultural portrait that allows us to understand the structure linked to family farming. Based on the results of the research carried out, we selected some aspects regarding the profile of family farmers in the two rural communities.

The results indicate that, regarding the identification of social actors, the majority of associates are female (52% and 48% male) (RG - 1). Barbosa et al. (2010) also found similar values, studying a rural community in Brejo Paraibano, where 44% were male and 54% female. In addition to highlighting the growth of the role of women as protagonists of agrarian activities.

The participation of rural women is notable, both in the work carried out within the home and also in the work they do in the fields alongside their husbands. Thus, they contribute to the family income and the development of communities in various ways. They work as entrepreneurs, as rural workers, in family businesses, and as self-employed workers; they are

also responsible for unpaid domestic work. However, their contribution is still limited due to discrimination and rigid gender roles, issues that need to be addressed to ensure that they reach their full potential.

Graph 1 - Gender of members of the two communities.



Source: Constructed with survey data

Initially, it is necessary to state that all interviewees emphasized the importance of the work of extension workers in the formation of groups with strong support in motivating, training and providing technical guidance to farmers, as well as in the elaboration and development of projects that enabled access to public resources and financing to structure the organizations.

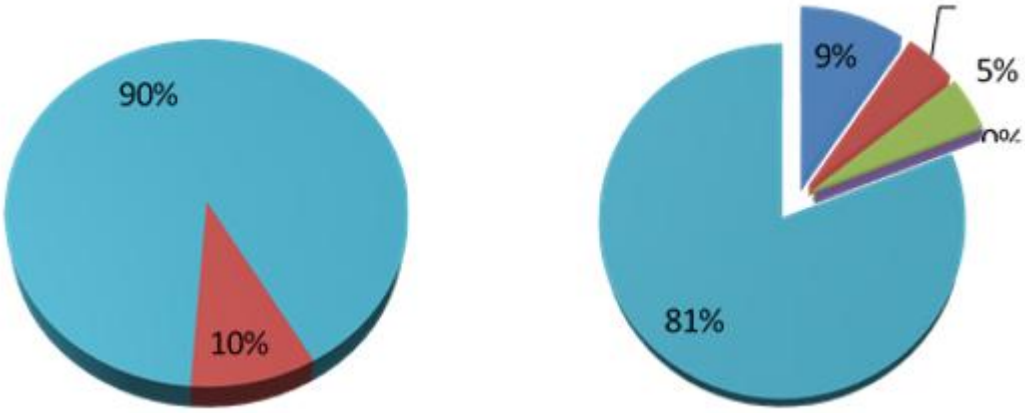
The presence of technicians was also mentioned, technicians' presence was primarily linked to project execution and the number of technicians to provide the necessary assistance to meet the demands of the communities is very limited. The farmers interviewed also said that the work of extension workers is essential in the formation and development of rural organizations and that they understand that they would not be able to develop many of the work and projects without the presence of technicians to advise them.

These data refer to the function of rural extension, the approach of the technician, and from this topic, the results of the interviewees' perception regarding the extension action in the guidance to the associates of the two rural communities are presented, related to various themes of use, sustainable soil management and adoption of conservation practices.

When asked about the transfer of guidance on sustainable land use, it was found that In the Feijão community, approximately 90% completely disagree, and among the residents of the Cantinho community, more than half completely disagree (81%). It is also noted that 5% did not wish to give an opinion on the topic discussed. This reflects that overall, more than 85% of those interviewed in both communities' state that they do not receive guidance on the

aforementioned issue (Graph - 2).

Graph 2 - Guidelines on sustainable land use (A – Beans B – Corner).

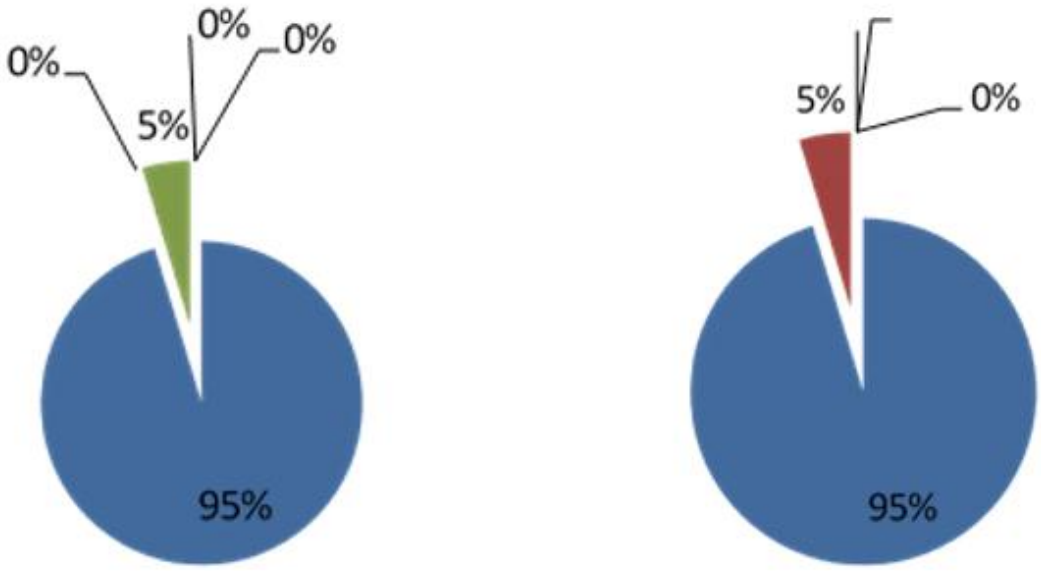


Source: Constructed with survey data.

Considering the relevance of technical assistance in rural areas to ensure improvements in the quality of life of producers, as well as local development, we asked about the need for technical assistance (G - 3). In the Feijão community, approximately 95% fully agreed that it is necessary to expand ATER services to assist and meet the needs of rural farmers; only 5% did not express a position on the matter. In the Cantinho community, 95% fully agreed on the importance of the service for the community and only 5% partially agreed.

Graph 3 - Need for technical assistance in rural communities, according to farmers in

Feijão (A) and Cantinho (B).



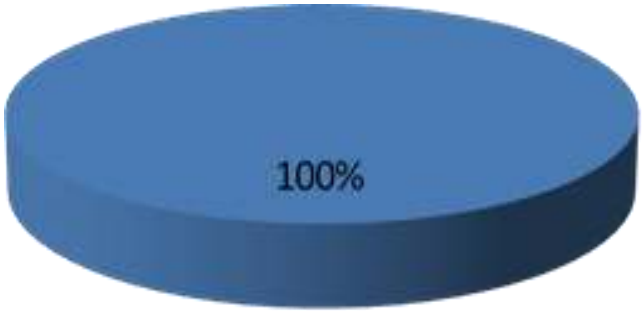
Source: Constructed with survey data.

In the questionnaires applied, it was found that all farmers (100%) totally agree (G- 4) that the technical assistance service and rural extension is of utmost importance for the development of rural communities, however it is worth highlighting that farmers are normally unassisted by ATER.

It is known that the ATER service constitutes an important support instrument for rural development. According to Scalabrin et al. (2009), the extension technician needs to go beyond simply providing useful information to rural producers. Information must be passed on taking into account the reality faced by rural farmers, respecting their experiences acquired throughout their lives, their culture and also the social environment in which they are inserted.

Graph 4 - Usefulness of technical assistance for farmers, according to farmers from Feijão and

Cantinho



Source: Constructed with survey data.

Organization of ATER's work:

When we sought to find out the farmers' understanding of the organization of technical assistance work (G - 5), we realized that 100% of both communities completely agree that it is necessary to increase the number of extension workers, which will bring improvements to assistance actions in rural communities.

This situation is present in discussions with farmers, in informal conversation circles, when they refer to the difficulties experienced in the maintenance of agricultural and livestock activities, among other activities, without technical support.

Graph 5. Increasing the number of technicians would improve the quality of assistance, according to farmers in both communities.

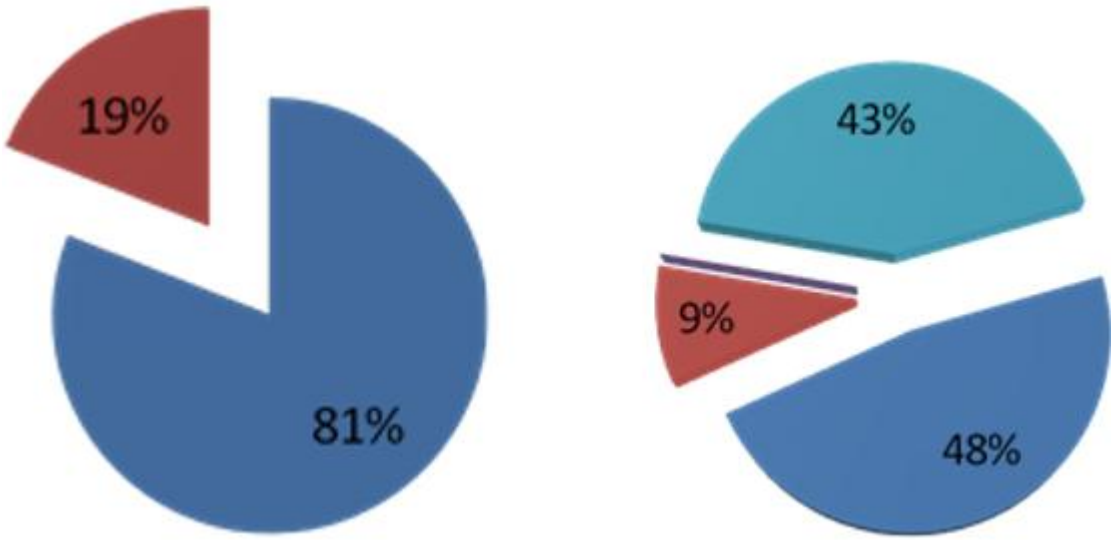


Source: Built with survey data

ATER's work methodology

The graph shows that 81% of the interviewees from the Feijão community completely agree that the presence of technicians in the community where they work is of utmost importance for development, and 29% partially agree. It is also observed that in the Cantinho community, 48% completely agree that the presence of extension workers in the community is necessary to provide guidance to farmers on organizations for the development of production systems that are sustainable and generate income and allow rural families to live a dignified and quality life. It is also observed that 9% partially agree, only 43% completely disagree on this subject.

Graph 6 – If the presence of the technician in the communities would improve assistance, according to farmers from Feijão (A) and Cantinho (B).



Source: Built with research data

Professional qualification of the ATER technician

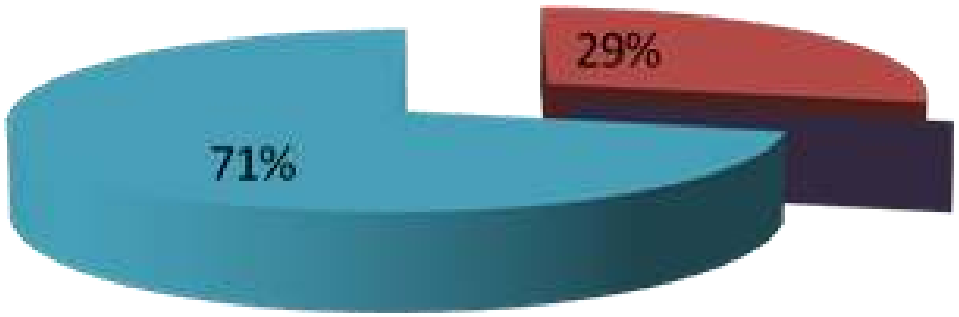
It is observed that 71% of the interviewees (7) completely disagree that extension workers are aware of the reality in rural communities, and 29% partially agree, demanding a more constant presence of technicians, to strengthen the service's performance with families.

The producers' rural communities were clear in identifying the most felt deficiencies in the team's performance in the communities and in what they expected from ATER. That there should be communication more efficient, the search for knowledge of the local reality and

support for training and organization of the Cantinho and Feijão communities.

Therefore, the main perspectives of rural extension, for farmers, are related to the search for improvement, the need for constant presence on their properties, and strong action against irregularities, developing better interaction between extension workers and farmers, seeking to improve the work developed by EMATER, which can seek sustainability and satisfy the expectations of farmers.

Graph 7 - Knowledge of the reality of the communities by the technician, according to farmers from the two communities.



Source: Constructed with survey data.

DISCUSSION

The analysis of family farmers' perceptions of Technical Assistance and Rural Extension (ATER) actions in the communities of Feijão and Cantinho, in the municipality of Serra Branca, Paraíba, reveals fundamental elements for understanding the potential and challenges faced by rural extension in the context of family farming. The data indicate, in general, that farmers recognize the relevance of extension services for the development of their productive activities, but they also express dissatisfaction with aspects related to the frequency, methodology and effectiveness of technical actions.

The finding that most farmers feel that there is a lack of practical guidance on sustainable land use highlights a gap between the real demands of communities and the technical approach currently adopted. This scenario reinforces the need to reconfigure extension strategies in order to overcome the verticalized model of knowledge transmission, still present in some practices (PIRES, 2003), and promote a dialogic, participatory and contextualized extension, as advocated by Freire (1987) and corroborated by Scalabrin et al. (2009).

The predominance of women among members, according to the survey data, reveals a significant change in rural socio-productive dynamics, in which women have been assuming leading roles in agricultural activities. This reality demands public ATER policies that are more sensitive to gender issues, promoting equal access to training and valuing local knowledge.

Another critical point identified refers to the shortage of technicians available to meet the demands of the communities. The unanimity of the interviewees in affirming the importance of increasing the number of extension workers points to a consensus on the structural limitation of ATER in the territories analyzed. The sporadic presence of technicians compromises continuous monitoring, participatory planning and the strengthening of local organizations, aspects considered central to the consolidation of sustainable agroecosystems.

Furthermore, criticism of the technicians' lack of familiarity with the local reality highlights the importance of investing in the ongoing training of ATER professionals, valuing an interdisciplinary approach committed to sustainable rural development. Farmers expect extension workers to act as knowledge mediators, fostering processes of collective learning, training and autonomy.

Thus, the results obtained are in line with the literature that advocates transformative rural extension, based on the appreciation of family farming, respect for local contexts and the construction of paths that integrate production, environmental conservation and social justice.

CONCLUSION

This research highlighted the weaknesses of Technical Assistance and Rural Extension (ATER) for strengthening family farming and for the sustainable development of rural communities in the municipality of Serra Branca - PB. Based on the analysis of the perception of farmers in the Cantinho and Feijão communities, it was found that the presence of extension technicians is considered essential for training, social organization, access to public policies and improvements in local production systems.

Despite the recognition of the relevance of extension actions, the data reveal significant limitations in the provision of services, such as the shortage of professionals working directly in the communities and the absence of regular guidance on sustainable soil management practices. This gap compromises the effectiveness of ATER actions and prevents more consistent advances in local development.

Farmers were clearly dissatisfied with the technical team's one-off performance and highlighted the need for ongoing, contextualized assistance based on dialogue with traditional

knowledge. This reinforces the urgency of restructuring ATER services, with an increase in the number of trained professionals who are involved in local realities, as well as with greater integration between technical knowledge and the sociocultural practices of rural producers.

It is concluded that rural extension, when properly implemented, represents a fundamental instrument to promote productive inclusion, strengthen family farming and foster sustainable alternatives in the semi-arid region of Paraíba. However, there is a weakness in the performance of rural extension in the communities of the municipality of Serra Branca, especially in relation to the low frequency of visits, the methodologies adopted by extensionists and the effectiveness of the services provided.

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