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# Characterization of the main actors involved in family farming in a quilombol community in the semi-arid region of Piauí, Northeast Brazil

Caracterização dos principais atores envolvidos com a agricultura familiar em uma comunidade quilombola no semiárido do Piauí, Nordeste do Brasil

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### RESUMO

O presente estudo objetivou investigar a relação que diferentes atores envolvidos com a agricultura familiar, residentes em uma comunidade Quilombola no município de Paulistana - Piauí, estabelecem com as atividades agropecuárias. Assim, foi conduzido um estudo de campo para realização de entrevistas com questionário semiestruturado, contendo perguntas objetivas e subjetivas. A maioria (76,47%) dos entrevistados era do sexo feminino, com idade entre 18 e 30 anos, tendo em sua maioria o ensino fundamental incompleto e renda de até 1 salário mínimo. 84,22% dos respondentes confirmaram que seus filhos contribuem com as atividades agropecuárias. Foram identificados 7 adolescentes, entre 12 e 18 anos. 70,58% dos adolescentes relataram realizar atividades agropecuárias e não agrícolas na propriedade familiar. Com relação a intenção de permanecer ou se evadir do ambiente rural, 64,70% afirmaram que pretendem migrar para zona urbana da cidade, a fim de estudar ou buscar melhores oportunidades de trabalho. 92,31% das mulheres responderam se sentir valorizadas pela sociedade e pelas entidades ligadas à agricultura familiar. Por sua vez, 87,5% dos idosos sinalizaram apresentar algum problema de saúde, dentre os quais destacam-se dores na coluna e hipertensão arterial. Portanto, é expressivo o número de criancas desenvolvendo atividades agropecuárias na comunidade rural e, por falta de oportunidades de trabalho e estudo, é elevada a parcela de jovens que não deseja permanecer na comunidade. Além disso, as mulheres desempenham papel importante no contexto da agricultura familiar, participando de maneira ativa das diversas atividades no âmbito da propriedade e da comunidade rural, assim como a população idosa agricultora demonstra problemas de saúde relacionados às suas atividades laborais.

**PALAVRAS-CHAVE:** agropecuária; coadjuvantes da agricultura familiar; produção de alimentos; povos tradicionais; zona rural.

#### ABSTRACT

The present study aimed to investigate the relationship that different actors involved in family farming, residing in a Quilombola community in the municipality of Paulistana - Piauí, establish with agricultural activities. Thus, a field study was conducted to carry out interviews with a semi-structured questionnaire, containing objective and subjective questions. The majority (76.47%) of respondents were female, aged between 18 and 30 years old, most of whom had incomplete primary education and had an income of up to 1 minimum wage. 84.22% of respondents confirmed that their children contribute to agricultural activities. 7 teenagers were identified, between 12 and 18 years old. 70.58% of adolescents reported carrying out agricultural and non-agricultural activities on the family property. Regarding the intention to stay or escape from the rural environment, 64.70% stated that they intend to migrate to the urban area of the city, in order to study or seek better job opportunities. 92.31% of women responded that they felt valued by society and entities linked to family farming. In turn, 87.5% of the elderly reported having a health problem, including back pain and high blood pressure. Therefore, the number of children carrying out agricultural activities in the rural community is significant and, due to the lack of work and study opportunities, there is a high

proportion of young people who do not wish to remain in the community. Furthermore, women play an important role in the context of family farming, actively participating in the various activities within the property and the rural community, just as the elderly farming population demonstrates health problems related to their work activities.

**KEYWORDS:** agriculture; food production; rural zone; supporting family farming; traditional people.

# INTRODUCTION

According to IBGE (2017), family farming comprises 77% of agricultural production units in Brazil, accounting for 23% of the total area of agricultural establishments in the country. As a productive model responsible for a significant portion of Brazil's food production, family farming involves various political actors who actively shape its definition (PICOLOTTO 2014). It encompasses small rural producers, agrarian reform settlers, foresters, aquaculturists, extractivists, fishermen, and traditional communities (IBGE 2017).

Among Brazil's traditional populations, quilombola communities stand out as remnants of historical quilombos. FREITAS et al. (2011) note that these communities still face challenges related to exclusion, inequalities, and racism, continuing to advocate for inclusive policies. In Northeast Brazil, several quilombola communities persist, including Quilombo Barro Vermelho in Paulistana, Piauí, certified as a quilombo remnant by the Palmares Cultural Foundation.

Traditionally, men have held a central role in family farming, with other actors often viewed as auxiliary participants. However, various individuals contribute significantly to agricultural activities: children (VASCONCELOS et al. 2022), youth (FERRARI et al. 2004), women (RODRIGUES et al. 2021), and the elderly (PISSAIA et al. 2022). Recognizing their contributions is crucial for understanding the dynamics of family-based agriculture, particularly in traditional communities like quilombolas.

This study aims to investigate the relationships between agricultural activities and diverse actors involved in family farming within a Quilombola community in Paulistana, Piauí.

#### MATERIALS AND METHODS

The research was conducted with residents of the Quilombola community of Barro Vermelho, located in the municipality of Paulistana, Piauí, which together with 15 other municipalities forms the territory of Chapada do Vale do Itaim.

This preliminary study had no sample selection criteria. A mixed-methods field study was carried out using a semi-structured questionnaire (Table 1) containing both closed and open-ended questions. These questions addressed the socioeconomic profile, child labor occurrence, potential reasons for youth migration from the community, the role of women in the productive context (guiding questions from MARION & BONA 2013), and health issues of elderly Quilombo residents.

Data collection occurred between May and June 2023. Initially, an agreement was established between residents (or their legal representatives) and researchers. An institutional document and informed consent form outlining the study design were presented, ensuring participant confidentiality. After approval, individual interviews were conducted, and responses were subsequently analyzed.

Data from closed-ended questions were tabulated in spreadsheets and analyzed using descriptive statistics, including frequency distribution and percentage calculations, using Microsoft Excel<sup>®</sup> 2016.

Tabela 1. Questionário aplicado aos moradores da comunidade Quilombola de Barro Vermelho, no município de Paulistana, Piauí.

Table 1. Questionnaire applied to residents of the community Quilombola de Barro Vermelho, in the municipality of Paulistana, Piauí.

Questionnaire				
1. Which gender do you identify with?				
() Female	() Female	() Female		
2. What is your age?				
( ) 1 - 10 years	( ) 1 - 10 years	( ) 1 - 10 years		
( ) 31 - 40 years old	( ) 31 - 40 years old	( ) 31 - 40 years old		
() 61 - 70 years	( ) 61 - 70 years	() 61 - 70 years		
3. What is your schooling?				
() Illiterate		() Illiterate		
() Incomplete elementary school		() Incomplete elementary school		

() Complete elementary school	() Complete elementary school			
() Incomplete elementary school	() Incomplete elementary school			
() Complete elementary school	() Complete elementary school			
() High school incomplete	() High school incomplete			
4. What is your family income?				
() Up to 1 minimum wage	() Up to 1 minimum wage			
() 1 - 3 minimum wages	( ) 1 - 3 minimum wages			
() 3 - 5 minimum wages				
5. How many children do you have? What gender				
	es of the production unit? If YES, what does he/she usually			
	nt do you think it is for your son(s)/daughter(s) to help out			
in the production unit?				
	S, is the school in the community itself or nearby? Is there			
_public transport?				
8. Do you carry out individual activities to earn your own money?				
() You plant or raise crops on the property	() You plant or raise crops on the property			
() Farm work outside the property	() Farm work outside the property			
9. Do you intend to stay in the community? If NOT, for what reason?				
10. Do you know other young people who have moved away from the community? If YES, did they go to				
other rural communities or to the urban area?				
11. Do you feel valued by society and family farm				
() Valued () Valued	() Valued () Valued			
women farmers?	vited to participate in groups, fairs and lectures aimed at			
	() Not invited			
() Not invited () Not invited	() Not invited			
13. What activities do you carry out daily on the property?				
<ul> <li>() Domestic activities only</li> <li>() Domestic activities and farm activities (animal husbandry, vegetable garden, orchard, management)</li> </ul>				
() Outside activities. Describe it:				
14. As a percentage, how much does your work represent in your family income?				
() From 5% to 10%				
15. Do you access rural credits for the property as the principal borrower?				
() Yes () Yes				
16. Are you attended at home by any team from the Unified Health System (SUS)?				
() Yes () Yes				
17. Do you have any health problems? If YES, which one(s)?				
18. Do you regularly use any medication? If YES, which one(s)?				
19. What health problem(s) do you believe you acquired/developed from work activities in the field?				
	onal protective equipment (PPE)? If YES which PPE?			

# **RESULTS AND DISCUSSION**

The majority of respondents were female, aged 18-30, with most having incomplete primary education and earning up to one minimum wage (Table 2). This indicates a strong presence of women in rural areas and a population that largely did not progress far in formal education, resulting in low monthly incomes.

Tabela 2. Perfil dos entrevistados da comunidade Quilombola Barro Vermelho, em Paulistana, Piauí. Table 2. Profile of interviewees from the Barro Vermelho Quilombola community. in Paulistana. Piauí.

Item	Total respondents (n = 34)
Sex	
Male	23.53%
Female	76.47%
Age	
1-10 years	0%
11-17 years	5.88%

18-30 years	26.47%
31-40 years	11.76%
41-50 years	23.52%
51-60 years	8.82%
61-70 years	14.70%
71-80 years	5.88%
Above 80 years	2.94%
Education	
Illiterate	20.58%
Elementary I incomplete	32.35%
Elementary I complete	0%
Elementary II incomplete	14.70%
Elementary II complete	0%
High school incomplete	8.82%
High school complete	23.52%
Higher education incomplete	0%
Higher education complete	0%
Postgraduate incomplete	0%
Postgraduate complete	0%
Monthly family income	
Up to 1 minimum wage	79.41%
1-3 minimum wages	20.59%
3-5 minimum wages	0%
5-10 minimum wages	0%
Above 10 minimum wages	0%

Of the total respondents (n=34), only 38.23% have children in their family unit. However, 47 children were counted among these 13 families. Notably, one interviewee reported having 11 children. 84.22% of respondents confirmed their children contribute to agricultural activities, but emphasized this was only in less strenuous tasks, such as providing water and food to animals, and some crop cultivation practices. Regarding education, 77.78% stated their children are enrolled and attending classes regularly, as there is a school in the community itself. VASCONCELOS et al. (2022), examining child labor in irrigated horticultural areas of

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Itabaiana/SE, reported that child labor remains a reality in rural contexts due to socioeconomic and cultural factors, as children must contribute to the productive unit's income and due to the belief that work dignifies the human being.

Seven adolescents between 12 and 18 years old were identified. 70.58% reported performing agricultural and non-agricultural activities on the family property, while 29.42% said they did not engage in activities or directly contribute to family income. Regarding intentions to stay or leave the rural environment, 64.70% stated they plan to migrate to urban areas to study or seek better job opportunities. TROIAN (2009), investigating factors influencing youth in Santa Rosa (RS) to stay or leave rural areas, observed a strong tendency for young people to depart, necessitating public policies to encourage their retention in rural activities. Additionally, 88.23% knew young people who had moved away from the community, indicating this as a common practice. Notably, many parents emphasized the scarcity of activities favoring adolescents' permanence in the rural environment.

Women constituted the majority (76.47%; n=26) of the interviewees (n=34). 92.31% of them reported feeling valued by society and organizations associated with family farming. When asked about their participation in groups, fairs, associations, or events targeted at women farmers, 96.15% stated they are typically invited and attend such activities or movements. A high proportion of women (84.61%) reported engaging in domestic tasks alongside numerous activities on their rural property. Moreover, 79.92% indicated that their work in agricultural activities contributes no more than 40% to the family income. This demonstrates that a significant portion contributes in some capacity to the household income. Regarding access to rural credit, 61.54% affirmed they had previously obtained some form of credit as the primary applicant. According to FAVARE & YADA (2018), female participation in family agricultural production is now a reality, with women increasingly advocating for recognition of their crucial roles.

Of the total respondents, only 23.53% are classified as elderly. Among these, 87.5% reported having health issues, primarily back pain and hypertension. They also noted regular medication use. When asked about home visits by medical/multidisciplinary teams from the Unified Health System (SUS), 100% confirmed receiving periodic check-ups. Half of the elderly respondents believed their health problems were related to their field work. PISSAIA et al. (2022), in a study examining Brazilian scientific literature on elderly farmers' health, found that medication use among this population is linked to the physical and psychological demands of agricultural work. Regarding sun protection and personal protective equipment for farming activities (crop cultivation and livestock management), 62.5% reported frequent use.

## CONCLUSION

A significant number of children engage in agricultural activities in the rural community. Due to limited work and educational opportunities, a high percentage of young people do not wish to remain in the community. Women play a crucial role in family farming, actively participating in various activities on the property and in the rural community. Additionally, the elderly farming population exhibits health problems related to their work activities.

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