

**Socioeconomic profile of agroextractivists in associativism, Marajó archipelago, Pará, Brazil**

**Perfil socioeconômico de agroextrativistas no associativismo, Arquipélago do Marajó, Pará, Brasil**

**Perfil socioeconómico de los trabajadores agroextractivos en asociativismo, archipiélago de Marajó, Pará, Brasil**

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## Abstract

The aim of the present study was to evaluate the socioeconomic profile of agroextractivists who practice associations in the archipelago of Marajó, state of Pará, Brazil. The study was carried out in the municipality of Breves, at the Ilha Pracaxi Settlement Residents Association (AMIP), with seven producers, in June 2019. Quanti-qualitative research was used, through the application of forms, with open and closed questions. Statistical analyzes were performed using the SPSS for Windows program, version 11.5. It was observed that there is a predominance of females in the total of associates. This population has an age range between 31 to 40 years, where 71.43% have some type of marital bond. Most (57.14%) have incomplete primary education. It was detected that 85.71% have housing with wooden structure. We emphasize that the main source of income comes from family farming. In addition to agricultural practice, respondents develop fishing and extractivism in the forest (57.14%). It is also worth mentioning that a part of the producers is granted social benefits, reaching an income of up to 2 minimum wages (42.86%). Due to the scarcity of data in the literature, this study carried out a cross-sectional analysis regarding the reality of associations in the Marajó archipelago. Thus, the provision of these data can assist in directing public policies that favor sustainable development in the region.

**Keywords:** Amazon; Activity; Settlement; Schooling; Income.

## Resumo

O objetivo do presente estudo foi avaliar o perfil socioeconômico de agroextrativistas que praticam o associativismo no arquipélago do Marajó, estado do Pará, Brasil. O estudo foi realizado no município de Breves, na Associação dos Moradores do Assentamento Ilha Pracaxi (AMIP), com sete produtores, em junho de 2019. Foi utilizada a pesquisa quanti-qualitativa, através da aplicação de formulários, com perguntas abertas e fechadas. As análises estatísticas foram realizadas com o programa SPSS para Windows, versão 11.5. Foi observado que há predominância do sexo feminino no total de associados. Essa população apresenta faixa etária entre 31 a 40 anos, onde 71,43% possuem algum tipo de vínculo conjugal. A maioria (57,14%) possui o ensino fundamental incompleto. Detectamos que 85,71% possuem moradia com estrutura de madeira. Destacamos que a principal fonte renda é proveniente da agricultura familiar. Além da prática agrícola, os entrevistados desenvolvem a pesca e o extrativismo na floresta (57,14%). Também vale destacar que uma parte dos produtores é contemplada com benefícios sociais, chegando a ter uma renda de até 2 salários-mínimos (42,86%). Em função da escassez de dados na literatura, o presente estudo realizou uma

análise transversal a respeito da realidade do associativismo no arquipélago do Marajó. Assim, o fornecimento desses dados pode auxiliar no direcionamento de políticas públicas que favoreçam o desenvolvimento sustentável na região.

**Palavras-chave:** Amazônia; Atividade; Assentamento; Escolaridade; Renda.

## **Resumen**

El objetivo del presente estudio fue evaluar la perfil socioeconómico de los trabajadores agroextractivos que practican el asociativismo en el archipiélago de Marajó, estado de Pará, Brasil. El estudio se llevó a cabo en el municipio de Breves, en la Asociación de Residentes del Asentamiento Ilha Pracaxi (AMIP), con siete productores, en junio de 2019. Se utilizó investigación cuanti-cualitativa, mediante la aplicación de formularios, con preguntas abiertas y cerradas. Los análisis estadísticos se realizaron utilizando el programa SPSS para Windows, versión 11.5. Se observó que existe un predominio de mujeres en el total de asociados. Esta población tiene un rango de edad entre 31 y 40 años, donde el 71,43% tiene algún tipo de vínculo matrimonial. La mayoría (57,14%) tiene educación primaria incompleta. Detectamos que el 85,71% tiene vivienda con estructura de madera. Destacamos que la principal fuente de ingresos proviene de la agricultura familiar. Además de la práctica agrícola, los encuestados desarrollan la pesca y el extractivismo en el bosque (57,14%). Cabe mencionar también que a una parte de los productores se les otorga beneficios sociales, alcanzando un ingreso de hasta 2 salarios mínimos (42,86%). Debido a la escasez de datos en la literatura, este estudio realizó un análisis transversal sobre la realidad de las asociaciones en el archipiélago de Marajó. Así, el suministro de estos datos puede ayudar a orientar políticas públicas que favorezcan el desarrollo sostenible en la región.

**Palabras clave:** Amazonas; Actividad; Asentamiento; Instrucción; Ingresos.

## **1. Introduction**

Associations include different models of collective organization. Association refers to a legally private, non-profit civil society, in which two or more individuals organize themselves democratically in order to defend their common interests (BRASIL, 2008; MUMIC et al., 2015). The associative practice in rural areas emerges as a strategy to strengthen family farming for the permanence, reproduction and maintenance of their rural properties (Clemente et al., 2020; Lisboa & Alcantara, 2019).

Family farming is defined as a social, economic and political category (Deponti et al., 2020; Mengel et al., 2020). It is based on the association among work, family and production (Delgado & Bergamasco, 2017). Within the pillars of family farming, there is recognition as a category of male and female workers, who play a relevant role for the food and nutritional security of the population (Teo et al., 2020), in addition to increasing income and economy promotion (Elias et al., 2019) and the implementation of more sustainable production strategies (Moreno et al., 2019).

Between the existing agricultural establishments in Brazil, 77% are classified as family farming, with an area of 80.9 million ha, accounting for 23% of the value of all national agricultural production (IBGE, 2019a), being one of the most important segments in Brazil. The data presented by the Government of Brazil shows an annual turnover of US \$ 55.2 billion, from family farming (BRASIL, 2018). Despite its importance in the country, family farming still presents political, environmental, social and economic problems (Pinto Filho et al., 2019; Heberlê et al., 2017; Silva et al., 2019). It is worth mentioning that small rural production, mainly from agrarian reform, is at social, economic and productive vulnerability (Mesquita & Mendes, 2012; Nascimento et al., 2019).

In the Eastern Amazon, territorial heterogeneity and the historical context, reproduce these multiple inequalities, especially those of a socioeconomic nature (Souza et al., 2019). This reality is evidenced in the Marajó archipelago, state of Pará, Brazil. In the region, the territorial organization of riverside communities, recognized as traditional populations, suffers from the strong socioeconomic changes (Carvalho et al., 2019). The modifications and diversity of the rural environment in Brazil, has aroused interest in research in this area (Lovatel et al., 2018; Wurz et al., 2019; Costa et al., 2020). Such studies help to understand the characteristics of heterogeneous agriculture, which plays an important role for local development (Oliveira et al., 2016).

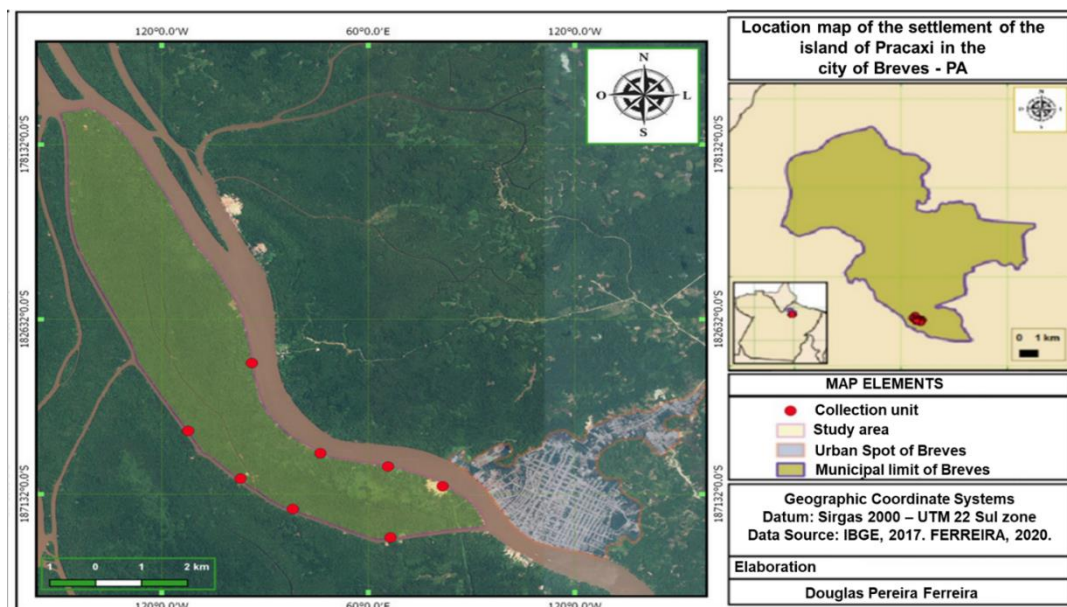
Economic and productive changes in rural areas, result in constant evaluation of local parameters. Socioeconomic indicators are an important tool for understanding this agricultural mosaic (Brito et al., 2016; Martins Filho et al., 2019). The use of these indicators, contribute to decision making, such as the creation of actions and public policies by the government. Thus, the objective of this work is to evaluate the socioeconomic profile of agroextractive workers who practice associativism in the city of Breves, Pará, Brazil. These results will promote the visibility of agriculture in the Amazon region, as well as generate information that can serve as a subsidy for actions aimed at rural development.

## 2. Material and Methods

### 2.1 Study area

The study was carried out at the Pracaxi Island Settlement Residents' Association (AMIP), located in the municipality of Breves, Marajó archipelago, Pará, Brazil (Figure 1). Marajó is located on the Amazon coast (Amaral et al., 2012). It is the largest fluvial-maritime island in the world, with 49,606 km<sup>2</sup> (IPEA, 2015). A region comprising 16 municipalities, which comprise the micro-regions of Arari (Cachoeira do Arari, Chaves, Muaná, Ponta de Pedras, Salvaterra, Santa Cruz do Arari and Soure), Furos of Breves (Afuá, Anajás, Breves, Curralinho and São Sebastião da Boa Vista) and Portel (Bagre, Gurupá, Melgaço and Portel).

**Figure 1.** Location of Pracaxi island Settlement, Breves, Pará, Brazil.



Source: Authors.

The municipality of Breves is to the southwest of the archipelago, with a territorial extension of 9,566.572 km<sup>2</sup> (IBGE, 2019b). It is located on the left bank of the Parauaú River. Surrounded by several riverside communities in almost all its extension. The main form of access to Breves is by river transport, with an average duration of 6 h (speedboat) or 12 h (ship / ferry) travel to the state capital, Belém, and by air in up to 45 minutes. The city is composed of the division between the Urban and Rural Areas, with urban and rural population well distributed, counting that 50% of the population lives in rural areas (IBGE, 2019b).

The majority of the local population is riverside, due to the city being surrounded by rivers and islands, highlighting extractivists, fishermen, aquaculture and family farmers. The Pracaxi island settlement is part of the Agroextractive Settlement Project (PAE) modality, instituted by the Ordinance of the National Institute of Colonization and Agrarian Reform (INCRA), number 268 of October 23, 1996, with the purpose of involving people settled for obtaining the title of land use concession, practice of land policy for land use planning (Carvalho et al., 2019). The association under study was founded in 2010. The collective organization that started with 190 members, aiming at granting land title through the PAE and obtain benefits that assist in the production and improvement of life, such as technical assistance and engines, currently the association has 150 members (SILVA, . Local visits were carried out during the month of June 2019.

## **2.2 Data collection and analysis**

The methodological path consisted of qualitative and quantitative research, with seven agroextractivists who practice associativism, considered a case study. The first was of an exploratory nature, whose basic procedures for its execution are bibliographic and documentary research, according to Kripka et al. (2015). Qualitative research requires that fundamental attitudes are openness, flexibility, the ability to observe and interact with the group of researchers and with the social actors involved (Minayo, 2004). This seeks to understand and explain the dynamics of social relations that cannot be quantified (Gerhardt & Silveira, 2009).

For the collection of quantitative data, an individual interview was conducted using semi-structured questionnaires, according to the methodology used by Gil (1999). Socioeconomic aspects such as gender were investigated; schooling level; marital status; family composition; family income, its sources and its contributors; place of residence, type of residence; water supply and sanitary construction; social benefit; list of household durable goods; and source of electricity. The interview is a meeting between people, so that one of them obtains information about a certain subject, through a conversation of a professional manner (Marconi & Lakatos, 2010).

At the end of the interview, the participant was asked to sign the Free and Informed Authorization Term, declaring that he was aware of the research process. To continue the study, after the end of each interview, the producer was asked to indicate other associated producers in the community to contribute to the study, according to the “snowball” interview

method (Bailey, 1982; Baldin & Munhoz, 2011). The identities of the participants were kept confidential, guaranteeing their anonymity and confidentiality of the information. The collected data were analyzed using descriptive statistics (Zar, 1999; Oladejo, 2010), with the aid of the SPSS for Windows program, version 11.5.

### 3. Results and Discussion

The results of the socioeconomic profile of agroextractivists in association at the Pracaxi Island Settlement are shown in Table 1.

**Table 1.** Socioeconomic profile of agroextractive workers in association at the Pracaxi Island Settlement, Breves, Pará, Brazil.

Variable	Absolute frequency (n)	Relative frequency (%)
<b>Gender</b>		
Male	01	14,29
Female	06	85,71
<b>Group of age</b>		
21 to 30 years	02	28,57
31 to 40 years	04	57,14
> 41 years	01	14,29
<b>Marital status</b>		
Single	02	28,57
Stable union	04	57,14
Married	01	14,29
<b>Education</b>		
Without formal instruction	03	42,86
Incomplete Elementary School	04	57,14
<b>Residence structure</b>		
Wood	06	85,71
Wood and masonry	01	14,29
<b>Health structure</b>		
Toilet	02	28,57
Piped water	02	28,57
Did Not answer	03	42,86
<b>Source of income</b>		
Agriculture	01	14,29
Agriculture + Fishing	01	14,29
Agriculture + Extractivism	01	14,29
Agriculture + Fishing + Extractivism	04	57,14
<b>Social benefit</b>		
Social program "Bolsa Família"	05	71,43
Retirement	01	14,29
Does not receive	01	14,29
<b>Family income</b>		

Less than 1 minimum wage	02	28,57
1 Minimum Wage	01	14,29
2 Minimum Wages	03	42,868
Did not answer	01	14,29
<b>Family composition</b>		
5 to 6 people	02	28,57
7 to 8 people	05	71,43
<b>Contribution to family income</b>		
Only 1 person	01	14,29
From 2 to 3 people	05	71,43
From 4 to 5 people	01	14,29

Source: Field research (2020).

### 3.1 Gender

In the present study, we identified associated men and women (Table 1). Gender plays an important role in agroextractivism. We observed the predominance of females (85.71%) and the smallest part of males. Similar results describe the importance of gender, where they point out the massive female presence in agricultural activities, over the years (Fagotti, 2017). When considering that the research was carried out at home, the predominance of women in the studied location may be linked to the division of labor in families. Where women devote themselves to household chores and men to field activities. For Santos et al. (2020), the disruption of the patriarchal logic and the consequent recognition of women as economic agents of production, depends on specific public policies. This gender dynamic is reported by Sousa et al. (2019), in Apodi, Rio Grande do Norte and reported by Sangalli et al. (2015), in Dourados in Mato Grosso (both in Brazil), in which they show the predominance of men in agricultural activities.

### 3.2 Age group

The majority (57.14%) of the interviewees are aged between 31 and 40 years old. This age group revealed their maturity in their work, demonstrating that associative agroextractivism was proportionally less explored by younger people. This phenomenon may be related to the migration of the youngest to the city, in search of better living conditions. The present study was similar to that reported by de Melo et al. (2017) studying riverside dwellers on the Arapiuns River, in western Pará and Godoy et al. (2010) in Santa Rosa, Rio Grande do Sul (Brazil). These data reveal the prevalence of older people in the field.



Generally, families in the countryside have three to six children, aged from 2 to 20 years old, these represent family succession in the field, as well as agents for the insertion of modernization of agricultural techniques over the generations (Silva, 2012; Souza, 2012).

### **3.3 Marital status**

Regarding the marital status of the interviewees, the majority have a stable union (57.14%), are married (14.29%) and 28.57% are single. This is probably due to the frequency of their age. Confirming the marriage tradition in rural areas, which is one of the most emphasized cultural activities in this environment (Nobrega et al., 2014; Silva, 2017; Souza et al., 2019). The results of the present study were different from those found by Martins Filho et al. (2019) when investigating the socioeconomic profile and agricultural practices of family farmers in Chapadinha, Maranhão (Brazil), they pointed out that the farmers were married (67%) and had a stable union (33%). It should be noted that in situations of matrimonial ties or stable union, according to INCRA Normative Instruction No. 981/03, it gives spouses the obligation to carry out joint land titling.

### **3.4 Education**

A total of 57.14% of respondents have incomplete primary education. There being thus no associated with educational level above that education. Different results from the present study show that family farmers in the state in Paraná (Brazil), 92% of the cooperative members had completed elementary school (Alves et al., 2011). The education level can be a factor that contributes to the low development of agriculture. The data demonstrate the low level of education of the interviewees, highlighting the need for the State to promote rural education, guaranteeing the right to education for all (Santos & Neto, 2017), as provided for in the 1988 Constitution of the Federative Republic of Brazil and the National Education Guidelines and Bases Act 1996.

Thus, agroextractive workers need educational and professional qualification. It is worth mentioning that agriculture requires a lot of technical knowledge to be successful. Our result is in line with those reported by Mendonça et al. (2019) in Jequitinhonha, Minas Gerais (Brazil). The authors observed that the low level of education of local farmers is linked to the lack of opportunities for study, since they help support the family from an early age. Alves et al. (2015), Caetano & Silva (2016), Oliveira & Pessoa (2017) associate the low level of

education in rural areas due to the absence of rural schools and / or the difficult access to them; precarious physical structure of schools; in addition to the intense extractive work and consequent exhaustion, contributing to the non-permanence of individuals from these locations in the school. This result reflects the reality of rural workers in Brazil.

### **3.5 Residence Structure**

The majority (85.71%) of the residences have a wooden structure, of the stilt type. As these are settled agro-extraction workers, who have benefited from the land concession under the agrarian reform project, instituted by the Federal Government, the interviewees' property system is unanimously owned, with agricultural activities for subsistence being practiced in these areas. The architecture of stilts present in traditional communities, indicates the permanence of a culture of habit reminiscent of the historical process of origin and occupation of the Amazon, in which the dependence on the river and the forest made its inhabitants adaptable to lowland and wetlands, building high houses to the floor (Trindade Júnior, 2002; Simonian, 2010).

### **3.6 Health Structure**

When asked about the sanitary structures in the homes, the majority (42.86%) did not respond. While 28.57% answered that there was only a bathroom, 42.86% said they had piped water in their homes. We did not observe cases of the existence of two health factors in the same residence. Despite the existence of a bathroom, a septic tank was not identified in any of the interviewees' areas. In this way, the excreta are thrown directly, without treatment, into the river or on the ground. This same reality was identified in 15% of Brazilian rural households, and in Pará this percentage is 10% (IBGE, 2010). For Neu et al. (2016), the majority of the population of the Amazon, uses systems of rustic pits and ditches, and in areas of riverside community use the river as sewage.

### **3.7 Income source and distribution**

In the present study, all interviewed families adopt the family's workforce in the production system. Thus, they are family farming establishments, in which the property and the employment agent relationship come from individuals who have consanguineous and / or

marriage connections, understanding the land as a means of production and supplying the family (Brasil, 2006; Lima et al., 2019).

It was observed that the majority (57.14%) of the interviewees practice agriculture, fishing and extractivism in Marajó. This demonstrates a heterogeneity of activities as a way of family subsistence. Agroextractivists grow cassava (*Manihot esculenta*), rice (*Oryza sativa*), cupuaçu (*Theobroma grandiflorum*), and vegetables such as lettuce (*Lactuca sativa*), coriander (*Coriandrum sativum*), chives (*Allium schoenoprasum*) and cabbage (*Brassica oleracea*); and practice extractivism activities in the forest (vegetable and animal), especially the extractivism of açai (*Euterpe oleracea*) and the fishing of tambaqui (*Colossoma macropomum*) and Amazonian shrimp (*Macrobrachium amazonicum*) for subsistence and the surplus is traded in the region. This generated profile may be linked to the need to develop the productive chain of agroextractivism in Marajó. De Melo et al. (2017) argue that the diversification of productive activities is important to ensure the social and economic good of the population.

In the present study, in addition to these activities as a source of income, producers reported that the income is also complemented by government social benefits. A total of 71.43% of respondents are benefited by the Bolsa Família program and 14.29% receive retirement benefits. Bitencourt and Dalto (2016), affirm that the rural social security benefit benefits the entire economic structure of the countryside. The results are similar to the study on socioeconomic profile and actions of family farmers in the rural Flores community in Pombal, Paraíba (Brazil), carried out by Nobrega et al. (2014). Melo Junior et al. (2017), explain that these new sources of family income may later have an even greater relevance in the composition of family income. It was observed that when adding government aid and agroextractive production, the total family income of the interviewees can reach up to 2 minimum wages (42.86%). Results of the present study were different from those found by Barbosa et al. (2020), in a rural settlement in Piauí (Brazil), where the monthly family income is less than a minimum wage.

### **3.8 Family Composition**

In this research it was found that the family composition is 7 to 8 people, representing 71.43% of the households, with 28.57% of the families having among 5 to 6 members. The study showed that the number of contributors to the family income is carried out by two and at most three people. From these data, and when considering the family

composition, despite the existence of factors such as: the diversification of agricultural subsystems, number of contributors to income and government increases, their family income is low. However, as a strategy for social reproduction of these families, food security is guaranteed by the potential income from natural resources not yet explored (Santos et al. 2015).

### 3.9 Availability of Goods

We found that all respondents have a stove for preparing meals. A similar result was found by Rodrigues et al. (2017), which according to the authors, shows the change of the traditional habits of the peasant. The use of the cell phone is present in 57.14% of the families. We also found that 28.57% of agroextractivists have a blender, 14.29% radio and television and 28.57% freezer. Was not observed the existence of a stereo, iron, computer or refrigerator in the present study. The description of the goods existing in the interviewees' homes can be seen in Table 2.

**Table 2.** Existing goods in the residences of agroextractivists in the settlement of Ilha Pracaxi, Marajó, Pará, Brazil.

Home appliances	Absolute frequency (n)	Relative frequency (%)
TV	01	14,29
Stereo	01	14,29
Stove	07	100,00
Freezer	02	28,57
Blender	02	28,57
Cell phone	04	57,14

Source: Field research (2020).

In the community studied, all interviewed families have energy from a combined source, using engines that work as electric energy generators, fueled with gasoline or diesel, with monthly costs ranging from R\$ 60.00 to R\$ 150.00. Although the location is part of a federal program, these were not covered by the Federal Government's "Luz para Todos" Program, legitimized by the Universalization Law No. 10438 of April 2002. For Sauer et al. (2003), the lack of access to electricity also generates social exclusion. Another excluding factor verified in this study, refers to the access to information through virtual networks. Although the majority of households visited have a cell phone, the number of devices and the

quality of the signal are not sufficient to serve all family members. Added to this reality, the limitation of quality internet access, making it even more difficult to disseminate knowledge and communication within and outside the settlement.

#### **4. Conclusion**

The characterization of the socioeconomic profile of these families in associations in Pracaxi island enabled a range of information that was never discussed by other works for the region, which highlights the importance of this socioeconomic survey. Among the main information generated are the family income, which does not exceed two minimum wages / family; the majority of agroextractive workers do not have completed elementary school; with a predominance of females in the activity; agriculture is not the exclusive income of families, needing to work in diverse activities such as fishing and extractivism. Thus, the provision of these data can assist in directing public policies that favor sustainable and socioeconomic development in the region.

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#### **References**

Alves, R. J. M., Rocha, L. C. F., Pontes, A. N., Costa, M. S. S., & Campos, P. S. S. (2015). Estudo socioeconômico de comunidades da área do polo industrial de Barcarena, Pará, Brasil. *Enciclopédia Biosfera*, Centro Científico Conhecer - Goiânia, 11(21), 3125.

Alves, V. O., Vieira, N. S., Silva, T. C., & Ferreira, P. R. (2011). O Associativismo na agricultura familiar dos estados da Bahia e Minas Gerais: potencialidades e desafios frente ao programa de aquisição de alimentos (PAA). *Administração Pública e Gestão Social*, 3(1), 66-88.

Amaral, D. D., Mantelli, L. R., & Rossetti, D. F. (2012). Palaeoenvironmental control on modern forest composition of southwestern Marajo Island, Eastern Amazonia. *Water and Environment Journal*, 26, 70-84.

Bailey, K. D. (1982). *Methods of Social Research*. (4a ed.), The Free Press, New York, NY, USA. 439p.

Baldin, N., & Munhoz, E. M. B. (2011). Educação ambiental comunitária: uma experiência com a técnica de pesquisa snowball (bola de neve). *REMEA-Revista Eletrônica do Mestrado em Educação Ambiental*, 27.

Barbosa, T. D. C. S., De Freitas, W.N., Dias, I. M., De Lima Brito, J. A., Da Costa, N. M. G. B., De Sousa, M. F., & Arrais, M. M. (2020). Perfil socioeconômico e ambiental de agricultores familiares em um assentamento rural no estado do Piauí. *Brazilian Journal of Development*, 6(6), 41856-41865.

Bitencourt, R. O. M., & Dalto, F. A. S. (2017). A internalização da Previdência Social Rural na autonomia e no consumo dos idosos: um estudo de caso. *Revista de Estudos Sociais*, 18(37), 42-57.

Brasil (2006). Lei no 11.326, de 24 de julho de 2006. *Estabelece as diretrizes para a formulação da Política Nacional de Agricultura Familiar e Empreendimentos Familiares Rurais*. Brasília: Diário Oficial da União.

Brasil (2018). Governo do Brasil. *Agricultura familiar do Brasil é 8ª maior produtora de alimentos do mundo*. Brasília: Portal do Governo.

Brasil (2003). Portaria INCRA nº 981, de 2 de outubro de 2003 - *Altera a Norma de Execução Nº 29, de 11 de setembro de 2002*. Efetiva o Direito de acesso à terra para as trabalhadoras rurais na reforma agrária.

Brasil (2008). Ministério da Agricultura, Pecuária e Desenvolvimento. *Cartilha do Associativismo*. (2a ed.), Brasília: MAPA/SDC/DENACOOP.

Brito, C. S., Silva, M. R. R., & Júnior, N. F. C. (2016). Indicadores Socioeconômicos da Gestão Pública: Quão Relevantes Vocês São?. *Id On Line Revista Multidisciplinar e de Psicologia*, 10(30), 144-167.

Caetano, V. N. S., & Silva, A. L. (2016). Desenvolvimento e educação no Marajó: estudo de caso no município de Breves (Marajó/Pará/Brasil). *Revista GeoAmazônia*, 4(7), 120-137.

Carvalho, J. P. L., Cruz, B. E. V. D., & Calvi, M. F. (2019). Política agrária e o ordenamento territorial no Marajó, Pará. *Mercator*, 18.

Caumo, A. J., Montagnhani, B. A., Tramontin, J., & Shikida, P. F. A. (2012). Corte manual da cana-de-açúcar sob uma perspectiva de gênero: um estudo de caso no município de Mirandópolis –SP. *REDES*, 17(1), 182 -202.

Clemente, E. C., Oliveira, I. L., & Sturza, J. A. I. (2020). O associativismo como promotor do desenvolvimento rural e (re) organização espacial em assentamentos rurais. *Brazilian Journal of Development*, 6(7), 44852-44864.

Costa, C. V., Santos, J. S. C., Silva, B. B. C., Pádua Júnior, C. R., & Ribeiro, M. A. (2020). Perfil socioeconômico dos trabalhadores rurais do setor sucroalcooleiro do município de Nova Olímpia–MT: impactos da colheita mecanizada. *South American Development Society Journal*, 5(15), 257.

Delgado, G. C., & Bergamasco, S. M. P. P. (2017). *Agricultura familiar brasileira: desafios e perspectivas de futuro*. Brasília: Ministério do Desenvolvimento Agrário, 470.

Deponti, C. M., Kist, R. B. B., Arend, S. C., & De Oliveira, V. G. (2020). O perfil, o uso e a apropriação de TIC pela agricultura familiar do Vale do Caí-RS, Brasil. *Revista Eletrônica Competências Digitais para Agricultura Familiar*, 6(1), 42-77.

Elias, L. D. P., Belik, W., Cunha, M. P. D., & Guilhoto, J. J. M. (2019). Impactos socioeconômicos do Programa Nacional de Alimentação Escolar na agricultura familiar de Santa Catarina. *Revista de Economia e Sociologia Rural*, 57(2), 215-233.

Fagotti, L. N. (2017). Associativismo e agricultura familiar: reflexões sobre uma associação de produtores rurais no interior paulista. *REDD–Revista Espaço de Diálogo e Desconexão*, 9(1).

Gerhardt, T. E., & Silveira, D. T. (2009). *Métodos de Pesquisa*. Porto Alegre: Ufrgs. 120p.

Gil, A. C. (1999). *Métodos e técnicas de pesquisa social*. (5a ed.), São Paulo: Atlas.

Godoy, C. M. T., Pérez, F. I. C., Wizniewsky, J. G., Guedes, A. C., & Moraes, C. S. (2010). Juventude rural, envelhecimento e o papel da aposentadoria no meio rural: A realidade do município de Santa Rosa/RS. In: Congresso Sober: Sociedade Brasileira De Economia, Administração e Sociologia Rural, 48. *Anais*. Campo Grande.

Heberlê, A. L. O., Sicoli, A. H., Silva, J. S., Borba, M. F. S., & Balsadi, O. V. (2017). Agricultura familiar e pesquisa agropecuária: contribuições para uma agenda de futuro. In: Delgado, G.C. & Bergamasco, S.M.P.P. (Org). *Agricultura familiar brasileira: desafios e perspectivas de futuro*. Brasília: Ministério do Desenvolvimento Agrário, 470 p.

IBGE (2011). Instituto brasileiro de geografia e estatística. *Censo Demográfico 2010: Características da população e dos domicílios*. Rio de Janeiro: IBGE.

IBGE (2019b). Instituto Brasileiro de Geografia e Estatística. *Panorama Cidade Breves/Pará*. População, Território e ambiente.

IBGE (2019a). Instituto Brasileiro de Geografia e Estatística. *Censo Agropecuário 2017: resultados definitivos*. Rio de Janeiro: IBGE.

IPEA. Instituto De Pesquisa Econômica Aplicada. Observatório da Função Socioambiental do Patrimônio da União na Amazônia: *Relatório Territorial do Marajó*. Rio de Janeiro, 2015.

Kripka, R., Scheller, M., & Bonotto, D. L. (2015). Pesquisa documental: considerações sobre conceitos e características na pesquisa qualitativa. *CIAIQ*, 2.



Lima, A. F., Assis Silva, E. G., & Freitas Iwata, B. (2019). Agriculturas e agricultura familiar no Brasil: uma revisão de literatura. *Retratos de Assentamentos*, 22(1), 50-68.

Lisboa, A. S., & Alcantara, F. V. (2019). O associativismo rural como estratégia de desenvolvimento para a agricultura familiar. *Para Onde!?*, 11(1), 17-28.

Lovatel, M., Simonetti, A. L., & Gazolla, M. (2019). Vulnerabilidades socioeconômicas e produtivas dos agricultores familiares pobres de Santa Catarina. *Revista Brasileira de Desenvolvimento Regional*, 6(3), 147-174.

Marconi, M., & Lakatos, E. M. (2010). *Técnicas de pesquisa: planejamento e execução de pesquisas, amostragens e técnica de pesquisa, elaboração, análise e interpretação de dados*. (7a ed.) 3. reimpr. São Paulo: Atlas.

Martins Filho, J. B., Meneses, K. C., Coutinho, R. S., Reinaldo, L. F., Pires, I. C. G., & Ferrão, G. E. (2019). Perfil socioeconômico e práticas agrícolas de agricultores familiares no município de Chapadinha (MA). *Natural Resources*, 9(1), 1-10.

Melo Júnior, L. C. M., Sayago, D. A. V., & Tourinho, M. M. (2017). Sistemas sociais comunitários ribeirinhos na Amazônia. *Sustentabilidade em Debate*, 8(3), 138-151.

Melo, S. A. B. X., Silva, F. S., & Melo, A. X. (2017). Aspectos socioeconômico dos agricultores familiares extrativistas do cumbaru no município de Poconé-Pantanal Mato-Grossense. *Revista Ibero-Americana de Ciências Ambientais*, 8(1), 62-73.

Mendonça, K. F. C., Ribeiro, Á. E. M., & Galizoni, F. M. (2019). Sucessão na agricultura familiar: estudo de caso sobre o destino dos jovens do alto Jequitinhonha, MG. *Anais...*, 1-20.

Mengel, A. A., Aquino, S. L., Deponti, C. M., & Arend, S. C. (2020). Agricultura Familiar e Soluções Tecnológicas—agentes locais como protagonistas na geração de conhecimento. *Redes*, 25(1), 84-103.

Mesquita, L. A. P., & Mendes, E. P. P. (2012). Agricultura familiar, trabalho e estratégias: a participação feminina na reprodução socioeconômica e cultural. *Espaço em revista*, 14(1), 14-23.

Minayo, M. C. S. (2004). *O Desafio do Conhecimento*. São Paulo: Hucitec.

Moreno, M. H. B., Schlindwein, M. M., & Camargo, G. M. D. (2019). Análise socioeconômica na agricultura familiar: uma avaliação da aplicação do PRONAF. *Seminário Internacional sobre Desenvolvimento Regional*.

Mumic, B., Aguiar, K. A. P., Livramento, D. E. do (2015). A importância do associativismo na organização de produtores rurais. *Revista de Iniciação Científica da Libertas*, 5(1).

Nascimento, D., Oliveira, E., Benini, E. G., Mello, G. S., Neto, L. F., & Teixeira, W. (2019). A dimensão política da economia solidária no ambiente rural: uma análise comparativa das categorias sociais de agricultores familiares e assentados da reforma agrária. *Revista Brasileira de Desenvolvimento Regional*, 6(2), 77-102.

Neu, V., Santos, M. A. S., & Meyer, L. F. F. (2016). Banheiro ecológico ribeirinho: saneamento descentralizado para comunidades de várzea na Amazônia. *Em Extensão*, 15(1), 28-44.

Nobrega, M. J. L., Costa, C. C., Barbosa, J. W. S., Reis, C. Q., & Silva, M. P. N. (2014). Perfil socioeconômico e ações dos agricultores familiares da comunidade rural de flores em Pombal, PB. *INTESA*, 8(1), 44-56.

Oladejo, A. J. (2010). Economic analysis of small-scale catfish farming in Ido Local Government Area of Oyo State, Nigeria. *Agricultural Journal*, 5(6), 318-321.

Oliveira, F. M. S., & Pessoa, A. S. G. (2018). A educação do caboclo-ribeirinho: problematizações acerca do currículo escolar e seus desdobramentos nas escolas ribeirinhas. *Colloquium Humanarum*. 15(4), 72-82.

Pinto Filho, J. L. O., Gonçalves, G. L., & Silva Lunes, A. R. (2019). Caracterização socioeconômica e ambiental da população das comunidades rurais da chapada do Apodi/RN. *Geosul*, 34(71), 697-712.

Rodrigues, P. L., Guimarães, J. B., Martins, C. M., Santos, M. A. S., & Rebello, F. K. (2017). Dinâmica socioeconômica e organizacional em comunidade remanescente do quilombo Rio Gurupá, Marajó, Pará. *Revista Verde de Agroecologia e Desenvolvimento Sustentável*, 12(1), 105-116.

Sangalli, A. R., Silva, H. C. H., Silva, I. F., & Schlindwein, M. M. (2015). Associativismo na agricultura familiar: contribuições para o estudo do desenvolvimento no assentamento rural Lagoa Grande, em Dourados (MS), Brasil. *Organizações Rurais & Agroindustriais*, 17(2), 225-238.

Santos, A. R., Felizardo, A. O., Nascimento, W. L. N., & Reis, A. A. (2015). Pluriatividade como estratégia de renda: o caso de um agricultor familiar na comunidade ribeirinha São João Batista, Pará. *Revista Tecnologia e Sociedade*, 11(23), 89-105.

Santos, F. R., & Neto, L. B. (2017). Movimentos sociais e políticas públicas de educação para as populações que habitam no meio rural. *Impulso*, 27(70), 17-32.

Santos, J. B., Bohn, L., & Almeida, H. J. F. (2020). O papel da mulher na agricultura familiar de Concórdia (SC): o tempo de trabalho entre atividades produtivas e reprodutivas. *Textos de Economia*, 23(1), 1-27.

Sauer, I. L., Rosa, L. P., Araujo, R. P., Carvalho, J. F., Terry, L. A., & Prado, L. T. S. “*A Reconstrução do Setor Elétrico Brasileiro*”. São Paulo. Ed. Paz e Terra, ed. UFMS. 2003, 39.

Silva, E. J. (2012). Jovens Agricultores: Entre a reprodução e a ressignificação da vida no campo. *V Simpósio sobre Juventude Brasileira*, 1, Recife/PE.

Silva, I. R. (2017). Modo de Vida Ribeirinho: construção da identidade amazônica. In: VIII Jornada Internacional de Políticas Públicas, 2017, São Luiz. *Anais...* São Luiz: Universidade Federal do Maranhão – UFMA. 22 a 25 de Agosto de 2017.

Silva, J. P. P., Silva Júnior, F. L. C., Ferreira, B. J. S., Oliveira, L. C., de; Oliveira, L. A. A., Silva, F. N. L. da. (2019). Associativismo em comunidade ribeirinha no arquipélago do Marajó, Pará, Brasil. *Revista Agraria Academica*. 2. 27-38.

Silva, R. P., Castro, N. R., & Pereira, F. O. (2019). Geração de valor econômico na agricultura familiar: diferentes retratos do produtor rural brasileiro. *Revista de Economia e Agronegócio*, 17(1), 56-80.

Simonian, L. T. L. (2010). *Palafitas, estivas e sua imagética na contemporaneidade urbano rural a Pan-Amazônia*. Belém: UFPA.

Soares, A. C. (2019). G20: Oportunidades para agricultura familiar e segurança alimentar. *Pontes*, 1, 6-7.

Sousa, E., Silva, R. A. D., Morais, F. C., Lima, E. R., & Lichston, J. E. (2019). Perfil dos agricultores de uma cooperativa de Apodi/RN, receptividade ao cultivo de cártamo e percepção sobre agrotóxicos e alternativas. *Nature and Conservation*, 12(3), 25-36.

Souza, C. F., Souza, J. M., & Veras, M. F. P. (2019). A vida ribeirinha amazônica: Alteridade, Territorialidade e Invisibilidade. *Anais dos Cursos de Pós-Graduação Lato Sensu UniEvangélica*, 3(1), 36-53.

Souza, F. M. (2012). *Caracterização socioeconômica e ambiental de produtos florestais não madeireiros de famílias agroextrativistas em Quatro Municípios de Goiás*. Dissertação (Mestrado em Ciências Florestais) – Universidade de Brasília.

Teo, C. R. P. A., Mossmann, M. P., Taglietti, R. L., & Triches, R. M. (2020). Agricultura familiar, alimentação escolar e a geração de oportunidades sociais para o desenvolvimento: experiências catarinenses. *Revista Grifos*, 29(49), 67-88.

Trindade Júnior, S. C. (2002). Imagens e representações da cidade ribeirinha na Amazônia: uma leitura a partir de suas orlas fluviais. *Revista Humanitas*, 18(2), 135-148.

Wurz, D. A., Dubiela, R. C., & Nunes, H. F. (2019). Perfil socioeconômico de produtores de morango no município de Canoinhas–Santa Catarina. *Revista Científica Rural*, 21(3), 13-27.

Zar, J. H. (1999). *Biostatistical Analysis*. (4th ed.), Prentice Hall, Upper Saddle River.

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