



AGRICULTURAL COOPERATIVES OF FAMILY FARMING IN THE STATE OF RIO DE JANEIRO AND ACCESS TO THE PUBLIC INSTITUTIONAL MARKET

**AS COOPERATIVAS AGROPECUÁRIAS DA AGRICULTURA
FAMILIAR DO ESTADO DO RIO DE JANEIRO E O ACESSO
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ABSTRACT

Brazil has a long history of building public policies in food and nutrition security, and one of the innovations in the recent period corresponded to the regulation of public food purchases from Family Agriculture (FA). This article aims to characterize the agricultural cooperatives of family farming in the State of Rio de Janeiro (ERJ) and problematize access to the institutional market, focusing on two essential programs: the National School Feeding Program (PNAE) and the Food Acquisition Program - Institutional Purchase (PAA-CI). Secondary data were used, both those made available openly and those obtained via the Access to Information Law (Lai), to outline the profile of agricultural cooperatives linked to Family Agriculture in the ERJ, as well as to analyze the potential for access to each of these Programs based on the geographical location criteria established by the PNAE and the PAA. Most of these cooperatives were created in the second decade of the 2000s to formulate public procurement policies that favor PA. These organizations are characterized as small and medium-sized due to the number of members who mostly have DAP and achieve local priority for both programs, predominating the categories of family farmers and agrarian reform settlers in their corporate composition. The study helped to elucidate that, given the characteristics of PA cooperativism in the state, government strategies and actions are still necessary to qualify its access to the public institutional market.

Keywords: Food and Nutrition Security; Public Policy; Family Farming.

RESUMO

O Brasil possui uma longa trajetória de construção de políticas públicas em Segurança Alimentar e Nutricional, em que uma das inovações no período recente correspondeu à regulamentação das compras públicas de alimentos da Agricultura Familiar (AF). Este artigo tem por objetivo caracterizar as cooperativas agropecuárias da agricultura familiar do Estado do Rio de Janeiro (ERJ) e problematizar o acesso ao mercado institucional, com foco no Programa Nacional de Alimentação Escolar (PNAE) e no Programa de Aquisição de Alimentos - Compra Institucional (PAA-CI). Foram utilizados dados secundários, tanto os disponibilizados de forma aberta, quanto os obtidos via Lei de Acesso à Informação (LAI), para traçar o perfil das cooperativas agropecuárias vinculadas à Agricultura Familiar no ERJ, bem como efetuar uma análise quanto ao potencial de acesso a cada um desses Programas a partir dos critérios de localização geográfica estabelecidos pelo PNAE e pelo PAA. A maioria dessas cooperativas foi criada a partir da segunda década dos anos de 2000, em contexto de formulação de políticas de compras públicas que privilegiam a AF. Essas organizações se caracterizam como pequenas e médias em razão do número de associados que, em sua maioria, são possuidores do DAP, predominando as categorias de agricultores familiares e de assentados de reforma agrária em sua composição societária, e alcançam prioridade local para os dois Programas. O estudo contribuiu para elucidar que ainda são necessárias estratégias e ações governamentais para qualificar o acesso ao mercado institucional público dada as características do cooperativismo da AF no ERJ.

Palavras-chave: Segurança Alimentar e Nutricional. Política Pública. Agricultura Familiar.

INTRODUCTION

Achieving the objectives of the National Food and Nutrition Security Policy (PNSAN) represents a challenge for the different programs that promote the strengthening of Family Farming (FF). The National School Feeding Program (PNAE) and the Food Acquisition Program - Institutional Purchase (PAA-CI) stand out as strategies that seek to expand food marketing opportunities for family farmers through the public institutional market (Brazil, 2003; 2009; 2020; 2022). PNAE and PAA-CI foresee the use of at least 30% of public resources for the acquisition of food from FF, whether those transferred by the National Fund for the Development of Education (FNDE) for school feeding or those destined for the acquisition of food by public institutions at different management levels (Brazil, 2009; 2020; 2023a), both through Public Call (PC).

The definition of family farming (FF) as a segment supplying food products to the National School Feeding Program (PNAE) and the Food Acquisition Program (PAA) is considered an innovation (Teo; Mossmann; Taglietti, 2017), since it facilitates access to previously inaccessible public resources (Brazil, 2009; 2022). In Brazil, FF has a normative definition, based on criteria such as area size, labor used, family income, and management of the agricultural establishment or enterprise by the family itself, which enables obtaining the Declaration of Aptitude to Pronaf (DAP) (Brazil, 2006). Originating with the creation of the National Program for Strengthening Family Farming (Pronaf), DAP constitutes a form of identification for



family farmers, the target population of the Program, but which ended up being required as a condition of access to several public policies, including PNAE and PAA. There is a network of agents issuing the document, consisting of Technical Assistance and Rural Extension (ATER) entities, unions, among others. Currently, DAP has been replaced by the Family Farming Registry (CAF), which provides for the identification of farmers and cooperatives through the Registration in the Family Farming Registry (RICAF).

Another aspect of the FF normative definition corresponds to the broad public, composed of family farmers and ranchers, harvesters, foresters, artisanal fishermen, aquaculturists, indigenous people, quilombola communities, settlers of agrarian reform, among others. According to the 2017 Agricultural Census, this segment comprises about 77% of the total number of agricultural establishments in the country. In the state of Rio de Janeiro (ERJ), the census survey indicated the existence of 43,786 FF establishments, corresponding to 67.13% of the state's agricultural establishments (IBGE, 2019).

Cross-sectional studies have been pointing to the benefits of institutional purchasing programs. With regard to the National School Feeding Program (PNAE) and the Food Acquisition Program (PAA), there is a shortening of the marketing chain, avoiding intermediaries and reducing food prices for consumers, the promotion of better use of perishable foods, the appreciation of farmers through increased income and job creation, the preservation of cultural traditions and sustainable production practices, as well as the diversification of foods produced (Barbosa et al., 2020; Corbo, 2021; Dias et al., 2021; Saraiva et al., 2013; Teo; Mossmann; Taglietti, 2017; Triches et al., 2019; Turpin, 2009; Valent; Silva, 2021; Vargas, 2017). In addition, by establishing a minimum percentage for the purchase of food from family farmers, the PNAE broadened its focus to promote development (Marques; Dalbianco, 2025). From this perspective, some studies have highlighted the contribution and relevance of the National School Feeding Program (PNAE) to regional development through the encouragement of cooperativism, local marketing networks, and technical assistance strategies (Machado; Silva, 2025), among other aspects.

On the other hand, studies have also demonstrated some challenges, such as the lack of institutional support and technical assistance to farmers (Carmo et al., 2021; Triches et al., 2019), resulting in instability in the food supply. Regarding PNAE, challenges relate to the need for production planning by farmers, the requirements in terms of documentation, the logistics required, the difficulty of communication between the actors involved, among other aspects (Saraiva et al., 2013; Teo; Mossmann; Taglietti, 2017; Triches et

al., 2019). Regarding the Food Acquisition Program (PAA), the literature has highlighted its potential to link food production to local consumption, while at the same time observing limitations in including rural settlements, as well as indigenous and quilombola communities, despite the Program's emphasis on these groups (Grisa et al., 2010). Studies also report problems such as flaws in the structure of Public Calls (PC), outsourcing, lack of stakeholder involvement, lack of knowledge of legislation, and changes in the political scenario (Salgado et al., 2022; Triches et al., 2022).

The organization of family farmers into associations and cooperatives has been identified as a strategy to overcome these challenges. Among the organizational forms, cooperatives constitute civil societies based on cooperation, solidarity, democracy, sustainability, and equity. Since the 1970s, Brazil has instituted, through law, the National Policy on Cooperativism (Brazil, 1971), which established the legal regime for cooperative societies. It is evident that the social framework of Brazilian agricultural cooperativism is primarily composed of family farmers, with the Legal DAP (Declaration of Aptitude to Pronaf) being established to identify the associative forms of family farming organization, which requires a minimum percentage of 50% of farmers with an Active Physical DAP in its corporate composition (Brazil, 2006; 2021). Thus, different associative organizational arrangements are identified as being from family farming, qualifying them to access public policies directed to this segment, such as PNAE (National School Feeding Program) and PAA (Food Acquisition Program).

It is important to consider the regional differences that impact the organizational potential of farmers and access to the public institutional market offered by PNAE and PAA. In this sense, Rio de Janeiro is the federative unit with the highest degree of urbanization in Brazil (IBGE, 2011), where the extrapolation of urbanization to rural areas is identified, bringing new economic activities to the countryside, impacting the producer profile and food production in the region. Although the state of Rio de Janeiro is still able to maintain its agricultural activities (Marafon, 2017; Souza, 2019), in 2017 most of the state's municipalities, characterized as urban, did not meet the minimum percentage of purchase of agricultural products from FF for the National School Feeding Program (PNAE) (Dias et al., 2021).

Considering the specificities of the state of Rio de Janeiro, this article aims to answer the following questions: what is the number of agricultural cooperatives holding a Legal DAP (Declaration of Aptitude to Pronaf) in the state of Rio de Janeiro? What is the profile of these organizations and

their regional location? Considering the priority criteria foreseen in these Programs, how does this profile affect access to PNAE and PAA?

This is a current issue that has been raised by family farmers in the state in various discussion forums, such as meetings and public hearings. Furthermore, studies addressing these Programs in the state of Rio de Janeiro have focused more on those who purchase family farming products, notably municipal administrations (Barbosa et al., 2020; Dias et al., 2021), leaving open the analysis of those who supply the food, i.e., family farmers and their organizations (associations and cooperatives). Thus, this article aims to characterize agricultural cooperatives of family farming in the state of Rio de Janeiro and to problematize access to the institutional market, focusing on the National School Feeding Program (PNAE) and the Food Acquisition Program (PAA).

METHODOLOGY

This work aligns with the field of studies on public policy implementation (Lotta, 2019), which seeks to extend the focus to the moment when the policy is put into practice. The study assumes that the implementation of public policies is incremental and can generate unforeseen results, producing changes in contexts, operational designs, as well as in their own results, in a two-way street (Hall, 1993; Howlett; Ramesh, 2003).

Based on the above, a descriptive documentary study was carried out, involving the use of both publicly accessible and restricted access secondary data. Restricted access data were obtained considering the Access to Information Law (LAI), through Fala.BR - the Integrated Platform for Ombudsman and Access to Information of the Federal Government. Data collection took place between May and June 2023, through a request to the Ministry of Agrarian Development and Family Agriculture (MDA) for a list of agricultural cooperatives holding Legal Declaration of Aptitude to Pronaf (DAP) in the state of Rio de Janeiro (Brazil, 2023b).

The analysis of the characterization of cooperatives considered the criteria established by the National Policy for Family Farming and Rural Family Enterprises, under the terms of the legislation (Brazil, 2006), which provides DAP for Family Production Units (Individuals), Associative Forms of Family Farming and Rural Family Enterprises (Legal Entities), Cooperatives (Legal Entities) and Associations (Legal Entities).



Based on the list of agricultural cooperatives in the state of Rio de Janeiro holding Legal DAP, the DAP extract was located on the MDA website. The following information was sought to characterize the cooperatives: (1) length of existence; (2) geographic location; (3) number of associated farmers with and without DAP; (4) segments that make up their social framework. Data analysis was descriptively presented, with the categorization of the aforementioned variables. Regarding geographic location, the regional classification proposed by the State Center for Statistics, Research and Training of Public Servants of ERJ (Ceperj, 2018) was used, resulting in the creation of geographic maps for the location of associative forms in ERJ.

The location of each agricultural cooperative of family farming was verified for the purpose of comparative analysis regarding the potential for access to PNAE and PAA, using as a reference the criteria established by each Program, as shown in Table 1:

Board 1 | Geographic location criteria according to PNAE and PAA.

PNAE (Resolution No. 6 of May 8, 2020).	PAA (Resolution No. GGalimenta 3, of June 14, 2022).
<p>Article 35:</p> <p>§ 2. In the case of a Legal DAP (Declaration of Aptitude to Pronaf), the term “location” refers to the municipality with the highest absolute number of Physical DAP registered in the Legal DAP extract.</p> <p>§ 3. Among the project groups, the following order of priority for selection must be observed:</p> <p>I – The group of projects from local suppliers has priority over the other groups;</p> <p>II – The group of projects from suppliers in the Immediate Geographic Region has priority over those in the Intermediate Geographic Region, the state, and the country;</p> <p>III – The group of projects from suppliers in the Intermediate Geographic Region has priority over those in the state and the country;</p> <p>IV – The group of projects from the state has priority over those in the country.</p>	<p>Article 10. For selection purposes, the eligible sales proposals must be divided according to the following order of priority:</p> <p>I - groups of projects from local suppliers,</p> <p>II - group of state projects,</p> <p>III - group of regional projects, and</p> <p>IV - groups of projects from the country.</p> <p>§ 1. In the case of a Physical DAP or CAF, “location” refers to the municipality indicated in the DAP or CAF.</p> <p>§ 2. In the case of a Legal DAP or CAF, “location” refers to the municipality where the CNPJ (Company Registration Number) of the productive organization is registered.</p>

Source: Brazil (2020; 2022).

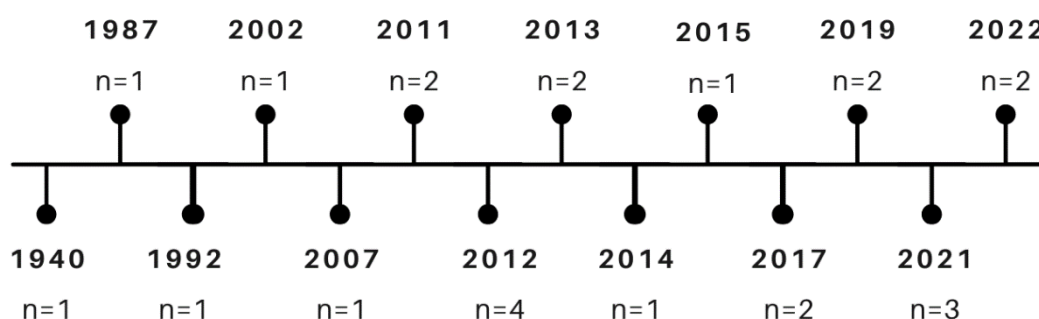


For the National School Feeding Program (PNAE), the location is determined by the highest number, in absolute terms, of Physical DAP registered in the cooperative's Legal DAP extract. In the case of the Food Acquisition Program (PAA), the location is determined according to the Company Registration Number (CNPJ), being defined by the cooperative's headquarters.

RESULTS

From data collection, 23 (twenty-three) agricultural cooperatives and 1 (one) association of cooperatives holding Legal DAP were identified in the state of Rio de Janeiro (ERJ) (Figure 1). Of these cooperatives, 21 (twenty-one) were created from the year 2000 onwards, with more than half of them founded after the publication of the PNAE and PAA legislation. However, there is the case of a cooperative located in the municipality of Barra Mansa, whose foundation dates back to 1940.

Figure 1 | Number of agricultural cooperatives holding Legal DAP in the state of Rio de Janeiro, according to the year of creation.



Source: Authors' elaboration, based on data from MDA (Brazil, 2023c).

Table 1 highlights that most cooperatives have a membership of up to 49 (forty-nine) members, while 3 (three) of them are constituted by the minimum number, corresponding to 20 (twenty) members. Furthermore, there are 4 (four) cooperatives that have more than 101 (one hundred and one) members, with the largest number being presented by an association of cooperatives in the municipality of Rio de Janeiro, which has 580 (five hundred and eighty) members (data not presented).

Table 1 | Distribution of agricultural cooperatives in the state of Rio de Janeiro according to the number of members in 2023.

Number of members	Cooperatives	
	n	%
From 20	3	12.5
From 21 to 50	15	62.5
From 51 to 100	2	8.3
Above 101	4	16.6
Total	24	100

Source: Authors' elaboration, based on data from MDA (Brazil, 2023c).

Of the total number of members of these organizations, 77.75% (n=1,586) of members have a Physical DAP (data not shown in the table). In Table 2, it can be observed that most cooperatives have between 90 and 100% of members holding a Physical DAP. However, two cooperatives had the status of Legal DAP blocked for not meeting the minimum percentage of family farmers with Active DAP in their corporate structure at the time of data collection.

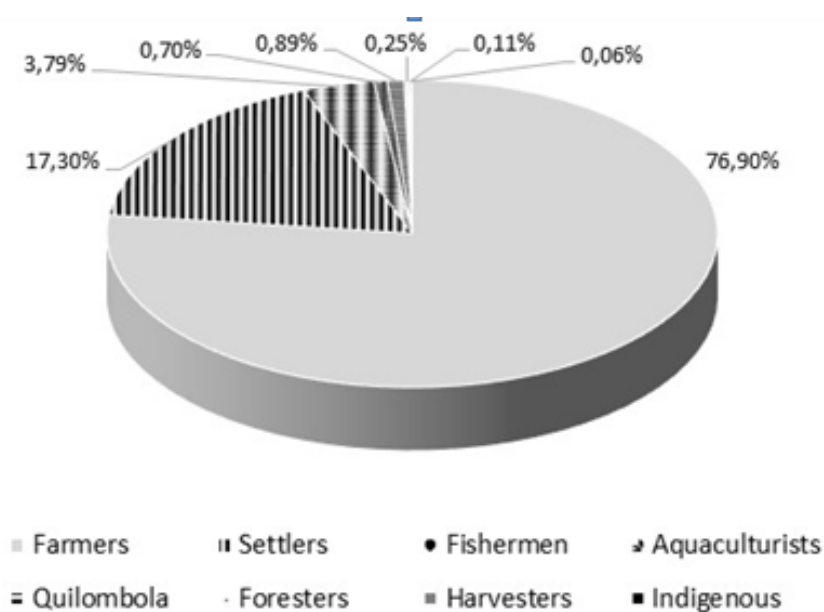
Table 2 | Distribution of agricultural cooperatives in ERJ according to the percentage of members with Physical DAP in 2023.

Percentage of members with DAP	Cooperatives	
	n	%
Below 50%	2	8.4
From 50 to 69,9%	6	25
From 70 to 89,9%	5	20.8
From 90 to 100%	11	45.8
Total	24	100

Source: Authors' elaboration, based on data from MDA (Brazil, 2023c).

Figure 2 shows the segments that make up the social framework of agricultural cooperatives holding a Legal DAP in the ERJ in 2023. The vast majority of cooperative members holding a Physical DAP are family farmers (n=1,219 members), followed by settlers (n=275 members), fishermen (n=60 members), quilombola communities (n=14 members), aquaculturists (n=11 members), foresters (n=4 members), harvesters (n=2 members), and one indigenous member.

Figure 2 | Percentage of segments that make up the social framework of agricultural cooperatives in the ERJ in 2023.



Source: Authors' elaboration, based on data from the MDA (Brazil, 2023c).

This diversity of segments is reflected in the social framework of cooperatives. Of the 24 (twenty-four) organizations, 9 (nine) cooperatives have their social framework composed of only one type of public, with 8 (eight) organizations consisting only of farmers and 1 (one) consisting only of fishermen. Most cooperatives are composed of more than one public: in 5 (five) of them, the social framework involves farmers and settlers, while in another 4 (four) they involve distinct arrangements between farmers and foresters, aquaculturists, harvesters and quilombola people. In another 5 (five) cooperatives, the social framework integrates three or more different publics (data not presented in the table).

Table 3 shows the distribution of FF organizations and family farmers with DAP by region. There is a greater distribution of cooperative headquarters in the Metropolitana and Serrana regions of the state, which is reflected in the number of members holding Physical DAP in these regions. As for the number of members with DAP, the Metropolitana, Serrana and Médio Paraíba regions stand out. It should be mentioned that two cooperatives have members holding Physical DAP located in other states, namely São Paulo and Minas Gerais.

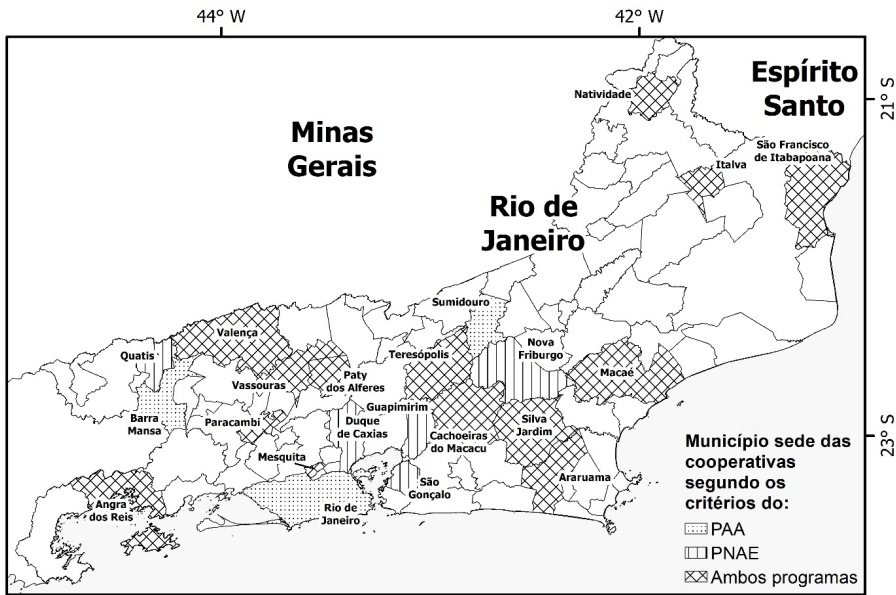
Table 3 | Distribution of cooperative headquarters and their members with DAP by geographic regions of the state of Rio de Janeiro, according to the CEPERJ classification.

ERJ region	Cooperatives		Total number of members with DAP	
		n		n
Metropolitana		7		274
Serrana		4		288
Baixas Litorâneas		3		133
Centro-Sul		3		170
Noroeste Fluminense		2		193
Norte Fluminense		2		174
Médio Vale do Paraíba		2		280
Costa Verde		1		37
Total		24		1549

Source: Authors' elaboration, based on data from MDA (Brazil, 2023c)

Figure 3 presents a map showing the distribution of cooperative headquarters according to the location criteria described in the PNAE and PAA legislation. As can be seen, the vast majority of organizations meet the location criteria for both Programs, totaling 83.3% (n=20). Only 16.7% differ in terms of location criteria for both Programs (n=4), being considered as locations in two municipalities according to the Program: Rio de Janeiro (PAA)/Duque de Caxias and Guapimirim (PNAE); Barra Mansa (PAA)/Quatis (PNAE); Sumidouro (PAA)/São Gonçalo (PNAE); Rio de Janeiro (PAA)/Nova Friburgo (PNAE).

Figure 3 | Map of the distribution of cooperatives in the state of Rio de Janeiro according to the location criteria of PNAE and PAA.



Cooperative headquarter municipality according to criteria from PAA PNAE Both Programs

Source: Authors' elaboration.

DISCUSSION

Data collected indicate that more than half of FF organizations in the state of Rio de Janeiro were founded after 2011, possibly reflecting the expansion of opportunities for commercialization through public food policies of the National School Feeding Program (PNAE) and the Food Acquisition Program (PAA) (Brazil, 2009; 2012; 2018; 2021). Dias et al. (2021) pointed to the evolution in food purchases from FF organizations in programs such as PNAE, showing the growth of this institutional market in the state of Rio de Janeiro.

In this context, the fundamental role of organizational processes fostered by public policies is highlighted (Grisa; Schneider, 2014). PAA induced a new trajectory focused on public institutional procurement from family farmers, which, in 2009, gained strength with the PNAE legislation, regulating the use of federal resources and guaranteeing a specific market for family farmers and their organizations (Brazil, 2009; Grisa; Schneider, 2014; Turpin, 2009).

It is also worth highlighting the market opening made possible by the Institutional Purchase (IP) modality of PAA in 2012, allowing public institutions at all levels of the federation to acquire food from family farmers, with their own financial resources and through bidding exemption. However, this market is still incipient. A study has indicated that, in a national universe of 64 (sixty-four) Brazilian universities, only 5 (five) from the Southeastern region purchased food from family farmers between 2012 and 2019 (Salgado et al., 2022). The PAA-CI (Food Acquisition Program - Institutional Purchase) is not widely documented in the scientific literature, as is the case with public purchase of family farming products for school meals (Triches et al., 2022), which has the prerogative of monitoring and overseeing the federal government in relation to the transfer of financial resources. In the case of self-management of the public entities' own resources, oversight is the responsibility of external control bodies, such as the Comptroller General of the Union, the Public Prosecutor's Office, and the Court of Auditors. Furthermore, many public bodies have been outsourcing food services and transferring the responsibility for purchasing family farming foods to the private sector, which makes purchasing unfeasible and distorts the public policy objective of shortening supply chains, bringing farmers and consumers closer together, strengthening priority groups, and the role of the State as a generator of alternative and sustainable food systems (Triches et al., 2022). This



leads public bodies to create strategies to enable purchasing, even with the outsourcing of food services, considering the importance of these programs for the Food and Nutritional Security of the groups served.

The National School Feeding Program (PNAE) and the Food Acquisition Program (PAA) are programs that enable farmers to access the public institutional market and encourage agricultural cooperativism and associativism for the socioeconomic development of food producers (Costa et al., 2020). Furthermore, due to the fact that Rio de Janeiro is a highly urbanized state (Souza, 2019), there are increasingly more families dedicating themselves to food production in urban and peri-urban areas, thus being able to access these programs. This associative format allows for greater organization of agricultural production, adoption of more profitable technologies, and expansion of food marketing with better prices, as well as technical assistance and financing (Gong; Battese; Villano, 2019). It is important to recognize cooperatives as an instrument to combat poverty in rural areas (FAO, 2012). When evaluating the impact of cooperatives and associations on the Brazilian family farming production, a study showed that collective production organizations contributed to increased production in smaller-scale agriculture in Brazil (Ramos; Vieira Filho, 2023). Despite the benefits of cooperativism, it should be mentioned that larger cooperatives have larger infrastructure and end up focusing on the institutional market of large cities, which involves a greater volume of financial resources, often acting as intermediaries in the food marketing, thus distorting the social profile of cooperatives (Baccarin et al., 2017). Therefore, it is necessary for control and technical assistance bodies to be attentive to these distortions.

Although the number of cooperatives in the state of Rio de Janeiro has increased in the last decade, it is still modest compared to other Brazilian regions, even in terms of the number of members, which characterizes the state as predominantly composed of small cooperatives, with the vast majority not exceeding 50 members. It could be inferred, therefore, that these organizations operate at the local and regional levels, constituting a form of inclusion for farmers and other populations in accessing markets through production chains. A study conducted in 2020 described that the number of Physical and Legal DAP holders in the state of Espírito Santo is five times greater than that in Rio de Janeiro (Gonçalves; Gama; Medina, 2020). The authors also reported that in

the same year, the state of Rio de Janeiro had an average of 20,000 members with Physical DAP, ten times greater than the number of Legal DAP holders, with 2,600 members in that category. Furthermore, in the same year, they used on average only 20% of the PNAE resources for the purchase of family farming products. The authors also identified that 70% of municipalities did not meet the requirements of using at least 30% of the resources for the purchase of family farming products (Gonçalves; Gama; Medina, 2020).

Public institutions of the state of Rio de Janeiro, whether through PNAE or PAA, offer a market potential that attracts organizations from other states. Thus, it is not uncommon for cooperatives from southern Brazil to participate in public calls, and sometimes to be the winners of processes in the state of Rio de Janeiro. This dynamic can compromise the effectiveness of the policy in promoting regional development, since the appropriation of resources transferred by the FNDE ends up being carried out by organizations outside the state of Rio de Janeiro. The Southern region of the country stands out with the greatest potential for organizing cooperatives, with the largest number of cooperatives and the highest number of members, followed by the Northeastern and Southeastern regions, with the state of São Paulo standing out in the latter (Harold et al., 2022; Silva; Schultz, 2017).

The social framework of these organizations reflects the diversity of the population that compose family farms in the ERJ, which includes a wide range of social categories, among them farmers, fishermen, aquaculturists, harvesters, foresters, indigenous people, and quilombola communities. Most cooperatives have more than one type of public in their social framework, with distinct arrangements, and one cooperative even has an indigenous person among its members. More than reflecting the social diversity of the rural environment, the presence of publics such as settlers, quilombola and indigenous people in the social framework can be an “advantage” when the cooperative submits proposals for public food procurement programs. Taking the National School Feeding Program (PNAE) as an example, among the tie-breaking criteria for proposals established by FNDE Resolution No. 26/2013, is the membership consisting of agrarian reform settlers, traditional indigenous communities, and quilombola communities, following the criterion of local suppliers in the municipality (Brazil, 2013). Prioritizing proposals involving agrarian reform settlers, indigenous

people, and quilombola communities signals an effort to overcome one of the limitations pointed out by Grisa et al. (2010), which concerns the inclusion of these groups in public food procurement programs. This effort was recently expanded with the publication of a Technical Note that aims to broaden access for traditional peoples and communities to the National School Feeding Program (PNAE) by making the DAP presentation non-mandatory, allowing the use of only the Social Identification Number (NIS) of the indigenous family, quilombola people, or Traditional and Specific Population Groups in the Single Registry for Social Programs (CadÚnico) (Brazil, 2023a).

If the growth of the institutional market in the state of Rio de Janeiro is one of the driving factors behind the creation of cooperatives, it is observed, on the other hand, that the municipalities of the ERJ face difficulties in reaching the minimum percentage of food purchases from family farming established by law. The difficulty is more pronounced in larger municipalities, with high urbanization rates, high mobilization of resources and large number of school units, where family farmers' organizations face difficulties in meeting the high demand for food products and dealing with the complexity of their transportation (Barbosa et al., 2020; Dias et al., 2021). On the other hand, the results show that there is a greater presence of organizations in the Metropolitana region, which is more urbanized and populous in the state of Rio de Janeiro, and therefore has the potential to access the institutional market of PNAE and PAA.

As previously mentioned, in the state of Rio de Janeiro, agricultural activity has been losing importance compared to other sectors of the economy. In the present study, it was identified that two cooperatives had their Legal DAP status blocked for not meeting the minimum percentage of Physical DAP holders, possibly because farmers did not meet the criteria defined by law due to the diversification of their work activity. In addition, difficulties in accessing Technical Assistance and Rural Extension (ATER) may also limit access to Physical DAP. Physical DAP has been one of the main instruments to differentiate family farmers from other social categories; however, it can constitute a "barrier" to accessing public policies due to the requirements in terms of family income composition.

In this context, government food procurement programs can play an important role in regional development. Analyzing the trajectory and role of different Family Farming organizations,

Moreira et al. (2023) point to their contribution to the expansion and strengthening of institutional markets in the state of Minas Gerais, helping to boost social capital and income generation in the countryside. In turn, the study carried out by Araújo and Fahd (2023) in the city of Castro, state of Paraná, identified the strengthening of the economy and local development through the retention of resources from the National School Feeding Program (PNAE) and the Food Acquisition Program (PAA) within the region. According to the authors, there was a contribution to local and regional development through production diversification, institutional strengthening, the opening of new markets, investment in productive activity, and income generation, reducing rural exodus. Thus, this work reinforces the considerations of these studies, pointing to the potential of PNAE and PAA to support regional development in the state of Rio de Janeiro, insofar as they promote food and nutritional security, strengthen family farming, generate employment and income, using cooperative organizations as instruments.

It is worth noting that there has recently been a change in the location priority criteria for the National School Feeding Program (PNAE) (Brazil, 2020). Therefore, organizations must deal with two different criteria when submitting sales proposals, which has resulted in some degree of dissatisfaction by limiting access to one of the programs in certain contexts. This difficulty has led to strategies on the part of organizations, such as maintaining an equal number of associated farmers in two municipalities to increase priority in the PNAE market. This is because, according to the regulations of this program, what identifies the headquarters municipality is the larger number of associated farmers. In contrast, in the Food Acquisition Program (PAA), the headquarters municipality is the one where the CNPJ (Company Registration Number) is registered. However, the study revealed that most organizations are considered local for both Programs, identifying that the largest number of members is in the same region as the organization's headquarters.

CONCLUDING REMARKS

This study contributed to outlining the scenario of family farming organizations in the state of Rio de Janeiro. The cooperatives in the state of Rio de Janeiro are characterized as small and medium-sized due to the number of members, since a large part does not exceed 100 (one hundred) members, most of whom holding a Physical DAP (Declaration of Aptitude to Pronaf). The Metropolitana and Serrana regions concentrate almost half of cooperatives, in whose composition the categories of family farmers and agrarian reform settlers predominate. Furthermore, most cooperatives achieved local priority for both Programs, PNAE (National School Feeding Program) and PAA (Food Acquisition Program), suggesting that there is no difficulty of access, considering that the largest number of members are in the same region as the cooperative's headquarters.

The mechanisms of public institutional purchases through PNAE and PAA have proven to be inducers of organizational processes of family farmers, with a view to guaranteeing a more stable production flow. The study helped to elucidate that government strategies and actions are still needed in the state of Rio de Janeiro to promote cooperativism and associativism, aiming to enable family farmers to access the public institutional market of the National School Feeding Program (PNAE) and the Food Acquisition Program (PAA), programs considered important for social inclusion and socioeconomic development in the region. In addition, it was demonstrated that there are still family farmers without Physical DAP (Declaration of Aptitude to Pronaf), which may be related to a lack of technical assistance.

However, the existence of two government food procurement programs, each with different prioritization criteria, means that farmers have to adopt two conceptions of locality as a form of access, which may constitute a problem in the implementation of the public policy. Thus, the proposal is to standardize the criteria for access to public policies that have common objectives, aiming to facilitate understanding by family farmers and their organizations. Other suggestions for improving public policy are: i) implementation of an ATER program focused on family farming cooperativism by the federal government; ii) development of projects and other actions in partnership with Universities; iii) strengthening of ATER (Technical Assistance and Rural Extension) in the state of Rio de Janeiro, replenishing the outdated technical staff of the official entity; iv) implementation of support programs for Family Farmers by municipal administrations.

It should be highlighted that further studies are needed, especially to identify the number of organic and agroecological farmers in the state of Rio de Janeiro, who are considered priority groups for these Programs, with a view to analyzing the challenges this segment faces in accessing the public institutional market.

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