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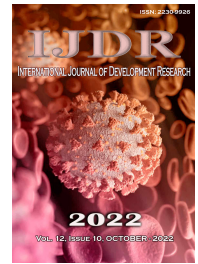
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RESEARCH ARTICLE

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IMPACT OF PNAE ON FAMILY FARMING: A LITERATURE REVIEW

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ABSTRACT

This article aimed to understand the impact of PNAE for the development of family farming in the municipalities of the São Francisco Valley, through the interdependence between the National School Meals Program - PNAE and the producers benefited by the hiring preference established by Law 11.947/2009, which determines that at least 30% of the amount transferred by FNDE for school meals should be used for the purchase of products from family farming. We considered original literature review articles, theses, dissertations, case studies and experience reports that addressed the topic, published in the last 10 years. The results showed that the PNAE has proven to be an important instrument in ensuring the flow of production, allowing new market niches for family farmers, improved income for producers participating in the program, the appreciation of regional foods and boosted the territorial development of the region.

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INTRODUCTION

From the 1990s, the Brazilian State, through the Ministry of Agrarian Development (MDA) began to incorporate, within the scope of public policies, the perspective of territorial development articulated with broader regional development policies. With the decentralization of public policies and the redirection of State intervention, the State reformulated its actions, which were no longer solely sectoral (FAVARETO, 2007), and adopted new perspectives of planning, which received influences from the territorial approach experimented in several European countries (SILVA, 2012). For Hespanhol (2010), Wanderley and Favareto (2013), from the management of President Fernando Henrique Cardoso (1995-2002), there was a reconfiguration of state actions and the landmark of the incorporation of the territorial development approach as a subsidy for the implementation of government programs, such as the National Program for the Strengthening of Family Agriculture (PRONAF) in the modality Infrastructure and Municipal Services. During the administration of President Luiz Inácio Lula da Silva, many public policies were implemented, such as, for example, the creation of the Secretariat of Territorial Development (DST). The agglutination of several municipalities with similar social and economic indicators, such as the Human Development Index (HDI), allowed, in 2004, the creation of

the Rural Territories Sustainable Development Program (PRONAT), and, finally, the institutionalization of the Citizenship Territories Program (PTC). With this, other public policies ended up bringing territorial development into their implementations and analyses, but on another scale of execution - the municipal. An example of policies at the municipal scale is the National School Meals Program (PNAE), created in 1955, restructured in 1994 because of the decentralization process and reformulated in 2009 with the institutionalization of Law 11947. The PNAE aims to ensure, on the one hand, elementary and middle schools, Youth and Adult Education (EJA), indigenous schools, quilombolas and preschools, a healthy diet and, on the other, from the enactment of Law No. 11947 of 2009, the possibility of constituting a marketing channel for products from family farming (BRASIL, 2009). PNAE is a decentralized policy that aims to achieve food and nutritional security and, at the same time, the participation of family farming. However, there are several challenges to the applicability of this policy that range from its creation to its implementation on a municipal scale, due to the particularities and conflicts present in the municipalities, such as the lack of dialogue between those involved about better prices, lack of planning, delays in calls for proposals, orders out of season and delays in payments. Thus, we sought to understand how the management of PNAE resources works in the municipalities of Juazeiro/BA and Petrolina/PE, and whether it is possible to say that the management of PNAE has had a positive impact on family farming. Juazeiro/BA and Petrolina/PE are

part of the Integrated Administrative Development Region (RIDE), created by complementary law no. 113, on September 19, 2001, and regulated by decree no. 4 366, on September 9, 2002, encompassing more than 700 thousand inhabitants in an area of about 35 thousand square kilometers. In this sense, this article aimed to understand the impact of the PNAE for the development of family agriculture in the municipalities of the São Francisco Valley, and is organized as follows: in the first part there is the introduction; in the second part the theoretical framework that supports the research; in the third part are the methodological bases with the description of materials and methods used; in the fourth part there are the results with the discussions; and finally there are the final considerations and the references used.

THEORETICAL FRAMEWORK

Territorial Development, Public Policies and Governance:

Development as a territorial dimension establishes the importance of analyzing the local scale as the effective place of elaboration, but not the only one of the development processes. The idea of territorial development is beyond the field of regional/local development and brings aspects that strongly differ from the development plans centralized in the State, which have always attended to an industrial policy and that most of the time, ignores or disregards the local territorial characteristics and the social organization of the region in question. According to Pecquer (2005) and Pires *et al* (2017), territorial development (local, endogenous, or bottom-up), involves the mobilization of actors, resources, and institutions with a strong spatial link, aiming to leverage the competitiveness of local economic activities and provide social and cultural well-being to the community living in this environment. Thus, there are two basic concepts for understanding territorial development, which are, territory and (territorial) governance. According to Llorens (2001) and Pires *et al* (2017), territory is the result of a historically and spatially determined social construction, being permeated by the existence of identity, specific political, economic, and social contours, being an unstable and changeable product. It is a dimension of the geographic space in which the material content and the immaterial-institutional are articulated. Thus, understanding it as a socially organized space, territory can be seen and accepted as an actor of development.

On the other hand, governance, as a management tool, results in a process that implies the development of multiple forms of integration and participation, the construction of less hierarchical and bureaucratic structures and activities, and the recognition of rules and norms capable of regulating collective action, to create learning and adaptability mechanisms that allow the adequate resolution of common problems. According to Pires (2017), territorial development should be inferred as a process of social change of endogenous character, capable of producing solidarity and citizenship (social and democratic participation). Moreover, it should lead in an integrated and permanent way to qualitative change and improvement in the well-being of the population of a locality or a region. In the competitive strategies of globalization, territorial development is driven by the expectations of economic agents on locational advantages, in which territory is the main actor in regional economic development, and policies, organizations, and governance are specific resources, either available or to be created; when available, it would be a matter of their diffusion in the territory, when absent, of their creation/construction. Therefore, it follows that territorial development strategies have an indeterminate character and are supported by not only economic, but also social, cultural, and territorial factors.

Family Agriculture, Agroecology and the Relevance of Pnae: The National Policy for Family Farming and Rural Family Businesses - Law No. 11.326, of July 24, 2006, known as the Family Farming Law, defines a family farmer and a rural family entrepreneur as one who practices activities in rural areas and simultaneously meets the following requirements:

- does not hold, for any reason, an area larger than 4 (four) fiscal modules.
- uses predominantly his own family's labor in the economic activities of his establishment or enterprise,
- has family income predominantly originating from economic activities linked to the establishment or enterprise itself.
- runs their establishment or enterprise with their family. Small rural producers, traditional peoples and communities, agrarian reform settlers, foresters, aquaculturists, extractivists and fishermen are considered family farmers (BRASIL, 2022, *s.p.*).

In Brazil, family farming occupies an area extension of 80.9 million hectares, which represents 23% of the total area of Brazilian agricultural establishments. The 2017 Agricultural Census survey, conducted on more than 5 million farms across Brazil, points out that 77% of the country's agricultural establishments were classified as family farming. Also, according to the statistics, family farming employed more than 10 million people in September 2017, which corresponds to 67% of the total number of people employed in agriculture and cattle ranching and is responsible for the income of 40% of the economically active population (EMBRAPA, 2022). Over time, the role of family farming in Brazilian development has been gaining strength, driven, by the conception of durable development, employment and income generation, food security, and local development (FAO, 2016). In this regard, Law 11947/09 stipulates that 30% of the funds transferred to states, municipalities, and the Federal District by the FNDE be used to purchase food directly from family farms and rural family entrepreneurs or their organizations, making a connection between family farming and school meals. By providing that the school meals menu should be healthy and appropriate, including the use of varied and safe foods, respecting the culture, traditions, and healthy eating habits, and supporting sustainable development, it promotes the acquisition of diversified foodstuffs, seasonal, produced locally and by family farms (BRAZIL, 2009).

The purchase of family farming products for school meals is regulated by Resolution CD/FNDE No. 26 of June 17, 2013 (updated by Resolution CD/FNDE No. 21 of November 16, 2021), which provides for the provision of school meals to students in basic education under the PNAE. Based on the Resolution, the General Coordination of the National School Feeding Program - CGPAE/FNDE prepared the Manual for the Acquisition of Family Farming Products for School Feeding, which aims to present the step-by-step process of acquiring family farming products (BRASIL, 2022). Family farming is present in all ecosystems of the country and is characterized by a great diversity of organization and resilience in each of the Brazilian biomes, ensuring food and nutritional security for the population. The way family farms are managed, using inputs from their own property or from the surroundings, their own labor, their tendency to multiply local genetic materials, and their participation in short commercialization circuits, bring them closer to agroecological principles. Another link by affinity that family farming has is with the production of ecosystem services, such as water production, maintenance of pollinator species, increase and maintenance of soil fertility, control, and reduction of erosion, increase of intra and interspecific biodiversity in crops (MATTOS, 2011; TOLEDO, 1985). From 1970 on, the results of the "application of conventional development strategies already began to prove insufficient to account for the growing conditions of inequality and social exclusion [...]" (CAPORAL; COSTABEBER, 2002, p. 23). These authors argue that, although there has been an increase in Gross Domestic Product (GDP), studies pointed out that such measures were bringing considerable environmental damage. The consequences caused by agrochemicals, waste, and gas pollution, as well as several other problems arising from the life model of highly industrialized societies, raised awareness about the inability to control these specific externalities of the hegemonic model and the indispensability of another development. It was from this context that Agroecology started to be developed in Brazil. According to Gliessman (2005), Agroecology has three basic components for sustainability: grounding in ecological principles,

economic viability, and social equity. With the publication of Law 11.326 of 24/07/2006, family agriculture has advanced in the consolidation of specific policies for the sector, as well as being recognized by the Brazilian society, as a strategic sphere for social and economic development, since it is responsible for 70% of the food production that makes up the basic food basket of Brazilians.

In addition to being responsible for 70% of food production, another fact of extreme importance, given the environmental crisis of global proportions facing humanity, is the capacity for conservation and sustainable use of natural resources and biodiversity found in family farming. Some authors place that, under the prism of stability, resilience and equity, there are many advantages presented by the family organization, due to its emphasis on diversification and the malleability of its decision-making process, adding other attributes such as, the use of internal inputs, in the durability of natural resources and quality of life, which highlight more ecological productive forms (KAUFMANN; PASQUALOTTO; SENA, 2019). From this point of view, agroecology meets the need for alternatives to adapt the varieties to the difficulties of each agricultural ecosystem, aiming to enhance the production of the family farmer, respecting the environment, through tools that improve production without harming the environment and the health of the worker. For Chaves and Campos (2012), family farming is an important ally in the implementation of sustainable rural development, as a productive and social segment, due to the fact that it is an essential element, both for internal consumption and food security of the population, and for the occupation and generation of jobs in rural areas, so that families do not leave their rural properties to live in urban centers. From this perspective, family farming has gained support in public policies, not only for allowing a way of cultivating that does not harm the environment, but also for ensuring the production of healthy food and assisting in food security.

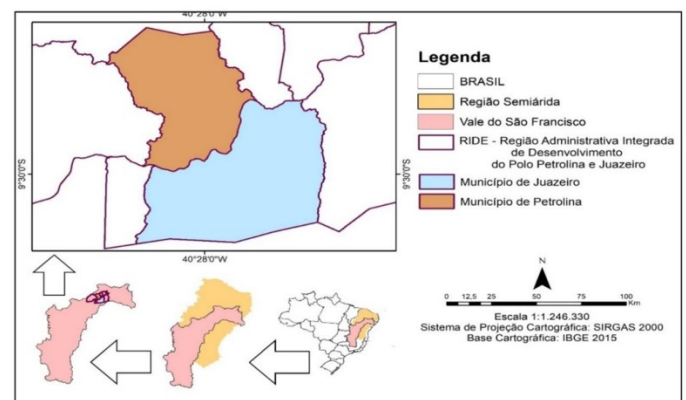
According to Triches (2015), many municipalities have seen benefits generated by the purchase of family farming products and are acquiring much more than the 30% determined by the legislation, while others do not see advantages in having these family farmers as suppliers and neglect them, acquiring products in the local retail trade, in violation of the law. These differences of viewpoint lack an interdisciplinary and intersectoral look by the professionals who are part of the process. To promote the development of family farming, public policies are needed that provide solutions associated with food and the environment, where, in the conception of Triches and Schneider (2010, p. 935) "to the formation of food chains that reconnect producers and consumers", because the prevailing models of agrifood supply are still "dominated by the long chains of agribusiness and the retail sector in food distribution. In Brazil, there are still few initiatives to connect consumption, production, and public food policies. In the case of PNAE, for example, the obstacles to the policy of purchasing family farming products are little known, "although there are certain indications that point to difficulties in its effectiveness" (TRICHES AND SCHNEIDER, 2010, p. 935). From this angle, family farming is gaining strength with some public policies that are on the agenda of the Brazilian political scenario, which recognize family farming as the main supplier of food that reaches the Brazilian table, and that have a differentiated relationship with the land, preserving and using natural resources in a sustainable way. This recognition served as support for a global action against hunger and poverty, the "Decade of Family Farming", which is aligned with Goal 2 of the Sustainable Development Goals - "End hunger, achieve food security and improved nutrition, and promote sustainable agriculture" - (BRAZIL, 2022).

Specific objectives of the "Decade of Family Farming" 2019-2028 include: Create an enabling policy environment to strengthen family farming, support youth, foster gender equality and the role of rural women, boost producer organizations, improve the socioeconomic inclusion, resilience, and well-being of farmers, families, and rural communities, promote the sustainability of family farming to achieve climate-resilient food systems, and innovate, in favor of territorial development and food systems that protect biodiversity, the

environment, and culture (BRAZIL, 2019, *s.p.*). Therefore, this initiative is in line with the global action plan against hunger and poverty announced on May 29 in Rome by the Food and Agriculture Organization of the United Nations (FAO), whose goal is to end hunger in the world by 2030.

METHODOLOGY

Geographical Context of the Research: The São Francisco Valley is bathed by the São Francisco River and its tributaries, covering the states of Minas Gerais, Bahia, Pernambuco, Sergipe, and Alagoas. It is a fertile region that has received several investments in irrigation since the 1970s by public agencies such as the Superintendence for the Development of the Northeast (SUDENE) and the Development Company for the São Francisco and Parnaíba Valley (CODEVASF). The cities of Juazeiro (Bahia) and Petrolina (Pernambuco), as shown in figure 1, are located in the sub-Middle São Francisco and represent the largest urban agglomeration in the Northeastern semi-arid region, being an important fruit and vegetable producer.



Source: Santos (2021)

Figure 1. City map of Juazeiro/BA and Petrolina/PE

In this Agroindustrial Hub are found the largest producers of mango and grapes in the country, some of them having already reached foreign markets. The area planted with table grapes grew in the period 1991/1995 by 71.8%, expanding its area from 2,620 hectares to about 4,500 hectares, while production grew in the same period by about 344%, corresponding to the amount of 32 thousand tons (EMBRAPA, 2022).

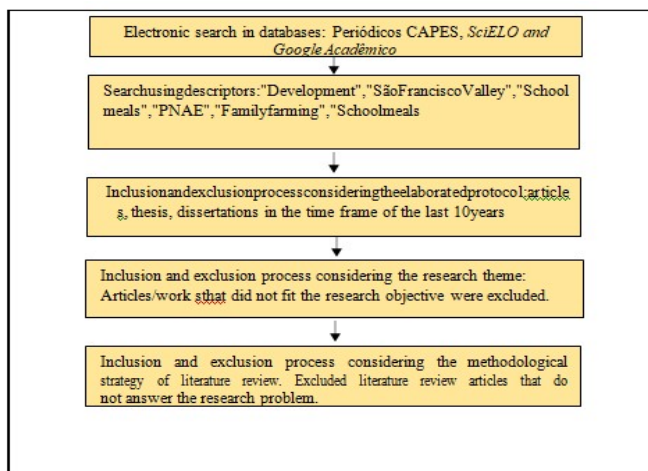
RESEARCH TYPOLOGY

To understand the research problem, the methodological strategy used was a Systematic Literature Review (SLR), through a descriptive and exploratory approach. The exploratory research aims to develop, clarify, and modify concepts and ideals, substantiating to obtain an overview about the chosen theme, which is usually little explored, constituting a far-fetched literature review (GIL, 2019). Descriptive research aims to observe, record, and analyze phenomena or systems, aiming at identifying, recording, and analyzing the characteristics, factors, or variables that relate to the phenomenon or process studied (GIL, 2002). The systematic review aims to answer a specific question, from careful analysis of articles published on a particular subject (GABRIEL *et al.*, 2011). Thus, regarding the procedures, the research is classified as bibliographic, based on already published materials. The bibliographical research, according to Gil (2019), generally has the advantage of allowing the researcher to cover a range of facts from the chosen sources, which should be rigorous in their choice, aiming at a better approach and discussion of the problem and the listed theme, intending to discover possible inconsistencies or contradictions. As a method for conducting the theoretical foundation through the SLR, we adopted the process of conducting independent searches and the identification of the findings to obtain rigor and reliability in the search, building a specific research protocol (YIN,

2010). To obtain the works that support this review, we adopted as tools the Periodical Portal of the Coordination for the Improvement of Higher Education Personnel (CAPES) through CAFE, and the *SciELO database (Scientific Electronic Library Online)*, and *Google Scholar (Google Scholar)* using as search descriptors: "Development" and "Vale do São Francisco" and "PNAE Brazil" and "School meals" and "Family farming. Therefore, the following search refinements were established: search for articles, theses, dissertations and books, and a time frame of the last 10 years. The papers obtained in this search went through other refinement processes to be included and be part of the discussion of this review. Thus, we included: articles published in journals with at least *Qualis B3*; those whose research region is the Submédio São Francisco. In addition to these selection processes cited above, articles/works that had only a literature review as a methodological strategy were excluded. The related data were submitted to a preparation process, to identify *a priori* if the chosen documents were in accordance with the theme to be reviewed, and then submit them to content analysis. Soon after, the data were aggregated into units, the exploratory reading of all content was performed, and the coding, classification, and categorization procedure was adopted. Thus, with all the data methodically aggregated into units, the analysis of the content presented in the text was performed, through a detailed interpretation of the literature object of investigation and of this systematic review.

RESULTS AND DISCUSSIONS

A RSL Results: In order to describe the search steps and the refinement processes (inclusion and exclusion) adopted, we have flowchart 1 (Figure 2). The search found 20,967 papers on the theme "Pnae". After the filtering process, only 20 papers were selected to compose the discussion of the RSL, for presenting direct relationship with the object of study and answer the QNs, according to flowchart 2 (Figure 3).



Source: Prepared by the author (2022)

Figure 2. Search and refinement process (inclusion/exclusion)

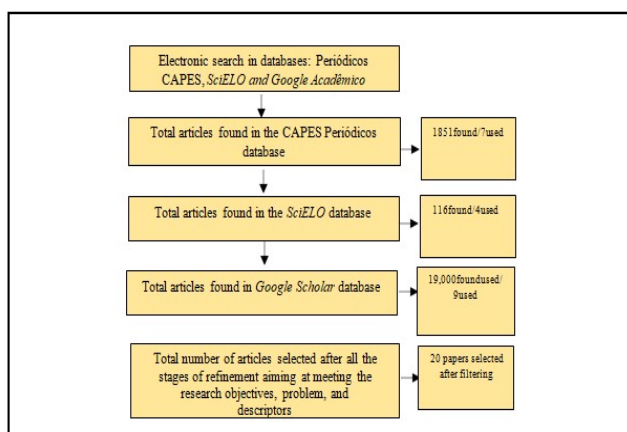


Figure 3. Search by search sources and selection of findings

It is relevant to inform that, when all the descriptors were used in the search, it was not possible to find any results. Thus, it was decided to search for each descriptor separately. To analyze the 20 selected papers, we organized them according to the central theme of their content, as shown in Chart 1.

Results found on the impact of PNAE for family farming: In work 10, Oliveira (2019) discusses family farming, public policies, and institutional markets, and describes the step-by-step of the family farming purchase, involving 10 steps or stages, as follows: 1. survey of available budget resources; 2. mapping of family farming products; 3. menu preparation; 4. conducting price research to compose the public call; 5. preparation and dissemination of the public call; 6. preparation of the sales project by farmers and/or associations or cooperatives; 7. receipt and selection of sales projects by the Executing Entity; 8. verification of the sample for quality control; 9. preparation of the purchase contract; 10. Delivery of products, term of receipt, and payment to farmers. According to the author, the binding of 30% for the purchase of school meals directly from local family farming, in addition to enabling family farming production, contributes to socio-territorial development and food and nutritional security. Oliveira (2019) highlights from the perspective of solidarity economy that cooperatives and associations constitute for farmers access to the institutional market through the legal DAP of marketing, enhancing access and the construction of differentiated and organized markets. Therefore, through associations and cooperatives, farmers create better job opportunities and end up strengthening the community in solidarity, organizing production, and facilitating access to consumer markets.

Nunes *et al.*, (2018), work 08, analyzes the National School Feeding Program (PNAE) as a public policy of inclusion in family farming in Northeastern Brazil. In this study from 2014 there was an increase in the participation of northeastern municipalities in the acquisition of foodstuffs from family farming, because even though the percentage of 30% was not reached, of the 1,633 municipalities that received resources, 1,170 bought from family farming. According to Nunes (2018), despite the drought of recent years in the Northeast region, this increase shows that farmers have created cooperatives, produced, and participated in the institutional market, thus ensuring direct marketing of their products. Nunes *et al.*, (2018) adds that with PNAE farmers started to organize themselves through cooperatives to expand the marketing area and add value to their products, highlighting their economic role and intermediary between the cooperative member and the market. Products such as green beans, red rice, sweet potatoes, jerimum, coriander, small animal meats (chickens, goats, fish, etc.) were introduced in public schools in the Northeast, positively reinforcing local and regional eating habits. Work 01 by Costa, (2014), entitled: "Permanência e transformação na Agricultura Familiar: Um estudo de caso sobre a resistência dos agricultores familiares no Submédio São Francisco", analyzes the rearrangements in the processes of economic accumulation and local political power, of family farmers in the dryland area in the Sertão do São Francisco. Whether as cowboys, cotton sharecroppers, settlers or fruit-growers, these farmers, who for centuries have lived under severe constraints, have had to adapt to guarantee the relative autonomy of their peasant way of life in the context of public policies, the context of social difficulties generated by food restrictions and insufficient income, and the urgent need to consolidate family farming. In work 20, "Capital Social e desenvolvimento no submédio São Francisco", Albuquerque and Cândido (2013), reflect on the importance of the themes of social capital and territorial development with a focus on family farming in the irrigated perimeters of the São Francisco Valley. The research showed that historically there was no support for organizational processes from the perspective of social capital formation within the irrigated perimeters, the result of which is the fragility of horizontal relations, the result of an excluding sectoral development project that prioritized economic efficiency above any other dimension, not in line with the perspective of sustainable territorial development. According to the author, PNAE has proven to be an instrument capable of legitimizing sustainability in its dimensions, allowing the inclusion of

Chart 1. Organization and classification of articles according to their central themes

No.	Job Title	Authors	Year	Type	Qualis	Theme
01	Permanence and transformation in Family Farming: A case study on the resistance of family farmers in the Submédio São Francisco	Coast	2014	Thesis	NSA*	The study seeks to investigate the strategies employed by the peasants of the Sertão to make their existence viable, seeking to understand the factors that make the social reproduction of thispeasantry possible
02	School feeding: practices of farmers from Ceará as suppliers for the national school feeding program (pnae).	Gomes	2019	Dissertation	NSA*	Study on the theme of school feeding and local economic and social development.
03	Environment & Society - Conceptions, dialogues and practices for nature onervation	Pacheco <i>et al</i>	2021	Book	NSA*	Chapter 17 - Agro-ecological Strategies in Family Farming in the Brazilian Semi-arid: A Systematic Review
04	Public Policies PNAE and PAA and the strengthening of family agriculture: case study of the association of rural producers of Petrolina's nucleus VI	Silva; Lima	2017	Article	B3	Benefits and advantages of the PNAE and PAA Programs for the strengthening of family agriculture
05	Agricultural cooperativism and its contributions to the empowerment of family farmers in the São Francisco submedium: the case of the association of rural producers of the VI nucleus - Petrolina/PE	Ribeiro; Nascimento; Silva	2013	Article	B3	Benefits and advantages of cooperatives for the strengthening of family agriculture
06	Comparative analysis of the development of PNAE among state and municipal schools in Santa Maria (RS) in light of the potential elements of Food and Nutritional Security (SAN)	Pauli; Schulz; Zajonz; Steindor	2017	Article	A3	Comparative analysis of the development of PNAE between state and municipal schools
07	Sustainable Public Purchases from Family Agriculture: a multicase study of the purchase process for school meals	Ponciano	2017	Dissertation	NSA*	Public procurement as an important driver of the economy in Brazil and in the world
08	The National School Meals Program (PNAE) as an inclusion policy for family agriculture in Northeastern Brazil	Nunes; Morais; Aquin;Gurgel	2018	Article	B3	An analysis of the National School Meals Program (PNAE) as a productive inclusion action, based on its effects on family agriculture in the Northeast region of Brazil.
09	School feeding: from welfare practice to the Human Right to Adequate Food	Siqueira ;Milagres	2021	Book	No Qualis	PNAE from the perspective of the right to food
10	Family farming, public policies and institutional markets: an exploratory analysis of the national school feeding program - pnae in rio grande do norte	Oliveira	2019	Article	A3	Family farming as an important instrument to catalyze changes in the rural space
11	School meals and local social development: the case of familyfarming	Gomes and Bezerra	2021	Article	B1	School meals and local social development: thecase of family farming
12	Social capital and development in the São Francisco submedia	Albuquerque; Cândido	2013	Article	B2	Sub-medium São Francisco Development
13	Elements of Economics 2	Fonseca <i>et al</i>	2019	Book	No Qualis	Chapter 2 - The perception of the residents of the cities of Petrolina-pe and Juazeiro-ba about family farming in the São Francisco Valley
14	Perceptions of family farmers and technicians about institutional markets in the development of family farming in Vale do Ribeira [...]	Gomes	2018	Article	B3	Institutional market for family farming food (PAAand PNAE)
15	Family agriculture and agro-ecology: a case of economic development in the semi-arid region of Alagoas	Silva	2019	Dissertation	NSA*	Analysis of the production journey free of chemical additives, where part of it has won its participation as producers of the Social Control Organization
16	Socioeconomic impacts of the National School Meals Program on family farms in Santa Catarina	Elias <i>et al</i>	2019	Article	A3	Study on the impact of the operationalization andsocioeconomic effects of the public policy
17	Between Whips and Organic Carrots: Coercion and Cooperation in the Implementation of Family Farming Purchases under Pnae	Bonduki; Palotti	2021	Article	A1	The Implementation of Family Farming Purchasesin the Context of Pnae
18	The purchase of food from family farms by PNAE in the municipality of Alegre-ES	Rodrigues et al	2017	Article	B1	PNAE and the process of purchasing food fromfamily farms to meet this market
19	Performance of Rio Grande do Sul municipalities in the execution of PNAE resources with family agriculture	Troain et al	2020	Article	A3	The State and the mechanisms to contribute to mitigate socioeconomic vulnerabilities in family agriculture
20	Inter-organizational Articulations for Social Management: Experiences in Rural Development in the São Francisco Valley	Neto <i>et al</i>	2016	Article	A4	The difficulties of inter-organizational articulationin issues related to the rural world were taken as a field of study, in the region polarized by the cities of Juazeiro-BA and Petrolina-PE

Source: Prepared by the author (2022)

consumers seeking healthier eating habits and suppliers with the potential to offer foodstuffs that respect diverse cultures and food traditions. In summary, one can see the importance of PNAE for the strengthening of family farming both for the formation of eating habits and for building the productive structure and collective organization of farmers. In paper 13 "Book Economy 2", Chapter 2 "The perception of residents of the cities of Petrolina-PE and Juazeiro/BA about family farming in the São Francisco Valley", Lima *et al.*, (2019) points out that residents recognize the importance of family farming farms in the region, taking into consideration both the context of healthier food production and the development of the region's economy. In study 04, "Public Policies PNAE and PAA and the strengthening of family farming: case study of the Association of Producers of Nucleus VI (APRNV) of Petrolina/PE," Silva and Lima (2017), discuss the strengthening of farmers of APRNV. According to the authors, the public policies PAA and PNAE have unanimous approval by family farmers and state that if these policies are suspended, there will be serious consequences for the production system. According to them, within these policies we can identify the PAA and the PNAE, which, in Petrolina, had as its first beneficiary in these programs the APRNV, located in the Senador Nilo Coelho Irrigated Perimeter, formed by small rural producers associated, based on family farming, produce banana, watermelon, guava, mango, cassava, pumpkin, papaya and passion fruit. Part of this production is destined for the PAA and PNAE programs, and the other part is for local commerce. According to the study conducted by Silva and Lima (2017), participation in the programs managed to improve the physical structure, the organization, and increased revenues. The public policies PAA and PNAE have unanimous approval by family farmers and the motivation that induced the members to participate in the programs were the attractive prices of goods defined in contract and the security of receiving payments. According to the authors, 85% of the interviewees formalized two or more contracts per property, since the DAP is designated per person and not per lot, implying that families with older children could formalize two or more contracts per program, making it possible to commercialize the production and raise the total family income. For the mentioned authors, by guaranteeing the purchase of family production, with prices differentiated from those practiced in the local market, these policies enable a greater balance in agricultural activity and improve the income of the producers of the programs. The financial increment ensures the circulation of money in the economy of the region itself and in the community where the products are located. Participation in the program allowed participants to exchange their carts for cars, bicycles for motorcycles, renovate and expand their homes, pay for school and/or courses for their children, and fund and maintain their own agricultural activity. Thus, the authors conclude that the PAA and PNAE public policies have been proving to be drivers of local family development.

CONCLUSION

As far as the impact of PNAE on the development of family farming in the pole municipalities of the São Francisco Valley is concerned, the present work has shown that participation in the program has improved the physical structure, the organization, and the increase in income of family farmers linked to the program. The purchase of the family production, through prices differentiated from those practiced in the local market, allows a greater balance to the agricultural activity, and provides an improvement in the income of the program's producers. The financial increase ensures the circulation of money in the economy of the region itself and in the community where the products are located. This study has shown that the PNAE has become an option for productive structuring and collective organization of family farming and by relying on credit policies, technical support, and the support of universities it can be a mechanism for building an economic density for the region, enabling opportunities for inclusion. In this regard, Law 11947/2009 provided an increase in the number of producer associations and recognition of the benefits and advantages that associations/cooperatives bring to the strengthening of family farming. Thus, the purchases of family farming for school meals

(PNAE) in the pole Petrolina/PE and Juazeiro/BA have improved the income of producers participating in the program, valued regional foods and boosted the territorial development of the region.

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