

#### EDUCATION AND SCHOOL FEEDING, THE PNAE AND ITS CONTRIBUTION TO REGIONAL DEVELOPMENT AND FAMILY FARMING IN SCHOOL MEALS IN GOIÂNIA

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#### ABSTRACT

This article aims to understand how the National School Feeding Program (PNAE) plays a crucial role in promoting regional development, especially by encouraging family farming in the city of Goiânia. This government initiative not only ensures the provision of nutritious and quality meals for public school students, but also boosts the local economy by integrating smallholder farmers into the process of providing food for school meals. The integration of family farming into the PNAE has multiple benefits, such as providing a stable source of income for family farmers, encouraging local production, and promoting the economic sustainability of rural communities. In view of this and through a literature review, with important authors, such as Alvarez (2022), Monteiro (2017), Triches and Schneider (2010), among others, the study explores the inclusion of fresh and varied foods in school meals in order to contribute to a healthier diet for students, combating malnutrition and promoting healthy eating habits from an early age. The results reveal that in Goiânia, the implementation of the PNAE with a focus on family farming has shown significant results. This is because through public procurement policies that prioritize local producers, the program strengthens the regional agricultural sector and encourages more sustainable agricultural practices. The PNAE in Goiânia exemplifies how well-structured public policies can foster regional development and sustainability, while ensuring healthy and quality food for students. It can be a reference for other regions.

Keywords: Education. School Lunches. Family Farming. Regional development.

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# INTRODUCTION

### EDUCATION AND SCHOOL FEEDING

Brazilian education, as in other countries, develops at different levels and modalities, with significant challenges and notable advances during the trajectory of schools. This division of the Brazilian educational system is basically structured in three levels, early childhood education, elementary education and high school.

Today, Brazil has continued to face significant challenges in its quest for quality education. For this reason, the National Common Curriculum Base (BNCC) was implemented to standardize teaching and improve the quality of basic education (BRASIL, 2018).

However, problems such as regional inequality, school dropout, lack of financial resources and the devaluation of education professionals still persist, as well as the students' own nutrition. This movement of depreciation and devaluation of public basic education, which is responsible for the integral formation of the individual, in all its stages.

As a way of improving these points, it should be noted that, in the 1950s, when malnutrition and nutritional deficiency were common problems in Brazil, public schools provided students with a balanced diet during the school period through the School Lunch Program.

Over time, the program gained more independence and, in 1979, it changed its name to the current one, the National School Feeding Program (PNAE), although it is still known by some as 'School Lunches'. As a result, since the 1988 Constitution, school feeding has been mandatory and is the responsibility of the federal, state and municipal governments.

Among the main changes, the stimulus to national family farming stands out, which since the standardization of the PNAE with Law No. 11,947, of June 16, 2009, there is an incentive to purchase foodstuffs produced by family entrepreneurs.

This article is a bibliographic review with the theoretical basis of the legal bases contained in our country and with renowned authors, including Alvarez (2022), Belik (2009), Costa (2001), Monteiro (2017), Peixinho (2013) and Triches and Schneider (2010), among others.

In this way, understanding the importance of education, school feeding and family farming, makes it possible to understand the importance of education and its reaches, such as the National School Feeding Program (PNAE) and Family Farming.



## EDUCATION

Education is listed as the first of the social rights in article 6 of the Brazilian Constitution of 1988, which determines the obligation of guarantees for people to access "education, health, food, work, housing, transportation, leisure, security, social security, protection of maternity and childhood, assistance to the destitute, in the form of this Constitution" (BRASIL, 1988).

From its divisions, early childhood education is the root of basic education, elementary education is its trunk and secondary education is its finish. It is from this holistic view of the "base" that one can have a consequent view of the parties. Basic education becomes, within article 4 of the LDB, a citizen's right to education and a duty of the State to serve him through qualified supply (CURY, 2008).

These initial considerations open spaces to understand the importance of the articulation between Early Childhood Education, Elementary Education and High School as an organized set of sequenced stages of education to be articulated in order to guarantee and ensure the common education of children, adolescents, young people and adults from any condition and region of the country. Linked to this, in all these phases, it is also important to promote student nutrition through school meals as a way to improve learning (SAVIANI, 2008).

Early childhood education (ECE), since its inclusion as the first stage of basic education (EB), in the Law of Guidelines and Bases of National Education (LDB), has undergone many changes in terms of supply and organization. Part of them was driven by changes in Brazilian legislation, among which the Constitutional Amendment (EC) No. 59/2009 and the National Education Plan (PNE) of 2014 stand out. The constitutional amendment made the enrollment of students aged between 4 and 17 compulsory and established that the service from 4 to 5 years old should be universalized by 2016. In a complementary way, the PNE, in addition to the universalization of this age group, established as a goal the care of at least 50% of children aged 0 to 3 years.

Even with the advances in the field of the declaration of the right, expanding access to early childhood education is still a challenge. The Report of the 3rd cycle of monitoring of the goals of the PNE (INEP, 2020), produced from the National Household Sample Survey (PNAD), indicates that, in 2018, only 32.7% of the population aged 0 to 3 years was served. This means that there were, in that year, 3.8 million children served and at least 1.5 million children who should be included in daycare by 2024. The same report presents data showing that the universalization of preschool had not been achieved until 2018. About 330

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thousand children between 4 and 5 years of age were still outside the educational system (INEP, 2020).

It is worth remembering that early childhood education must be offered under the principles that govern Brazilian school education, established by the Federal Constitution, among which are "equal conditions for access and permanence", "free public education in official establishments" and the "guarantee of a standard of quality" (BRASIL, 1988).

These principles express the recognition of the equality of all children. In addition, a commitment is made to a type of education that cannot happen without the effective participation of the State (LIBÂNEO, 2023).

This means that, in addition to many children losing the fundamental right to free education, they no longer enjoy school meals, which are also guaranteed by law.

For the materialization of the right to early childhood education to materialize, ensuring increased access and quality conditions to study and food, financial investment by the State is necessary. It is about requesting and providing the necessary inputs to offer the best conditions and resources built historically and culturally, so that children can enjoy their civil, human and social rights, being able to manifest themselves and see these manifestations welcomed, as subjects of rights (LIBÂNEO, 2023).

It is pertinent to highlight that the municipalities have challenges of different proportions with regard to access and conditions of provision of early childhood education. The technical and financial resources to overcome these challenges are not the same for everyone, which highlights the relevance of a federative pact that, in fact, is cooperative.

Ensuring a supply in quality conditions presupposes increasing the spending of municipal networks on education in all municipalities, even in those with the highest values in this indicator. In view of this, it is urgent to increase revenues to enhance the supply of adequate education. In some cases, this expansion of resources must happen with the complementation of the Union and the States (SAVIANI, 2008).

As for elementary education in Brazil, it is a crucial stage of basic education, aimed at children from 6 to 14 years old, as determined by Brazilian legislation. This period is divided into two cycles, the first cycle, from the 1st to the 5th grade, and the second cycle, from the 6th to the 9th grade.

Historically, elementary education in Brazil has undergone several transformations, both in terms of curricular structure and the quality of teaching and universal access. However, it still faces many challenges, especially in poorer regions and rural areas.

In Brazil, more than 80% of primary and secondary school enrollments are in the public network. The expansion of basic education is a reality in the country, especially after



the Fund for the Maintenance and Development of Basic Education and the Valorization of Education Professionals (FUNDEB) and the Constitutional Amendment No. 59 of the Ministry of Education that expanded the mandatory nature of education from 4 to 17 years old (INEP, 2023).

However, there is a significant disparity between the quality of education offered in the most developed and the poorest regions of the country, as well as the food quality of the meals. Many schools, especially in rural and peripheral areas, face problems of poor infrastructure, such as lack of adequate classrooms, absence of basic equipment, deficient libraries, poorly equipped kitchens, and low financial resources. As a result, school dropout is still a relevant problem, especially among the most socially vulnerable students (SAVIANI, 2008).

In recent years, some initiatives have emerged to improve the quality of elementary education in Brazil, such as literacy programs; initiatives aimed at improving literacy in the early grades; the incentive to stay; scholarships and programs that encourage students to stay in school, such as the Bolsa Família program; innovative curricula and the adoption of more flexible and contextualized curricula, which seek to improve student engagement with content.

Likewise, there are already recommendations from the PNAE to improve the quality of school meals, such as the availability of a nutritionist as the technical responsible, evaluation of dietary restrictions among students, the establishment of varied menus and the appreciation of local producers.

Improving the quality of education and food at this stage depends on continuous efforts on several fronts, such as investment in infrastructure, teacher training, the most appropriate curricula and effective public policies that address regional and social inequalities (SAVIANI, 2008).

The trajectory of secondary education in Brazil has also been marked by challenges and transformations over the last decades, reflecting social, political, and economic changes in the country. High school is a stage of Brazilian basic education, aimed at young people between 15 and 17 years old, lasting three school years.

In recent decades, there has been a significant expansion in access to secondary education, with an increase in the schooling rate in this age group. This was driven by public policies for the universalization of basic education and by greater awareness of the importance of education for individual and national development (SAVIANI, 2008).

This phase went through several curricular reforms and adjustments in educational legislation. One of the most recent reforms was the implementation of the National



Common Curriculum Base (BNCC), which establishes guidelines for school curricula at all stages of basic education, including high school.

Despite advances in access, the quality of secondary education is still a concern, as mentioned in the improvements it needs, school dropout remains a significant challenge, especially among young people from more economically vulnerable families. Reasons such as the need for work, lack of interest in the content offered and social problems influence dropout (SAVIANI, 2008).

There is a growing demand for a high school that prepares students not only for the job market but also to enter higher education. The need for a more complete and integrated education has been a recurring topic in educational discussions. Even with initiatives and perspectives with the reform of secondary education, which began in 2017, it is expected that there will be greater integration between theory and practice, with the implementation of training itineraries that include specific areas of knowledge, such as languages, mathematics, natural sciences, human sciences, and technical and professional training.

It is essential to ensure the participation of young people in decisions that affect their educational path, listening to their needs and expectations to make high school more relevant and effective, essential steps to ensure quality and the ability to prepare young people for the challenges of the twenty-first century (FREIRE, 2013).

It is necessary that the educational process be sensitive to the political and social purposes of transforming an excluding society into a new society, inclusive and open to all regardless of the classes and *status quo* of its members, since "teaching is not just a mechanical act, but a critical act, curiosity, action and transformation" (FREIRE, 2008, p. 64).

With regard to public education policies and the duties of the State in order to ensure the rights of society, the Federal Constitution of 1988, in its article 208, item VII, provides for the "assistance to the student, in all stages of basic education, through supplementary programs of didactic and school material, transportation, food and health care" (BRASIL, 1988).

Supplementary education programs are actions that are part of the regular educational system, aiming to meet the specific needs of students to give more quality to basic education and address social and economic issues that can interfere in the learning and dropout process. These actions are initiatives implemented at different educational levels, from kindergarten to high school, and encompass the areas of health, food, culture, among others. As an example of public policies, we can mention the National Textbook



Program (PNLD), the National School Transportation Program (PNATE), the National School Feeding Program (PNAE) and the School Health Program (PSE).

Even before the 1988 Constituent Assembly, the National Textbook Program (PNLD) was established by Presidential Decree No. 91,542, of August 19, 1985, "with the purpose of distributing textbooks to students enrolled in public 1st grade schools" (BRASIL, 1985).

Law No. 10,880, of June 9, 2004, which institutes the National Program to Support School Transportation (PNATE), has the "objective of offering school transportation to students in public basic education, residing in rural areas, through financial assistance, on a supplementary basis, to the States, the Federal District and the Municipalities" (BRASIL, 2004).

The School Health Program (PSE) was instituted by Presidential Decree No. 6,286, of December 5, 2007, with the purpose of "contributing to the integral formation of students in the public basic education network through prevention, promotion and health care actions" (BRASIL, 2007).

Although the National School Feeding Program (PNAE) was standardized from Law No. 11,947, of June 16, 2009, school feeding is a policy that has existed since the 1940s. Such public policies, after being instituted, were regulated and today have their legislation and collegiate bodies responsible for monitoring their execution (PEIXINHO, 2013).

In a complementary way, basic education, which involves the three levels mentioned, should enable conditions for the subject to constitute and reconstitute their own identity, in the midst of bodily, affective-emotional, socio-emotional, cognitive and socio-cultural changes, with a view to respecting and valuing diversity. Thus, it is important to recognize the pillars that support this education, focusing, for example, on school feeding.

# SCHOOL FEEDING/PNAE

Feeding is a basic need found in all living beings, whose main objective is to obtain the energy necessary for the maintenance of vital functions and for the physical and mental development of the human being. So for our body to be in perfect balance, it is important to have a proper diet. That is why it is necessary to provide assistance to students who attend schools in Brazil, especially those who do not have access to certain food groups, whether they are children, young people or adults, because food is of paramount importance for the academic development of the student (RECINE, 2014).

School feeding aims to provide nutrition in adequate quantity and quality, in order to meet the physiological needs of students, in addition to promoting the adoption of healthier



eating habits, which contribute to better growth, development, learning and lower incidence of diseases.

To achieve this goal, balanced and varied menus must be prepared, always taking into account the acceptance of students in school meals. This is because this meal at school is intrinsically linked to education, since, according to official data, it is proven that, after a good diet, the human brain has a higher development and learning index (GONÇALVES AND PIRES, 2019).

With this in mind, from 1955 onwards, the National School Feeding Program (PNAE) was implemented in Brazil. This program, which is a Brazilian public policy of universal character inserted in the school environment, is one of the important strategies implemented to ensure both the right to food and the right to education and is linked to the National Fund for the Development of Education (FNDE) of the Ministry of Education. The program serves, universally and free of charge, students enrolled in basic education in public, philanthropic and community schools in all municipalities in the country (BRASIL, 2020).

In 1997, the PNAE was incorporated into the National Fund for the Development of Education (FNDE), an autarchy created to execute public policies linked to education through financial transfer programs. The distribution of financial resources for school feeding occurred with Provisional Measure No. 32 1,784, of December 14, 1988, which provides for the transfer of financial resources from the PNAE to states and municipalities. In its Article 2, it is established that the "transfer of financial resources aiming at the decentralized execution of the PNAE will be carried out automatically by the Executive Secretariat of the FNDE, without the need for an agreement, adjustment, agreement or contract, through deposit in a specific current account" (BRASIL, 1998), which made the financial distribution process more efficient and agile.

The development of the school feeding management policy in Brazil, over the more than 60 years of institutional implementation of the PNAE, has made it possible to strengthen it. Initially conceived as a food supplementation or assistance program, aimed at pre-school students and students of the former first grade, current Elementary School, enrolled in public education establishments, it has undergone several resignifications and restructurings throughout its existence (PEIXINHO, 2013).

The objective of the PNAE is to promote and ensure that basic education students have access to adequate food, which helps them develop, grow, learn and perform well at school, as well as develop healthy eating habits. It is a supplementary financial assistance program in which states, municipalities and federally funded schools are reimbursed in a



fixed amount per student, for each day of instruction, based on the student's age and mode of instruction (BRASIL, 2015).

Due to the importance of healthy eating for the health and development of students, understanding that education and nutrition are interconnected, this policy seeks to ensure that students enrolled in basic education have access to nutritious meals, contributing to their learning and healthy growth.

Established as a State policy, the PNAE is a policy that transcends governments, as the program, in addition to being structured in various instances of society, also stands out in the educational conception, since it encourages good health habits and social awareness (GONÇALVES AND PIRES, 2019).

In the case of the PNAE, State policy is related to the idea that school feeding is a fundamental right of students and should be guaranteed continuously over time, regardless of ideologies.

The PNAE has a service dimension of about 10 billion meals per year and aims to provide food security to public basic education students across the country (ALVAREZ, 2022). This has a direct impact on life in society, since, although Brazil is a major food producer, one of the causes of food insecurity is precisely the lack of access to basic foods, that is, the reason for food insecurity in Brazil is social inequality, which penalizes the poorest who do not have the financial conditions to acquire enough food to meet nutritional needs.

The delivery of foodstuffs by suppliers can be carried out directly to the school units and there can be central supply intermediation warehouses. A great advantage of the centralized way is the possibility of carrying out an effective control of the entire process and ensuring that the quality of the products and menus is applied in all schools in the municipality. In addition, centralization confers greater negotiating power on the city hall visà-vis suppliers, which can lead to a reduction in expenses, considering that the volume of purchases is higher (BELIK, 2009).

Currently, about 45.6 million students are served daily by the PNAE, which has changed nutrition standards at school. Over the last few decades, school meals, as preferred by the Ministry of Education, School Feeding, have undergone transformations (TURRIANI; FORTUNATO, 2008).

Changes in the list of products were made, such as the basic components in order to ensure better quality and safe food for students and contribute to learning, with the objective of finding practical and effective solutions that will minimize the school dropout rate and also provide the stimulus to healthy eating.



As it is a supplementary public policy, states and municipalities must make the counterpart investment of their own resources to subsidize the acquisition of foodstuffs to compose school meals, as well as the necessary structure for the execution of the program (COSTA AND VASCONCELOS, 2013).

To calculate the financial transfer to states and municipalities, the number of children and young people enrolled reported in the School Census of the previous year, the two hundred mandatory school days and the type of educational service modality are considered. This is because each type of service modality has a different per capita and has been defined throughout the program through updates in the resolutions that regulate its execution, as well as update the per capita values (COSTA AND VASCONCELOS, 2013).

In addition, the School Feeding Council (CAE), the social control body responsible for supervising the program and advising the executing institution, is the entity that represents social control before public policy and is responsible for monitoring and monitoring the resources and execution of the program. In this way, the policy of social control was consolidated from the process of our 1988 Constitution, through the devices created for the effective participation of society in the implementation, monitoring and inspection of the most diverse public policies. (COSTA AND VASCONCELOS, 2013).

It should be noted that the School Feeding Council (CAE) of each state and municipality, according to Article 43 of Resolution CD/FNDE/MEC no. 006, of May 8, 2020 (BRASIL, 2020), in addition to monitoring and inspecting the execution of the program, is responsible for analyzing the accountability issued by the Executing Entity and issuing a conclusive opinion approving or not approving it. It should be noted that the delay in sending the accountability may result in the non-availability of the resource.

It is also worth noting the obligation of the nutritionist technician to be responsible for the execution and monitoring of the PNAE. The actors involved in the development of the PNAE, mainly nutritionists and cooks, are committed to understanding the entire process of school lunch production, in order to understand that this food program is part of a social policy inserted in a certain political and economic context, suffering, therefore, the influences of the historical moment in which it is situated, which will give meaning to the work of these actors (COSTA *et al.*, 2001).

The knowledge and understanding of this totality facilitates a posture of connection with work, allowing the creation of new strategies for more timely and creative interventions in the resolution of daily problems and in which skills and experiences are applied in interactive actions with the school population.



As a result, the state and municipalities are obliged to provide adequate education and nutrition to all Brazilians. However, it is worth noting that the Government is not solely responsible for guaranteeing these rights. According to articles 205 of the Federal Constitution of 1988 and 2 of the LDB, education is also the responsibility of the family, and it is up to society to promote, encourage and collaborate in the realization of this right (BRASIL, 1988; LDB 1996).

In recent years, public policies have sought to improve the quality of education, with initiatives such as the National Common Curriculum Base (BNCC, 2018), which defines essential competencies and skills for each stage of education, in addition to financial investments in food programs for students.

Among the main changes, we can highlight the stimulus to national family farming; the inclusion of food and nutrition education in the teaching and learning process; the participation of the community in social control; recommendations to ensure students' access to a wider variety of foods; and the incentive for the acquisition of natural and minimally processed foods (FARIA, 2020).

In addition, by promoting the purchase of food from family farming, the PNAE also supports the economic inclusion of small farmers, which contributes to the reduction of social disparities in the country and regional development.

In 2009, Law No. 11,947 (BRASIL, 2009) established, in its article 14, that at least 30% of the transfers from the National Fund for the Development of Education (FNDE), within the scope of the National School Feeding Program (PNAE), should be invested in the acquisition of foodstuffs from family farming.

Law No. 14,660 (BRASIL, 2023) clarifies that

of the total financial resources transferred by the FNDE, within the scope of the PNAE, at least 30% (thirty percent) must be used to purchase foodstuffs directly from family farming and rural family entrepreneurs or their organizations, prioritizing agrarian reform settlements, traditional indigenous communities, quilombola communities and formal and informal groups of women.

In order to facilitate the participation of local family farmers, bidding was waived, and the acquisition of products from these families in the region was subject to simplified procedures by public call, which also enables regional development.

# REGIONAL DEVELOPMENT AND FAMILY FARMING

The emergence and recognition of family farming in Brazil are recent and three factors are equally important for a better understanding. The first has to do with the resumption of the role of the trade union movement after the end of the Military Dictatorship;



the second is related to the role of mediators and intellectuals, especially social scientists who debated the topic in the early 1990s; and the third factor is related to the role of the State and public policies, which began to recognize this sector and provide visibility from the creation of the National Program for the Strengthening of Family Agriculture (PRONAF) (BECKER AND ANJOS, 2015).

The period of political transition, from 1992 to 1994, ended up strengthening the struggles of organized rural social movements, especially trade unionism, which led to the creation of the National Program for the Strengthening of Family Agriculture (PRONAF). In 1996, through Presidential Decree No. 1,946, of 07/28/1996 (BRASIL, 1996) and, later, with Law No. 11,326, of 07/24/2006 (BRASIL, 2006), it provided the formation of what is now called family farming (BECKER AND ANJOS, 2015).

In 2009, Law No. 11,947, of 06/12/2009 (BRASIL, 2009), instituted, within the scope of the National School Feeding Program (PNAE), the mandatory use of at least 30% of the resources decentralized by the National Fund for the Development of Education (FNDE) for federal, state and municipal schools, for the acquisition of foodstuffs from family farming.

Peixinho (2013) cites Law No. 11,947/2009 as a major advance in the National School Feeding Program, because, among other aspects, it defines food and nutrition education as a priority axis for achieving the objectives of the PNAE, in addition to strengthening the participation of the community in the social control of the actions developed.

Authors such as Oliveira & Santos (2015) and Caldas & Nonato (2014) address the issue of public procurement as a promoter of sustainable development and local development. In addition to allowing the government to perform its functions, public procurement would have a role in stimulating economic, social and environmental aspects that lead to an improvement in people's quality of life.

For Oliveira & Santos (2015), Law No. 11,947/2009, with regard to the obligation to purchase from family farming, represents one of the greatest advances in terms of establishing criteria that seek social impacts for public purchases.

For those who do not work directly with the theme, it would be expected that, eight years after the enactment of the law, the dynamics of the operation of family farming acquisitions would no longer be a problem for those involved, considering that the rules of operation of the program and its purposes and objectives are widely described in Law No. 11,947/2009 itself and subsequent decrees. Such information is widely disseminated by the agencies linked to the execution of the National School Feeding Program (PNAE) in the



various federative instances and by the Technical Assistance and Rural Extension (ATER) agencies.

In fact, in 2014, of the R\$ 2.48 billion transferred by the National Fund for the Development of Education (FNDE) to the municipalities, more than R\$ 578 million were invested in acquisitions of family farming, which represents 23.3% of the total. However, in that same year, only 39.5% of the municipalities reached the minimum limit of 30% for the acquisition of family farming. This means that about 60% of the municipalities were still unable to meet the minimum percentage provided for by law. Even though these numbers have been growing between 2011 and 2014, it is evident that the purchase of family farming still has aspects to advance (THIES *et al.,* 2016).

Some analyses that have been developed contribute to the realization that executing the purchase of family farming goes far beyond the knowledge of the law and poses questions that make the development of the program quite complex (TRICHES & SCHNEIDER, 2012). Inserting family farming products in school meals is not a trivial action, both for those who buy and for those who sell.

Family farming plays a key role in regional development, especially in regions that rely heavily on agricultural production. This sector is characterized by the predominance of family labor, small properties and the diversification of agricultural activities. In addition, family farming is closely linked to environmental sustainability, food security and the dynamism of local economies.

Family farming is responsible for a large part of the food production consumed in Brazil and in the world. According to data from the Food and Agriculture Organization of the United Nations (UN), approximately 80% of the food in the world is produced by family farmers. In Brazil, family farming accounts for about 70% of the food that reaches the table of Brazilians, contributing significantly to the country's food and nutritional security (FAO, 2014).

Family farming is marked by the diversification of production, which includes everything from basic food crops to agroecological and organic products. This diversity not only ensures the livelihood of the families involved, but also promotes economic and environmental sustainability. Diversified production contributes to the maintenance of biodiversity, since it avoids monoculture and soil degradation (COSTA, 2018).

In addition, family farming plays a vital role in preserving cultural traditions and strengthening rural communities. Traditional knowledge and agricultural practices passed down from generation to generation are preserved, promoting a sustainable and environmentally friendly way of life.



The National School Feeding Program (PNAE) has been an important instrument to strengthen family farming and, consequently, promote regional development, since, as mentioned, it provides that at least 30% of the resources transferred to states and municipalities for school feeding are used to purchase family farming products. This policy not only ensures a stable market for smallholder farmers, but also promotes food diversity and the appreciation of local products.

In Goiânia, the implementation of the PNAE has shown positive results in promoting regional development. By encouraging the purchase of products from family farming, the program contributes to income generation and the settlement of families in the countryside, reducing the rural exodus and strengthening the local economy. In addition, by providing fresh and quality food to schools, the PNAE improves students' diet, contributing to their physical and cognitive development (COSTA, 2018).

In Goiânia, the implementation of the PNAE has demonstrated tangible positive impacts in promoting regional development and strengthening family farming. According to Silva *et al.*, (2017), the inclusion of family farming products in school meals has contributed to the diversification of agricultural production and the increase in the income of local farmers.

Another study carried out by Guimarães *et al.*, (2018) highlighted that, in Goiânia, the PNAE has encouraged sustainable agricultural practices, promoting the production of organic and agroecological foods. In addition, the interaction between schools and family farmers has generated an environment of cooperation and mutual learning, where schools benefit from fresh food and farmers improve their cultivation techniques.

Regional development involves improving the economic, social, and environmental conditions of a specific region. Family farming contributes to regional development by generating jobs, promotes social inclusion, and encourages sustainable development. This sector also plays a crucial role in the preservation of natural resources and the maintenance of biodiversity, essential factors for the sustainable development of a region (GUIMARÃES, 2018).

Studies indicate that the implementation of the PNAE has a positive impact on regional development and the sustainability of family farming. According to Silva *et al.*, (2017), the PNAE promotes the diversification of agricultural production, improves the income of family farmers, and encourages sustainable agricultural practices. Another study by Guimarães *et al.*, (2018) shows that the inclusion of family farming products in school meals in Goiânia has contributed to the appreciation of local products and to the dynamization of the rural economy.



Despite the advances, there are still challenges to be overcome. Goiânia, for example, like most municipalities, since 2020, has not been able to apply the 30% in family farming because of some factors. Among these factors, the need to train family farmers to meet the requirements of the PNAE, such as standardization and product quality, stands out. In addition, the logistics of food distribution can be an obstacle in more remote regions (SILVA, 2017).

Logistics is one of the main challenges faced by family farming in the context of the National School Feeding Program (PNAE). This is because efficiency in the distribution of products is crucial to ensure the quality of food supplied to schools and to ensure the economic sustainability of family farmers. Logistical challenges are varied and can be grouped into several main categories, including infrastructure, storage, transportation, coordination, and regulation (GUIMARÃES, 2018).

For example, the efficient transportation of family farm products to schools requires a well-coordinated and punctual system. However, farmers often face difficulties such as a lack of appropriate vehicles, high fuel and maintenance costs, and logistical problems in coordinating deliveries. The fragmentation of production is also an obstacle, i.e. a characteristic of family farming that can generate increases in transport costs due to the need to collect small plots from several producers.

Despite these challenges, there are several solutions and opportunities that can be explored to improve logistics in family farming and in the context of the PNAE, such as public support policies. The government can play an important role by creating incentive policies that facilitate logistics for family farming. This can include subsidies for transportation, tax incentives for infrastructure investments, and programs to support health certification. Overcoming these challenges is essential to ensure that the benefits of the PNAE are fully realized, promoting food security, sustainability, and regional development (GUIMARÃES, 2018).

Cities and regions that have been able to successfully implement the PNAE can also serve as models to be followed. Studying these cases can provide valuable insights into best practices and strategies that can be adapted to other regions, for example, the creation of family farmer cooperatives has proven to be an effective solution to overcome logistical and infrastructure challenges.

With these new practices to encourage family farming in school meals, the National School Feeding Program (PNAE) not only ensures a stable market for farmers, but also contributes significantly to the generation of employment and income in rural areas and,

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consequently, helps to reduce the rural exodus and strengthen the local economy, promoting a more balanced and sustainable regional development (FAO, 2014).

Therefore, the inclusion of fresh and quality products in school meals improves children's diets, contributing to their physical and cognitive development. In addition, the food and nutrition education promoted by the PNAE sensitizes students and their families about the importance of healthy eating, creating more conscious and sustainable eating habits.

#### CONCLUSION

As we have seen, Brazilian education has rights established by the Federal Constitution, among which are the "equal conditions for access and permanence", the "free public education in official establishments" and the "guarantee of a standard of quality" (BRASIL, 1988). Therefore, it is imperative that there is adequate financial investment by the State. This investment must ensure the provision of adequate resources and conditions so that all children can enjoy quality education, including school feeding, which is a crucial part of educational and social development (MEC, 2020).

It is necessary that the educational process be sensitive to the political and social purposes of transforming an excluding society into a new society, inclusive and open to all regardless of classes and *status quo* of its members, since "teaching is not just a mechanical act, but an act of criticism, curiosity, action and transformation" (FREIRE, 2008, p. 64). Supplementary education programs are actions that are part of the regular educational system, aiming to meet the specific needs of students to give more quality to basic education and address social and economic issues that can interfere in the learning and dropout process.

The National School Feeding Program (PNAE) has proven to be an example of public policy of extreme relevance for the strengthening of family farming and regional development, particularly in the city of Goiânia. By integrating food from small local producers into school meals, the PNAE promotes a series of benefits that go beyond the simple nutrition of students. This program is a clear example of how well-structured public policies can act as catalysts for social, economic, and environmental change.

One of the main positive impacts of the PNAE in Goiânia is the contribution to the sustainability of rural communities. By ensuring a stable market for family farming products, the program not only improves farmers' incomes, but also encourages the continuity of traditional and sustainable farming practices. This support is essential in a scenario where many families face economic difficulties and are tempted to abandon the countryside in



search of opportunities in the cities. The maintenance of family farming contributes to the preservation of local culture, biodiversity and food security, essential factors for sustainable development.

The inclusion of fresh and nutritious food in school meals has direct impacts on the health and academic performance of students. Studies show that proper nutrition is essential for cognitive and physical development, positively influencing learning and school attendance. Thus, the PNAE not only fights malnutrition, but also plays a crucial role in promoting healthy eating habits from childhood, contributing to the formation of more conscious and healthy citizens in the future.

The creation of cooperatives and farmers' associations is a strategy that can help overcome these challenges by promoting collaboration among producers and facilitating access to resources and technologies. These initiatives can also serve as platforms for sharing knowledge and good practices, further strengthening family farming and its integration into the PNAE.

Also important is the need to raise awareness about the importance of the PNAE and similar policies for regional development. The successful experiences of Goiânia can serve as a model for other regions of Brazil, encouraging the replication of practices and policies that have proven effective. To this end, it is essential that the government, educational institutions, farmers, and civil society continue to work together, promoting dialogue and cooperation towards a common goal, that is, ensuring healthy, sustainable, and affordable school meals for all students.

Finally, it is essential that public policies such as the PNAE are constantly evaluated and improved, so that they can respond more efficiently and effectively to the changing needs of the population and the country's economic and social challenges. The continuity and strengthening of these policies are essential to ensure not only the right to food, but also the right to quality education, promoting the integral development of students and the progress of local communities.



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