## THE PRICE REFERENCE SYSTEM FOR THE PNAE

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### INTRODUCTION

The PNAE (National School Nutrition Program) is the oldest program of the Brazilian government in the area of feeding and Nutritional Food Safety (SAN, in the Portuguese acronym), and it has fostered biopsychosocial development, learning, school performance and the formation of healthy habits in the students attended by it. For these reasons, it is among the largest and most comprehensive public policies in the world regarding the universal care for schoolchildren and the guarantee of the human right to adequate and healthy food.

In 2009, by Law 11,947, the purchase of Family-based Agriculture products was made compulsory for the use of at least 30% of FNDE (National Fund for Educational Development) onlendings for the foodstuff purchases carried out by the executing agencies in the country, such as public schools. That was an action that has faced countless difficulties in its execution due to problems that will be pointed out in this chapter.

First of all, it is important to emphasize that the relevance of this program as public policy goes beyond its more immediate aspect, which is to promote a healthy and a good quality diet for students. Among its guidelines, it is necessary to point out the "Sustainable Development" that involves the

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participation of the regional agricultural production in its development, which ends up promoting great advances for the local productive chain.

Linked to the actions of the FOME ZERO (Zero Hunger) program, another government program, launched in 2003 in an intensive way regarding the transfer of resources to small-scale agriculture for the eradication of poverty, the PNAE, as well as the PAA (Food Acquisition Program), has been revitalized as a public policy although its emergence dates back to 1930, when, besides being maintained through international donations, it prioritized basic and processed foods, most of which did not come from local production (PEIXINHO, 2013).

However, despite the incentives and advances in the participation of family farmers in the program, we should consider the obstacles they are experiencing, as some research shows. SILVA et al. (2015), in a research on the PNAE carried out with COOFELIZ, the cooperative that supports Family-based agriculture in Espera Feliz, MG, demonstrates that the success of the program is related to the willingness of producers and executing agencies to make their activities and demands more flexible, which is,therefore, an ongoing process of social construction. If, on the one hand, family farmers must adjust their production to meet the demands of consumer institutions, increasing their management techniques, which implies significant changes in the processes of productive organization, on the other hand, PNAE executing entities must also be aware of peculiarities of family agriculture, giving priority, for example, to seasonal products.

In a research carried out in Dracena, SP, Hespanhol (2013) highlights the benefits of the PAA, as well as the difficulties of the adhesion of a larger number of family farmers. Among the findings, which can be applied to the micro-region of Passos, MG, where the project presented with the PNAE will be developed, we should highlight the lack of associativism, technical assistance with little focus on the program and difficulties in dealing with bureaucratic aspects, as well as uncertainty regarding the continuity of this public policy.

In addition to Law 11.947 and Resolution FNDE 26/2013, the scientific approach to the topic has already been pointed out in some publications and drawn attention to a need to work on several conflicting points related to the management of the PNAE program, as follows: "Concerning the obstacles encountered in the implementation of Federal Law 11947/2009 in their municipalities, 23% of the farmers mentioned the lack of training of

the actors involved. Among those, 47% mentioned the lack of preparation of municipal managers and 29% said the same about the farmers themselves. The lack of preparation of the executing agencies, the lack of organization of the Family-based agriculture and the lack of connection between both have also appeared in many of the answers. The unfamiliarity with the currrent legislation on the PNAE was cited by 11% "(SILVA, 2013 p.11).

SARAIVA (2013) points out that, in 2010, 47.4% of Brazilian municipalities purchased Food from Family-Based Agriculture (FA) for the PNAE, and the average percentage of purchase of these municipalities was 22.7%. Considering these results, there is a need to strengthen and implement strategies in different public sectors and organized civil society in order to put this public policy into practice. Carvalho and Castro (2009), analyzing successful experiences in Brazilian municipalities before the new guidelines for PNAE implementation, emphasized that sustainable biddings in school feeding have promoted regional development, social inclusion, local economy movement, fresher food consumption by schoolchildren, reduction in transportation costs and the promotion of food and nutritional education beyond the school environment. On the other hand, the lack of planning or inadequate planning by the manager to execute the purchase was identified as the main obstacle for the purchase of FA.

According to data from the FNDE General Coordination of the School Feeding Program, which manages the execution of the PNAE program resources, in 2014, about 60% of the decentralized resources for the 41 secondary schools, technical and technological institutions of the Federal School Network, were not executed, which indicates a return of about 12 million reais, a figure that would no longer be applied in FA. This information reveals, in numbers, how relevant is the implementation of actions that stimulate and allow more efficient management of the resource allocated to the PNAE, especially in relation to the application of the 30% share in the direct purchases from family farmers.

As shown above, although it has many advantages for family agriculture, the PNAE has many challenges to be faced. Among them, there is the pricing of products, which, on the occasion of public calls, must be represented by an average of at least three price quotations. Due to the lack of trained personnel and the availability for conducting field market research, among other things, frequent difficulties in pricing are observed, such as overestimated or underestimated values and possibilities for inappropriate direction and favouritism. These price-fixing failures cause further delays

in the publication of public calls and make it impossible for producers to participate, which culminates in the failure of the process. This is a recurrent and frequently reported event in the discussion forums about the subject, by farmers and by employees, whether of schools, town halls or Technical Assistance and Rural Extension (ATER) entities. This paper aims to point out some possibilities that have already been implemented in IFSULDEMINAS extension projects and indicate the way to solve some of these obstacles.

# THE START OF THE PRICE REFERENCE PROJECT IN IFSULDEMINAS

By implementing compulsory purchase of food directly from Family-based Agriculture for school feeding, Law 11.947 / 09 created new sales channels for this category striving, in addition, to establish conditions for family farmers to access this market, replacing the traditional bidding processes by the adoption of public calls for this specific purchasing process. This modality of purchase increases the possibility of attending the necessary specificities for food purchasing directly from the farmers, since it simplifies the administrative and operational acts, promoting their participation (RAIMUNDO, 2017).

In order to purchase food from the farmers through public call, a price survey is carried out, primarily, at the local market. The price published in the public call will be the average price among those obtained in the survey, which must be carried out in at least three local markets, prioritizing the family producers fair. If the survey cannot be carried out locally, it must be carried out or complemented at the territorial, state or national level, in that order.

The IFSULDEMINAS, in order to start the purchase of food directly from family-based agriculture, held some PNAE events from the year 2012 onwards. These events happened throught dialogue and partnership with farmers' associations, municipal education secretariats, the rural extension office (EMATER MG) representatives and state school managers. During such events, it was noted that, although the price survey was presented as a simple quotation procedure, it was considered a problem for both managers and farmers. The main difficulties regarding the price survey conduction by the executing agencies presented in these discussion forums were the lack of servers and available vehicles in state schools to carry out the price survey in a short period of time and the difficulty in obtaining information from farmers and traders.

The difficulties pointed out above have caused delays in public call notice publications and overloaded school servants. In addition, the lack of uniformity in the survey procedures entails a high variation of prices paid by different municipalities and even by different schools within the same municipality. In order to find alternatives to overcome these difficulties and contribute to the success of public calls in the region, which includes its own calls, the IFSULDEMINAS has strenghtened the dialogue with the Southern Minas PNAE executing entities, with rural extension agents and with family farmers organizations. This dialogue motivated the development of a project intended to think of a reliable methodology for searching prices and that could also be a price reference to be used by the town administrations, state schools, and the IFSULDEMINAS *campus* to draw up the public calls. That has resulted in the PNAE Price Reference System (SRP) in the South of Minas Gerais.

# METHODOLOGICAL PROCEDURES FOR THE PRICE REFERENCE SYSTEM

The SRP (Price Reference System) was conceived in 2016, within the scope of the IFSULDEMINAS Extension Office and the Inconfidentes town campus, aiming to meet a demand considered relevant by the PNAE executing agencies for the implementation of the program. So that this tool could, in fact, contribute to the speed and efficiency of public calls, a multidisciplinary team was constituted by IFSULDEMINAS servants, EMATER MG extensionists, nutritionists of some municipalities and servants from the Pouso Alegre city Regional Superintendency of Education. According to this team, the SRP should go beyond the price quotation since it should indicate the food already produced and those which would have the potential for production by local agriculture, the appropriate specification for the direct purchases from family-based agriculture and, finally, the possible farmers to supply those products. With this in mind, the project took the following steps:

- 1- Surveying food purchased for school feeding by state schools and municipal administrations in the region;
- 2- Mapping regional production;
- 3- Listing foods that could be purchased by the PNAE in the region;

- 4- Description of each food for possible inclusion in public calls;
- 5- Surveying municipalities that produce food in the region;
- 6- Surveying municipalities with good market indicators related to family-based agriculture purchases for PNAE;
- 7- Definition of reporting municipalities.

Such actions were conducted in conjunction with meetings and activities among the partners involved. Following those initial actions, extension workers and nutritionists listed 42 foodstuffs produced in southern Minas Gerais which were on the school menus. This preference for only researching food produced in the region was a way of reducing the possibility of farmers acting as middlemen \_ie buying foods in the supply centers and selling them as if they were their producers\_ or the possibility of there not being suppliers for foodstuffs which were not produced in the region. The measure also provided a stimulus for nutritionists to prioritize the insertion of regional food in menus, contributing to the students' food education.

From this list, the partner nutritionists described each food item, considering the qualitative aspects of food and without including difficult requirements to be met by family farmers, such as food classification (Type 1, Class A, specific packaging, for example).

It was established that the Price Reference System would be initially a pilot project applied to the southern Minas region, in which there are 51 municipalities reporting to two Regional Superintendencies of Education, SRE Itajubá and SRE Pouso Alegre.

Thereafter, six municipalities were listed for price surveys according to the PNAE marketing history, geographic location and classification as microregional distribution centers for the Family farmers production. It was established that the municipalities where the surveys would be carried out should be located at a maximum distance of 50 km from one another as shown in FIGURE 1, where:

- a) Municipalities covered by SRE Pouso Alegre: Ouro Fino-MG, Pouso Alegre-MG, and Cambuí-MG;
- b) Municipalities covered by SRE Itajubá: Brazópolis-MG, Itajubá-MG, and Cristina-MG.

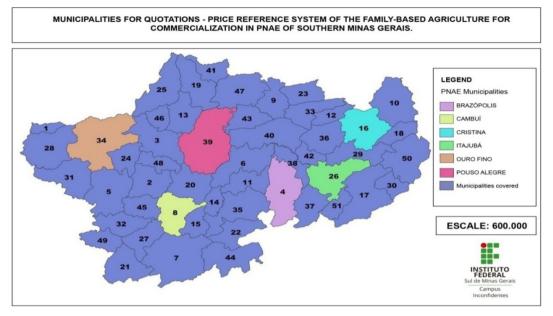


Figure 1. Central municipalities and regional coverage of the Price Reference System project in 2016

In these pole municipalities, in order to comply with Art. 29 § 2 of Resolution 26/2013 FNDE, the priority locations to carry out the quotation survey were the street fairs, town markets, fruits & vegetable stores and, finally, supermarkets. The quotation of at least 3 prices per product in the 6 municipalities was carried out by Emater-MG extension workers and by IFSULDEMINAS scholarship students. They used specific forms to register general data of the location of the quotation, CPF / CNPJ, date, person responsible for carrying out the research, product description and specification, and signature of the person responsible for the information. Concurrently, information from farmers that were interested in selling their products to the PNAE through public calls was also collected.

After the price quotation and systematization of all the information collected, an online price bulletin for the items surveyed was created to be published quarterly on the IFSULDEMINAS website and to be sent to executing agencies (EEx), producer associations and other concerned parties.

The data divulgation made possible the improvement in the product specifications, in the definition of minimum, average and maximum price by municipality or region, as well as in the indication of potential suppliers, thus enabling the EEx. to use these references in the formulation and achievement of public purchases calls from Family-based agriculture to PNAE, giving greater agility and speed to the purchase process.



#### TECHNOLOGICAL EXTENSION PROJECT

The Price Reference System for School Feeding Products in Inconfidentes Microregion for Consultation on Purchases from Family-based Agriculture for the PNAE



Bulletin 04 - April / 2018 1st guarter

- >>> Quotations made between 13 and 18/04/2018, in the municipalities of Ouro Fino and Monte Sião, covering the Region of SRE Pouso Alegre
- >>> The research meets the provisions of paragraph 1 of Article 29 of Resolution CD/FNDE 04/2015.
- >>> The inputs, such as freight costs, packaging, charges and any others needed to supply the product were not considered.
- >>> According to paragraph 4 of Article 29 of Resolution CD/FNDE 04/2015, up to 30% (thirty percent) may be added to the prices of conventional products for the definition of the prices for certified organic and agroecological products, according to Law 12.512 of October 14, 2011.

MERELY ILLUSTRATIVE IMAGES	ITEM	DESCRIPTION	QUANTITY	AVERAGE PRICE
	Avocato	1st quality avocado, uniform size and coloring, immediate and scale consumption during the week, within a maximum of 5 days before shelf-life expiration. Characteristics: Selected product with a firm and intact pulp, ripe or almost, with no physical damage from handling and shipping.		R\$3,47
	Ripe Pumpkin	Round ripe pumpkin with dark green bark. Clean, mature, firm, with peduncle, no cracks, no mold, no rot. Small size, weight between 1 and 2 pounds. With appearance, consistency and coloring characteristic of the species, free of abnormal external moisture, abnormal smell and / or taste, bruises and lesions, insects, molds and / or parasites, as well as damage caused by them. Clean, dry packaging made of material that does not cause external or internal changes to the products and does not transmit odor or taste to the products.	Kg	R\$2,24
200	Green Zucchini	Green zucchini squash, type "menina", top quality, in natura, Italian or "caipira" type. Fresh (recent picking), clean, firm (not withered) and heavy, abundant pulp, light in color, with a soft green peel. Small size: length between 150 and 200mm and diameter between 40 and 70 mm. In good condition (not rotted, no spots or changes that make them unfit for human consumption); free from bruises, injuries, abnormal external moisture, abnormal smell and/or taste, insects, moids and/or parasites, as well as from any damage caused by them.		R\$3,16

Figure 2 - Price Bulletin published (extract)

At the end of the first year of its execution, and after the presentation of the project to the other SREs in Southern Minas Gerais region, there were interest and support for its expansion to the region of Passos-MG. Thus, a local partnership to carry out the proposed activities was built among SRE Passos, IFSULDEMINAS - campus Passos, and the regional office of EMATER in that city.

Having accomplished the collaborative articulations, the partner entities defined 42 products from AF to be quoted, their specifications and the target municipalities for the price survey.

In 2017, therefore, the project started to involve three SREs \_ Pouso Alegre, Itajubá and Passos \_ thereby reaching 68 municipalities with 9 quotation centers:

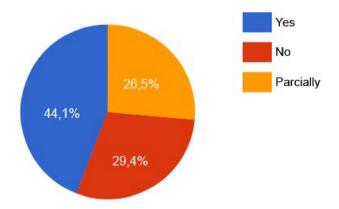
Municipalities covered by SRE Pouso Alegre: Ouro Fino-MG, Pouso Alegre-MG, and Cambuí-MG;

Municipalities covered by SRE Itajubá: Brazópolis-MG, Itajubá-MG, and Cristina-MG.

Mulnicipalities covered by SRE Passos: Passos-MG, Carmo do Rio Claro-MG, Piumhi-MG.

In that same year, the same methodology was adopted equally in the three SREs. and a quarterly SRP bulletin was published in each region. They were used by the EEX. as a reference and a way to promote the execution of the PNAE public calls.

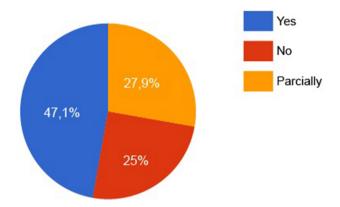
At the end of the 2nd year of execution, a survey was done with the EEx. of the regions served by the project. The aim was to analyze the results and the use of the information published, as well as to evaluate the applicability and continuity for the following year. There were 68 responses to 10 questions. The following graphs highlight the most relevant results:



Graph 1. The usage of the price reference bulletin material by Executing Entities (68 replies)

The graph above reflects the result of the answers to question number 4. About 70% of EEx. stated that they had used the price bulletin of the project totally or partially. This is a very relevant indication since it shows the applicability of the SRP.

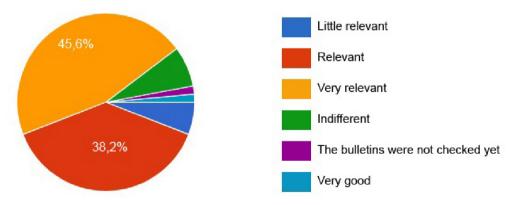
In graph 2, we observe the evaluation of the schools regarding the usefulness of the price reference bulletins in the formulation of public calls.



Graph 2. The usage of the price reference bulletin by Executing Entities in the formulation of the purchasing process (68 replies)

We can also verify that 75% of the institutions stated that the information published helped in the formalization of the public calls.

And, finally, when responding about the relevance and importance of the continuity of the project and the publication of the reference bulletins, approximately 83% of the entities said they were relevant or very relevant, thus reaffirming the need to continue. (graph 3).



Graph 3. Importance of the continuity of the price reference bulletin publication (68 replies)

In view of the results presented and evaluated in 2016 and 2017, in addition to the approval of an extension project in the Secretariat of Professional and Technological Education - which included some actions to promote the implementation of the PNAE for the municipal, state and federal network, with resources for hiring scholarship students, among others -, in 2018, the Pricing System was expanded to all SREs where the IFSULDEMINAS has its campuses settled, as shown below:

- a) Campus Inconfidentes and campus Pouso Alegre / scope of SRE Pouso Alegre: Ouro Fino-MG, Pouso Alegre-MG and Cambuí-MG;
- b) Campus Carmo de Minas / scope of SRE Itajubá: Brazópolis-MG, Itajubá-MG and Cristina-MG;
- c) Campus Passos / scope of SRE Passos: Passos-MG, Carmo of Rio Claro-MG, Piumhi-MG;
- d) Campus Poços de Caldas / scope of SRE Poços de Caldas: Poços de Caldas-MG, Alterosa-MG, Nova Resende-MG;
- e) Campus Machado / scope of SRE Varginha: Machado-MG, Três Corações-MG, Poço Fundo-MG, Boa Esperança-MG, Alfenas-MG, Varginha-MG and Lambari-MG

After that expansion in its third year, the project had reached a range of 136 municipalities in Southern Minas Gerais and assisted 5 regional SREs, with the quarterly price bulletin listing between 33 and 42 items.

## DEVELOPMENTS AND THE CURRENT PHASE OF SRP

Due to the visibility gained by Price Reference System in the state of Minas Gerais, since it actually contributed to the process of purchasing food from family-based agriculture by public schools, in 2018, some partnerships were established with the State Secretariats of Education, the Planning and Management Secretariat, the central EMATER-MG, and SEBRAE-MG, aiming at formalizing both the methodology and the price reference system. The objective was to create a price reference bank for family-based agriculture products that could reflect the prices of regional products in a dynamic and easily accessible way to the executing entities of public policies involved, that is, PNAE and PAA.

A working group was then set up, and its members discussed the construction of this proposal during the second half of 2018.

Some methodological changes were listed, such as quotations in all municipalities by local EMATER-MG extension agents or, in the absence of them, by state school officials. For this purpose, a computerized system to receive, process and publish the information would be necessary and, in a first agreement, it would be developed and managed by the central EMATER-MG. Another issue widely discussed by the group was the need for dynamic feedback of this database with the information about the purchases made by the executing entities, making the process automatic and reliable. In such collective construction, the IFSULDEMINAS was responsible for coordinating with the other four federal institutes in Minas Gerais, based in different regions of the state, so that, working in partnership, they serve as multipliers and validators of the methodology for local partners.

Despite the relevance of the project, the discussions were interrupted at the end of 2018 after the change in state management. Currently, the composition of the new administrative teams of the state secretariats and other entities involved are expected for continuity or reconstruction of the proposals, so that the implementation of the pricing of family farming products in the state of Minas Gerais could occur.

In the scope of IFSULDEMINAS, also reflecting changes in Federal Government management, the financial contributions for costing student scholarships were not approved, hindering the continuity of the project. With the extent of actions in its third year of execution, the project awaits the resumption of partnerships built in state level for continuity throughout Minas Gerais.

### FINAL CONSIDERATIONS

The development of this project made it possible to verify its relevance for overcoming the difficulties in pricing items to be purchased from FA by the executing agencies of the National School Feeding Program. Plus, the formation of a price base that complies with the current legislation in line with the demands of the FA and the preventing of labor demand in pricing for the servers of the executing entities are also ascribed to the SRP.

In this sense, according to different evaluations and reports from EEx., the bulletins produced by the project provide greater efficiency and speed in the processes, as well as better use of scarce public resources for school feeding, thus meeting the requirements of the current law.

Finally, it is necessary to emphasize the importance of the federal institutes in promoting transversal and interinstitutional actions in the development of extension, research and teaching projects that dialogue directly with the needs and aspirations of local and regional society where they are installed, aiming at supporting and promoting social, economic and environmental development, one of the premises for the creation of these institutions.

### REFERENCES

BRASIL. Lei nº. 11.947, de 16 de junho de 2009. *Diário Oficial da União*, Brasília, DF, 17 de jun. 2009. Seção 1, p. 2.

BRASIL. Resolução CD/FNDE nº. 26, de 17 de junho de 2013. Dispõe sobre o atendimento da alimentação escolar aos alunos da educação básica no Programa Nacional de Alimentação Escolar – PNAE. *Diário Oficial da União*, Brasília, DF, 18 de jun. 2013. Seção 1, p. 7.

BRASIL. Ministério da Educação. *Cartilha Nacional da Alimentação Escolar*. Brasília, 2015. 88p. Available from: https://www.fnde.gov.br/centrais-de-conteudos/publicacoes/category/116-alimentacao-escolar?download=9572;pnae-cartilha-2015. Access: 31 mar. 2019.

BRASIL. Ministério da Educação. *O encontro da agricultura e a alimentação escolar*. Available from: https://www.fnde.gov.br/programas/pnae/pnae-area-para-gestores/pnae-manuais-cartilhas/item/5196-cartilha-o-encontro-da-agricultura-familiar-com-a-alimenta%C3%A7%C3%A3o-escolar. Access: 31 mar. 2019.

CARVALHO, D. G.; CASTRO, V. M. O Programa Nacional de Alimentação Escolar–PNAE como política pública de desenvolvimento sustentável. *In*: ENCONTRO DA SOCIEDADE BRASILEIRA DE ECONOMIA ECOLÓGICA, 8., 2009, Cuiabá. *Anais* [...]. p. 1-20.

FNDE. Fundo Nacional de Desenvolvimento da Educação. Ministério da Educação. 2019. Available from: https://www.fnde.gov.br/. Access: 31 mar. 2019.

HESPANHOL, R. A. M. Programa de aquisição de alimentos: limites e potencialidades de políticas de segurança alimentar para a agricultura familiar. *Sociedade & Natureza*, Uberlândia, v. 25, n. 33, p. 469-483, set/dez/2013. Available from: http://www.scielo.br/scielo.php?script=sci\_arttext&pid=S1982-45132013000300003. Access: 31 mar. 2019.

IFSULDEMINAS. Centro Colaborador de Alimentação e Nutrição Escolar. CECANE. 2019. Available from: https://cecane.ifsuldeminas.edu.br/. Access: 31 mar. 2019.

PEIXINHO, A. M. L. A trajetória do Programa Nacional de Alimentação Escolar no período de 2003-2010: relato do gestor nacional. *Ciência & Saúde Coletiva*, Rio de Janeiro, v. 18, n. 4, p. 909-916, 2013. Available from: http://www.scielo.br/scielo.php?pid=S1413-81232013000400002&script=sci\_abstract&tlng=pt. Access: 31 mar. 2019.

RAIMUNDO, R. R. F. *A implementação do Programa Nacional de Alimentação Escolar no Instituto Federal de Educação, Ciência e Tecnologia do Sul de Minas Gerais*: desenvolvimento sustentável por meio das aquisições da agricultura familiar. 2017. 114 p. Dissertation (Master's degree in Desenvolvimento Sustentável e Extensão) - Universidade Federal de Lavras, Lavras, 2017. Available from: repositorio.ufla.br/handle/1/15183. Access: 31 mar. 2019.

SARAIVA, E. B. *et al.* Panorama da compra de alimentos da agricultura familiar para o Programa Nacional de Alimentação Escolar. *Ciência & Saúde Coletiva*, Rio de Janeiro, v. 18, n. 4, p. 927-936, 2013. Available from: http://www.scielo.br/scielo.php?script=sci\_abstract&pid=S1413-81232013000400004&lng=en&nrm=iso&tlng=pt. Access: 31 mar. 2019.

SILVA, M. G.; DIAS, M. M.; AMORIM JR, P. C. G. Mudanças Organizacionais em Empreendimentos de Agricultura Familiar a partir do Acesso ao Programa Nacional de Alimentação Escolar. *Revista de Economia e Sociologia Rural*, Piracicaba, SP, v. 53, n. 2, p. 289-304, abr./jun. 2015. DOI: http://dx.doi.org/10.1590/1234-56781806-9479005302006