

Rural Credit in Family Agriculture: An analysis of the distribution of PRONAF resources in Pará from 2016 to 2020

Renno de Abreu Araújo¹, Samuel Carvalho de Aragão², Márcio Teixeira Oliveira³,
Viviane Marques Gondim Guedes⁴, Priscila Gonzales Figueiredo²

¹Federal Institute of Pará – IFPA – Campus Paragominas

²Federal Institute of Mato Grosso do Sul – IFMS – Campus Naviraí

³Federal Institute of Mato Grosso do Sul – IFMS – Campus Três Lagoas

⁴Federal Rural University of Amazonia – UFRA – Campus Paragominas.

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Abstract— Over time, family farmers have been on the sidelines of public policies that have fostered their development since the colonial period. However, after the promulgation of the Federal Constitution of 1988, added to various social movements that claimed policies that really assist this people, in 1995, the National Family Farming Program (PRONAF) was created, with the objective of enhancing the development of farmers, with an increase in income, quality of life, number of jobs, in addition to the permanence of man in the countryside. Thus, this study aimed to analyze the distribution of PRONAF resources in the state of Pará in the period from 2016 to 2020. Taking into account that in Pará rural establishments are predominantly family farming, corresponding to more than 85%. Therefore, this study found that the state of Pará had a share of more than 21.9% of the resources distributed in the Northern Region in 2020, obtaining expressive growths in the period studied in the costing modality, with emphasis on the livestock activity this year. It is noteworthy that over the period studied there was an increase of 183% in the total value of PRONAF resources financed in the state of Pará, and that in 2020 the state received R\$ 490,666,354.83 totaling 12,674 contracts. Furthermore, it is worth noting that the southeast region of Pará was the region that had the greatest increase in receipts of resources from PRONAF in the period studied, 184% between the years 2016 to 2020. That the work of rural extension needs to be implemented more and more in the state, in order to help in the projects and that more resources can be available to small farmers who need it so much.

I. INTRODUCTION

Agriculture has been practiced since the beginnings of society, at first it was used on a subsistence basis, however over the years, in addition to producing for their own consumption, man started to allocate the surplus

production by bartering, and finally, the commercialization of food. Throughout history, agriculture has gone through several phases of transformations and modernizations that mainly benefited the large and more capitalized landowners.

In Brazil, agricultural modernization caused the same reflex, since only employers' agriculture benefited the most from these advances. From a governmental point of view, the State has always implemented public policies that benefit the largest farmers more, leaving small farmers or family members on the sidelines of these policies.

Although large producers have their importance, family farming has a very important role in Brazilian society. In addition to the economic, environmental, social and cultural benefits, it is responsible for a large part of the food that arrives on Brazilians' tables; in addition to helping to mitigate the rural exodus, diversifying its products, employing most of the jobs in rural areas, among many other factors.

Only after the Federal Constitution in 1988 with the legal reorganization of the state, added to the demands of rural movements that the Government implemented the first public policy in the context of family farming, the National Family Farming Program (PRONAF) created in 1995 with the objective of promoting the development of family farming through the granting of rural credit, in order to guarantee the permanence of man in the field, as well as the possibility of growth and perpetuity of the activity.

Therefore, this work aims to analyze the distribution of PRONAF resources in the state of Pará in the period from 2016 to 2020. And as specific objectives: to analyze the distribution of the number of contracts and financial amounts allocated in the costing, investment, commercialization and industrialization; in addition to verifying the greatest incidence of subprograms in the modalities present in the program.

A. Portraits of family farming in Brazil

Among the Brazilian economic activities, agribusiness has been renowned. In this scope, family farming is responsible for guaranteeing a good part of the food that is on the table of Brazilians, in addition to guaranteeing employment in rural areas, being crucial to alleviate the exodus in the countryside [1]. There are records that the production of food and domestication of animals took place between 5,000 BC to 10,000 BC, where plants began to be cultivated and animals managed for their own subsistence, as well as bartering. From that point on, agriculture and at the same time animal husbandry evolved and spread around the world [2][3].

In Brazil, although agricultural production had been practiced for a long time by the Indians, it only gained more notoriety and greater dimensions after the discovery of the country in 1500, when it began to be developed by Portuguese colonizers [4]

The forms of production in Brazil Colony were export-oriented and experienced various economic cycles such as: mining, rubber, sugar and coffee. Soon, there were large properties of land destined for the production of monocultures that were under the yoke of Portugal

In this juncture, subsistence agriculture was formed, as large producers grew and benefited, on the other hand, throughout history small subsistence farmers and low production capacity were left out in the open [5].

The same author discusses that Brazilian agriculture has gone through several periods of transformation, including the Post-War period in which the policy of "modernization" of Brazilian agriculture was adopted, with significant changes occurring in the agricultural dynamics. However, it also brought negative environmental and social externalities in the last decades of the 20th century. After the mid-1950s, several debates began to be discussed and raised in defense of family farming that over the centuries was left abandoned and unattended by the State.

Castro, Resende and Pires[1] corroborate some aspects stating that farmers received little support from the State to develop their activities.

Family farming was forgotten by all entities of the federation during the process of modernization of Brazilian agriculture, which began after World War II. It was only after the promulgation of the Federal Constitution of 1988, with the legal reorganization and the endorsement of organizations and social movements that the discourse of the need for public policies in the area of family farming, especially rural credit, became solid [6]. The National Program for Strengthening Family Farming (PRONAF) created in 1995 was the first public policy focused on family farming [6] [7] [1].

There is a great deal of discussion about the concept of family farming, for Corrêa, Maneschy and Sobrinho[8] family farming is characterized by agricultural establishments, so that the production system is carried out by the family, being developed mainly as a source of subsistence with the objective of meeting food needs.

Usually, family farmers have a low level of education, production is diversified, with a view to increasing income by taking advantage of environmental opportunities and the availability of local labor [1].

This subsistence activity is responsible for a large part of the food that is produced to feed the population [9]. In large part, there is a diversification of cultivated foods, little technology is used, production is low-income, and one of the most notable characteristics is that the management of the activity is family-run, as well as the

workforce [7]. Troian and Machado[10] brought together some distinct definitions about the expression “family farming” that can be seen in Table 1 below.

Table 1: Different definitions for the expression family farming

| Definitions for the expression family farming | Author |
|---|----------------------------|
| Characterized as one in which the family performs productive work while owning the means of production. It has a productive structure that involves family-production-work and all the strategies defined by the family tend to ensure its immediate survival and guarantee the reproduction of subsequent generations. | Wanderley (1996) |
| Production unit with extremely different, varied and similar conditions. Non-homogeneous social group, which has eccentric adaptive competence. | Lamarche (1997) |
| It does not fit into a single model and involves cultural aspects in the way of life and how it is associated with economic activities. They associate family relationships with productive activities and have a vocation to adapt to peculiar regional situations, incorporating and adapting their mode of production to local characteristics. | Carneiro (1997) |
| Those who practice activities in the rural environment basically meeting the following conditions: the activities in the productive space to be practiced predominantly by the producer and family; that is, family labor is greater than contracted work, and the extension of the productive space is within an area specifically determined for each region of the country. | Guanziroli e Cardim (2000) |
| The forms of productive organization adopted go beyond production/economic profitability, taking into account the needs and objectives of the family. | Carmo (2000) |
| Units made up of domestic groups that carry out their work under a family economy, united by parental and consanguineous ties. | Schneider (2006) |
| Farmers who practice activities in rural areas, meeting, simultaneously, the following requirements: “I – does not hold, under any title, an area larger than 4 (four) fiscal modules; II – predominantly use labor from the family itself in the economic activities of its establishment or enterprise; III – has a minimum percentage of family income originating from economic activities of its establishment or enterprise, as defined by the Executive (Wording given by Law No. 12,512, of 2011); IV – run your establishment or business with your family”. | Brasil (2006, art. 3) |
| Influential conduct of the family in the organizational structure of social reproduction, through the development of family and individual strategies that influence the transfer of material and cultural heritage. Family farming mode in which property and work are linked to the family. | Savoldi e Cunha (2010) |

From the table, it is clear that the concept of family farming has matured, due to the large volume of studies and research related to the subject. Among the definitions listed in Table 1. It is worth highlighting the creation of Law 11.326, of July 24, 2006, which defines the guidelines for the formulation of public policies for this segment, in addition to identifying this public by defining the criteria. The law establishes that the property is classified as family farming when activities are carried out in rural areas, has an area of up to four fiscal modules, labor from the family itself, income linked to the establishment itself and that the management of the property or enterprise is carried out by the own family. The following are included as beneficiaries of family farming according to the criteria defined in the law: foresters, aquaculturists, extractivists,

fishermen, indigenous peoples, remnant communities of rural quilombos and traditional communities [11].

The Ministry of Agriculture, Livestock and Supply (MAPA) adds that family farming is formed by small rural farmers, traditional peoples and communities, land reform settlers, foresters, aquaculture, extractivists and fishermen. The main products produced by this sector are: corn, cassava root, dairy cattle, beef cattle, sheep, goats, vegetables, beans, sugarcane, rice, swine, poultry, coffee, wheat, castor, fruit and vegetables. Of the 5 million rural properties in the country according to the 2017 Agricultural Census, around 77% of agricultural establishments were classified as family farming, occupying an area of 80.9 million hectares which

corresponded to 23% of total rural establishments Brazilians. Furthermore, the sector employed more than 10 million people in September 2017, which corresponded to 67% of those employed in agriculture [9].

B. Family farming in the state of Pará

The state of Pará, located in the Amazon biome, is the second largest in terms of territory and one of the richest states in the great North Region, with an area of 1,245,870,707 km² and an estimated population of 8,690,745 people, distributed in 144 municipalities [12]. The State is divided into six geographic Mesoregions, which are a set of municipalities in a geographic area that have similarities in common in economic and social areas and belong to the same Federation Unit, defined by the dimensions: social process, being determinant, the aspect natural, as a condition, and geographic and communication elements, as a spatial factor of articulation [13].

Thus, the following geographic Mesoregions make up Pará: Baixo Amazonas with 15 municipalities; Marajó with 16; Metropolitan of Belém with 11; Northeast Pará with 49; Southwest of Pará with 14; and Southeast Pará with 39. In these Mesoregions of Pará there are 22 geographic microregions. Of these Mesoregions, the ones with the greatest predominance of family farming are the Northeast and Southeast with more than 60% of rural family farming establishments, whereas in the Northeast region of Pará it held more than 40% and the Southeast of Pará with 21%.

According to the 2017 Agricultural Census, Pará had 281.7 thousand rural establishments, of which more than 85% were family farm establishments. Rural establishments had an area of more than 28.4 million hectares in Pará, and family farming in relation to this area represented 30%. This sector employed almost 80% of all personnel who were employed in the field, which was over 979 thousand workers [14]. These data show the importance of this activity in economic, social and environmental aspects.

The Pará economy is based on industry sectors; agriculture and livestock; and trade and services [15]. According to the Agricultural Defense Agency of the State of Pará (ADEPARÁ) agriculture, in addition to being responsible for most of the food that arrives on the table of Brazilians daily, in Pará the agricultural production chain is responsible for almost 40% of the state's economy. In 2017, the state occupied the first position in the production of cassava, açai, cocoa, citrus and oil palm crops, standing out in these productions in the country [16].

This predominance of family farming in the state of Pará is repeated in many municipalities in the Amazon, although in recent years family farming has been losing

ground to monoculture, especially in Southeast Pará, where the agricultural frontier area in which soybean is located is located. main crop, so that it had an increase of 684% in planted area, going from 71 thousand hectares in 2008 to 557 thousand hectares in 2018 [17]. Despite this, there are many municipalities that still have a very strong agricultural and/or extractive tradition. Family farming represents the essence of society, supplying the market and having a direct influence on organized social movements [8].

C. PRONAF's public policy as a financial support for family farming in Brazil

Public policies are the product of government, their construction is carried out by various social actors that make up a complex social game. The process of formulating, implementing and evaluating policies is carried out in a completely political environment. This construction is conceived through the interaction between the State and society, resulting in actions that will impact and benefit the collective interests and needs of various individuals and segments of society [18].

For a long time, family farming was on the sidelines of society, lacking public policies to promote and include in political agendas, considering that throughout the Brazilian historical process, public policies were exclusively aimed at employer agriculture, benefiting the most capitalized [19]. After the promulgation of the Federal Constitution of 1988, with the legal reorganization of the Brazilian State, debates around public policies that benefit the rural environment, especially in family farming, became more discussed, gaining great notoriety in the agendas of policies that came to benefit this segment [20].

Troian and Machado[10] highlight that, throughout history, public rural credit policies have been unable to meet the needs of family farmers. However, with the consolidation of the 1988 Constitution, several social movements endorsed the speech and demanded that the Federal Government elaborate specific policies for family farming, with the aim of promoting rural development [20].

In this scenario, several organizations and social movements were created, such as: the Single Workers Center (CUT) in 1983; National Department of Rural Workers (DNTR) in 1988; Landless Workers Movement (MST) in 1984; Movement of People Affected by Dams (MAB) in 1991 and National Council of Rubber Tappers (CNS) in 1985.

In the following years, such organizations elucidated their creations even more the precariousness of Brazilian family agriculture and the need for policies on the part of the State that would benefit them, highlighting agrarian

reform and rural credit [21]. As a result of these claims, in 1994 the government of Itamar Franco created the Program for the Valorization of Small Rural Production (PROVAP), which was subsidized with resources from the National Development Bank (BNDES). This program was the kickoff for the PRONAF public policy that was to be created two years later. In 1995, during the government of Fernando Henrique Cardoso, PROVAP was remodeled, increasing its coverage area [22]. PRONAF was established in 1995 by resolution No. 2191 of August 24, 1995, through the Central Bank of Brazil, offering financial support to farmers [23][24].

In 1996, PRONAF was implemented by Presidential Decree No. 1,946. In 1996, the creation of this public policy had the objective of promoting rural development through the granting of credit, being considered as one of the main public policies in rural areas based on financial volume and the number of benefited farmers [25] [6]. Until the early 1990s there was no public policy at the national level that specifically benefited family farming, therefore, PRONAF was implemented with the premise of including and meeting the needs of this social segment [26][27][28].

According to Sena and Barbosa[29], the main objective of the program is to provide resources for financing production, acquisition of equipment and infrastructure in family farming establishments, as well as providing an increase in the farmer's income, therefore the permanence

of the man in the countryside avoiding the rural exodus [30]. Diniz Filho and Zafalon[31] strengthen this statement, saying that PRONAF was established in the 1990s to support family farmers. On the other hand, Pêssoa[32] highlights that PRONAF aims to socially strengthen the category of family farming, with the objective of enhancing development in the rural environment, with actions aimed at increasing production, improving the lives of farmers, maintaining jobs and insertion in the market.

Among other features, the program aims to alleviate the adversities faced by rural farmers in remaining in the countryside, so the possibility of getting a credit allows the farmer to have capital to increase productive capacity, purchase equipment, inputs, improve infrastructure.

The credits granted by the program can be used for funding, marketing, investment, industrialization or integration of quotas by beneficiaries in agricultural production cooperatives. The criteria regarding credit limits, terms and interest will depend on the purpose. The program has low interest rates ranging from 3% to 4.6% per year and advantageous terms and payment conditions [1][24][30]. In addition to enabling a variety of credit lines as summarized in Table 2.

Table 2: PRONAF credit lines

| Credit line | Farmer group |
|---------------------------------|---|
| Pronaf Costing | It is intended for financing agricultural activities and processing or industrialization and marketing of own production or that of third parties classified under Pronaf. |
| The Pronaf Plus Food/Investment | Aimed at financing the implementation, expansion or modernization of production and service infrastructure, agricultural or non-agricultural, in rural establishments or in nearby rural community areas. |
| Pronaf Agroindustry | Line for financing investments, including in infrastructure, aimed at the processing, processing and marketing of agricultural and non-agricultural production, forestry and extractivism products, or handcrafted products and the exploitation of rural tourism. |
| Pronaf Agroecology | Line for financing investments in agroecological or organic production systems, including costs related to the implementation and maintenance of the enterprise. |
| Pronaf Eco | Line for financing investments in techniques that minimize the impact of rural activities on the environment, as well as allow farmers to better interact with the biome in which their property is located. |
| Pronaf Forest | Financing of investments in projects for agroforestry systems; ecologically sustainable extractive exploration, forest management plan, restoration and maintenance of permanent preservation areas and legal reserve and recovery of degraded areas. |
| Pronaf Semi-Arid | Line for financing investments in projects for coexistence with the semi-arid region, focused on the sustainability of agro-ecosystems, prioritizing water infrastructure and the implementation, expansion, recovery or modernization of other infrastructures, including those related to agricultural and non-agricultural production and services projects, according to the reality of |

| | |
|--|---|
| | farming families in the semiarid region. |
| Pronaf Woman | Line for financing investment of women farmer credit proposals. |
| Pronaf Young | Investment financing of credit proposals from young male and female farmers. |
| Pronaf Costing and Marketing of Agribusiness Relatives | Aimed at farmers and their cooperatives or associations to finance the cost of processing and industrialization of their own and/or third-party production. |
| Pronaf Quota-Part | Investment financing for the payment of quotas for family farmers affiliated to production cooperatives or for investment in working capital, costing or investment |
| Rural Microcredit | Aimed at low-income farmers, it allows for the financing of agricultural and non-agricultural activities, and the credits can cover any demand that may generate income for the assisted family. Credits for family farmers in Group B and female farmers belonging to family production units in Groups A or A/C |

The main sources of resources for PRONAF, in addition to the BNDES, come from the Worker's Support Fund (FAT), which is currently the main source of resources with around 80% of the total since 1999. Other important sources are the Constitutional Funds of the Northeast (FNE), Midwest (FCO) and North (FNO) [22]. The main financial institutions responsible for providing PRONAF credits have been Banco do Brasil (BB), Banco do Nordeste (BNB) and Banco da Amazônia (BASA). For the farmer to have access to the program, he must meet the criteria and have a Declaration of Aptitude to PRONAF (DAP), which is one of the requirements that qualifies the farmer to have access to the program [29] [23].

Although PRONAF has been an advance for family farming in Brazil, however there are several studies that demonstrate that most financial resources have always been concentrated in a more elite group of family farmers, especially those located in the southern region of the country [6][10][23][25][33][34][35][36][37][38].

II. METHODOLOGY

The research was developed through a bibliographic study, using a quantitative approach. According to Gil [39], a bibliographic study is based on various scientific materials such as books, articles, dissertations and theses. For Lakatos and Marconi [40] "it is a general overview of the main works already carried out". Considering that one of the most relevant data sources that supported the research was the data collected on the IBGE website, specifically, from the 2017 Agricultural Census, with the state of Pará as the object in question. rural credit for family farming in the state through PRONAF [39][40].

In order to obtain more information on the volume and values handled by Pronaf, secondary data from the Central Bank of Brazil collected from the Rural Credit Data

Matrix in the field of contracts were used, so that they were analyzed in the aspects of the Major Regions, the state of Pará, and the different modalities and subprograms of PRONAF.

The data obtained in the aforementioned references were used in Microsoft Excel 2016 in order to carry out a statistical analysis of the percentages of historical evolution of financial resources allocated to PRONAF, allocated in the state of Pará during the period studied. As well as, in the manipulation of data, construction of tables, tables and graphs of the Mesoregions and the main cities where the resources were destined.

All the literature used as the basis for writing this article was gathered from articles, government documents, dissertations, monographs and journals available on the web. First, a general survey was carried out on the fundamental data related to Pronaf, so that, from that moment on, the theoretical basis on the subject could be carried out, so that the analysis of the program's specificities could be carried out.

III. RESULTS AND DISCUSSION

Through the 2017 Agricultural Census data, it can be noted that the state of Pará is predominantly formed by family farming, taking into account the number of rural establishments, reaching more than 85% [14]. In the state of Pará there were a total of 281,699 rural establishments according to the 2017 Agricultural Census, which corresponded to an area of 28,419,453 hectares. About 51% of Pará's land use was destined to pastures with more than 14.5 thousand hectares, another 37% were composed of forests with more than 10.5 thousand hectares and about 6% were destined to crops with more than 1.6 thousand hectares [14]. It is observed that in land use the most predominant activity is livestock, a situation that has been

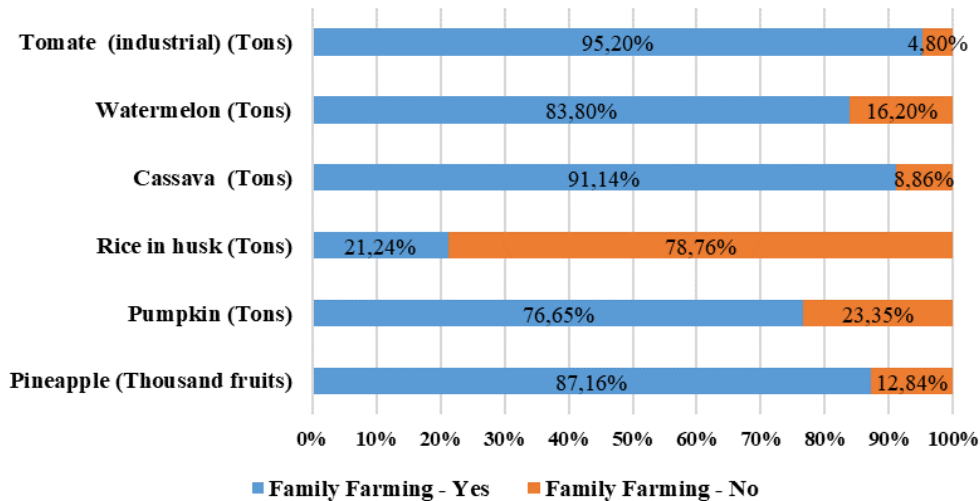
modified in recent years due to the entry of precision agriculture throughout the territory of Pará, in the last 10 years.

Of the area set aside for crops, around 47% (780,929 hectares) are permanent crops. On the other hand, temporary farming represented 53% with 889,790 hectares

and another very small percentage was destined to the cultivation of flowers, greenhouses and greenhouses. In Graph 1 below, the temporary crops that have the largest share in the state's total production in 2017 are shown in family farming, as shown above.

Graph 1 – Temporary crops produced by family farming with the highest share in 2017.

Temporary farming - The most sought after products by family farming in 2017



Source: Created by authors.

Note that of the temporary crops represented in the graph above, family farming is responsible for more than 75% of the state's production, with the exception of rice, which only represented 21.24%. However, crops such as cassava had a production of more than 1,041 tons, of which family farming was responsible for more than 949 tons.

Graph 2 presents a representation of the financial movement of PRONAF resources that occurred in the specified period. It could be noted that from 2016 to 2017 the Brazilian regions continued to grow, and as shown in this research by other studies, the South region in the period studied predominates as one of the regions that received the most financial resources in the 25 years of the program. The South region obtained an average of 55.22% of the amounts financed from 2016 to 2020. While the Southeast, Northeast, Midwest and North regions obtained an average of 16.32%; 14.59%; 7.09% and 6.78%, respectively. This inequality in distribution was identified in the studies by Schultz and Ahlert [23]; Troian and Machado[10]; Cruz et al.[42].

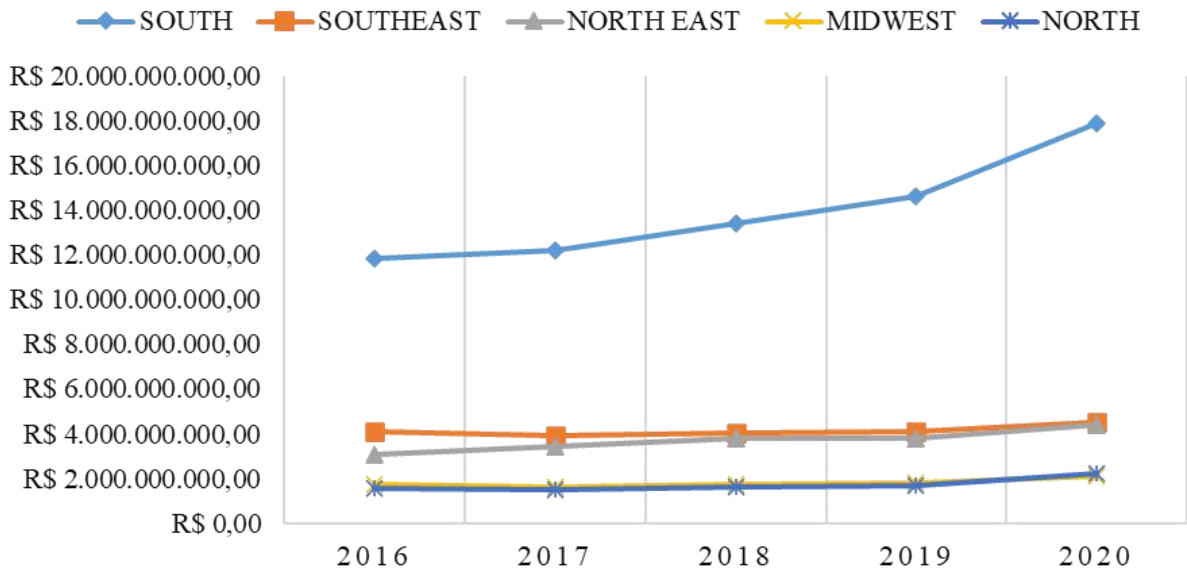
However, it is notorious to know that in the aforementioned southern region, there is greater

organization among the communities of family farmers, in association, unions, cooperatives, agrovilas, has political representation, great availability of technical assistance and ease in marketing and marketing its products[38].

It was observed that the South region presented a significant annual growth, while the other regions remained almost stagnant in relation to the distributed percentage of financed amounts. These facts reinforce the discourse of the concentration of financed amounts in the South region, which in 2020 alone was responsible for more than R\$ 17.9 million of the R\$ 31.1 million of amounts financed in the country. In the North region, Pará was the second state that received the most funding from PRONAF, only behind the state of Rondônia. The distributions of the number of contracts in the Brazilian regions are shown in Graph 3.

Graph 2 below depicts the movement of PRONAF resources distributed in the Major Brazilian Regions in the period from 2016 to 2020.

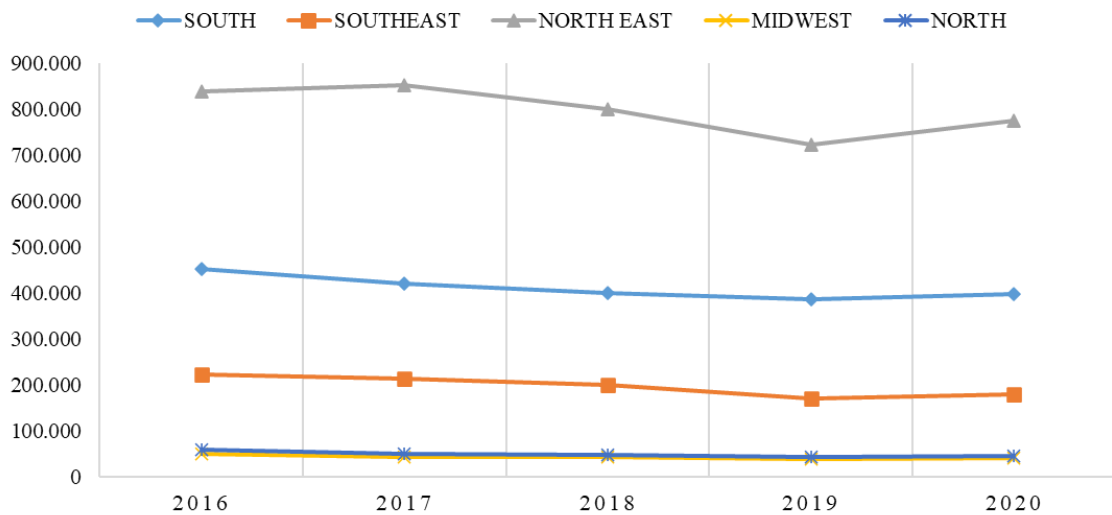
VALUE OF PRONAF RESOURCE MOVEMENTS IN THE LARGER REGIONS OF BRAZIL FROM 2016 TO 2020



Source: Created by authors.

Graph 3 – Number of contracts distributed in the Major Brazilian Regions from 2016 to 2020.

NUMBER OF CONTRACTS DISTRIBUTED IN THE MAJOR BRAZILIAN REGIONS FROM 2016 TO 2020



Source: Created by authors.

There was a drop in almost every year in the Brazilian regions, with a slight increase from the year 2020.

According to the study carried out by Grisa, Wesz Junior and Buchweitz[25], the South Region in 1998

accounted for 60% of contracts and the Northeast Region for 25%. In 2012, this reality began to change, with the South region accounting for 32.75% of contracts and the Northeast region for 45.48% of total contracts, while the

North and Center-West regions had small shares, never exceeding 6 % of the total. Over the years of PRONAF's public policy, the Midwest and North regions had the lowest growth in rural credit. Therefore, the regional distributions of resources are out of balance, which runs from 1999 to 2017 [10].

Although the southern region concentrates the largest amount of financing as seen in Graph 2, however, it is the Northeast region that holds the largest number of contracts. One of the reasons is that this region accounts for almost half of the number of rural establishments in Brazil, accounting for about 54% of contracts in 2020, followed by the South region with approximately 28% and the Southeast with 12%.

The regions that presented the lowest number of contracts were the Midwest and North regions, around 3% each of the distribution of contracts in the country. Both in the number of contracts and the amount financed in the

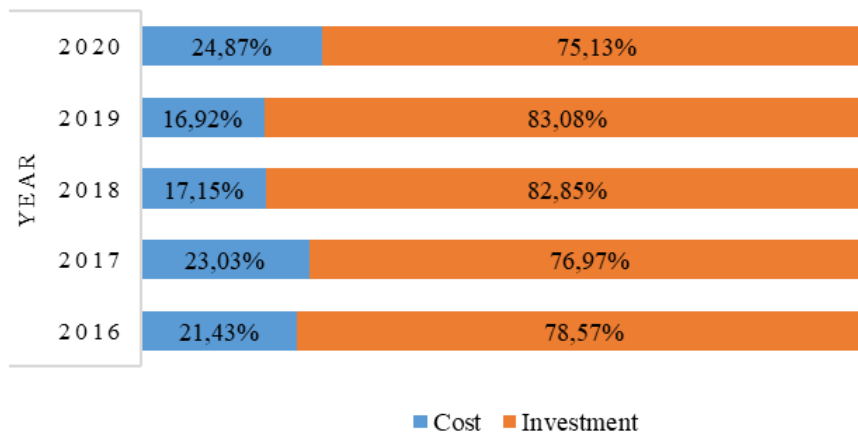
North region (which has 7 states), Pará has been in second place over the years, only behind the state of Rondônia and ahead of the state of Acre.

Through data from the Census of Agriculture, it is possible to verify that in 2017 only 6% (17,661) of rural establishments had access to some type of financing, of which 37% were financed by the government, while the other 63% occurred in the private sector.

Of the financing provided by the government, a percentage of 1.75% (4,940) of rural establishments received financing through PRONAF [14]. It is noticed that more than 75% of the financing made by the government consisted of the studied program. Graph 4 depicts the distribution of PRONAF resources from 2016 to 2020 in the state of Pará in the financed modalities.

Graph 4 – Analysis of the distribution of PRONAF resources in the state of Pará from 2016 to 2020.

ANALYSIS OF THE DISTRIBUTION OF PRONAF RESOURCES IN PARÁ FROM 2016 TO 2020



Source: Created by authors.

According to data provided by the Central Bank of Brazil (BCB)[41], in relation to the distribution of PRONAF financial resources, the state of Pará corresponds to 17.19% of the resources destined for the Northern region in 2017. Furthermore, it was verified that the modalities existing PRONAF: costing, investment, commercialization and industrialization, in the state there was only registration of contracts in the costing and investment modalities, as exemplified in Graph 4. It was noted that over the analyzed period, more than 75% of the resources were destined to the investment purpose.

It is important to highlight that in 2016, of the 57.18 million reais allocated to Pará, of this amount were allocated to the costing and agribusiness (investment) subprogram, corresponding to 99.98% and 0.02%, respectively. In the costing subprogram, 1,172 contracts were financed for the agricultural activity, totaling R\$ 31,927,409.33. While in this same subprogram 1,132 contracts were allocated, resulting in R\$ 25,249,970.46 directed to the livestock activity. The average values of the contracts corresponded to R\$ 27,242.00 and R\$22,306.00, respectively. For the agro-industry (investment)

subprogram there was only 1 contract for livestock in the amount of R\$ 7,473.13.

The investment modality in 2016 had a total allocation of R\$ 209,673,575.51 in the state of Pará. In this modality, the subprograms achieved consisted of: costing; microcredit; agribusiness (investment); woman; Forest;

agrarian reform (microcredit); Eco (renewable energy and sustainability); it's young. In the year 2020, there is a marked growth in the livestock activity in number of contracts and financial values compared to 2016, as shown in Table 3.

Table 3: Distribution of PRONAF resources by activity, costing area, number of contracts and average value of contracts in the costing modality in 2016 and 2020.

| Year | Activity | Area of Cost | Quantitative Cost | Cost Value | Average value of contracts |
|------|--------------|-----------------------|-------------------|---------------------------|----------------------------|
| 2016 | Agricultural | R\$ 11.397,56 | 1.172 | R\$ 31.927.409,33 | R\$ 27.241,82 |
| | Livestock | R\$ 1.242,33 | 1.132 | R\$ 25.249.970,46 | R\$ 22.305,63 |
| | Total | R\$ 12.639,89 | 2.304 | R\$ 57.177.379,79 | R\$ 24.816,57 |
| 2020 | Agricultural | R\$ 6.877,35 | 524 | R\$ 24.895.473,77 | R\$ 47.510,45 |
| | Livestock | R\$ 160.789,90 | 2.528 | R\$ 97.138.057,87 | R\$ 38.424,86 |
| | Total | R\$ 167.667,25 | 3.052 | R\$ 122.033.531,64 | R\$ 39.984,77 |

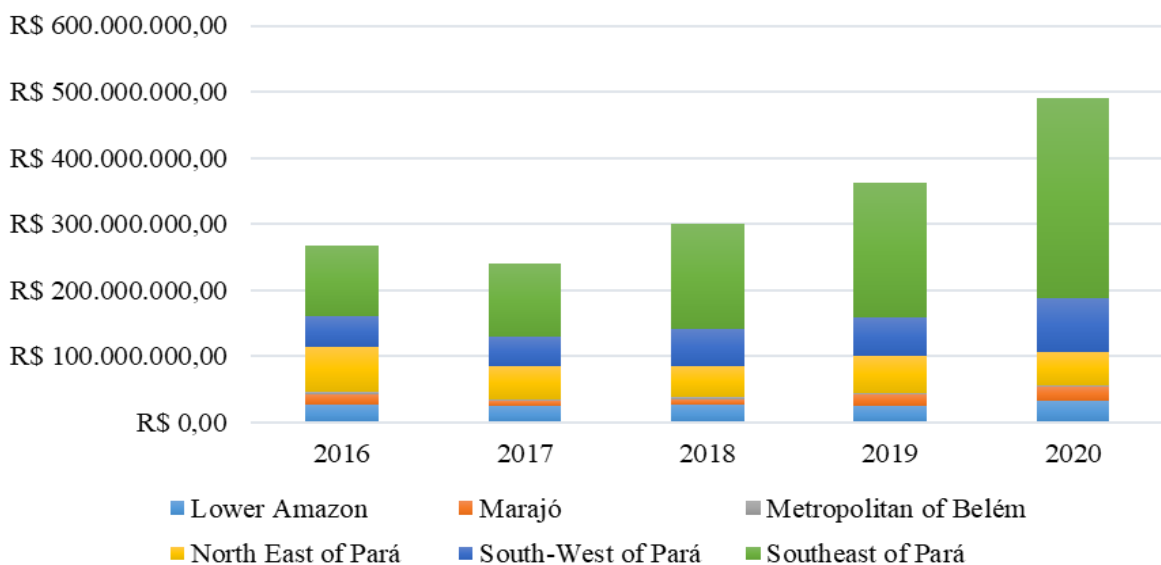
Source: Created by authors.

In the financial aspect, the total cost of the program more than doubled from 2016 to 2020, in addition to more than doubling the number of contracts for the livestock activity, consequently, there was a decrease in the number of contracts in the agricultural activity. One of the reasons that consequently led to this increase in livestock activity

was the high demand from foreign trade in exports, since the increase in the dollar valued the price of beef in the country, so with the heated market this encouraged family farmers to seek resources to pay for cattle production in the state.

Graph 5 - Distribution of PRONAF resources in Pará by Mesoregions from 2016 to 2020.

Distribution of PRONAF Resources in Pará by Mesoregions from 2016 to 2020



Source: Created by authors.

In graph 5, we see the evolution of the distribution of PRONAF resources in the period studied, making it evident that the Southeast Mesoregion of the state of Pará PA, is the one that had the greatest increase in the distribution of this resource, and that in this region there is

the largest number of settlements of rural workers in the state. Noting that in 2017 all mesoregions had a reduction in the distribution of these resources, one of the causes to be considered was the period of political transition that the country faced.

Table 4 - Ranking of the 10 municipalities in Pará that received the most resources from PRONAF in 2020.

| Position | Cities | Mesoregion | 2020 |
|----------|-----------------------|------------|-------------------|
| 1° | Eldorado do Carajás | Southeast | R\$ 29.939.856,42 |
| 2° | Itupiranga | Southeast | R\$ 29.061.256,27 |
| 3° | Floresta do Araguaia | Southeast | R\$ 28.069.184,43 |
| 4° | Marabá | Southeast | R\$ 23.522.388,11 |
| 5° | Pacajá | South-west | R\$ 20.151.716,71 |
| 6° | Novo Repartimento | Southeast | R\$ 19.730.474,41 |
| 7° | Rurópolis | South-west | R\$ 15.815.658,54 |
| 8° | Piçarra | Southeast | R\$ 15.678.828,81 |
| 9° | Conceição do Araguaia | Southeast | R\$ 14.820.351,67 |
| 10° | Água Azul do Norte | Southeast | R\$ 14.456.553,02 |

Source: Created by authors.

Another important factor analyzed in this study, as shown in Table 4, which shows the 10 municipalities that most received PRONAF resources in the state of Pará in the period studied, 8 municipalities are the ones with the largest number of settlements and encampments in the state, with emphasis on the 26 de Março settlement, located in the municipality of Marabá - PA, which is one of the largest settlements of landless workers in Latin America, with the largest number of settled families, the only one in Brazil that has implemented a Federal Institute within the settlement, exclusively for attend to the children of settlers, campers, maroons and riverside dwellers [27].

One factor that has made it difficult for small farmers to have access to PRONAF is the lack of dissemination in the mass media where information reaches the small rural producer, and the shortage of rural extenders to provide technical guidance on the required documentation and in carrying out the DAP as already mentioned in this work. This scenario shows that over the years it has not changed, requiring changes in public policies in order to solve the

problem, so it is certain that with greater resources for the small producer, there will be a significant increase in production from agriculture family in Brazil[23][29].

IV. CONCLUSION

PRONAF recognized as the first public policy aimed at family farming was the result of several studies over its 25 years. Despite being praised, it has received several criticisms over the years. This work achieved the objectives which were proposed.

We observed throughout this study that, for the family farmer to have access to this resource, it is necessary for him to have technical assistance from rural extension professionals, who will help him in the construction of the entire process for the realization of the financing. For this, technical support is needed from the municipal secretariats of agriculture and also from rural extension professionals in the state, such as rural extensionists from the state secretariat of agriculture.

The state of Pará has stood out as one of the states in the northern region that receives the most funds from PRONAF. However, given the large number of family farmers in the state, it is observed that the number of contracts carried out in the state is negligible, corresponding to less than a tenth of the number of family farming establishments in the state, and that family farmers would be producing a lot more, if development lines such as PRONAF benefited a much larger number of small producers.

As it is known, that the products of family farming are what feed the Brazilian people, a public policy like this must be increasingly strengthened and publicized, available to everyone, only in this way will we really be a true country called the breadbasket of the world. Since the government would be strengthening the production of its market and internal consumption, since precision agriculture has really stood out on the planet

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