Revista Multidisciplinar do Nordeste Mineiro, v.13, 2025
ISSN 2178-6925
DOI: 10.61164/x6p5q565

FINANCIAL CONTROL IN FAMILY FARMING: A STUDY WITH RURAL PRODUCERS IN THE CITY OF MANAUS

CONTROLE FINANCEIRO NA AGRICULTURA FAMILIAR: UM ESTUDO COM PRODUTORES RURAIS DA CIDADE DE MANAUS

Kacilda Barros da Silva
Bachelor´s degree in Mathematics, Amazonas State University, Brazil
E-mail: kbds.cic20@uea.edu.br

Elisângela Leitão de Oliveira
PhD in Environmental Sciences and Sustainability in the Amazon, Amazonas State University, Brazil
E-mail: eloliveira@uea.edu.br

Daniel Nascimento-e-Silva
PhD in Production Engineering, Federal Institute of Education, Science and Technology of Amazonas, Brazil
E-mail: danielnss@gmail.com

Recebido: 01/07/2025 – Aceito: 12/07/2025

Abstract

Family farming in the Amazon does not appear to have evolved over the centuries, as studies by past explorers and anthropologists have shown by past explorers. It is likely that the absence of financial management instruments and procedures, such as control, largely explains the low quality of life, well-being, and comfort, such as those of the distant past. This study aimed to analyze the financial control practiced by family farmers who participated in a family farming fair in Manaus. The survey method was used, with data collected through a questionnaire with close questions (about the demographic aspects of the production units, the revenue of these units, the challenges of the production units, their management and accounting aspects), analyzed with descriptive statistics and the results presented in frequency tables. The results showed that a) the workforce is composed of up to five people, b) it must have a maximum average monthly turnover of up to four minimum wages, c) the main challenges of the production units are logistical, and the division of labor, d) financial management is rudimentary or non-existent, e) without the assistance of accounting professionals. The conclusion shows that a few family farmers practiced financial control and some types of formal production planning.

Keywords: Family farmers; Family farming; Financial control; Accounting control; Production management.

Revista Multidisciplinar do Nordeste Mineiro, v.13, 2025
ISSN 2178-6925
DOI: 10.61164/x6p5q565

Resumo

A agricultura familiar na Amazônia não parece ter evoluído ao longo dos séculos, como mostram estudos de antigos exploradores e antropólogos. É provável que a ausência de instrumentos e procedimentos de gestão financeira, como o controle, explique em grande parte a baixa qualidade de vida, bem-estar e conforto, como os de um passado distante. Este estudo teve como objetivo analisar o controle financeiro praticado por agricultores familiares que participaram de uma feira de agricultura familiar em Manaus. Foi utilizado o método *survey*, com dados coletados por meio de questionário com perguntas fechadas (sobre os aspectos demográficos das unidades de produção, o faturamento dessas unidades, os desafios das unidades de produção, sua gestão e aspectos contábeis), analisados com estatística descritiva e os resultados apresentados em tabelas de frequência. Os resultados mostraram que a) a força de trabalho é composta por até cinco pessoas, b) deve ter um faturamento médio mensal máximo de até quatro salários-mínimos, c) os principais desafios das unidades de produção são logísticos e a divisão do trabalho, d) a gestão financeira é rudimentar ou inexistente, e) sem o auxílio de profissionais de contabilidade. A conclusão mostra que alguns agricultores familiares praticavam controle financeiro e alguns tipos de planejamento formal da produção.

Palavras-chave: Agricultores familiares, Agricultura familiar, Controle financeiro, Controle contábil, Gestão da produção.

1. Introdução

In the late 19th and early 20th centuries, a French couple of explorers published some works describing the reality of the Amazonian population that inhabited the banks of the rivers and their nearby hinterlands. Henri Coudreau described the customs, habits, dialects and especially the survival methods of the communities of the Branco (Coudreau, 1886), Tocantins-Araguaia (Coudreau, 1897a) and Xingu (Coudreau, 1897b) rivers; Octavie Coudreau dedicated himself to exploring the rivers on the left bank of the Amazon, such as the communities of Trombetas (Coudreau, 1900), Maicuru (Coudreau, 1903a) and Curuá (Coudreau, 1903b), with her incredible skill as a photographer, so that her works are filled with photographs. The impression one gets from the descriptions of the habits, customs, and production of the inhabitants of that time is that the French scholars describe the realities of today's Amazonian communities. Octavie's works are more compelling because they are filled with photographs as if they were opening in the distant future.

The concept of family farming and its development among family farmers is recent and almost contemporary. However, this form of production seems to be as

ISSN 2178-6925
DOI: 10.61164/x6p5q565

old as Amazon's exploration thousands of years ago. And the results, from what everything seems to indicate, have not changed significantly for the current Amazonian peoples and communities. Just as in the works of the French explorers, poverty is the image that still insists on being part of the daily farming practice of these communities; misery is understood as the almost total lack of comfort, well-being, and quality of life. Just as for centuries, farmers continue to die from the same diseases, living in unsanitary, unhygienic housing, at the mercy of nature's dictates. But why does this happen?

From a financial control perspective, this study sought to understand the reality of the so-called family farmers who participated in a fair for this type of production held in Manaus. The study's basic assumption is that every kind of production requires some form of planning, understood as the choice of objectives and goals based on the definition of an appropriate strategy, which is the path that will lead to the intended targets. If there is production planning, there will naturally be a way to control the resources, the production process, and especially the results achieved, which is called control. Financial control is the monetary expression of resources, methods, and results. The central hypothesis is that the more influential the control, the greater the results and production benefits, often translated into improved living conditions, comfort, and well-being.

2. Family Farming and Financial Control

The literature review for this study showed that the prevailing approach to family farming considers it as production carried out primarily by the labor of the farmer's own family, who are relatives (Gutiérrez-Malaxechebarría; Prime; Révillion, 2013; Nardi; Leismann; Bertolini, 2021; Silva, 2022; Neto et al., 2022). Although the study by Houensou, Goudjo, and Senou (2021) recorded incidents of hiring external workers, the family base is the main characteristic of family farming worldwide, including in Brazil and the Amazon region.

The second characteristic is family management, as can be seen in the studies by Nardi, Leismann, and Bertolini (2021), Silva et al. (2023), and Houensou, Goudjo, and Senou (2021). This is where the significant differences between the Brazilian and global reality begin. The first is that in the world, highly

ISSN 2178-6925
DOI: 10.61164/x6p5q565

specialized management predominates, with the use of advanced technologies capable of providing reliable demand forecasting schemes, establishing production lines resulting from it, and establishing a distribution system with long-term partnership contracts. Many family farmers actively participate in the stock exchanges, influencing the behavior of future production prices. The predominant Brazilian reality is that of illiterate and semi-literate farmers who are almost entirely unaware of the management process (planning, organization, direction, and control).

A third very prominent aspect is the work performed. The study by Silva et al. (2023) divides the work performed by family farmers into three groups: family, agricultural, and commercial. These three instances are integrated because they allow the continuity of the production unit with high productivity and maintain the family tradition, which almost always results in high-quality products. The Brazilian reality is concentrated almost exclusively on land management on a small scale, with low productivity rates, insignificant mastery of commercial techniques, no long-term partnership scheme, and a quality of life that often decreases.

The study by Lunas and Alencar (2021) defines family farming as a productive activity that optimizes production with an impact on generating increasing revenues, even if the property is small, which implies using advanced technologies as a fundamental tool for multiplying the efforts undertaken. The study by Houensou, Goudjo, and Senou (2021) describes family farming as an operation that combines the production of food and other products, but in a highly rationalized way, in a way that generates results that continually improve the quality of life of family members. Finally, the Paraguassu-Chaves et al. (2020) study considers family farming as a set of production units formed by small and medium-sized properties that apply production and management procedures and techniques.

The stock of knowledge that science makes available does not allow us to distinguish what is effectively family farming from capitalist agriculture and agribusiness, as shown in the study by Gutiérrez-Malaxechebarría, Prime, and Révillion (2013). In most studies, for example, family farmers obtain economic and financial results as high as those of so-called agribusiness because their

ISSN 2178-6925
DOI: 10.61164/x6p5q565

characteristics are not easy to differentiate since there is agribusiness on small properties in the same way as there is family farming of this size. It must be considered that family farming on a global scale differs from the characteristics practiced in Brazil, especially in the Amazon, where farmers and their relatives have difficulty reading and understanding simple texts. On the other hand, in states such as Santa Catarina, Rio Grande do Sul, and Paraná, most family-owned production units are no longer easily differentiated from agribusiness. Many of these families do not view being classified as family farmers favorably.

It is also essential to consider the findings of the study by Siqueira et al. (2021) on the difficulties and doubts about the socioeconomic attributes of family farming, especially as a development model for countries like Brazil and the Amazon region. The study shows that entrepreneurial agriculture, which is planned and makes the production unit a fundamental link in the local, regional, national, and even international system of supplying demands, is very difficult, if not impossible. Entrepreneurship means knowing the need to be met adequately, and it becomes essential to determine a partnership scheme so that this supply is carried out continuously over time with rules established in a contract. Since partnerships are two-way systems, the partners provide the family producer with the resources they need to make and deliver the production and with clarity on the amount of profit that both will have over time. In the case of Brazil and the Amazon, production and management resources are scarce, the climate is unfavorable, and uncertainty and instability prevail, making it unmotivating to produce anything other than for one's consumption. Often, only the leftovers are destined for sale. Since the soil is used exhaustively, without adequate techniques and technologies, fire is used as the leading land preparation technology (Cardoso et al., 2021; Sampaio et al., 2007a; Sampaio et al., 2007b) and intoxication with agricultural pesticides complete the scourge of the Amazonian family farmer (Abreu and Alonzo (2016), because all these aspects converge to financial success or failure, which is what guarantees and structures the quality of life of family farmers and every entrepreneur.

Financial control is difficult to understand and points to execution challenges. As the enterprise advances in volume and profitability, the challenge

ISSN 2178-6925
DOI: 10.61164/x6p5q565

increases proportionally, as the scientific literature shows. The first reason for financial control as a challenge is that it constitutes a specialized and in-depth investigation of management practice (Popa, 2024). The logic of this investigation is the investment of resources, translated into money, with the objectives intended by the family farmer, agribusiness, or entrepreneur contained in a formal document called a plan. This document includes all the objectives designed to be achieved, divided into tasks with shorter time frames, called goals. Each goal can only be achieved if the resources (not just money) are correctly applied, which implies technical and procedural knowledge of relative complexity, which is almost always beyond the understanding capacity of the Brazilian family farmer, given their very low or non-existent level of education.

The study by Alrjoub et al. (2023) shows that financial control is a set of procedures with five aspects: ensuring the security of investments, safeguarding resources, ensuring that they comply with applicable laws, rules, and instructions, and identifying and correcting any irregularities. Applying these aspects to family farming requires farmers to master production and financial management processes so that investments in production units can generate the expected economic and non-financial returns in the short, medium, and long term. This requires knowledge of management, finance, accounting, legislation, agricultural or livestock production, negotiation skills, and countless other skills necessary for the family farming enterprise to grow and develop.

Financial control is not just a challenge for businesses and large companies. It is essential for governments (Khamidova, 2024) mainly to speed up and legalize all actions to be taken, as well as for family units and homes so that each family member knows exactly what their financial situation is at a given moment and how it will be in the near or distant future. In this sense, the study by Trpeski et al. (2020) describes it as a stage of implementing financial plans. This means, naturally, that carrying out financial control is developing and executing a plan. Plans are necessary because they indicate what must be done and how to do it so that the objectives can be achieved. This requires high rationalization, management and production knowledge, and cognition. From the perspective of family farming, a production plan should have at least one breakdown into a

ISSN 2178-6925
DOI: 10.61164/x6p5q565

financial plan for the short, medium, and long term so that everyone can see to what extent their objectives have already been achieved. The literature shows that controlling finances is a total sum of the work done and to be done, as described in the study by Dandibi, Seddi, and Emmanuel (2023). The role of this type of control is to guide the organization members, whether they are on the path outlined in the plan, redirect them to the path outlined whenever they are off track, and interpret the budget cycle in terms of adequacy or inadequacy. A budget cycle comprises cash inflows and outflows from the production unit in a given period, which must primarily coincide with a target set out in the production and financial plans. This is why accounting is the pillar that supports financial controls.

Accounting, according to Crepaldi (2019), is a fundamentally helpful science since its main result is to provide information for the management, planning, and control stages, highlighting aspects related to the equity, economic, and financial situation of an organization and highlighting that its fundamental objective is to provide helpful information for decision-making by managers. Accounting is considered an essential tool for business management and modern business administration, as it plays a significant role in decision-making (Rodrigues et al., 2016). Thus, accounting is an instrument for managing an entity's progress and reporting to users. Rural accounting is a branch of accounting sciences applied to the rural sector and covers the recording of events that occur during rural activities in specific periods. Rural accounting is a methodology specifically designed to capture, record, summarize, and interpret the phenomena that affect any rural entity's patrimonial, financial, and economic situations. It is an administrative tool that rural producers rarely use due to its complex execution technique (Senar, 2015; Crepaldi, 2019). For Kruger et al. (2014), there is a need to use accounting in rural areas, firstly so that rural managers can recognize their objectives and later as a tool to support the process of cost management, evaluation of results, investments, and support for other decisions. Although not widely used in rural areas, rural accounting has gained credibility and new followers. The agribusiness manager must be integrated with rural property technologies and sectors and closely connected with accounting. In addition to providing information on credits and debits, it also shows possible

ISSN 2178-6925
DOI: 10.61164/x6p5q565

paths and avoids unnecessary risks, aiming at profitability, growth, and effectiveness in agribusiness management (Rodrigues, Couto, Vespucci, 2018).

According to Zachow and Plein (2018), applying management tools adapted to the reality of family farming is essential to enable farmers to make assertive decisions in an increasingly competitive market, thus contributing to the sustainability and strengthening of this sector. Accounting is a fundamental tool for decision-making in any administrative area, including family farming. It helps managers control expenses, forecast investments, and maintain adequate reserves, especially in a sector that deals with seasonal factors and uncertainties (Rodrigues, Couto, Vespucci, 2018). Rural accounting plays a fundamental role in providing several tools that contribute to the management and control of the assets of rural properties, being essential for the effective financial and operational administration of enterprises (Hofer, Borilli, Philippsen (2006).

According to Crepaldi (2019), bookkeeping is considered dispensable for individuals since controlling small assets does not require the implementation of systematized accounting. Although they do not need systematized accounting, family farmers need access to decision-making support tools adapted to their way of operating. For Santos and Quintana (2011), budgeting and strategic planning are essential tools for decision-making in rural activities, and together, they form a set that allows for more specific functional control and management. Accounting practices involve planning, budgeting, controlling, and calculating results. Thus, applying accounting as a tool in managing family units improves the conditions for insertion in markets, income generation, and preparation to deal with costs and other variables in rural areas.

3. Research Methodology

This study analyzed the financial control practiced by family farmers participating in a family farming fair in Manaus. To this end, a qualitative and quantitative study was applied, with family farmers who participated in a rural production fair held in Manaus as the units of analysis. The results were achieved by using the systematic method described in this section.

ISSN 2178-6925
DOI: 10.61164/x6p5q565

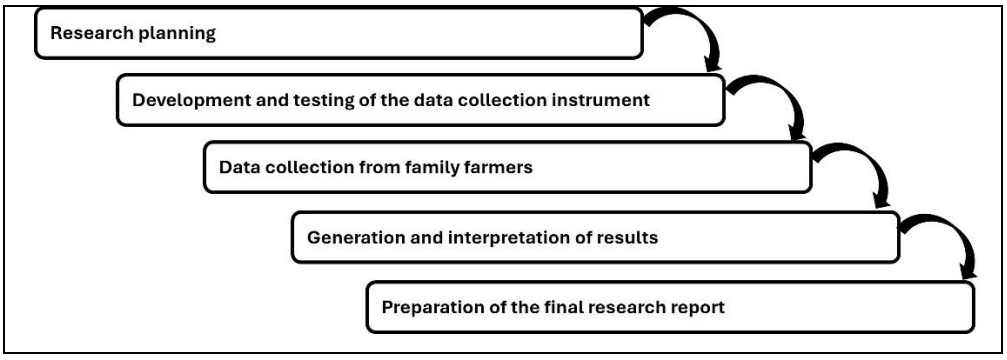
3.1 Guiding questions

The general objective was divided into five well-defined objectives, transformed into guiding questions: 1) How many people in the family help with production? 2) What is the average monthly revenue? 3) What are the main difficulties faced in agricultural activity? 4) How does the family conduct agricultural activities? 5) How do farms manage their finances? 6) What difficulties do these farmers encounter when requesting advice from accounting professionals? 7) What suggestions can be given to farmers to facilitate access to accounting services? The entire study design was designed to answer these questions.

3.2 Study design

To carry out this research, the seven stages were followed, as shown in Figure 1, which shows the order of tasks performed based on the definition of the specific objectives, which made it possible to develop the guiding questions so that a collection instrument could be designed to be applied to representatives of family farms in the city of Manaus, at two agricultural fairs, through interviews. In this way, the information collected made it possible to produce data presented in tables to show the percentage of responses according to the farmers' opinions. This enabled the analysis and generation of elements to present the results.

Figure 1: Design of the research study



Source: prepared by the authors.

ISSN 2178-6925
DOI: 10.61164/x6p5q565

The preparation of the data collection instrument consisted of eight questions aimed at surveying the productive, financial, and economic aspects of family farming properties and verifying the use of accounting procedures in conducting rural activities. For this purpose, 43 farmers were interviewed at two family farming fairs in Manaus. Data was collected at two rural fairs in Manaus, one in the Aleixo neighborhood, where farmers sell their produce in a space provided by an association, and the other in a shopping mall parking lot in the Chapada neighborhood. A semi-structured interview script consisting of 8 semi-closed questions was used, and 43 farmers were interviewed. The steps for analyzing the results initially occurred to verify the number of people who help in production and the average revenue resulting from the sale of crops at minimum wages. Subsequently, the process began to verify the difficulties faced in managing agricultural activities and how farmers manage their finances. Next, analyzing the assistance received or not by these farmers, their obstacles to obtaining these services, and the search for alternatives to have this access began.

3.3 Research subjects

The respondents were selected based on their ability to answer the research questions by scheduling an appointment with consumers at the fairs surveyed before the start of the service. These subjects were selected randomly, considering only their inclusion or non-inclusion as family farmers. Therefore, 43 representatives of the agricultural production family from properties located in the rural areas of Manaus, Iranduba, and Rio Preto da Eva were interviewed.

3.4 Data collection instrument

The collection instrument used literature focused on rural accounting in family farming. It made it possible to prepare a semi-structured form with questions focused on agricultural production management, its economic and financial aspects, and the difficulties in recording and controlling expenses and earnings from this activity. In addition, the instrument included questions aimed at

ISSN 2178-6925
DOI: 10.61164/x6p5q565

verifying the challenges inherent in obtaining accounting advice and gathering suggestions that would enable these farmers to access this service.

3.5 Data collection strategy

Due to the limitations of access to accounting services, whether due to lack of knowledge of the benefits that this advice offers or lack of access, the strategy adopted for this data collection was to promote solutions for the accounting community in planning actions that would reduce this situation through orientation courses, raising awareness among accounting academics and rural support agencies. These reasons were explained to the responding farmers, who allowed them to contribute by cooperating with the data collection. Thus, data collection occurred before and after these farmers' stalls' sales hours to not compromise sales.

3.6 Data organization and analysis techniques

The data collected through questionnaires were first criticized to assess the responses' adequacy and then entered an electronic spreadsheet. Analytical dimensions and the research guiding questions then organized the data. Each analytical dimension had at least two specific questions, each with its analytical categories. For each question, the data were computed to obtain the total of the simple frequencies of responses by analytical category and then transformed into percentage frequency. This procedure resulted in the creation of frequency tables where the responses for each category appear and, by extension, the reflection of the question whose behavior we wanted to know.

3.7 Techniques for generating and interpreting results

The inferences in the data presented are considered the most extensive and minor quantities of responses. The most significant amount represented the most conclusive concerning family farms' productive and economic activity. Therefore, the results with the lowest number of responses represented the most emerging, for example, the difficulties encountered in using rural accounting in

ISSN 2178-6925
DOI: 10.61164/x6p5q565

production management. The results were interpreted by comparing the empirical results with the theories of financial control and rural production management.

4. Results and Discussion

This section presents the empirical results of the research that sought to analyze the practice of financial control by family farmers working in Manaus, whose data were collected during a rural production fair. The findings will be presented following the research's guiding questions. The section ends with a discussion of the results, based on a comparison of the empirical findings with the theoretical architecture of the study.

4.1 Demographic aspects of the production units

Table 1 allows an analysis of the number of family members who help in production. 60.47% of the families have 3 to 5 people, while 20.93% have 1 or 2 people, and 18.60% have six or more people. The distribution of data reveals that most families involved in the research have many members who collaborate in production, which can influence the dynamics and organization of work. Thus, production relies on the significant participation of family members.

Table 1. Number of family members involved in production

Number of people	**Frequency %**
1 to 2 people	20,93%
3 to 5 people	60,47%
Six or more people	18,60%

Source: Data collected by the authors.

Farmers have few people to assist in the production processes in the field. Only 18.60% of this total is supported by more than six people in agricultural production. It is worth noting that this production process includes purchasing inputs and selling agrarian production. This shows that these farmers must perform these tasks to meet their economic goals.

ISSN 2178-6925
DOI: 10.61164/x6p5q565

4.2 Average monthly revenue

A tabela 2 apresenta a média de faturamento mensal das famílias, 58,14% contam com um faturamento mensal de até 2 salários-mínimos, enquanto 27,91% contam com faturamento de 3 a 4 salários-mínimos e apenas 13,95%, com faturamento superior a 5 salários-mínimos. Conforme verificado, a média de faturamento mensal da amostra é relativamente baixa, o que pode indicar um cenário socioeconômico desfavorável para as famílias agricultoras.

Table 2. Average monthly revenue

Average revenue	Frequency %
1 to 2 minimum wages	58,14%
3 to 4 minimum wages	27,91%
Five minimum wages or more	13,95%

Source: Data collected by the authors.

The data show the limited financial return on all the work done by these farmers in the field, given the difficulties inherent in purchasing inputs, the logistical routes for selling production, and the climate impacts such as floods and droughts that can affect these plantations. Only 13.95% obtain a monthly revenue above five minimum wages. These results reflect the value received due to the great importance that family farming contributes to food security. It is suggested that this indicator is influenced by the agricultural production costs, which negatively affects this revenue. If the various expenses that need to be accounted for are considered, this income becomes negligible.

4.3 Challenges of Production Units

Table 3 presents the difficulties faced with the activity, with the issue of production flow being the most mentioned, with 48.84% indicating that product logistics are essential challenges for most participants. Furthermore, the lack of input for planting was mentioned by 2.33%, while the purchase input was mentioned by 13.95% and sales by 4.65%. These data demonstrate that issues

ISSN 2178-6925
DOI: 10.61164/x6p5q565

related to inputs and product marketing are relevant to most interviewees. The alternative ‘others’ accounted for 30.23% of the responses, which addresses other challenges described by the interviewees, such as problems in planting due to the acidity of the soil, dry or flood seasons, difficulties with water and climate, as well as issues related to the lack of government support and no difficulties at all. This variety of responses shows the complexity and variety of challenges faced by professionals involved in the activity, which range from operational issues to external and structural factors.

Table 3 - Difficulties faced in agricultural activity

Dificuldades	**Frequency %**
Production flow	48,84%
Purchase of inputs	13,95%
Sales	4,65%
Lack of inputs for planting	2,33%
Others	30,23%

Source: Data collected by the authors.

According to the data, farmers' difficulties producing produce start with purchasing inputs and sales. The results related to the distribution of production, 48.84%, show that distributing and selling agricultural production is the most challenging of all the tasks these farmers perform. One of the most common obstacles is the precarious structure of the roads that provide access to urban areas. In addition to facing this problem, farmers do not have the financial means to have their vehicles to transport their produce. Table 4 provides answers on how the participants carry out their tasks and reveals that 95.35% of the answers were attributed to family help in all tasks. This indicates that the activity is predominantly carried out jointly, involving the active participation of several family members in all stages of the production process. It demonstrates a variety of family arrangements and dynamics that are involved in carrying out production activities.

ISSN 2178-6925
DOI: 10.61164/x6p5q565

Table 4. Management methods for agricultural activities

Management methods	**Frequency %**
Agricultural activity managed by the property representative	4,65%
Agricultural activity is managed by all members of the family	95,35%

Source: Data collected by the authors.

All family members mostly manage agricultural activities. The behavior of the farming family members stems from a culture focused on knowledge of production practices from the beginning of adulthood, where parents teach their children all stages of the production process on the farms.

4.3 Financial management aspects of production units

Table 5 provides answers on how participants control their finances, where 55.81% of the responses indicated that they do not perform financial control. This shows a significant gap in the financial management of activities, which can negatively affect the sustainability and growth of the enterprises. In addition, 39.54% of the responses indicated that the participants recorded their finances in notebooks, which could demonstrate a more traditional and informal approach to control. Still, according to reports, this is not routine practice. Only 4.65% of the responses mentioned preparing reports, which indicates a minority that adopts more structured management practices. These data point to the need for financial control and management training for those involved in the activities to promote a more efficient and sustainable approach.

Table 5. Control of property finances

Types of Financial Control	**Frequency %**
Manual notes	39,54%
Digital reporting	4,65%
No control over finances	55,81%

Source: Data collected by the authors.

Controlling the finances of rural properties is essential for recording the administrative facts of the family and the property. The form of control carried out

ISSN 2178-6925
DOI: 10.61164/x6p5q565

through manual notes (39.54%) and the lack of control of these finances (55.81%) show the reality experienced by these farmers regarding the conduct of economic and financial management in family farming. Although recorded manually, such data does not offer any type of security regarding providing information for decision-making. Therefore, public policies must support the provision of advice from professionals in the accounting area. Table 6 verifies whether families have the support of an accounting professional or another area to carry out their activities. It shows that 88.37% of the participants stated they do not have support, and only 11.63% have such support. These data suggest that most of those involved in the activities do not have access to specialized guidance on accounting and financial issues, which could represent an opportunity for improvement in the management and financial planning of the activities. The assistance of an accounting professional or a professional from a related field can contribute significantly to the organization and sustainability of enterprises.

Table 6. Existence of support from an accounting professional or a professional from a related field

Answers	**Frequency %**
Not	88,37%
Yes	11,63%

Source: Data collected by the authors.

Given the seriousness of the lack of assistance from an accounting professional in family farming, according to the results collected, 88.37% responded that they do not have the aid of this type of advisory. It is worth noting that accounting is a tool used not only to control activities but also to record, support, and evaluate the management of companies in general and present, through its statements, the results obtained by these entities, which are essential for the decision-making process.

4.4 Professional Accounting Aspects

Table 7 presents data on the difficulties interviewees face in requesting advice from accounting professionals or related areas, where 32.56% stated that

ISSN 2178-6925
DOI: 10.61164/x6p5q565

they have already sought help but do not have the financial means to cover these costs. This suggests that the cost of professional services may represent a significant barrier to accessing this advice. Furthermore, 34.88% reported that they do not know how to ask for help from these professionals, suggesting a possible lack of knowledge about how to seek out and interact with accounting professionals and that they are unaware of the importance of accounting services. Meanwhile, 20.93% said they have difficulty requesting advice because they do not know anyone in the field, and only 11.63% said they know someone who helps them. These data highlight the importance of addressing the availability of accounting services and accessibility and awareness about seeking out and interacting with qualified professionals, especially for those facing financial constraints.

Table 7. Difficulties in obtaining assistance from accounting advisors

Difficulties	Frequency %
Does not know how to apply for this assistance	34,88%
Does not have the financial means to pay for the services	32,56%
Does not know about assistance for this type of service	20,93%
Only knows one person in this area	11,63%

Source: Data collected by the authors.

Difficulties arise from a lack of knowledge about the existence of this type of advisory service and the financial conditions required to afford these services. These results show that accounting applications in family farming must be better publicized and that this tool can benefit these organizations. In addition, including this type of service in public policies could significantly contribute to offering this type of advice to farmers and providing better economic results in this type of management.

Table 8 shows the suggestions to facilitate family farmers' access to accounting services, allowing multiple choices. All participants suggested that the agencies that assist farmers could offer accounting and financial advisory services. This indicates that the interviewees perceive the need for more

ISSN 2178-6925
DOI: 10.61164/x6p5q565

significant interaction between support services and the specific needs of agricultural enterprises. In addition, 18 interviewees reinforced, along with the previous suggestion, that the amount charged by accounting professionals should be differentiated to meet the financial conditions of family farming enterprises. This indicates that participants realize the importance of adopting a more flexible approach appropriate to their economic conditions. The other five mentioned, along with the two previous suggestions, that accounting professionals should have a different perspective on the category of farmers. This suggests a need for a more sensitive and personalized approach to the specific needs of agricultural enterprises. Thus, the suggestion 'this service could be offered by agencies that support farmers' was mentioned 43 times, corresponding to 100%. In comparison, the suggestion of differentiating the value of the service was mentioned 23 times or 53.49%. These suggestions indicate the need for greater integration and adaptation of accounting services to the needs and realities of family farming enterprises, especially those facing financial difficulties.

Table 8. Suggestions for accessing accounting services

Suggestions for accessing accounting services	**Frequency %**
Professionals should have a different perspective on the category	11,63%
The price of the service charged should be differentiated according to financial conditions	53,49%
Support agencies could offer the service for family farmers	34,88%

Source: Data collected by the authors.

These results show that farmers are interested in obtaining this accounting advice. However, they are asked to offer these services at a special price, given that these farmers do not have the financial means to pay for this service. Of the three survey situations, this one had the highest number of responses (53.49%), which

ISSN 2178-6925
DOI: 10.61164/x6p5q565

shows that there is indeed a concern with this type of outlay since farmers already bear the high costs and expenses of production.

4.5 Discussion of results

The demographic aspects of the production units show low participation of people in the production and management process. There is a very low indication regarding the number of family members who help in agricultural production. Studies that sought to identify the socioeconomic profile of these family farmers show that 64% of these workers receive help from only 2 or 3 people to carry out activities in the field (Soares et al., 2022). The average monthly revenue is meager. The results obtained in this sense can be routinely low. Studies on the evolution and monitoring of values obtained through sales at agroecological family farming fairs through direct sales channels show that the average monthly revenue obtained by these farmers was approximately R$866.49 in 2017, R$767.54 in 2018, and R$800.31 in 2019. The inherent justification for this result is that income is influenced by the seasonality of demand and supply with low price volatility (Miranda; Wegner; Dias, 2024). Revenue is how much the production unit transforms its products into money, which cannot be confused with profit. Profit is the result of discounting revenues from all costs and expenses incurred at all stages of the production process, from the pre-operational stages. If production costs are estimated at around 70%, as suggested by the study by Santos and Villwock (2024), profits fall to R$240. These results largely explain the dependence of family farmers on government benefits intended for the impoverished population.

The challenges faced by the production units studied are logistical and management organization. Management theories show that every production system needs to define the supply system in advance, which is the acquisition and arrival of inputs, materials, machines, equipment, and everything else necessary for production, as well as an efficient distribution channel that takes the output to its first-tier customers, who may be distributors, retailers or even end consumers. Without the establishment of these channels, the probability of success of the enterprise decreases drastically. The same can be seen about the organization of

ISSN 2178-6925
DOI: 10.61164/x6p5q565

people: some need to dedicate themselves to the core activities of agricultural production, while others need to specialize in support activities, such as logistics, sales, purchasing, and relationships with suppliers and customers. Family farming faces problems regarding economic and financial management. These properties often lack the knowledge to carry out the necessary controls, cost surveys, and, especially, make decisions based on reliable information. The diversification of agricultural production is a differential for developing this type of rural activity. However, due to the breadth of products cultivated, the inherent economic and financial management difficulties increase. To improve the obstacles inherent to this management, it is suggested that an asset survey be carried out using economic analysis guided by variable costing. Adopting these tools could provide a more effective monetary and financial analysis. It is worth mentioning that the breadth of crops can help increase profitability in this type of economic activity (Fontoura et al., 2022).

Another reason that could justify this low yield is the high production costs. Costs, in general, are not controlled by these properties. There is no way to plan which costs may be a priority without knowing the details inherent to the values that can significantly influence these results. Adequate cost control can positively impact the results obtained by these communities, allowing for continuous assessment aimed primarily at identifying significant costs by the type of stage of the agricultural production process. In agricultural management, planning and controlling the activities encompassing these properties is important, aiming to conduct a detailed analysis of production costs and their proper harvesting (Terres, 2023).

The financial management aspects of the production units showed no effective financial control, even though there has already been a manual control test. Now, let's explain how it should be in theory. Financial control could be done by adapting tools from the financial and accounting areas, which could be helpful in adequately managing the agricultural and economic activities of family farming communities. Thus, adopting these tools, which could be done through electronic spreadsheets, would be of utmost importance for controlling inventories, costs, and accounts receivable on these properties. It is worth mentioning that using

ISSN 2178-6925
DOI: 10.61164/x6p5q565

cash flow, income statements, vertical and horizontal analysis, and the formation of the sales price could complement this set of financial controls necessary for making productive decisions in these enterprises (Fonseca; Lopes; Dalongaro, 2024).

The use of financial controls in managing family farming is essential for recording, controlling, and evaluating the expenses of the properties inherent to the expenses, especially the costs of production. Studies on financial controls used in family farming show that on these properties, farmers monitor agricultural activities only through notes and diaries or control notebooks, as they are unaware of models that allow for adequate management of this type of records, such as the use of cash flow and cost planning (Souza et al., 2024). For these tasks, it is understood that these farmers should have the support of an accounting-financial sector promoted by public policies to provide this service to family farmers since they do not have the financial means to bear this expense.

Another alternative option for employing management tools in these communities could involve courses, training, and qualifications for farmers. Studies that address this strategy of applying management and rural entrepreneurship tools to family farming using the focus group methodological technique have shown that through group interviews, which aimed to both collect information about the management of these organizations and propose the use of PDCA Cycle management tools and the SWOT Matrix, the result was that knowledge of these tools could be capable of providing subsidies to these farmers to carry out rural activities more efficiently (Oliveira, 2023).

The professional accounting aspects showed a lack of knowledge among professionals about what accounting can do to transform production practices and achieve results that lead to improved quality of life, comfort, and well-being. Explain how the theory says it should be done. Rural accounting can be considered a complete tool that can be used on family farming properties to adapt this tool to this type of economic reality with a focus on financial control. By recording the administrative facts of these properties, the producer will better understand production costs, enabling the viability of financial planning that involves future investments (Santos et al., 2024).

ISSN 2178-6925
DOI: 10.61164/x6p5q565

5. Conclusion

This study showed that few family farmers practiced financial control and some types of formal production planning. Most family farmers with access to accounting services claim to have no difficulties carrying out their activities, unlike most farmers surveyed, which largely explains their continued poverty and economic and financial dependence. This demonstrates that accounting tools encompassing control, management, and planning enable those responsible for the activity to identify which costs have the most significant impact, contributing significantly to the organization and sustainability of the enterprises. Despite being designed to meet the specific needs of family farmers, government programs often follow the prevailing logic of the market, so family farmers need to use these tools to deal with costs to avoid losses and situations related to the risks of rural areas.

The issue of respondents who stated that they did not have the support of an accounting professional is mainly associated with the issue of difficulties in accessing accounting services due to their lack of financial means to pay for the service, representing a significant barrier for family farmers in developing their activities. Given the impact of the activities developed by family farmers, the government must take a different look at areas other than production, such as activity management, to promote a more efficient and sustainable approach to control and decision-making.

It is essential to explore the possibility of agencies that assist rural entrepreneurs by offering accounting and financial advisory services, especially for farming families. These strategies aim to meet the needs and realities of family farmers, especially those facing financial difficulties, promoting greater integration and adaptability of accounting services. Another possibility would be for accounting professionals to focus on the social side, adapting the amount charged to the financial conditions of family farmers' businesses and adopting a more attentive and personalized approach to the specific needs of this audience.

These efforts must be directed so that family farmers begin planning their production. Even though there is no formal, technically supported planning system, it is necessary to define certain central aspects, such as what, how much, when, and with what technologies to produce, what is the minimum acceptable revenue amount, what is the maximum permissible cost, what is the minimum operating profit and what is the amount of money that will be retained as an investment, mainly to avoid bank loans. In addition, it is necessary to carry out weekly and monthly assessments of what was done compared to what was planned so that learning can begin to take hold and transform these communities' individual and collective reality. It is likely that this practice, in partnership with accounting professionals, will help to transform the sad fact that the Coudreau couple portrayed more than a century ago and that persists.

References

ABREU, P. H. B.; ALONZO, H. G. A. Family farmer and (un) safe use of pesticides in Lavras, Minas Gerais, Brazil. **Revista Brasileira de Saúde Ocupacional**, v. 41, 1-12, 2016. http://dx.doi.org/10.1590/2317-6369000130015.

ADEBAYO, A. V.; ILESANMI, K. D. Financial resource management in the Nigerian public sector: policy measures to address loopholes. **Problems and Perspectives in Management**, v. 18, n. 2, p. 329-339, 2020. https://doi.org/10.21511/ppm.18(2).2020.27.

ALMEIDA, A.; BORGES, M. A. D. A. A importância da contabilidade rural como ferramenta de gestão para as pequenas propriedades rurais: uma revisão bibliográfica. **Revista GeTeC**, v. 9, n. 24, p. 1-18, 2020.

ALRJOUB, A. M. S. et al. Information technology and its role in improving the quality of financial control due to corona pandemic: The Jordanian income tax as a case study. **International Journal of Professional Business Review**, v. 8, n. 4, p. e01568-e01568, 2023. https://doi.org/10.26668/businessreview/2023.v8i4.1568.

AMBRÓS, V. A. B.; MARQUEZAN, L. H. F.; ANVERSA, T. S.; RIGON, L. Demanda não obrigatória pelo profissional contábil: uma análise no ambiente dos produtores rurais. **Contabilometria - Brazilian Journal of Quantitative Methods Applied to Accounting**, Monte Carmelo, v. 6, n. 1, p. 104-121, 2019.

BAIARDI, A.; ALENCAR, C. M. M. Agricultura Familiar, seu Interesse Acadêmico, sua Lógica Constitutiva e sua Resiliência no Brasil. **RESR**, Piracicaba - SP, v. 52, n. 1, p. S045-S062, 2014.

BITTENCOURT, D. M. C. **Estratégias para a Agricultura Familiar:** visão de futuro rumo à inovação. Brasília: Embrapa, 2020.

BRASIL. **Lei n. 11.326, de 24 de julho de 2006. Estabelece as diretrizes para a formulação da Política Nacional da Agricultura Familiar e Empreendimentos Familiares Rurais**. Brasília: Senado, 2006.

CARDOSO, A. J. G.; KATO, O. R.; MELO, P. D.; NASCIMENTO-E-SILVA, D. The influence of the organizational and environmental factors on the Amazon family farming enterprises in Brazil. **Research, Society and Development**, v. 10, n. 3, p. e16110313105, 2021 http://dx.doi.org/10.33448/rsd-v10i3.13105

COUDREAU, H. Voy**age au Rio Branco aux montagnes de la lune au haut trombetta (mai 1884 - avril 1885)**. Rouen: Imprimerie de Espérance Cagniard.

COUDREAU, H. **Voyage au Tocantins-Araguaya, 31 décembre 1896 - 23 mai 1897**. Paris: A. Lahure, Imprimeur-Éditeur, 1897a.

COUDREAU, H. **Voyage au Xingú, 30 mai 1896 - 26 octobre 1896**. Paris: A. Lahure, Imprimeur-Éditeur, 1897b.

COUDREAU, O. **Voyage au Maicuru, 5 juin 1902 - 12 janvier 1903**. Paris: A. Lahure, 1903a.

COUDREAU, O. **Voyage au rio Curuá, 20 novembre 1900 - 7 mars 1901**. Paris: A. Lahure, 1903b.

COUDREAU, O. **Voyage au Trombetas, 7 août 1899 - 25 novembre 1899**. Paris: A. Lahure, 1900.

CREPALDI, S. A. **Contabilidade rural**: uma abordagem decisorial. 9. ed. São Paulo: Atlas, 2019.

DANDIBI, B. G.; SEDDI, M. S.; EMMANUEL, O. U. Financial control and financial accountability in the public sector in North East Nigeria. **FUW-International Journal of Management and Social Sciences**, v. 8, n. 1, p. 18-18, 2023.

DANNA, M. F.; MATOS, M. A. Aprendendo a observar. São Paulo: Edicon, 2006.

DELGADO, G. C. BERGAMASCO, S. M. P. P. (Orgs.). **Agricultura familiar brasileira:** desafios e perspectivas de futuro. Brasília: MDA, 2017.

FERREIRA, E. B. **Gestão financeira na agricultura familiar:** um estudo empírico com pequenos agricultores rurais no município de Araçagi-PB. 2021. 14 p. Monografia (Graduação em Ciências Contábeis). Universidade Federal da Paraíba, Mamanguape, 2021.

FONSECA, K. P. S.; LOPES, A. O.; DALONGARO, R. C. Plano de ação para uso de ferramentas de controle financeiro para microempresa familiar: um estudo de caso. **International Journal of Scientific Management and Tourism**, v. 10, n. 2, p. e753-e753, 2024. https://doi.org/10.55905/ijsmtv10n2-011,

FONTOURA, F. B. B. DA *et al.* Diversificação da produção rural: em busca de alternativas para a gestão econômica e financeira na agricultura familiar. **Revista Brasileira de Planejamento e Desenvolvimento**, 2022. v. 11, n. 1, p. 128–148.

GIL, A. C. **Como elaborar projetos de pesquisa**. 6. ed. São Paulo: Atlas, 2017.

GUTIÉRREZ-MALAXECHEBARRÍA, A.-M.; PRIME, S.; RÉVILLION, C. Irrigated family farming panorama in the Latin-American highlands. **Cuadernos de Desarrollo Rural**, v. 10, n. spe70, p. 93-114, 2013.

HOFER, E; BORILLI, S. P.; PHILIPPSEN, R. B. Contabilidade como ferramenta gerencial para a atividade rural: um estudo de caso. **Enfoque Reflexão Contábil**. v. 25, n. 3, p. 5-16, 2006.

HOUENSOU, D. A.; GOUDJO, G. G.; SENOU, M. M. Access to finance and difference in family farm productivity in Benin: Evidence from small farms. **Scientific African**, v. 13, p. 1-12, 2021. https://doi.org/10.1016/j.sciaf.2021.e00940.

KHAMIDOVA, Z. Directions for organizing internal audit and measures of state financial control in the public sector. **World Journal of Advanced Research and Reviews**, v. 22, n. 3, p. 276-284, 2024. https://doi.org/10.30574/wjarr.2024.22.3.1704.

KRUGER, S. D.; GLUSTAK, E.; MAZZIONI, S.; ZANIN, A. A Contabilidade como Instrumento de Gestão dos Estabelecimentos Rurais. **Reunir: Revista de Administração, Contabilidade e Sustentabilidade**, v. 4, n. 2, p. 134-153, 2014.

LIMA, A. F.; SILVA, E. G. A.; IWATA, B. F. Agriculturas e agricultura familiar no Brasil: uma revisão de literatura. **Revista Retratos de Assentamentos**, v. 22, n. 1, p. 50-68, 2019. https://doi.org/10.25059/2527-2594/retratosdeassentamentos/2019.v22i1.332.

LOURENZANI, W. L. Capacitação gerencial de agricultores familiares: uma proposta metodológica de extensão rural. **Organizações Rurais & Agroindustriais**, v. 8, n. 3, p. 313-322, 2006.

LUNAS, D. A. L.; ALENCAR, I. P. V. Agricultura familiar: o fim do ministério do desenvolvimento agrário no território rural do sudoeste goiano (2012-2017). **Revista de Economia da UEG**, v. 17, n. 2, p. 31-43, 2021.

Marion, J. C. **Contabilidade rural:** agrícola, pecuária e imposto de renda. 15. ed., São Paulo: Atlas, 2021.

MIRANDA, S. P.; WEGNER, R. C.; DIAS, A. Comercialização nas feiras da agricultura familiar: um estudo de caso sobre a estrutura desses canais. **Revista de Economia e Sociologia Rural**, 2024. v. 62, p. e270700.

NARDI, A. C.; LEISMANN, E. L.; BERTOLINI, G. R. F. Influência socioeconômica do programa nacional de fortalecimento da agricultura familiar (PRONAF) no estado do Paraná. **Revista Brasileira de Gestão e Desenvolvimento Regional**, v. 17, n. 2, p. 91-108, 2021. https://doi.org/10.54399/rbgdr.v17i2.6336.

NETO, J. et al. Vine protection on family farms: Decision making and pesticide use. **Modern Environmental Science and Engineering**, v. 8. N. 4, p. 246-251, 2022. https://doi.org/10.15341/mese(2333-2581)/04.08.2022/005.

OLIVEIRA, F. S. Gestão e empreendedorismo rural na agricultura familiar: um relato de experiência em unidades produtivas no território Sertão do São Francisco. **Extramuros-Revista de Extensão da UNIVASF**, 2023. v. 11, n. 1, p. 157–167.

PARAGUASSU-CHAVES, C. A. et al. Family farming and sustainable rural development: a case study in a settlement in the Brazilian Amazon. **International Journal for Innovation Education and Research**, v. 8, n. 9, p. 369-394, 2020.

POPA, I.-G. Public financial control–financial policy instrument of the state. In: **International conference Knowledge-Based Organization**, v. 30, n. 2, p. 1-8, 2024. https://doi.org/10.2478/kbo-2024-0053.

RODRIGUES, A. O.; BUSCH, C. M.; GARCIA, E. R.; TODA, W. H. **Contabilidade Rural**. 5. ed., Rio de Janeiro: Freitas Bastos, 2021.

RODRIGUES, V. D. V.; COUTO, M. H. A.; VESPUCCI, I. L. Contabilidade Rural: Particularidades, Benefícios e Dificuldades de Aplicação no Setor Agrícola. **Revista Científica Multidisciplinar Núcleo do Conhecimento**, v.1, n. 3, p. 57-80, 2018.

SAMPAIO, C. A.; KATO, O. R.; NASCIMENTO-E-SILVA, D. Alianças estratégicas no contexto dos agroecossistemas sustentáveis da Amazônia: uma abordagem teórico-metodológica de gestão. In **IX ENGEMA - Encontro Nacional Sobre Gestão Empresarial e Meio Ambiente**, Curitiba, 19 a 21 de novembro de 2007.

SAMPAIO, C. A.; KATO, O. R.; NASCIMENTO-E-SILVA, D. Corte e trituração da capoeira sem queima como alternativa de uso da terra, rumo à sustentabilidade florestal: o caso Tipitamba em Igarapé-Açu-Pará. In **IX ENGEMA - Encontro Nacional Sobre Gestão Empresarial e Meio Ambiente**, Curitiba, 19 a 21 de novembro de 2007.

SANTOS, I. N. F. *et al.* Contabilidade rural como ferramenta estratégica de apoio a gestão: um estudo com pequenos agricultores na cidade de Floriano-PI. **Revista Ibero-Americana de Humanidades, Ciências e Educação**, v. 10, n. 6, p. 1278–1302, 2024. https://doi.org/10.51891/rease.v10i6.14518.

SANTOS, L. B.; QUINTANA, A. C. Análise da importância da utilização do orçamento e do planejamento estratégico como ferramenta de controle na atividade rural. **Revista Catarinense da Ciência Contábil**, v. 10, n. 29, p. 69-82, 2011.

SANTOS, P. H.; VILLWOCK, A. P. S. Análise da viabilidade econômica do cultivo de acerola em propriedade familiar do estado de Sergipe. **Exten. Rur.**, v. 31, p. 1-25, 2024. https://doi.org/10.5902/2318179671667.

SENAR. **Curso técnico em agronegócio:** contabilidade rural. Brasília: SENAR, 2015.

SILVA, I. C. Agricultura familiar na região do alto Juruá-AM. **Boletim Paulista de Geografia**, v. 1, n. 110, p. 233-256, 2023. https://doi.org/10.61636/bpg.v1i110.3129.

SILVA, J. S. Agricultura familiar, pluriatividade e políticas públicas no Brasil nas décadas de 1990 e 2000. **Research, Society and Development**, v. 11, n. 14, p. e13111434501, 2022. http://dx.doi.org/10.33448/rsd-v11i14.345012022.

SILVA, S. A. G; FIIRST, C. Contabilidade e sua importância para o pequeno produtor rural. **Revista Competitividade e Sustentabilidade – ComSus**, v. 2, n. 1, p. 76-88, 2015. https://doi.org/10.5935/2359-5876.20150006.

SILVA, V. L. et al. Analysis of scientific and technological perspectives on the development of new food products from family farming. **Agriculture**, v. 13, n. 3, p. 1-20, 2023. https://doi.org/10.3390/agriculture13030606.

SIQUEIRA, E. S. et al. Management in family farming: Evidences from settlements. **Brazilian Journal of Management**, v. 14, n. 4, p. 888-906, 2021. https://doi.org/10.5902/1983465953130.

SOARES, F. I. L. *et al.* Perfil socioeconômico de agricultores familiares no Baixo Amazonas: um estudo na feira municipal de Alenquer, Pará, Brasil. **Revista Principia (João Pessoa)**, 2022. v. 59, p. 1464–1474.

SOUZA, M. V. R. DE *et al.* Controles financeiros utilizados na agricultura familiar: um estudo com cafeicultores de são sebastião do paraíso (MG). **Revista Mythos**, 2024. v. 21, n. 1, p. 104–119.

TERRES, A. C. **Gestão de custos na agricultura familiar: um estudo de caso**. Tapejara: FAT, 2023.

TRAJANO, C. B.; ANJOS, M. A. D. A importância da contabilidade nas operações rurais. **Revista GeTeC**, v. 10, n. 32, p. 118-129, 2021.

TRPESKI, P. et al. Financial management in logistic companies. **Knowledge-International Journal**, v. 41, n. 1, p. 177-181, 2020.

ZACHOW, M.; PLEIN, C. A gestão como característica da agricultura familiar. **Brazilian Journal of Development**, v. 4, n. 6, p. 3318-3334, 2018.