
THE REASONS FOR IMPLEMENTING THE DIVERSIFICATION STRATEGY DEVELOPED THROUGH AGROINDUSTRY ON SMALL RURAL PROPERTIES

Os motivos de implantação da estratégia de diversificação desenvolvida por meio da agroindústria nas pequenas propriedades rurais

Daiane Aline Tomaz Sobczuk

Contadora. Mestre em Administração pela Universidade Estadual do Oeste do Paraná – Unioeste. Rua do Balonismo, 3340, Santos Dumont, CEP: 85720-292 - Medianeira, PR. daiane_at@outlook.com

Geysler Rogis Flor Bertolini

Administrador. Doutor em Engenharia de Produção pela Universidade Federal de Santa Catarina – UFSC. Docente Adjunto do PPGAdm – Mestrado Profissional em Administração. Rua Universitária, 1619 – Jd Universitário – Cascavel/PR CEP: 85819-110. geysler_rogis@yahoo.com.br

Abstract: The general objective of this research is to analyze the reasons for implementing the diversification strategy developed through agroindustry in small rural properties in the municipality of Medianeira-PR. The research was carried out through a qualitative, descriptive and exploratory multi-case study, based on structured interviews carried out between January and April 2022. The field of study is the family properties that diversify their production through of the family agroindustry. As the main findings of the research, it was identified that, in the implementation of the rural livelihood diversification strategy, the effective motivation revolves around income generation, staying in rural areas and the opportunity to have a better quality of life. Producers also strategically seek to add new knowledge to family traditions in order to create new products and services that are reverted through customer satisfaction. Finally, the performance of the livelihood diversification strategy through agroindustry shows that access to natural, human, social, physical and financial capital is essential for the development of small family agroindustries, in addition to the fact that the knowledge acquired by families improves the business and diversification strategy promotes sustenance; consequently, families and their successors remain on rural properties.

Keywords: Family Agroindustry; Family Farming; Diversification Strategy.

Resumo: O objetivo geral desta pesquisa é analisar os motivos de implantação da estratégia de diversificação desenvolvida por meio da agroindústria nas pequenas propriedades rurais do município de Medianeira-PR. A pesquisa foi realizada por meio de um estudo de multicase de cunho qualitativo, descritivo e exploratório, sendo que se procedeu a partir de entrevistas estruturadas realizadas entre janeiro e abril de 2022. O campo de estudo são as propriedades familiares que diversificam sua produção por meio da agroindústria familiar. Como principais achados da pesquisa, identificou-se que, na implantação da estratégia de diversificação do sustento rural, a motivação efetiva-se em torno da geração de renda, da permanência no meio rural e da oportunidade de ter melhor qualidade de vida. Os produtores também buscam estrategicamente somar o conhecimento novo às tradições familiares com o intuito de criar novos produtos e serviços que são revertidos por intermédio da satisfação dos clientes. Por fim, o desempenho da estratégia de diversificação de sustento por meio da agroindústria evidencia que o acesso ao capital natural, humano, social, físico e financeiro é fundamental para o desenvolvimento das pequenas agroindústrias familiares, além de que o conhecimento adquirido pelas famílias aprimora o negócio e a estratégia de diversificação promove o sustento; por consequência, há a permanência das famílias e de seus sucessores nas propriedades rurais.

Palavras-chave: Agroindústria Familiar; Agricultura Familiar; Estratégia de Diversificação.



Este é um artigo publicado em acesso aberto (Open Access) sob a licença Creative Commons Attribution, que permite uso, distribuição e reprodução em qualquer meio, sem restrições desde que o trabalho original seja corretamente citado.

1 INTRODUÇÃO

Brazilian agriculture has been constantly changing, whether with the implementation of new technologies or the supply of innovative products for production, making it a challenge for rural producers to keep up with this technological advance, especially for small and medium-sized ones.

In Brazil, it is estimated that of the 5,570 municipalities, around 60% are predominantly rural (IBGE, 2017). In these rural areas, still dominated by agriculture, it is pertinent to promote the diversification of properties, as an important strategy to reduce vulnerability and keep rural producers in the countryside. This diversification may or may not be related to the activities that the producer is already used to doing (Li; Westlund; Liu, 2019).

Diversification does not only refer to complementing farmers' activities with new non-agricultural activities, but also provides the creation of a new basis for the rural economy of the local community, of which agricultural activity is a part (Prayukvong; Foster, 2014). This initiative, therefore, can promote the inclusion of multifunctional agricultural activities, such as diversified agricultural products, product processing and rural tourism (Li; Westlund; Liu, 2019; Gautam; Andersen, 2016).

The western region of the state of Paraná has been following this trend of development of small properties. The existence of agro-industries in the region is one of the evidences to be noted; they can be understood by numerous variables, starting from public policies, which can encourage their implementation and strengthening, the interest of rural landowners, the ability and initiative to produce something new and differentiated, or good production practices, with the objective of ensuring competitiveness and viability for products and agro-industries.

Therefore, for the farmer to remain competitive in the market and continue developing his property, it is essential to carry out diversification. Thus, the objective of this research is to analyze the reasons for implementing the diversification strategy developed through agroindustry in small rural properties in the municipality of Medianeira-PR.

Based on this study, rural managers have the opportunity to analyze the strategies employed in their agribusiness, providing an opportunity to reevaluate their businesses and exchange information. For technical assistance agencies, the study provides data that can contribute to the discussion of public policies aimed at the difficulties and opportunities of these rural landowners, directing assistance with the objective of helping with the weaknesses encountered.

2 REFERENCIAL TEÓRICO

Brazil's economic growth is strongly linked to agribusiness through the development of its production chain. With its geographic extension and dynamic climate, the country stands out at world levels as a major competitor in the food supply. According to the *Ministério da Agricultura Pecuária e Abastecimento-MAPA* (2019), the government agency responsible for managing public policies to encourage agriculture and livestock, agribusiness generates opportunities for small, medium, and large rural producers at all stages of the production chain, including serving families. consumers (Smalci; *et al.*, 2020).

The management of this sector demands continuous development in all the agents of the chain, both in the operations of production and distribution of supplies and in the production within the agricultural units, in the processing and distribution of agricultural products and the items generated from them. In this way, the rural producer, seeking the success of his organization, must be constantly updating his way of managing the entire process of which he is part of (Kapp; *et al.*, 2013).

To consolidate itself as an increasingly competitive and excluding market, agribusiness must create alternative forms of income and work that aim to guarantee the sustainability of properties.

The diversification of the productive portfolio can be a strategy, since it can reduce the risks of having only a single source of income for the property (Esau; Deponti, 2020).

Diversification strategies provide opportunities for producers to reduce adverse effects, such as drought, for example, evidenced in the study by Wan *et al.* (2016), who noted that, when implementing diversification strategies, Chinese farmers increased the resistance and resilience to drought of their crops, making the food supply system more stable. Production diversification is not only a useful strategy for managing disaster risk and improving social well-being, but also provides a new perspective for analyzing system vulnerability, as well as contributing to the economic and environmental sustainability of where it is applied, the latter being one of the concerns of the agricultural sector today.

In the context of the diversity of productive activities of family agriculture, the industrialization of agricultural products also stands out, seeking to add value to the raw material and the preservation of the property as a maintenance strategy in family agriculture, beyond the economic aspect, but as a way of reproducing a more complex and social vision. Within the social context, the activity can contribute to the construction of markets, social networks, and alternatives for the diversification of livelihoods (Wilkinson, 2002; Matei, 2015).

The industrialization of primary production on family farms arises from the knowledge and needs of producers to feed themselves and conserve their products, from the use of surpluses, and when there is an unfavorable price scenario for a given production. Thus, the rural producer recognizes the agro-industrial activity as a way of adding value to the production and the diversification of the supply chains, as a determinant that adds in the productive processes. It is not the solution to all the problems faced by rural properties, but it is an alternative that contributes to an increase in family income, generates jobs and occupations for the rural population, helping to break migratory flows. It provides the construction of a set of economic, social, and cultural factors that interact with the decision-making process on the part of rural families (Mior, 2005; Gazolla; Pelegrini, 2008).

The agro-industrial activity is also part of the history and culture of family farmers, as it emerges from the practice based on their historical knowledge, improving their ways of doing and producing. The search for healthy foods related to cultural aspects, as well as contact with nature, gives visibility to products with differentiated quality attributes, creating new market opportunities, mostly accessible to small family producers. This makes possible to create networks that expand the possibilities of learning and access to inputs and information (Zerbato, 2013; Santos, 2018; Conterato; Strate, 2019; Kasmin; *et al.*, 2019).

Another point to be considered when talking about diversification of activities is the increased complexity of carrying out controls in organizations, mainly due to the indirect costs of studies, development, administrative routines and marketing of products, the same can be observed in rural production (Martins; Rocha 2010).

There is a contradiction between rural diversification and the need to carry out economic and financial controls on the property, since monoculture producers, in general, controlled their business data “in their heads”, understanding the process in its entirety, even without carrying out many formal controls. Therefore, the diversification of rural activities is beneficial in relation to several social issues, production techniques and in economic terms, forming an economic approach with multiple dimensions, in addition to covering the social and environmental aspects. However, it has its disadvantages in terms of control, that is, there is an increase in complexity due to diversification, which clashes with the habit of not carrying out efficient controls on the properties (Fontoura, 2022);

The process of rural and social diversification that reflects on the livelihood and way of life of the rural producer in Elis's (2000) understanding is defined as a method in which a family group builds an increasing diversification of the portfolio of activities and assets to survive and achieve

a better standard of living. Diversifying livelihoods contributes to financial security and stability, reducing the impacts of seasonality.

The analysis of the diversification of livelihoods implies what Ploeg (2008) determined as the constant struggle to strengthen the available resource base on the part of rural landowners and their ability to constantly fight for their autonomy and freedom. The author believes that farmers who innovate and react to deprivations and adversities create “spaces for maneuver” that help management.

Ferreira (2013) argues that, based on detailed analyzes of the processes and social meanings of this new rural environment, farmers are valuing the opportunities available in their rural spaces and putting diversification strategies into practice. It is of great relevance for the rural scenario when the family is able to seek development for its activity.

Based on these assumptions, Ellis (2000) developed an analysis framework capable of directing micro-policies to reduce rural poverty, as well as to assess the local impact of macro-policies. This structure brings together the natural resource base in the face of human interference and defines the five categories of assets that make up the support platform for rural properties capable of directing their strategies and providing property diversification.

Natural capital encompasses natural resources that are harnessed by people to generate livelihoods. This capital is related to the environmental resources available on a property, which can be separated between renewable and non-renewable. Natural capital is plundered according to the extraction rate of the individuals who use it. Physical capital is defined as a production good present on the property, technological advances have allowed the replacement of natural resources by physical resources and contributed to the reduction of pressure on natural resources. Structural assets facilitate the diversification of livelihoods and provide better working conditions. The third capital, human capital, is related to the work available for the development of livelihoods, including education, health and skills, the development of this asset takes place based on encouraging education and training, as well as through skills which are acquired by the activity that develops within the property. The fourth capital is financial, this asset corresponds to the monetary amount that the family unit has access to. Finally, social capital tries to capture the effects of the individual or family unit's relationships with the community in which they are inserted and their access to livelihood (Ellis, 2000; Niehof, 2004).

Access to the support platform, called available capital, is mediated by two factors classified as endogenous and exogenous. Ellis (2000) classifies endogenous factors in social relations, institutions, and organizations. Social relations are related to the positioning of the rural family and its property within society. Institutions refer to formal rules, conventions and informal codes of conduct that generate limits to human interactions, also called regularizing patterns of structured behavior within society. Organizations are formed by groups of individuals formed with the same purpose and aim to achieve certain goals. However, endogenous factors can be modified depending on the context in which they occur, that is, when there is a change in the livelihood platform, strategies can also change. In this context, activities can be included or excluded, or even combined with other activities linked to the rural environment.

The second group of factors, the exogenous ones, can modify access to capital, being represented by trends or shocks. Trends refer to elements such as population, technological change, migration, relative prices, and macroeconomic policies. In contrast, external shocks are related to pests, droughts, diseases, civil wars, and floods. Both factors cannot be controlled by individuals and have consequences for the viability of sustaining the family unit (Ellis, 2000).

The framework, developed by Ellis (2000), was applied to a series of studies carried out in several countries, among them Tanzania, Uganda, and Malawi, analyzing the issue of rural livelihoods related to diversification in the promotion of a particular sector (Ellis; Mdoe, 2003; Ade Freeman; *et al.*, 2004), with a focus on determining public policies that can contribute to deve-

lopment and income generation in rural areas. In Brazil, some studies use this knowledge base to analyze the rural environment and the strategies applied to contain poverty, migration and also the seasonality of small properties (Padilha, 2009; Faoro, 2017).

In this way, the framework contributes to the understanding of a different view about the diversification strategy, that is, there are other ways of approaching diversification that are not restricted to competitiveness factors, which contributed to the objective of this study in terms of investigating livelihood diversification strategies in small rural agribusiness properties, specifically in the study of properties that develop the family agroindustry.

3 METHODOLOGY

To achieve the proposed research objective, an exploratory study was developed through a multi-hull study with a qualitative data approach. According to Flick (2009) and Severino (2017), this approach is oriented towards the analysis of specific cases in their temporal and local particularities, based on the activities and expressions of individuals in their local contexts, which opens space for the analysis of variables and dynamic processes. It seeks to identify the results and reasons why family farmers diversify their productive activities through family agroindustry, mapping the capital available to rural families and used in the rural diversification strategy of the property through family agroindustry; thus, there is a survey of situations that interfere and modify access to capital, in order to provide an understanding of the results of the rural diversification strategies implemented.

Thus, as the object of study, rural properties that diversify their activities through family agroindustries in the municipality of Medianeira were selected. The data collection period took place between January and April 2022. Data collection was carried out through structured interviews conducted with rural producers and IDR extension agents. The municipality has 13 agro-industries registered with the Municipal Department of Agriculture, 6 of which were not surveyed because they did not meet the requirements and two did not agree to participate in the study. The established requirements were:

- a. Family rural properties that diversify their sources of income by exploring more than one activity on the property.
- b. The size of the rural property must be a maximum of 50 hectares. This option was based on the need to analyze different contexts to determine whether the same strategy would suit all properties or whether each one would have to adapt it to its particularities.
- c. Family rural properties must have access to the capital mentioned by Ellis (2000), namely human capital, related to work; physical capital, social capital that captures the individual's relationships; financial capital, related to the rural family's monetary amount; and natural capital, which includes natural resources. These assets are essential for implementing diversification strategies on rural properties.
- d. The activities must be performed mainly by the rural family.

As this is a qualitative study, the selection of rural properties using these criteria may represent similar ones in other regions of Brazil.

The data collected for the study were from primary and secondary sources. First, the interviewees were contacted by telephone to schedule the day and time of each interview. On the day of the on-site interview, the interviewees were asked for permission to use the information obtained, and they were also asked for permission to record, transcribe, tabulate and analyze the data.

Thus, Chart 1 presents the categories of analysis and themes collected in the interviews and which were related to the characterization of rural properties, identifying the main aspects observed.

Chart 1 – Rural property characterization

Category	Themes	Observed Aspects
Rural property characterization	Identification and installation of the rural property	- Identification; - Location; - Specificities of the property area; - Suitability/quality of facilities.
	Implementation of agro-industrial activity	- Main motivation and/or influence of implementation; - Process of implementing the activity on the property.
	Labor occupancy data	- Labor of the rural family; - Hired labor.
	Formation and composition of income data	- Income from productive activities (%); - Income from rural tourism activity (%).
	Financial management and administration	- Decision making, financial control and pricing; - Origin of resources to develop rural tourism activity (%).
Rural property characterization	Technical support	- Process of technical assistance, facilities and difficulties.
	Divulgence	- Concern about disclosing, costs involved - Disclosure vehicles used.
	Effect of agro-industrial activity (on the life of the rural producer and his family)	- Degree of importance of agro-industrial activity; - Main aspects of agro-industrial performance; - Family tradition rescued; - Main expected results for the rural family in relation to agro-industrial activity; - Future plans for the activity; - The property and its importance; - Importance of group work and associativism for the development of agro-industries; - Interest in association with other rural producers who develop agro-industry
	Positive and negative points of the agro-industrial activity and enterprise	- Open and free-answer questions; - Reasons: (many services) or (decision making).

Source: Adapted from Padilha (2009).

The second part of the form presents the categories related to the rural livelihood diversification strategy, explaining the determination of analysis categories and themes, to identify the aspects, information and strategies implemented by the properties. Chart 2 shows the aspects observed by each category and the theoretical basis that gave rise to such categories.

Chart 2 – Rural Livelihood Diversification Strategy

Categories	Themes	Observed Aspects	Theoretical Basis
Rural property characterization	Livelihood diversification	The rural livelihood diversification strategy	Barret, Reardon e Webb (2001)
	Access and use of capital	- Natural - Human - Physical - Financial - Social - Capital Identification	Ellis (2000) Moser (1998) Niehof (2004) Padilha (2009) Ploeg (2008) Sen (2010)
	Elements that modify access to capital	- Social relationships - Institutions - Organizations	Ellis (2000) Niehof (2004)
	Elements that interfere with access to capital	- Tendencies - Shocks	Ellis (2000) Niehof (2004)

Source: Adapted from Padilha (2009).

The data from the quantitative stage were tabulated using Microsoft® Excel™ software, and a table was created identifying the respondents. They were then analyzed using the content analysis technique consisting of pre-analysis, material exploration, processing of results and interpretations, seeking to identify common points that are relevant to the research (Bardin, 2009).

4 RESULTS AND DISCUSSION

In the city of Medianeira - PR, family agroindustries have generated income and added both financial and social value to the rural producer. The family agroindustries in the municipality use family labor, industrialize the raw material, mostly produced on the rural property itself and are distributed in several rural communities in the city. Family agroindustries produce dairy products, sausages, fruit jellies, snacks, cornmeal, canjica, among other products. These products are sold at fairs, bakeries, supermarkets and directly to consumers. Chart 3 shows the characterization of each property interviewed.

Chart 3 – Summary of the characterization of the researched properties

N	Agricultural Activities	Area (ha)	Income Source	Agroindustry Products	Motivations for Implementing Agroindustry	Workforce	Administrative and Financial Management	Technical Assistance	Dissemination
A	- Soybean and corn production - Milk production	16	Agroindustry Agriculture	- Dairy products - Jams - Juices	- Add value to raw materials - Increase family income	- Family (couple and one child) - Day laborer	- Owner and their child	- IDR	- Clients
B	- Milk production - Corn and soybean production	5	Agroindustry Agriculture Retirement pension	- Pasta - Savory snacks - Cakes	- Increase family income	- Family - Cooperation with neighbors	- Owners	- IDR	- Clients - Internet - Rural Producer Fair
C	- Corn and soybean production - Milk production	50	Agroindustry Agriculture	- Cornmeal - Corn pudding - Corn porridge	- Add value to raw materials - Increase family income - Succession of the rural property	- Family	- Owners and their children	- IDR	- Clients - Rural Producer Fair
D	- Corn and soybean production - Livestock farming	5.6	Agroindustry Agriculture Retirement pension Salary	- Sausages - Pork cracklings - Lard	- Increase income - Work on a private business	- Family	- Owner	- IDR	- Clients - Rural Producer Fair - Radio - Internet
E	- Corn and soybean production - Milk production	6	Agroindustry Agriculture Retirement pension	- Cheese	- Increase income	- Family	- Owner	- IDR	- Clients - Rural Producer Fair

Source: Made by the author. (2022).

Among the activities, agricultural production is present in all properties surveyed and is developed in a conciliated way with other livestock activity. The producers have agro-industrial and livestock activities as a source of income and in two properties there is income outside the property such as retirement and salary. As for the motivation to implement the agro-industrial activity, the producers answered that the main motivation was the aggregation of income. Family labor is present in all properties surveyed and in two of them it is reconciled with cooperation with other properties. The financial management of the properties is carried out by the owners themselves and in properties A and C the children also help with accounting and selling the products.

Technical assistance is provided on all properties by the IDR, producers reported that assistance does not occur constantly, but whenever necessary, technicians help. When asked about how to advertise their products, only one of the properties reported that they advertise through sponsorship on a radio program, two other properties invest in advertising through social networks, but all reported that the main means of disclosure is the customers themselves. Producers who do not invest in disclosure report that they do not see the need for this investment and that they do not intend to allocate resources for it at the moment.

4.1 Rural diversification strategies

About income source diversification strategies, Ellis (2000) argues that diversification consists of a process that provides quality of life and well-being for the rural family through the development of new activities integrated with social factors and trends, which result in the adoption and adaptation of properties in the long term and, consequently, increase their income.

In this way, diversification in Properties A, B, C and E was achieved through agro-industrial activity, finding, in the figure of their owners, the stimulus for its implementation. In these properties, the option for agroindustry was motivated by the need to increase the income of the property and add value to the raw material, which, mainly in properties A and E, was going through a time of low prices, in addition to allowing families to remain in the rural property. This confirms what was exposed by Foguesatto and Machado (2017), who show the fact that rural properties are looking for alternatives that provide the economic development of the property and contribute to the reduction of the rural exodus.

The surveyed properties invested in colonial products, each with a differential capable of attracting customers. The son of one of the owners points out that *“there was a demand for colonial products, but there were few producers concerned with producing differentiated products to sell, it was a market little noticed in the city”*. Property A, seeing these opportunities, invested in cheeses and sweets that were not found in local markets and fairs.

Property C also focused on an underexplored niche market; the family worked with dairy farming and grain production, in a conventional way, however, a project by Itaipu sparked the idea of directing grain production towards organic. The family conglomerate started to produce organic soybeans and corn that were intended for export. With that, the manager reported that he began to perceive the business from another perspective and started to transform the harvested grains into new products.

Another similarity between the surveyed rural properties is the owners' desire to remain in the rural environment and the ability to find new alternatives to guarantee the family's livelihood and improve their well-being, in addition to working in their own business, which is the motivation for the property D who had the opportunity to undertake. This analysis culminates with the point of view of Ellis (2000), when referring that diversification converges with the possibility of survival and improvement of the standard of living.

Analyzing the reasons that drove the diversification of productive activities that contribute to improving the quality of life of the rural family, the manager of Property D declared that *“we saw in agroindustry the possibility of working on something that was ours, working our hours, working our way and we believe that the activity would add more value to the property”*. Agroindustry has become a social reproduction strategy that provides the development of the rural family, confirming the hypothesis raised by Besen *et al.* (2021) where the property now has a higher added value.

From the motivation to undertake, some factors that facilitated the implementation of the strategy of diversification of activities, on Properties A and E, was the access to the raw material of dairy farming, present in the properties for many years, being crucial to implement the agroindus-

try. In addition, the IDR's support, and encouragement to set up the agroindustry were also aspects that facilitated the implementation of the strategy and its improvement in both properties.

Family labor was pointed out by Properties B and C as one of the factors that facilitated the implementation of agro-industrial activity, in addition, both properties received assistance from the *Programa Nacional de Fortalecimento da Agricultura Familia* (PRONAF) which contributed to the construction of structures of agroindustries. In Property D the location of the property facilitates locomotion and also provides opportunities for the trade of products in the agroindustry itself. Regarding the difficulties faced, three properties pointed out that adapting to all the rules was a challenge, in addition to the lack of better roads to access rural properties.

The data and reports collected converge on a common point: agricultural activities lost competitiveness on these properties, ceasing to be unique, presenting agroindustrial activity as an alternative for increasing income, reducing risk, making rural properties viable and guarantee of economic stability. According to the producers interviewed, agricultural activities have lost their place as the main crop on the property due to the high investment in machinery, which makes production in small areas unfeasible. These results are identified by Barrett *et al.* (2001) as primary reasons, that is, agroindustry proved to be a promising alternative for rural development. In this way, the project contributed to the reduction of risk, functioning as a defense mechanism against crises that put pressure on the agricultural sector. In addition, the establishment of complementary strategies between activities and the development of skills and talents is an indication that agricultural activities are being modified and offering more space for other activities that are not exclusively agricultural.

Regarding the factors that facilitated the beginning of the agroindustrial activity, the cultural richness, the communication skill, and the conviction that the enterprise would succeed reflect on the promising development of the properties and their agroindustries. As for the negative aspects, there is the lack of support from public policies and the lack of adequate access structure to the properties. In this sense, it is observed that the feasibility of a diversification strategy in any type of enterprise requires the mobilization of resources or capital that are strategic for its implementation.

Chart 4 systematizes the reasons that led to diversification, as well as the factors that facilitate and hinder the implementation of the diversification strategy. The main reasons that led families to diversify their activities were the need to remain in rural areas, increasing their financial income, in addition to improving their quality of life.

Chart 4 – Reasons to diversify and factors that facilitate and hinder the implementation of the strategy

Property	Reasons	Facilitators	Barriers
A	- Need to increase income	- Raw material	- Compliance with regulations
	- Add value to raw materials	- Differentiated products	
B	- Need to increase income	- Family workforce	- Lack of infrastructure
	- Need to increase income	- Family workforce	- Lack of infrastructure
C	- Add value to raw materials	- Raw material	- Lack of government support
	- Keep the family in rural areas	- Support from Itaipu Program	
D	- Need to increase income	- Location	- Compliance with regulations
	- Better quality of life	- Family workforce	
E	- Keep the family in rural areas	- Family tradition	
	- Keep the family in rural areas	- Raw material	- Compliance with regulations
	- Keep the family in rural areas	- Differentiated products	

Source: Research data (2022).

Thus, according to Weltin *et al.* (2017), one of the reasons for the diversification of activities is the perception of risks and uncertainties arising from the development of a single activity, as well as the optimized use of available resources.

4.2 Access and use of capital

Access to the five capitals – natural, physical, human, financial and social – is fundamental for the implementation of the diversification strategy to be efficient (Ellis, 2000). Access to these capitals contributes to the development of productive activities on rural properties.

Natural capital is understood by land, water, and biological resources, which are used by individuals as inputs in the generation of means of survival; this capital is also understood as an environmental resource or even as “environment” (Ellis, 2000). The surveyed properties use their resources to develop their activities and, in return, contribute to their preservation.

The properties surveyed have as natural capital the land where they grow grains, produce milk, and preserve the forest and native vegetation. The properties grow grains in the flat areas and the more rugged terrains are used for dairy farming. Water is a resource used in large quantities by rural properties. Seeking its preservation, they capture rainwater through cisterns and later use this resource to wash the agroindustry. A Properties B and D have an artesian well that provides water for the family and for productive activities; in addition, these properties carry out a work of preservation of the springs and the banks of the rivers that pass through them.

This connection between the rural property and the environment is essential for rural development, since, corroborating the study by Freitas, Rambo, and Schneider (2014), the land asset strongly depends on the preservation of springs, rivers, native forests, soils, among other resources and, through this asset, other activities are carried out on the property, such as agroindustry.

Analyzing the natural capital from the perspective of its availability and use in the viability of the diversification strategy, the dimension of its attractiveness and use is evidenced. Therefore, according to the analysis of the natural capital of the properties, it can be inferred that, among the families, there is a consensus on the sustainable production and conservation of the natural resources of their establishments, over the years, being essential to guarantee the quality of life, especially in rural areas, where “sustenance” comes from the exploitation of these natural resources. It is necessary for properties to look at their means of production and seek more sustainable alternatives, reinforcing Rocha's conclusion (2019), that there are still adjustments to be made in the process of family agroindustries so that they are fully sustainable.

The second capital is physical, which includes improvements, machines, tools, and infrastructure. At the beginning of the rural enterprise, properties A, C and E had facilities that could be used for the family agroindustry, being necessary to expand or reform to adapt to the norms.

Owners also report that acquiring physical capital was a challenge at the beginning of the activity, due to the high cost, but they emphasize that they are essential to maintain productive activities and generate income for the family. It should be noted that the increase in capital available on the properties can be justified by observations on the preparation of projects for acquiring credit via Pronaf, through which three families acquired equipment for agroindustrial activity. This reality is also evidenced in the study by Poletto (2019), who identified the increase in investment in technology through Pronaf lines of credit, contributing to the permanence of the family in the countryside.

As for infrastructure, four properties reported that road access could be better. Producers are concerned about investing in infrastructure, which is why they have already sought investment from the government, but so far have had no return; on one of the properties, the dirt road was renovated more than six years ago and is in poor condition.

Communication networks and power lines are classified by producers as reasonable and good, as some properties have internet and telephone service limited to a single company and the signal is not always of good quality. The power lines are still divided between two companies, Copel and Cerme, but, on days of heavy rain and wind, the power service takes longer to be normalized in most of the surveyed properties.

Another important asset for the diversification strategy is human capital. Sen (2010) establishes that the human aspect is essential in understanding the possibilities of making changes in the living conditions of individuals.

In the surveyed properties, human capital is composed of family labor. Properties A and C receive help from their children to carry out the activities of the property and agroindustry, both in administration and production. Both properties encourage the preparation of this capital and argue that education is one of the most relevant strategies for the success of rural enterprises. According to property manager C: *“the college provides theoretical knowledge, and the rural property enables the application of this knowledge in a family business that can bring countless benefits”*. This view reinforces Senadza's point of view (2014), that education is a key item for the formulation of a livelihood diversification strategy, since, through it, opportunities are created that favor access to information.

The concern with family succession made producers invest in the diversification of family property in order to generate income to provide quality of life for future managers. The results of the study by Moreira (2018) collaborate with this idea, pointing out that the larger the capital portfolio and the amount of assets available, the greater the ease of keeping young people in the countryside. In this way, these assets and capital are used as mobilizing strategies for generational succession in these small family properties.

In properties B, D and E, human capital is composed of family labor and that of partnerships formed with other rural producers; in addition, none of the three families has a higher education, but they believe that training is essential to prepare them for everyday challenges. This cooperation enables growth and the exchange of ideas. At property B, human capital was strategic at the beginning of the agroindustry activities, as it enabled the reduction of costs, developed communication, and broadened the vision of the owners about their business. Managers point out that the challenge of this capital is to make young people stay in the countryside and not migrate to the city; another point pointed out by property A is the lack of quality and specialized labor, which can interfere with the growth and longevity of the property.

It should be noted that human capital, made up of family labor, enabled the development of communication skills, expansion and strengthening of knowledge about management and development of new products, as well as activities for the managers of the five properties. Collaborating with the study by Padilha (2009), it is evident that the combination of prior knowledge with assimilated knowledge provides the development of new products and services. In addition, the traditions made possible the intellectual exercise in the rescue of the historical memory of each property, providing investments in education directed to the management of the rural property and the agroindustry, in addition to improving the individual skills applied to the business. In this way, the access and development of human capital refer to the understanding that, in each property, resources that were within their reach were mobilized and accessed, which, according to demand, were, over time, enhanced, which resulted in the successful diversification of rural family income.

In order for income diversification to take place on rural property, financial capital plays a notable role in building the portfolio of assets and strategies by, mainly, converting itself into other forms of capital or consumer goods. To start the agro-industrial enterprise, three properties sought the Pronaf line of financing. Financing with government resources has contributed to rural development and provides rural producers with differentiated rates and terms, diluting investment payments. Producers argue that one difficulty encountered in accessing these lines of credit is the

bureaucracy involved. The other two properties surveyed implemented the agro-industrial activity through their own resources from agricultural and livestock activities.

The last capital, social capital, was also significant in the process of making the livelihood diversification strategy viable in the rural properties surveyed. By producing for the local market, in short marketing circuits, producers establish a close relationship with their customers, direct consumers, and broaden their learning about how the market works. This relationship is full of learning, reflecting a greater concern of rural producers in listening to consumer demands and meeting their expectations, producing quality and healthy products (Padilha, 2009; Molina *et al.*, 2014).

This greater autonomy of the properties confirms the hypothesis of Conterato and Strate (2019), which considers the autonomy of the producer in relation to the market as a social innovation, capable of improving livelihoods. This is possibly related to the fact that the researched families produce food with specific characteristics of their family, typically from the locality in which they are inserted and produced in an artisanal way (Santos, 2018). This conclusion also confirms the idea advocated by Gomes (2016), that the social environment provides opportunities for producers to create their marketing channels linked to their reality.

Managers point out that the diversification of livings and livelihoods, as set out in Bebbington's studies (1999); Ellis (2000) and Ploeg (2008), is a strategic process that families use to motivate a more stable situation with the aim of improving their quality of life, including reducing the influence of adverse conditions caused by crises and overcoming the difficulties imposed due to problems or limitations in their productive activities.

Regarding the identification of needs and difficulties for the implementation of the diversification strategy, human capital is what most concerns property managers. They point out that there is some difficulty regarding the workforce; in some cases, the rural enterprise could grow in potential, but it is limited to qualified labor. Another item pointed out by families is access to credit, as they are afraid of losing Pronaf credit lines, since, according to producers, external financing lines have very high interest rates, which can make investments unfeasible.

4.3 Elements that modify the capitals

Due to the complexity of the processes, within the scope of agribusiness, to keep up with the world scenario, managers must be prepared to seek ways to make their businesses viable and reach an adequate level of sustainability or a competitive standard that is self-sustaining. Based on the idea that rural properties are pressured by external and internal forces, which influence the coordination of their activities, some aspects are linked to the modification of access to capital in the process of diversification strategy through agroindustry (Ellis, 2000).

Access to natural capital is modified due to bureaucracy and obstacles created by legislation relating to the rural environment, but one of the properties understands that care for the environment is justified, as it is necessary to preserve natural resources so that properties can continue to use them. The IDR technician justifies that there are procedures that are necessary for the development of activities and that the institution does its best to assist and facilitate the bureaucratic procedures that are within the reach of the institution.

One of the properties considered investing in rural tourism, but, due to the bureaucracy with licenses and compliance with the legislation applicable to the sector, they gave up. Therefore, these bureaucratic obstacles modify access to natural and financial capital, limiting the exploitation of property and preventing its expansion.

As for the physical capital, its access is modified mainly by the lack of conservation and lack of maintenance of the city's roads. Two properties reported that, on rainy days, they stopped delivering the property's products because they had no way to leave the house.

The lack of qualified and accessible labor makes it difficult to access the human capital of the properties. As a result of the rural exodus, families have difficulties finding labor that lives close to the rural property; thus, to adapt to this scenario, families have sought cooperation: in properties D and E, human capital modifies access to capital because, according to the managers, they practice cooperation in order to develop their businesses.

The surveyed rural properties report that the difficulty related to access to human capital modifies the financial capital of the rural property. Two properties mention the lack of labor as a limiting factor for their growth and expansion. With regard to social capital, the data collected, in the five properties surveyed, did not show interference driven by aspects related to sex, religion, social class and age.

4.4 ELEMENTS THAT INTERFERE WITH ACCESS TO CAPITAL

Regarding access to capital or available resources, rural families can be modified by a set of factors, as well as being subject to unexpected trends or negative externalities, called external shocks (Ellis, 2000).

In this sense, it could be noted that, among the elements that interfere with access to capital, the surveyed properties mentioned trends related to the rural exodus, the adoption of new technologies, economic trends, and price formation. These elements are present in the daily life of rural properties and, as pointed out by Niehof (2004) and confirmed by this study, each manager has created a strategy to try to minimize these interferences, using resources from the processes that occur within the family property.

Managers understand that the main element that interferes with access to human capital is the migration, mainly of young people to the city, resulting in aging and the reduction of the rural population.

The managers of properties A and C comment that the lack of labor has been compensated with the evolution of equipment and technology, both in agricultural and agro-industrial activities. Agricultural machinery allowed families to reduce dependence on labor; in addition, equipment in agroindustries facilitated the means of production and helped to increase the amount produced. IDR technicians report that, in order to overcome this lack of labor in rural areas, they have guided the adoption of new practices and encouraged some properties to invest in technologies accessible to small producers, with the help of programs such as Pronaf and Banco do Produtor Rural, for the acquisition of equipment and machinery.

Technological advances have also improved the quality of life of rural families, as machines and equipment have reduced manual labor. This conclusion collaborates with the study by Gautam and Andersen (2016), defending livelihood diversification as an effect with a direct impact on the well-being of the rural family, which creates opportunities for the less favored.

This exposure to economic trends made the properties strategically seek technical assistance to manage their activity, confirming one of the conclusions of Foguesatto (2017), which classifies the ability to face economic situations as a strategy, with management applied to new technologies and based on the use of technical information that became allies of producers in this process of adapting to the market.

Regarding external shocks, producers who have agricultural and livestock activity reported that the biggest concern is with possible storms, since the region, in the last year, suffered from climate interference that directly affected production, in addition to droughts and pests that can harm crops.

A common curiosity in the five properties was the fact that, even with the pandemic, which started in 2020, the demand for and sale of their products increased by more than 50%; the producer of property E points out: *“I thought that with the pandemic there would be a surplus of product,*

but people kept calling asking for cheese, I was impressed, my sales increased significantly to the point of running out of product". The producer also believes that the value of natural capital, as well as handcrafted products, is in an appreciation process: *"my products are made in a colonial and artisanal way, I do not use preservatives and customers are looking for healthier products, it is a growing market"*. When asked about what these policies would be, he reported that the municipal government does not monitor the properties, that there are several agribusinesses operating irregularly, that do not follow health and environmental standards and that are not inspected.

The existence of factors that modify income strategies, which translate into impacts for rural properties, can also be noted in some circumstances, as factors that interfere with access to capital and hinder the effective reach of income generation were identified. However, it was found that the greater the access to capital, the greater the ability to generate income and remain on the rural property, which highlights the importance of managing the relationships that facilitate this access and its transformation into income strategies in consistent "results".

4.5 Rural diversification in the view of IDR extension workers

In the five surveyed properties, the managers mentioned the IDR as an institution that has contributed to the development of their productive activities. In conversation with the technicians, they mention that the diversification of productive activities, especially on small properties, brings countless benefits to the rural family and the local community. The institution seeks to aid and advise on the development of rural properties, in order to provide producers with knowledge and information capable of changing the reality of the family.

As for the motivations that lead producers to diversify, technicians mention the search for income generation and improvement in quality of life, as unanimous reasons among rural producers. In addition, they share reports of properties that were resistant to diversification, but when they put it into practice, they had a drastic change in their way of life.

Another reported fact is that, through diversification, there was an opposite effect of migration; the children of producers are returning to rural areas to work on the property, investing in new activities or specializing activities already developed.

Agroindustrial activity has grown in the region and the IDR has sought to be closer to the rural producer, encouraging, sharing knowledge, technically guiding, and assisting producers in the bureaucratic part, mainly in agroindustrial activity, in which producers do not master the bureaucratic procedures. Technicians report that *"agroindustry promotes the development of an activity that is not just agricultural, it makes the property develop alliances, have marketing skills and, above all, be able to improve their lives"*.

With regard to the difficulties faced in the process of disseminating rural diversification strategies, the technicians cite the culture and the stagnant views of some rural producers, who are attached to ideas and past results that only great crops generate potential income for properties. Even facing some barriers, the technicians report that the producers have sought the institution to help develop strategies capable of promoting the economic growth of the property and, most of the time, those who have sought this support are the younger public, which represents the succession of rural properties. These new managers have seen the diversification and specialization of activities as a way to make small properties more promising, reducing exposure to risk and increasing the economic and environmental sustainability of rural enterprises. Finally, social capital, in the view of technicians, is what adds value to rural enterprises, since the institution helps producers to insert their products in the market and, in this way, social chains are created by producers and the community.

5 FINAL CONSIDERATIONS

This study demonstrated the importance of family agro-industries in the context of diversifying livelihoods for small rural properties. This importance goes beyond the common objective of all enterprises, which is the generation of profit, as it was noticed that these rural properties bring to their families something besides income, such as quality of life, family life and succession, expansion of security of the sustenance and preservation of existing resources on properties.

Therefore, considering the reality of the small properties object of this study, an analysis structure was applied that allowed the evaluation of the results of implantation of the strategies of diversification of the sustenance, in the small properties of the city of Medianeira, in a way that it was verified how the strategies of diversification used were implemented, especially in the agro-industrial activity.

Through interviews with managers and rural families, it was found that the need to increase income to remain on the property was the main reason that led producers to diversify their activities, confirming the results of Padilha (2009). The family succession of the property and the search for a better quality of life were also mentioned as reasons to diversify activities, collaborating with the study by Gautam and Andersen (2016).

Access to natural, physical, human, financial and social capital was fundamental for the implementation of diversification strategies in the rural properties surveyed. In natural capital, land and water were cited by producers as essential for productive activities; in physical capital are the equipment and facilities. Human capital is composed of family labor present in all properties and the cooperation exercised by some of the properties surveyed; the financial capital was acquired by three properties through financing from Pronaf and the other two properties invested resources from other productive activities. Finally, social capital showed that producers developed their communication and sales skills through agro-industrial activity and have invested in alternatives to be closer to their customers.

As a result of the implementation of diversification strategies, family agroindustry is an important transformation strategy that has a decisive contribution to the composition of income in the family unit, making this activity even more important for the economy and the dynamics of family agriculture and, also, for rural development. This is because producers can count on an additional activity that does not have the need to expand agricultural areas, as the agro-industrial activity is “land-saving”.

In addition to the results already mentioned, others also drew attention in the research: the number of women who oversee the administration and production of the activities of the family property, being present in four properties surveyed, and the family succession undertaken by two rural properties, which have their children involved with the management and production of agribusiness. These actors are training themselves to manage their businesses, following market trends and developing innovative products.

However, both rural properties adopted diversification strategies over the years, so that they created a portfolio of productive activities, which ensured not only their permanence on the property, but also better quality of life and well-being for the family.

The practical contribution of this study is in providing information to the agencies that help rural properties in Medianeira-PR, such as the Instituto de Desenvolvimento Rural-IDR. The analyzes carried out can serve as support for the evaluation of the performance of rural properties and their family agro-industries, so that these institutions can assess the need for technical, environmental, social and financial support, and can take programs aimed at development to the properties of rural diversification, such as the Banco do Produtor Rural Paranaense, which makes resources available to small properties and has lines of credit aimed at family agro-industries. In addition, these ins-

tutions can seek actions focused on the problems faced by rural enterprises, with the mission of making them more sustainable from an environmental and financial point of view.

In view of the limitations of the study, it is possible to mention the difficulty presented by some interviewees in responding reliably to the script applied. This is because some managers did not feel comfortable sharing details related to financial aspects. In addition, it was found that some interviewees were limited to answering some questions with “yes” or “no”. As a possibility for future studies, it is suggested to compare the sustainability of properties that use agroindustry as diversification and those that do not use.

REFERENCES

- ADE FREEMAN, H.; ELLIS, F.; ALLISON, E. Livelihoods, and rural poverty reduction in Kenya. **Development policy review**, v. 22, n. 2, p. 147-171, 2004.
- BARDLN, Lawrence. **Análise de conteúdo**. Lisboa: edições, 2009.
- BARRETT, C. B.; REARDON, T.; WEBB, P. Nonfarm income diversification and household livelihood strategies in rural Africa: concepts, dynamics, and policy implications. **Food policy**, v. 26, n. 4, p. 315-331, 2001.
- BEBBINGTON, A. Capitals and capabilities: a framework for analyzing peasant viability, rural livelihoods, and poverty. **World development**, v. 27, n. 12, p. 2021-2044, 1999.
- BESEN, F. G. et al. Agricultura familiar e reprodução social: análise socioeconômica de um grupo de agroindústrias familiares rurais do oeste do Paraná. **Revista Econômica do Nordeste**, v. 52, n. 1, p. 163-183, 2021.
- CONTERATO, M. A.; STRATE, M. F. D. Práticas de agroindustrialização e arranjos produtivos locais como estratégia de diversificar e fortalecer a agricultura familiar no Rio Grande do Sul. **REDES: Revista do Desenvolvimento Regional**, v. 24, n. 1, p. 227-245, 2019.
- ELLIS, F. The determinants of rural livelihood diversification in developing countries. **Journal of agricultural economics**, v. 51, n. 2, p. 289-302, 2000.
- ELLIS, F.; MDOE, N. Livelihoods and rural poverty reduction in Tanzania. **World development**, v. 31, n. 8, p. 1367-1384, 2003.
- ESAU, C.; DEPONTI, C. M. Tomada de decisão pela diversificação: uma alternativa para agricultura familiar na microrregião de Santa Cruz do Sul/RS. **DRd-Desenvolvimento Regional em debate**, v. 10, p. 439-460, 2020.
- FAORO, D. T. O. **Estratégias de diversificação de sustento rural dos produtores rurais da rota das salarias de Marau-RS**. Dissertação (Programa de Pós Graduação em Administração) – Universidade de Passo Fundo, 2017.
- FERREIRA, A. D. D. Processos e sentidos sociais do rural na contemporaneidade: indagações sobre algumas especificidades brasileiras. **Estudos sociedade e agrícola**, v. 18, p. 28-46, 2002.
- FLICK, U. **Introdução à pesquisa qualitativa**. 3 ed. Porto Alegre: Artmed editora, 2008.

FOGUESATTO, C. R.; MACHADO, J. A. D. O processo decisório na criação de unidades que agregam valor à produção: as agroindústrias familiares. **Desenvolvimento em Questão**, v. 15, n. 39, p. 301-319, 2017.

FONTOURA, F. B. B. 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**, v. 11, n. 1, p. 128-148, 2022.

FREITAS, T. D.; RAMBO, A. G.; SCHNEIDER, S. Desenvolvimento humano e bem-estar no meio rural como superação da vulnerabilidade: o caso de Arroio do Tigre/RS. **Colóquio-revista do desenvolvimento regional**, v. 11, n. 2, p. 9-30, 2014.

GAUTAM, Y.; ANDERSEN, P. Rural livelihood diversification and household well-being: Insights from Humla, Nepal. **Journal of rural studies**, v. 44, p. 239-249, 2016.

GAZOLLA, M. **Conhecimentos, produção de novidades e ações institucionais: estudos de caso de agroindústrias familiares** (Tese de Doutorado). Universidade Federal do Rio Grande do Sul, Porto Alegre, RS, Brasil. 2012.

GAZOLLA, M. PELEGRINI, G. **A agroindústria familiar no Rio Grande do Sul: Limites e potencialidades a sua reprodução social**. Editora da URI: Frederico Westphalen-RS, 197p, 2008.

GOMES, K. G. B. **Agroindústrias familiares rurais: uma perspectiva preliminar do crescimento de valor doméstico-primário à (re) construção de espaços autônomos**. Tese (Programa de Pós-Graduação em Sistemas de Produção Agrícola Familiar) – Universidade Federal de Pelotas, 2016.

IBGE – INSTITUTO BRASILEIRO DE GEOGRAFIA E ESTATÍSTICA. **Classificação e caracterização dos espaços rurais e urbanos do Brasil: uma primeira aproximação**. Rio de Janeiro, 2017.

KAPP, C. Jr.; MORO, S. G.; SECURATO, J. R. Proposição de um modelo de apoio a tomada de decisão para quantificar a proporção da diversificação de atividades em uma propriedade rural. **Anais do Congresso Internacional de Administração**, Ponta Grossa, Paraná, 2013.

KASMIN, M. A.; PASSINI, J. J.; BOICO, D. G. A importância da assistência técnica e extensão rural para agroindústrias familiares: o caso da agroindústria de panificação no Oeste do Paraná. **Gestão e Desenvolvimento em Revista**, v. 5, n. 1, p. 84-98, 2019.

LI, Y.; WESTLUND, H.; LIU, Y. Why some rural areas decline while some others not: an overview of rural evolution in the world. **Journal of Rural Studies**, v.68, p.135-143, 2019.

MAPA. Ministério da Agricultura, Pecuária e Abastecimento. **Agroindústria Familiar**. 2019. Disponível em: <https://www.gov.br/agricultura/pt-br/assuntos/agricultura-familiar/agroindustria-familiar>. Acesso em: 24 maio. 2022.

MARTINS, E.; ROCHA, W. **Métodos de custeio comparados: custos e margens analisados sob diferentes perspectivas**. São Paulo: Atlas, 2010

MATEI, A. P. **Os processos de inovação e as interações nas agroindústrias familiares em regiões do Brasil e da Itália**. 2015. Tese de Doutorado. Tese de Doutorado Universidade Federal do Rio Grande do Sul. Faculdade de Ciências Econômicas Programa de Pós-Graduação em Desenvolvimento Rural.

MIOR, L. C. Agricultura familiar, agroindústria e desenvolvimento territorial. **Colóquio internacional de desenvolvimento rural sustentável**, v. 1, p. 1-15, 2007.

- MOLINA, S. L. W. et al. **Práticas e mecanismos de inovação na construção de mercados para agricultura familiar**. In: SCHNEIDER S, MENEZES M, SILVA AGS, BEZERRA I, organizadores. Sementes e brotos da transição: Inovação, poder e desenvolvimento em áreas rurais do Brasil. Porto Alegre: Editora da UFRGS, p. 193-213, 2014.
- MOREIRA, S. L. **Estratégias e modelos sucessórios em propriedades rurais do município de Cruz Alta/RS**. Dissertação (Programa Pós-graduação em Agronegócio) – Universidade Federal de Santa Maria, 2018.
- NIEHOF, A. The significance of diversification for rural livelihood systems. **Food policy**, v. 29, n. 4, p. 321-338, 2004.
- PADILHA, A. C. M. **A estratégia de diversificação de sustento rural e a dinâmica da capacidade absorptiva no contexto do turismo rural: proposição de estrutura de análise**. Tese (Programa Pós-Graduação em Agronegócio) – Universidade Federal do Rio Grande do Sul, Porto Alegre, Rio Grande do Sul, 2009.
- PLOEG, J. D. W. D. **Camponeses e impérios alimentares: lutas por autonomia e sustentabilidade na era da globalização**. Porto Alegre: UFRGS, 2008.
- POLETTI, J. R. **A diversificação dos leiteiros da secção São Miguel: um estudo comparativo das rendas numa comunidade rural de Francisco Beltrão-PR entre os anos 2013 e 2018**. Dissertação (Programa de Pós-Graduação em Desenvolvimento Regional) - Universidade Tecnológica Federal do Paraná, Pato Branco, Paraná, 2019.
- PRAYUKVONG, W.; FOSTER, M. J. Buddhist economics meets corporate social responsibility. **International Journal of Economics and Business Research**, v.8, n.2, p.175-192, 2014.
- ROCHA, P. M. R. **Desempenho Sustentável das Agroindústrias Familiares de Cascavel-PR**. Dissertação (Programa de Pós-Graduação em Administração) - Universidade Estadual do Oeste do Paraná, Cascavel, Paraná, 2019.
- SANTOS, L. P. **Ações coletivas e sustentabilidade: uma análise da produção de frutas, verduras e legumes na microrregião de Toledo-PR**. Tese (Programa de Pós-Graduação em Desenvolvimento Regional e Agronegócio) - Universidade Estadual do Oeste do Paraná, Toledo, Paraná, 2018.
- SEN, A. **Desigualdade reexaminada**. 2 ed. Rio de Janeiro: Record, 2010.
- SENADZA, B. Income diversification strategies among rural households in developing countries: Evidence from Ghana. **African Journal of Economic and Management Studies**, 2014.
- SEVERINO, A. J. **Metodologia do trabalho científico**. 2 ed. São Paulo: Cortez, 2017.
- SMA - SECRETARIA MUNICIPAL DE AGRICULTURA. **Serviço de Inspeção Municipal dos Produtores de Origem Animal do Município de Medianeira**. 2022 Disponível em: <https://www.medianeira.pr.gov.br/?agricultura/sim-sisbi>. Acesso em: 5 abril 2022.
- SMALCI, A. FERNANDES, C. A.; QUEL, L. F. Fatores determinantes e condicionantes para inovação e competitividade no setor do agronegócio brasileiro. **Revista Metropolitana de Sustentabilidade**, v. 10, n. 1, p. 6-6, 2020.
- WAN, J.; WANG, W.; LIU, Z.; CHEN, B. Income diversification: A strategy for rural region risk management. **Sustainability**, v. 8, n. 10, p. 1064, 2016.

WELTIN, M.; ZASADA, I.; FRANKE, C.; PIORR, A.; RAGGI, M.; VIAGGI, D. Analysing behavioural differences of farm households: An example of income diversification strategies based on European farm survey data. **Land use policy**, v. 62, p. 172-184, 2017.

WILKINSON, J. Sociologia econômica, a teoria das convenções e o funcionamento dos mercados: "inputs" para analisar os micro e pequenos empreendimentos agroindustriais no Brasil. **Ensaio FEE**, v. 23, n. 2, p. 805-824, 2002.

ZERBATO, C. C. **Política pública para a agricultura familiar: avaliação do programa paranaense “Fábrica do Agricultor”**. Dissertação (Programa de Pós-graduação em Governança Pública) - Universidade Tecnológica Federal do Paraná, Curitiba, 2013.