



DIVERSIFICATION STRATEGIES FOR THE DEVELOPMENT OF FAMILY AGRICULTURE

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ABSTRACT

The article presents the theoretical framework of diversification strategies for the development of family farming, using the Resource Based Vision method as an analytical tool, aimed at its application in the rural context. This emphasizes the resources that enhance the capacity and economic performance of family farming. Initially the article recovers the context of family farming. It then makes considerations about the Resource Based View and the diversification of agriculture, investigating the references from the main authors. Thus, it presents the theoretical status of the approach and analyzes its potential for studies on the potential of the method in favor of diversification in family farming.

Key words: agricultural diversification; competence; Resource Based View.

1. INTRODUCTION

A broad process of transformation in the socioeconomic sector changed the agricultural sector in the course of the 20th century. Family farming, responsible for a large part of the world food production, faces major problems to achieve greater profitability and sustainability, thus compromising the continuity of the activities of small rural producers (PERONDI, 2007; SCHNEIDER, 2003). The adoption of competitive strategies in family production aims to help rural properties in the efficiency of internal resources, essential assets for the formation of skills (REIS; RICHETTI; LIMA, 2005).

Agricultural production in Brazil, therefore, is one of the main responsible for the country's trade balance values. The use of the term Family Farming was adopted in Brazil recently, as a result of the implementation of a federal policy aimed at this segment, the

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Program for Strengthening Family Farming - PRONAF. Years later, with the enactment of Law 11,326 / 2006, guidelines for the sector were set (BRASIL, 2006).

Throughout history, the agricultural sector in Brazil has undergone several cycles and transformations. These changes were based mainly on the composition of crops, the incorporation of new technologies, the modification of the structure of the organization of factors of production and the modernization of activities (SCHMIDT; BOHNENBERGER, 2009; KARNOPP; 2012). As Neves (2007) points out, family farming is a socioeconomic category and can be understood in several ways, depending on the context in which it is addressed. Therefore, in the general field, family farming corresponds to the forms of organization of production in which the family is, at the same time, owner of the means of production and executor of the productive activities.

According to the 2010 Agricultural Census, Brazil has 5,175,489 agricultural establishments; of these 85.9% have less than 100 hectares and are family-based (IBGE, 2012). Considering this agrarian reality, it is possible to understand the characteristics of internal organization and insertion in the market of this form of production. With the growth of competition in rural areas, these properties seek to improve both in technology of equipment, improvement in the development of rural tasks, investments, information and in a good management of the property. These new procedures, adopted by farmers, influence agricultural economic performance (GEIDE; FERRAZ; BELTRAME, 2006).

Thus, the diversification of family farming is understood not only as a strategy adopted for growth of the rural segment, but as one of the important characteristics of subsistence and survival of the members of this sector (ELLIS, 2000; PADILHA, 2009; PERONDI, 2007; SCHNEIDER, 2003). Therefore, it presents a risk reduction, because it means that producers do not depend exclusively on a single production culture. Diversification has been the target of several specific incentive programs developed by the Ministry of Agrarian Development (MDA), such as economic diversification, improved productivity, adequate exploitation of resources, use of technological machinery and equipment, among others.

According to Grant (1991) and Barney (1991), organizational competencies are understood as part of the productive, managerial and innovation capacity. The identification of resources used in organizations is relevant to direct the actions of specific programs, to strengthen existing resources and to prospect or create new resources. It is also noted the importance of verifying the existence of organizational competence formation, defended by

the Theory of Resource Based Vision, as the key to organizational competitiveness (GRANT, 1991; BARNEY, 1991; FLEURY; FLEURY, 2003; PENROSE, 2006) .

Considering this, this article aims to analyze the diversification strategies for the development of family farming. To this end, rural family farms are seen as family businesses that need to allocate their resources appropriately and that can achieve competitiveness through the development of internal skills (PADILHA, 2009). To understand this context, questions are raised about the characteristics of family farming, the resources available on the properties and the diversification strategies that are viable for the development of this form of production.

1 FAMILY AGRICULTURE

For Ploeg (2014) the importance of family farming for rural / regional development rises beyond the production of food on the property. For the author, the family members of a property are able to control the resources on the property, such as land, crops, equipment, buildings and their practice in using their resources. For Deponti (2014, p. 12), family farming is understood:

[...] as a social form of work and production, organized socially, economically, productively and environmentally under the aegis of territorial diversity and its multiple mechanisms of perpetuation is translated as a rural / regional development strategy that implies a search for alternatives to the traditional agricultural development pattern.

According to the Agricultural Census, produced by IBGE in collaboration with the Ministry of Agrarian Development (MDA), a clear distinction can be seen between family and non-family farming. Of the 5,175 million rural establishments in Brazil, 86% were identified as belonging to the former, corresponding to 4,360 million properties. These are distributed in the major regions of the country as follows: North 413,101, Northeast 2,187,295, Central West 217,531, Southeast 699,978 and South 849,997 family units (IBGE, 2012).

According to Schneider and Cassol (2013) the concept of family farming emerged in the early 1990s in the political and scientific fields. In this, authors like Ricardo Abramovay and Hugues Lamarche are the precursors in the discovery of the theme; in the political field, Contag stands out. In Brazil, the term family farming came to be understood as a

differentiated social form and as a segment within a larger group of farmers. In developed countries, however, the term had already been legitimized (SCHNEIDER; CASSOL, 2013).

The main milestone in the country occurs with Federal Decree n° 1,946 (BRASIL, 1996), when the Brazilian government created the National Program for Strengthening Family Agriculture (Pronaf), directing public funds and agricultural credit to rural men. Although the term is already used at different times, its legal definition only happened in the following decade, with Federal Law No. 11,326, of July 24, 2006 (BRASIL, 2006). At this point, a new concept is added to the theme, that of “rural family entrepreneur”. This refers to the farmer who practices his activities in rural areas and who meets the same requirements as the family farmer. These requirements are linked to land, work, income and the form of property management. This law thus establishes, in Article 3, the need to comply with the following principles:

- I - does not hold, in any capacity, an area greater than 4 (four) fiscal modules;
- II - predominantly use the family's own labor in the economic activities of its establishment or enterprise;
- III - has a family income predominantly originating from economic activities linked to the establishment or enterprise itself;
- IV - direct your establishment or enterprise with your family; (BRASIL, 2006).

The Family Agriculture Law remains valid, however, there was a change in item III of Art. 3, through the publication of Law No. 12,512 of 2011. This started to be considered as follows: “have a minimum percentage of family income from activities economic conditions of your establishment or enterprise, as defined by the Executive Power ”(BRASIL, 2011). This change empowers the Executive to change the minimum family income.

Although the term “family farming” was not yet included, Federal Law No. 4.504 of 1964, known as the Land Statute, already contained some definitions. These would serve as a reference for the current concept. According to Art 4, item II, family property is defined as:

The rural property that, directly and personally exploited by the farmer and his family, absorbs the entire workforce, guaranteeing their subsistence and social and economic progress, with a maximum area fixed for each region and type of exploitation, and eventually work with the help of third parties. (BRASIL, 1964).

For Karnopp (2012, p. 100) the transformations promoted in the rural environment, were successful in “science, technology and information, which meant, in practice, the incorporation of advances in the productive process, such as mechanization, the incorporation of new technologies , accelerating spatial transformations ”. A characteristic feature of rural

properties of great relevance are the resources that enhance the capacity and economic performance of family farming.

2 THE RESOURCE-BASED VIEW (VBR)

The Resource Based View (VBR) or also defined as Resource Based View (RBV) is a theory that argues that resources, capabilities and the different ways in which these are combined are responsible for the difference in the performance of companies (BARNEY; HESTERLY, 2007; GRANT, 1991). For VBR, the organization that has an effective corporate strategy has the ability to bring in income generating capabilities and resources.

For Barney and Hesterly (2007) this theory proposes that the internal resources of organizations are sources of competitive advantages. Thus, the importance of VBR is related to the look on the resources and capabilities presented by organizations, including both tangible and intangible attributes, enabling the implementation of strategies in the market.

Wernerfelt (1984) points out that tangible resources are those that are possible to measure and account for, such as facilities, machinery and equipment. Intangible assets, on the other hand, are those that cannot be measured or quantified, difficult to be identified and transferred due to their link to the company, that is, rooted, inherent to the firm. As for their subdivisions and categories, Grant (1991) presented six categories, which Padilha et al. (2010) define as:

- Financial: tangible resources related to the company's financial availability, such as loans, financing and investor capital;
- Physical: tangible resources related to the company that comprise the facilities, machinery, equipment, land, materials and products;
- Human: intangible resources that include individual and collective capacities and competences;
- Organizational: tangible resources that comprise the routines and formal processes developed by the organization;
- Technological: tangible resources that can be acquired on the market or developed by the company itself;
- Reputational: intangible resources that refer to the intangible assets of the firm's perception by customers, that is, the brand.

The definition of strategic resources, for Barney and Hesterly (2007), is a very complex task, because to achieve them, it is necessary to have a very systemic view of the organizational context. They make it possible to encompass the possibilities of obtaining competitive advantages through the recognition of potential strategic resources. This approach makes it possible to analyze the competitive advantages based on the organization's resources - which are mostly endogenous, but can also be identified through ownership with the environment (DIERICKX; COOL, 1989).

3 APPLICATION OF THE RESOURCE-BASED VISION IN THE RURAL CONTEXT

The sales market for most rural producers can be defined as competitive, but also due to the diversity of the technology used, its implementation and the products derived from cultivation and livestock for sale. Thus, rural properties have important performance differences. The limited rationality of individuals, access to information, the difference in volume, the difference in forms of perception, cognition, among other characteristics that make the performance of heterogeneous and complex properties must also be observed (PENROSE, 2006).

The more uncertain the environment, the greater the need for the ability to interpret. In rural areas there are many uncertainties, since there are some uncontrollable factors, such as climate, temperature, among others. In rural properties, in general terms, information is freely available, that is, there is no great concern with protecting information. This is because knowledge is the result of characteristics intrinsic to the resource and not an organizational effort on the part of rural producers. Another characteristic is that the superior performance between peers or competitors in agricultural production is not seen as a risk related to competition (GALDEANO et al., 2008).

The survey of strategic resources in rural properties, according to Gafsi (2006), is complex and multidimensional. The author highlights the importance of these resources in rural properties, both to ensure sustainability and to play a multifunctional role in their interaction with the community. This is because, one must not forget, in addition to a company, rural property in family farming is a cell with kinship ties that becomes the center of decision-making that affects its members.

The use of environmentally friendly practices has a positive influence on opportunities in the agricultural sector, leading to closer relations between performance variables

(GALDEANO et al., 2008). Family farming presents differences that are linked to the type of information that each farmer has, the technologies and financing to which he has access, public policies, products, technical assistance received, among others. The process is even more complex, because decisions in this sector are made both by the producer, and by his wife, children and successors, thus having a participatory character, especially with regard to the concept of family farming (MELO, 2003; SOLANO et al., 2006).

The farmer's decision is also linked to components of tradition, learning, infrastructure, as well as psychological, social and economic factors. The strength or influence of these elements in the decision also depends on the characteristics of the farmer. The infrastructure of a rural property, such as machinery, installations and equipment, also has a strong force in the decision-making process (MELO, 2003; LIMA et al., 2005). Therefore, the identification of the resources of a rural property ends up facilitating the implementation of diversification strategies for the development of family farming.

4 AGRICULTURAL DIVERSIFICATION

Padilha (2009) presents two definitions of diversification. The first defends diversification as a competitive advantage, as it addresses the growth of the organization through the allocation of surplus resources. The second, on the other hand, defines it as a way of rural livelihood, since it works as a way of reducing risks through the selection of an income portfolio with a low or negative correlation between them. For Ellis (2000), it must be understood as a process of diversification developed by rural families whose objective is to improve life.

According to Ellis (2000), the cause of diversification in the rural area has to do with seasonality, with risk strategies, with the job market, with the credit market and with the behavior towards the necessary adaptations in the segment. Regarding seasonality, it refers to the production cycle during the year, which requires intercalation between cultures. For families that live on this production, there must be an intercalation between high-risk and low-risk strategies, that is, seeking to complement or even have a variety of activities. The job offer is also quite seasonal, as much depends on the progress of production, thus identifying the needs of manual labor. The credit market is a very relevant factor, as opportunities for expanding property arise, acquisition of machinery or equipment. Finally, the adaptation behavior appears when an unexpected situation arises, leading farmers to seek solutions for

what happened. Padilha (2009), in turn, defines strategic assets, which he considers as the main resources when it comes to the livelihoods of rural families. They are natural, physical, human, financial and social capital.

Regarding the local economy and the territory, the results of diversification are clear when considering that regions with diversified local economies can create environments favorable to the sectoral integration between agriculture, commerce, industry and services. Thus, regional diversity can generate greater security and reduce instability resulting from fluctuations in the labor market and sources of income. It therefore helps to form regions that obtain comparative and competitive advantages through economies of scope, which can reduce transaction costs and generate positive territorial externalities. The creation of strategies that enable diversification therefore depends, among other factors, on the performance monitoring of rural properties.

5 ECONOMIC PERFORMANCE OF RURAL PROPERTIES

According to Martins (2003), for a good management of the rural property it is necessary to measure the economic performance, which has been evolving with the adoption of new technologies. Santos, Marion and Segatti (2009) state that the role of the rural manager is to plan, decide and evaluate results, having to make decisions about what, when and how to produce. Therefore, good management includes controlling such activities and evaluating the results.

For Assaf Neto and Lima (2011), economic performance is obtained through assessing the current moment of organizations through data presented through financial statements and, from that, it is possible to create a planning for future proposals. It is noted that there is a wide possibility of using economic indicators, each of which has the purpose of seeking to analyze different aspects of performance.

Andreatta (2009) also states that the agricultural sector has some specificities related to biological factors. The productive and reproductive cycles have their own characteristics, and farmers are conditioned to accept what comes from nature. It also points out that aspects related to economic policy also have a significant impact on the agricultural sector. This is because credits, subsidies, price quotations, interest rates, among others, are important for the development of the rural sector. In the study by Accarini (1987, p. 195), the author already discussed the peculiarities of the agricultural sector, saying that:

[...] the consequences of the peculiarities discussed tend to reduce the economic return of rural activities, as they contribute to depress sales and revenue prices, to raise costs and to slow down the recovery of investments made in different forms of capital.

According to Santos, Marion and Segatti (2009), the manager must know the internal and external factors that affect the economic results of his property. External factors include product prices, climate, history and trends, the existence of a market for products, credit and financing policy, among others. For the internal factors, the authors point out the size of the agricultural company, the yields of the crops and creations, the productive activities, the capacity of the labor, the equipment for use and, also, an analysis of the personal conditions of the rural producer.

6 FINAL CONSIDERATIONS

The theme of agricultural diversification refers to the question of how rural families organize themselves and build mechanisms for distributing resources, which, in essence, takes the question to the field of competitive advantage. Therefore, when advocating diversification, we are dealing with ways of producing and ordering the available resources and technologies that, in different social contexts, require efficiency, coordination, cooperation and control devices.

For a good management of the rural property, a new phase of studies and references was initiated that sought to reorient the actions and conceptions of development. It is in this context that an immensity of propositions about the Resource Based View (VBR) emerges, in which the approach to diversification and the sales market are inscribed. This is defined by most rural producers as competitive, but it is also marked by the diversity of the technology used, its implementation and products derived from cultivation and livestock for commercialization.

There is still a lot to do in this thematic field, starting with the definition of a matrix for the analysis of diversification and the market. As a way of making the final considerations of this article and in order to leave it open, it is possible to present the following analysis, which indicates three points of understanding of diversification in family farming. Although they are interconnected and interdependent, the first point refers to the production unit, in which diversity presents itself as an attribute and manifests itself in the form of the combination of

resources and capacities presented by family farming, including both tangible and intangible assets. It is the intersection between the property and the family unit.

The second point refers to the local economy, or what can be called a social context or even territory, here understood as the space used and appropriated by the actors present and acting in it. It is an intermediate view between the actors and the processes that are located in certain spaces that have physical, historical, social and cultural conditions. After all, the third point refers to more general contacts with regions and with processes that take place on a national and even global scale. It is, therefore, the macro environment, which affects diversification, enabling the implementation of strategies in the market, economic structures in which these processes are inserted.

And, in each of these points, different effects related to the diversification processes can be perceived. In the first, the effects of diversification can be more visibly identified because they manifest themselves as attributes that are clear, such as the increase in the portfolio of activities and products offered by farmers. Thus, the alternatives for their insertion in the markets are expanded and the seasonality and stagnation of agricultural income is reduced.

Likewise, diversification reduces dependence on sectorial price fluctuations and generates innovations and technical changes within the property that can save resources. But it also implies new ways of handling and using plants, animals and space, making the properties and the landscape itself diverse. It also has effects on social relationships, since the satisfaction levels of diversified farmers tend to be higher because they have greater interaction with consumers or even with the local community.

Diversification allows for changes in the quality of life in rural areas, allowing not only farmers, but also the markets around them, greater access to varied products. It also reduces the risks of producers and allows the development of differentiated forms of culture that encourage land renewal and less wear on the environment. Finally, as far as the broader level is concerned, it is believed that the Application of the Resource Based View in the rural context can be the basis on which a more varied and democratic form of development will be built, which will not only allow difference, but will stimulate and cultivate it.

REFERENCES

ACCARINI, JH Rural Economy and Development: reflections on the Brazilian case. Rio de Janeiro: Vozes, 1987.

ANDREATTA, T. Beef cattle production in Rio Grande do Sul: a study from the profile of ranchers and organizations of agricultural establishments. 2009. 241. f. Thesis (Doctorate) - Postgraduate Program in Rural Development, Federal University of Rio Grande do Sul, Porto Alegre, 2009.

ASSAF NETO, A .; LIMA, FG Financial Management Course. 2. ed. São Paulo: Atlas, 2011.

BARNEY, JB Firm resources and sustained competitive advantage. *Journal of Management*, Indiana, Vol. 17, p. 99-120, 1991.

_____; HESTERLY, WS Assessment of a company's internal capabilities. In: _____. *Strategic management and competitive advantage*. São Paulo: Pearson Prentice Hall, 2007, p. 63-98.

BRAZIL. Law No. 11,326, of July 24, 2006. 2006. Establishes the concepts, principles and instruments for the formulation of public policies aimed at Family Agriculture and Rural Family Enterprises. *Federal Official Gazette*, Brasília, DF, July 24. 2006. Available at: <http://www.planalto.gov.br/ccivil_03/_ato2004-2006/2006/lei/111326.htm>. Accessed on: 30 jun. 2018.

BRAZIL, Law 12.512 / 2011. Institutes the Support Program for Environmental Conservation and the Program to Promote Rural Productive Activities; amends Laws 10,696, of July 2, 2003, 10,836, of January 9, 2004, and 11,326, of July 24, 2006. *Diário Oficial da União*, Brasília, DF.14 out. 2011. Available at: <http://www.planalto.gov.br/ccivil_03/_ato2011-2014/2011/lei/112512.htm>. Accessed on: 15 ago. 2018.

BRAZIL, Decree 1.946, of 2006. Establishes guidelines for the formulation of the National Policy for Family Farming and Rural Family Enterprises. *Federal Official Gazette*, Brasília, DF, July 24. 2006. Available at: <http://www.planalto.gov.br/ccivil_03/_Ato2004-2006/2006/Lei/L11326.htm>. Accessed on: 20 ago. 2018.

_____. Law no. 4.504, of November 30, 1964. Provides for the Land Statute and makes other provisions. *Federal Official Gazette*, Brasília, DF, November 30 1964. Available at: <http://www.planalto.gov.br/ccivil_03/leis/l4504.htm>. Accessed on: 07 jun. 2018.

DIERICKX, I .; COOL, K. Asset stock accumulation and sustainability of competitive advantage. *Management Science*, v. 35, n. 12, p. 1504-1511, 1989.

DEPONTI, CM The “hardships” of rural property management by family farming. *Redes - Rev. Des. Regional*, Santa Cruz do Sul, vol. 19, ed. special, p. 9-24, 2014.

ELLIS, F. *Rural livelihoods and diversity in developing countries*. Oxford: Oxford University Press, 2000.

FLEURY, ACC; FLEURY, MTL Competitive strategies and essential skills: perspectives for the internationalization of the industry in Brazil. *Management & Production*, v. 10, n. 2, p. 129-144, 2003.

Diversification Strategies for the Development of Family Farming.

GALDEANO, GE et al. Does an endogenous relationship exist between environmental and economic performance? A resource-based view on the horticultural sector. *Environ Resource Economic*, v. 40, n. 1, p. 73-89, 2008.

GAFSI, M. Exploitation agricole et agriculture durable. *Cahiers Agricultures*, v. 15, n. 6, p. 491-497, 2006.

GEIDE, JAF; FERRAZ, JV; BELTRAME FILHO, JA Agropecuária versus other investments - Instituto FNP. São Paulo: Agriannual, 2006.

GRANT, RM The Resources-Based Theory of Competitive Advantage: implications for strategy formulation. *California Management Review*, Vol. 33, n. 3, p. 114-135, 1991.

IBGE - Brazilian Institute of Geography and Statistics. Municipal Agricultural Production 2012. Available at: <http://www.ibge.gov.br/home/estatistica/pesquisa/pesquisa_resultados.php?id_pesquisa=44> . Accessed on: 02 Jun. 2018.

KARNOPP, Erica. Development trends in family farming: a regional analysis. *Rde - Economic Development Magazine*. Salvador BA. year XIV, nº 26, dez. 2012

LIMA, APL et al. Administration of the family production unit: modalities of working with farmers. 3rd ed. Ijuí: Unijuí, 2005.

MARTINS, E. Cost accounting. 9. ed. São Paulo: Atlas, 2003.

MELO, VLF Influence of the characteristics of management systems on the succession process of family production units in São Luiz Gonzaga. 2003. 134p. Dissertation (Master in Agribusiness) - Federal University of Rio Grande do Sul, Porto Alegre, 2003.

NEVES, DP Family farming: how many anchorages! In: FERNANDES BM; MARQUES, ME; SUZUKI, JC (Orgs.). *Agrarian geography: theory and power*. São Paulo: Popular Expression, v. 1, 2007, p. 211-270.

PADILHA, ACM The strategy of diversifying rural livelihoods and the dynamics of absorptive capacity in the context of rural tourism: proposing a structure for analysis. 2009. 255 p. Thesis (PhD in Agribusiness) - Federal University of Rio Grande do Sul, Porto Alegre, 2009.

_____. et al. Barriers and opportunities to diversify productive activities in rural areas: an analysis of the resources of rural producers associated with Coagrisol. In: *INTERNATIONAL CONGRESS OF ADMINISTRATION*. 22., 2010, Ponta Grossa. Anais ... Ponta Grossa: DADM, 2010.

PENROSE, E. The theory of the growth of the firm. Campinas: Editora da Unicamp, 2006.

PERONDI, MA Diversification of livelihoods and commercialization of family farming. 2007. Thesis (Doctorate in Rural Development) - Federal University of Rio Grande do Sul, Porto Alegre, 2007.

PLOEG, JD Diez quality of family farming. *Leisa - Journal of agroecology*, vol. 29, nº 04, 2014. Available at: <<http://www.leisa-al.org/web/index.php/volumen-29-numero-4/998-diez-cualidades-de-la-agricultura-familiar> > Accessed on: 10 ago. 2018.

REIS, RP; RICHETTI, A .; LIMA, AL Economic efficiency in coffee culture: a study in southern Minas Gerais. *Rural and agro-industrial organizations*, v. 7, n.1, 2005.

SANTOS, GJ; MARION, JC; SEGATTI, S. Cost management in agriculture. 4. ed. São Paulo: Atlas, 2009.

SCHMIDT, S .; BOHNENBERGER, MC Entrepreneurial profile and organizational performance. *Revista de Administração Contemporânea*, v. 13, n. 3, p. 450-467, 2009.

SCHNEIDER, S. Social theory, family farming and pluriactivity. *Brazilian Journal of Social Sciences*, v.18, n. 51, 2003.

_____.; CASSOL, A. Family farming in Brazil. Santiago de Chile: RIMISP, 2013.

SOLANO, C. et al. Using farmer decision-making profiles and managerial capacity as predictors of farm management and performance in Costa Rican dairy farms. *Agricultural Systems*, v. 88, p. 395-428, 2006.

WERNERFELT, B. A Resource-based view of the firm. *Strategic Management Journal*, v. 5, n. 2, p. 171-180, 1984.