RURAL CREDIT AND THE LIVESTOCK PROCESS IN THE MICROREGION OF VILHENA, RONDÔNIA, WESTERN AMAZON

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ABSTRACT

The study has as general objective to analyze the scenario of the municipalities in the microregion of Vilhena, State of Rondônia, based on the federal government's rural credit policy, in order to identify the possible livestock processes that would be carried out in this microregion. It is an applied, descriptive, cross-sectional research with a quantitative approach, since the objectives generate knowledge for practical application, which includes the number of contracts and the volume of financial resources for agriculture and livestock in the municipalities of Chupinguaia, Parecis, Pimenta Bueno, Primavera de Rondônia, São Felipe D'Oeste and Vilhena of the micro-region of Vilhena, Rondônia, Brazilian Amazon, in the period corresponding to the years 2000 and 2010. Data collection was carried out through reports from the rural credit statistical yearbook of the Central Banco do Brasil for the years 2000 and 2010. Based on the results found by the research, it was evidenced that in the municipalities of the microregion of Vilhena there was a process of cattle ranching, through the incentive of the rural credit policy granted to family rural producers, where it was observed that among the six municipalities that comprise In the micro-region of Vilhena, all of them presented a strong stimulus to the livestock sector, demonstrating a reversal of agricultural activity for livestock in this micro-region.

Keywords: Rural Credit; Livestock; Microregion; Vilhena; Rondônia.

I. INTRODUCTION

According to Silva [1] both agriculture and livestock were encouraged since the 60s by the Brazilian federal government through credit policies and since then Brazilian agribusiness has increased its production volume. For Almeida and Zylbersztajn [2] the proper functioning of the credit market represents one of the foundations for production, particularly in agribusiness. CEPEA [3] highlights that in the current Brazilian economy, the agribusiness sector has been very important in generating income and positive balances in the trade balance. According to GDP and trade balance data, agribusiness is characterized as one of the main economic activities in Brazil and in recent years it has favored the advancement of the Brazilian economy worldwide. The country is one of the largest producers and exporters in the world, especially in the production and export of food [4].

In this sense, in recent decades, the national cattle raising has leveraged its production in a way that considerably increased its herd. According to data from the Brazilian Institute of Geography and Statistics [5] the national cattle herd in 2014 was 212,343,932 cattle. The cattle herd in the North region has 45,826,142 heads (21.58% of the national total)

The Brazilian Amazon region has undergone countless transformations in recent decades. The demographic "emptiness" and the "late" occupation have given way to cities driven by agribusiness, whether for soy, rice or cattle raising [1]. To stimulate economic activities in the Legal Amazon, the federal government, in addition to investments in infrastructure (such as the construction of highways) and the colonization projects it carried out, instituted tax incentive policies and credit lines to stimulate economic activities in the region [6]. Santos [7] highlights that the Amazon development plans were directed to favor the implementation of large projects, through subsidies and tax incentives offered by the federal government and facilitated access to land for large private groups, that caused profound changes to the environment.

Cattle ranching, as reported by Silva [1], expanded in the Amazon from the integration policies of the region in the 1960s, in which several factors contributed to its more accelerated expansion. Santos [7] highlights that the introduction of livestock in the late 1960s was sponsored by government incentives through SUDAM and the Manaus Free Trade Zone (SUFRAMA), which favored livestock enterprises through exemption from the tax on income and direct financing for the implantation of pastures with the consequent practice of deforestation. Between 1965-1967, institutions (laws and agencies) were created to support the process of occupation of the Amazon frontier based on encouraged livestock, that is, modern and business livestock farming supported by the fiscal and financial incentive policy provided by the Government Federal through SUDAM and BASA [8].

In the 1970s and 1980s, a period in which credit was subsidized and distributed according to the size of establishments owned by borrowers, a large portion of rural credit was directed to large landowners. This aspect ended up being a generator of credit restriction, especially for small farmers, who could not offer the proper guarantees "usually land" [9].

Livestock farming in the Amazon developed mainly within the territory known as the Arc of Deforestation, whose activity has been constantly growing since the 1970s. The massive presence of cattle in the Amazon stems from more than 30 years of public policies that stimulated the construction of infrastructure, roads, dams, territory occupation, induced migration and financing of the activity with public funds from SUDAM and, more recently, from the Constitutional Fund North (FNO) and the National Development Bank, as reported by Greenpeace [10].

However, the expansion of cattle ranching in the Amazon has been questioned because of its environmental impacts and low social contribution, since it is associated with high rates of illegal deforestation and because it employs little labor, and those that are employed are in the mostly informal workers. Added to this is the fact that many of the properties used to carry out the activity do not have titles, that is, they face land regularization problems [1].

Study of the causes of deforestation carried out by Geist and Lambin [11]; [12] point out that the cause of deforestation is associated with land use and directly affects the environment and vegetation cover. The authors associate the proximate causes (here called direct causes) of deforestation into three categories, namely: expansion of pastures and agricultural areas, logging, and expansion of infrastructure. Changes in land use are driven by economic processes that sustain them. For Cooney et al [13] (2009) the deforestation process is growing basically as a result of some key activities: logging, soy growth, cattle expansion and family farming. Another prominent factor is the range of government subsidies that help facilitate the expansion of these processes. FNO, SUDAM and PRONAF are clear examples of government support for activities strongly associated with deforestation.

According to Barreto; Pereira and Arima [14] public financial subsidies for livestock continue and there are signs that they encourage deforestation. The subsidized loan provided by the Constitutional Fund of the North - FNO should only be used to improve the quality and productivity of livestock, as the Fund prohibits investments in deforestation. However, as FNO constitutes a subsidy, it

tends to increase investment in this activity more than would be normal (using market interest rates) and may even indirectly stimulate deforestation. As an example, the authors cite that a farmer can deforest new areas without a loan, because he knows he will get good income using the subsidized loan to buy the herd. For these authors, subsidized rural credit for the Amazon should exclude livestock, as it indirectly stimulates deforestation. That is, maintaining some type of subsidy for the region, which is directed towards activities that generate public benefits, such as environmental and ecological services - for example, reforestation that encourages the conservation of biodiversity and carbon sequestration.

Rondônia is a state that well synthesizes the different facets of the Amazon. It also has twothirds of its area completely forested, it is home to one of the most dynamic economic areas in the region, with older municipalities, more deforested and with high human development, both in relation to the region and to Brazil. And, above all, it is the State where cattle raising has expanded the most in relation to other parts of the Amazon – ideal place, therefore, to study the intensification of this activity. Furthermore, there are areas in the State characterized by medium/large sized properties, in which colonization projects favored rural companies, and regions where agrarian reform projects left a land structure much more based on small and medium properties [15].

Understanding the dynamics of federal government incentive in rural credit policy in this microregion, seeking to analyze the possible process of cattle raising in Rondônia, demonstrates the importance and relevance of research for science and public management, in order to contribute to making it more effective, effective and efficient. Therefore, more coherent with the purposes of sustainable development.

Recently, questions about the productive system inserted in the Amazon are sometimes pointed out in the international scenario as an obstacle to the formalization of agreements inserted in the bi- or multilateral field with the Brazilian government, under the argument that the country is contributing to the devastation of its resources in the case of the Amazon, from its native forest cover.

Although this concern has been observed in a contemporary way in social media and headlines related to the actions of the federal government, this work sought to show how the credit policy, at the federal level, impacted the reality of the micro-region of Vilhena, based on years prior to 2000 and 2010, which can help to understand and materialize a perception of the historical reality in the Region.

The theoretical-methodological baggage of this research may serve as support for future work, within this perspective, in order to allow a better understanding of the dynamics of rural credit institutionalized by regional development policy and its influence on the emergence of economic matrices arising from lines of financing.

Based on Rondônia's colonization policy, the Brazilian State instituted incentive mechanisms based on land tenure regularization, which required proof of "improvements" on properties for the purpose of issuing definitive titles.

In this context, the Institute for Colonization and Agrarian Reform (INCRA) was the federal organization responsible for such policy in Rondônia. As a result, access to rural credit was only possible upon proof of the "improvements" required by INCRA which, after being guaranteed, made financial resources accessible to rural producers.

The result of this policy in Rondônia was the rapid economic growth of the region, based on agricultural activities, which showed growth rates from that moment on. However, from the socio-

environmental point of view, questions about the credit policy also grew based on the basic criteria of analysis by the federal government based on the proof of "improvements".

The problem is that such "improvements" were synonymous with deforestation in the area. And in view of this reality, what can be observed, in general, is that, directly or indirectly, the economic growth of Rondônia, during the period of agricultural colonization, resulted from an accelerated process of regional deforestation, a factor with great national and international repercussions.

Thus, at the beginning of the creation of the State of Rondônia, rural credit played an important role in the conduct of agricultural policy as an instrument of regional development and, based on it, the issue of socio-environmental problems, mainly related to deforestation of native areas and conflicts with indigenous peoples.

Almost half a century after the beginning of the colonization process, Rondônia still seems to live today, a reflection of the effects of the politics of the 1970s, where it has been standing out as one of the leading states in the production of cattle raising, for example. And just as in the period of their formation, the socio-environmental issue also continues to be an active questioning reality within this scenario.

Given the above, behold, the epistemological problem of this research arises. Using a spatial cut, where a micro-regional analysis of Rondônia can be seen, can one speak of an ongoing cattle raising process in the Vilhena micro-region stimulated by the federal government, through the rural credit policy?

Thus, as a general objective, it is intended to analyze the scenario in the micro-region of Vilhena, State of Rondônia, based on the federal government's rural credit policy, in order to identify the possible cattle raising process that would be being conducted in that micro-region, by institutional stimulus of the Brazilian rural development policy, granted to the agricultural sector, in the modality of family farming, through financial availability, according to the Statistical Yearbook of Rural Credit, 2000 and 2010 version, as made available by the Central Bank of Brazil.

II. REGIONAL DEVELOPMENT POLICIES FOR THE AMAZON

The 1940s represented a moment of great relevance for the Amazon region, as it registered the beginning of the preparation of the first attempt at planning regional development in the Brazilian Amazon, with the insertion of Article 199 in the 1946 Constitution and the debates that followed from there, culminating with the act of creation of the Superintendence of the Amazon Economic Valorization Plan (SPVEA), through Law 1,806, of January 6, 1953 [16].

The creation of the Superintendence of the Amazon Valorization Plan – SPVEA, according to Chalala; Chalala [17] can be considered a pilot experience of a set of government interventions that would take place in the following decades in the Amazon, and in other Brazilian regions. According to Cardoso; Muller [18], the SPVEA intended to "proceed to the selection of economic spaces more conducive to development, where growth poles could be established whose effects would radiate over a larger area".

Serra and Fernández [19] highlight that the creation of SPVEA was the Brazilian government's recognition of its previous failures in promoting the development of the Amazon economy and also of the importance of preparing a development plan for the region through a planning agency regional. Furthermore, the Brazilian government, due to the area that would come to be controlled by SPVEA,

created a political definition for the Amazon, which was called "Legal Amazon". The use of a political concept, not a geographical determination, was the result of both the need for a planning effort and the promotion of development in the Amazon region.

According to Chalala; Chalala [17], SPVEA's first Five Year Plan (1955–1959) aimed to promote regional development through 14 (fourteen) goals contained in Law No. 1,806. There was the intention to create population centers stimulating the colonization of the region, especially in rural areas with a vocation to form agricultural production centers, with a view to guaranteeing local supply. Furthermore, the construction of highways was revealed as a necessity to break the physical isolation of the region.

The Plan represented the immaturity of Brazilian public planning directed towards the Amazon, given the limited knowledge that was had about the region and the lack of a technical framework capable of transforming the objectives into action, as well as the relative neglect of the Brazilian congress in regarding regional problems, considering that the plan was not approved by parliament [17].

To Serra and Fernández [19] the results obtained by SPVEA during its 11 years of existence were inexpressive in their entirety. In fact, its main project, the construction of the Belém-Brasília highway, which was more than 2,000 km long, was completed in 1960, but its inauguration only took place five years later. This highway was the first to facilitate the colonization of the Amazon region on a large scale.

The military regime, since mid-1966, transformed the Legal Amazon into the largest territorial occupation frontier in Brazil through the conflicting coexistence of two occupation fronts: the expansion front and the pioneer front. These two fronts continue to advance towards the Amazon hinterland, until today, in a scenario of forest destruction and permanent violent conflicts that have ended in the deaths of rural workers in their daily confrontation in the struggle for land against the power of large landowners [8].

Through Law n° 5.122, of September 29, 1966, the federal government decided to transform Banco de Crédito da Amazônia into Banco da Amazônia S/A (BASA). Also in 1966, Law No. 5,173 of October 27, 1966 created the Superintendence for the Development of the Amazon (Sudam) and extinguished the Superintendence of the Plan for Economic Valorization of the Amazon (SPVEA). Sudam's main objective was to design, promote and coordinate the Amazon Economic Valorization Plan (PVEA). In addition to Sudam, the execution of the Plan relied on Banco da Amazônia S.A., other federal government agencies and also accredited entities that were able to participate and contribute to the development of the Amazon region [6].

As a way to make the policy of occupation and development of the Legal Amazon feasible, the military government also instituted the policy of fiscal incentives (Law No. 5.174, of October 27, 1966), which would constitute the main instrument for sanctioning resources to support the investors in the Amazon, especially cattle raisers responsible for the deforestation of the forest [8].

The first agricultural projects, according to Becker [20], date back to 1966, but it was in the 1970s that the economic and political predominance of the agricultural company in the region crystallized: the government considers colonization based on small and medium landowners impracticable given the scale of investments and business organization considered necessary for rapid occupation in an extensive area such as the Amazon. However, it is the government itself that guarantees and credits subsidies to entrepreneurs, through the tax incentive mechanism.

According to Ferreira and Alves [21] from 1970 onwards, the military governments created a set of measures with the objective of stimulating the occupation of the region. On the one hand, fiscal subsidy and land concession policies stimulated the opening and implementation of large agricultural projects, mainly for cattle raising, timber and mining projects; on the other, colonization programs acted as mechanisms for transferring settlers, peasants and small producers from different regions of the country. The authors emphasize that, in addition to opening new fronts for economic expansion, these policies, when confronting traditionally occupied territories, produced specific social, political and economic configurations in the Amazon region.

However, the Brazilian fiscal-financial crisis led to a great scarcity of public resources from the fiscal waiver and the reduction in the approval of agricultural projects and the extinction of several government institutions, including the Superintendence for the Development of the Amazon (SUDAM) [8].

For Prates and Bacha [6] the extinction of SUDAM through Provisional Measure n° 2.146-1, of May 2001, was an important change in the development policy of the Amazon Region. The aforementioned provisional measure also created the Amazon Development Agency (ADA) and the Amazon Development Fund (FDA), managed by the ADA and which had the objective of leveraging the necessary resources to carry out investments in the agencies' areas of operation. The main function of the ADA was to propose and coordinate the implementation of the Amazon Development Plan.

Still according to Prates and Bacha [6] the last transformation of the structure for the formulation of policies aimed at the development of the Northern Region was the approval of Decree n 6199, of August 2007, which regulated what is called the New Superintendence for the Development of the Amazon (SUDAM), linked to the Ministry of National Integration, extinguishing the Amazon Development Agency (ADA). With the new Sudam, the government intends to maintain the apparatus of policies to promote economic activities in the region. Although, as one might assume, economic policies for development must embrace environmental issues.

In the view of Chelala and Chelala [17], public policies for the development of the Amazon implemented from the 1960s onwards are responsible for the form of productive occupation of the region. For these authors, the Amazon is not an industrialized Brazilian region, however, its industrial activities, although less expressive when compared to other regions of the country, represent a determining variable for understanding the current environmental characteristics, so as to understand the causes of the devastation of some areas, as well as to explain the reasons why other parcels have been preserved.

For Brito [22], the exhaustion of the development policy for the Amazon from the mid-1980s was evident in the rhythm of social and economic processes in the region, noting both an intensification of social disaggregation and the fact that in approximately 15 years, an area destroyed by deforestation was accounted for exponentially exceeding the areas degraded during two centuries of colonization.

For Ferreira and Alves [21], the policies of tax incentives, land concession, infrastructure construction and technology development, as well as colonization programs, have transformed the Amazon region into one of the main growth fronts for Brazilian agricultural production. In the last three decades, the rate of increase in the planted area of grains and cattle raising were higher than in other regions.

2.1 RURAL CREDIT

The National Rural Credit System implemented in 1964 in Brazil was responsible for changes in the environment of organizations throughout the agro-industrial chain. Such changes impacted and continue to generate effects on the way agents transact [2]. According to North [23], understanding these changes allows us to elucidate how agents determined economic maximization, through formal or informal rules, incentives, agreements and sanctions. The author understands that the costs of measuring and enforcing property rights reflect the political, social and economic institutions established in each nation.

The financing of agriculture gained greater importance from 1965 onwards with the creation of the National System of Rural Credit (SNCR), then regulated by the National Monetary Council (CMN), as well as by the institutionalization of Rural Credit (Federal Law No. 4,829, of 5 of November 1965), regulated by Decree No. 58.380, of May 10, 1966. Article 2 of Federal Law No. 4.829/65 defines rural credit as "the supply of financial resources by public entities and private credit establishments to rural producers or their cooperatives for exclusive application in activities that meet the objectives indicated in the current legislation". Thus, it is understood that the credit is the supply of a resource presumably well applicable and legally possible its performance.

Rural credit, a financing instrument for rural activity, will be supplied by all financial agents without discrimination between them, through compulsory application, free own resources, allocations from official credit operations, funds and any other resources, with the following objectives: (Art 48 of Law No. 8171, of January 17, 1991, which provides for agricultural policy). I - encourage rural investments for production, non-predatory extraction, storage, processing and installation of agribusiness, which is when carried out by rural producers or their associative forms; II - to favor the timely and adequate cost of production, non-predatory extraction and the commercialization of agricultural products; III - encourage the introduction of rational methods in the production system, aiming at increasing productivity, improving the standard of living of rural populations and adequate soil conservation and regularization of land by small producers, squatters and tenants and rural workers; VI - develop forestry and fishing activities; VII – support the replacement of the extensive livestock system by the intensive livestock system; VIII - stimulate the development of the organic agricultural production system

Rural credit has three modalities: current rural credit, educational rural credit and special rural credit. Current rural credit consists of supplying resources without providing technical assistance at the company level. Rural educational credit refers to the supply of resources combined with the provision of technical assistance, including the preparation of a project or plan and guidance to the producer. Special rural credit is intended for cooperatives of rural producers, for their own applications or those of their members; and colonization or agrarian reform programs [24].

Also according to BACEN [24] rural credit can have the following purposes: funding, investment, marketing and industrialization. The cost credit is intended to cover normal expenses of production cycles. Investment credit is intended for investments in goods or services whose enjoyment extends over several production periods. The commercialization credit is intended: a) to the rural producer, to cover expenses subsequent to the collection of his exploration or to convert into cash the titles deriving from the installment

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sale of the production or the delivery of products to his cooperative; b) cooperatives of rural producers in the activity of processing and industrialization, processors, agribusinesses and cereal producers who cumulatively carry out cleaning, standardization, storage and marketing of agricultural products, for the purchase of agricultural products directly from producers rural or their associations, for a price not lower than the minimum or reference prices, when necessary for the flow of agricultural production. The industrialization credit is intended for the industrialization of agricultural products, when carried out by cooperatives or by the producer on his rural property.

Rural credit, before 1965, was carried out only by Banco do Brasil, through its Agricultural and Industrial Credit Portfolio, created in 1935. Currently, the National Rural Credit System is made up of basic, linked and articulated bodies. The basic bodies include Banco Central do Brasil, Banco do Brasil, Banco da Amazônia and Banco do Nordeste. And these bodies are linked to the National Bank for Economic and Social Development (BNDES), private and state banks, savings banks, rural credit cooperatives and credit societies. Finally, the articulated bodies are official regional valuation bodies and entities providing assistance [25].

Furthermore, Law No. 7,827, of September 27, 1989, created the Constitutional Funds of the North (FNO), the Northeast (FNE) and the Center-West (FCO), which receive part of the resources collected by the federal government through the Income Tax and Tax on Industrialized Products. The FNO covers all the states of the Northern Region and this fund aims to promote, through special lines of credit, the development of economic activities in the agricultural, mineral, industrial, agro-industrial, tourist, commercial and service sectors [6].

To obtain rural credit, the requirements vary according to the financing institution. Among the most common requirements are: the suitability of the borrower, the preparation of plans or projects with budgets as well as the proper training for their execution and a schedule for disbursement and repayment of the money borrowed. Regarding the constitution of guarantees, they can vary according to the pledge of production, real estate, common mortgage, surety or any other asset allowed by the National Monetary Council [26].

2.2 SUSTAINABLE DEVELOPMENT

The development of a given location, in theory, is an object of concern for government policies and has generally focused on economic growth. As a way of reversing this concern, it would be necessary to structurally change the processes and forms of growth, as it is known that it is not just economic measures that guarantee the change of today [27].

For Sachs [28] development and the environment are indissolubly linked and must be addressed by changing the content, modalities and uses of growth. Three fundamental criteria must be obeyed simultaneously: social equity, ecological prudence and economic efficiency.

The term "sustainable development" emerged from studies by the United Nations on climate change, as a response for humanity to the social and environmental crisis the world was going through from the second half of the 20th century [29].

At the Ottawa Conference, held in 1986, five requirements were established for achieving sustainable development: - integration of conservation and development; - satisfaction of basic human

needs; - achieving equity and social justice; - provision of social self-determination and cultural diversity; - maintenance of ecological integration [30].

In the Brundtland Report, in 1987, sustainable development was defined as "[...] that which meets the needs of the present without compromising the possibility of future generations meeting their own needs" [31].

According to Veiga [32], the concept of sustainable development is a utopia for the 21st century, despite defending the need to seek a new scientific paradigm capable of replacing the paradigms of "globalism".

For Opschoor and Straaten [33], this type of development is based on a process of change in which the exploitation of resources, the direction of investments, the orientation of technological development and institutional change are all in harmony. The authors emphasize that the notion of sustainable development will have to be properly incorporated into economic theory, with repercussions for, among other things: 1) the treatment of natural resources as factors of production, as well as determinants of well-being, 2) evaluation theoretical, and 3) evaluation of market forces.

In the view of Abramovay [34], several components of a sustainable development strategy can be found in government policies, in practices carried out by private companies and in the work of numerous Brazilian civil society organizations. These parts, however, are far from forming a coherent whole, which precisely removes their strategic reach. For the author, sustainable development is formed by a multitude of determining factors, but whose progress depends precisely on the presence of a strategic horizon among its decisive protagonists. Thus, what is at stake in this process is the content of human cooperation itself and the way in which, within this cooperation, societies choose to use the ecosystems on which they depend.

Sustainable development is the process that comes into play based on strategies to bring the human environmental system closer to the level of sustainability, with a view to making the life of this complex system harmonize and perpetuate over time. Thus, it seeks to break paradigms through changes in the understanding and cultural positioning of society, that is, to raise awareness of its importance with the help of actions and attitudes that reposition the negative aspects identified by the indicators towards sustainability. Thus, with the successful conduct of sustainability and sustainable development is achieved [35].

III. METHODOLOGY

It is an applied, descriptive, transversal research with a quantitative approach, since the objectives generate knowledge for practical application, which includes the number of contracts and the volume of financial resources for agriculture and livestock in the municipalities Chupinguaia, Parecis, Pimenta Bueno, Primavera of Rondônia, São Felipe D'Oeste and Vilhena of the micro-region of Vilhena, Rondônia, Brazilian Amazon, in the period corresponding to the years 2000 and 2010. Data collection was carried out through reports of the rural credit statistical yearbook of the Central Bank of Brazil for the years 2000 and 2010. For the definition of microregion, the microregion geography criterion was used for statistical purposes by the Brazilian Institute of Geography and Statistics - IBGE [5]. The micro-region of

Vilhena is formed by six municipalities: Chupinguaia, Parecis, Pimenta Bueno, Primavera de Rondônia, São Felipe D'Oeste and Vilhena.

IV. RESULTS AND DISCUSSION

4.1 RURAL CREDIT IN THE VILHENA MICROREGION IN THE 10-YEAR PERIOD

The micro-region of Vilhena is made up of six municipalities: Chupinguaia, Parecis, Pimenta Bueno, Primavera de Rondônia, São Felipe D'Oeste and Vilhena. The data worked for this microregion were grouped according to a survey carried out with the rural credit statistical yearbook.

4.1.1 Number of Contracts for Agriculture

By analyzing the data in Table 1, a reduction in the number of contracts signed for agriculture is evidenced, both in the "costing" and "investment" modality in the Vilhena micro-region between the analyzed periods. It can be inferred, due to the "costing" modality having reached 60.4% of the contracts in 2000, that the agricultural activity was already part of the reality of the micro-region of Vilhena. However, new areas seem to have been added in the region due to the number of investment contracts having corresponded to 39.6% in that same year.

In 2010, there was an inversion, the number of investment contracts surpassed the "costing" modality, indicating, in principle, that new areas are being implemented in the region in the "agriculture" activity. However, it is noteworthy that there was a reduction of 86.4% and 74% in this scenario in the number of "costing" and "investment" contracts, respectively, in relation to the years 2000 and 2010, which allows us to infer that there may be there has been a clear process of deceleration of agricultural activity in this micro-region, both in the number of contracts in the "costing" modality and in the "investment" modality.

| Year | | | |
|------------|---------|---------|----------------|
| Contract | 2000 | 2010 | V.P.(%) |
| | 1180 | 161 | |
| Costing | (60,4%) | (44,5%) | -86,36 |
| | 773 | 201 | |
| Investment | (39,6%) | (55,5%) | -74 |
| Costing + | | | |
| Investment | 1953 | 362 | -81,46 |

Table 1 - Number of contracts for Agriculture in the Microregion of Vilhena.

Source: Statistical Yearbooks of Rural Credit.

4.1.2 Number of contracts for livestock

It was found that the agricultural activity in the micro-region of Vilhena suffered a very significant drop in the number of contracts entered into with the rural credit sector of the federal government. It is observed that in the livestock activity for the years analyzed, the "investment" modality prevailed, and in 2000 it was responsible for 80.7% of the contracts signed, that is, an attempt to leverage the livestock sector is evident, therefore, it already demonstrated a strong institutional stimulus from the public power through credit lines. For "costing" only 19.3% of the number of contracts for the same period was observed. In relation to the second year analyzed (2010), a reduction in the number of signed contracts was observed, both in the modality of "costing" and for "investment", which, together, totaled a drop of - 12.56%. However, even with the drop in the number of contracts, the "investment" modality was still responsible for 82.52% of the contracts signed, demonstrating that the livestock activity continued in full force in the microregion in 2010, considering that investment it represents growth in the activity, as there is evidence of the application of resources to expand or intensify the cattle raising activity in the region.

Although the number of contracts decreased in the period, it is not relevant to show a significant drop, as the decrease between the periods analyzed may be related to momentary situations that the micro-region went through.

| Year | | | |
|------------|----------------------|---------|----------------|
| Contract | 2000 | 2010 | V.P.(%) |
| | | 196 | |
| Costing | 248 (19,3%) | (17,5%) | -20,97 |
| | | 925 | |
| Investment | 1034(80,7%) | (82,5%) | -10,54 |
| Costing + | | | |
| Investment | 1282 | 1121 | -12,56 |

Table 2 - Number of contracts for Livestock in the Microregion of Vilhena.

Source: Statistical Yearbooks of Rural Credit 2000 and 2010.

4.1.3 Volume of financial resources made available for agriculture

With regard to the volume of financial resources for agriculture, it was found that for the years analyzed there was a very significant increase, with a greater proportion in the "costing" modality, which was 627.84% compared to the two periods analyzed (2000 and 2010), in the same way, but with a lower percentage, in relation to the "investment" modality, which represented 263.92% comparing the two periods (Table 3).

It is possible to verify that both in 2000 and in 2010, the volumes of resources for agriculture destined as a result of the signed contracts were, in their majority, for the "costing" modality, where they reached 50.2% in 2000 and 66.8% in 2010. Therefore, one can infer a scenario with a tendency for possible stagnation of agricultural activity, as with the prevalence of an increase in the "funding" modality there is a logic to understand this scenario from the non-effectiveness of new areas for the

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expansion of agriculture, a fact achieved with the prevalence of the "investment" modality, which did not occur. Therefore, it is understood that this scenario points to the maintenance of what was already being consolidated, in general and, therefore, not foreseeing significant increases for the expansion of agriculture for the period analyzed.

| | Year | | | |
|------------|---------------|---------------|---------|--|
| Contract | 2000 | 2010 | V.P.(%) | |
| | 5.911.597,24 | 43.026.956,62 | | |
| Costing | (50,2%) | (66,8%) | 627,84 | |
| | 5.874.411,00 | 21.378.302,69 | | |
| Investment | (49,8%) | (33,2%) | 263,92 | |
| Costing + | | | | |
| Investment | 11.786.008,24 | 64.405.259,31 | 446,46 | |

Table 3 - Volume of financial resources for Agriculture in the Vilhena Microregion.

Source: Statistical Yearbooks of Rural Credit.

4.1.4 Volume of financial resources made available for livestock

In relation to the volume of resources destined to livestock, it is noted that there was an increase between the years analyzed, totaling 360.69% in the "costing + investment" modalities. It can be seen that in 2000, the "investment" modality already had the largest share in relation to "financing", where 61.2% of the volume of resources from the federal government's rural credit operations were allocated to the 'investment' of the activity and 38.8% for "costing" (Table 4).

When analyzing the year 2010, we found that for "financing" 43.8% was made available and in the "investment" modality 56.2% of the volume of resources, we observed a small reduction for "investment" in relation to the first year analyzed, and however, this same modality still held a higher share than "financing" in 2010 and, therefore, does not mean to say that the activity showed decay in the microregion, since the "investment" modality is synonymous with growth.

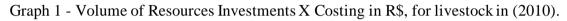
| Year | | | | | |
|------------|--------------|---------------|----------------|--|--|
| Contract | 2000 | 2010 | V.P.(%) | | |
| | 3.828.801,51 | 19.941.141,23 | | | |
| Costing | (38,8%) | (43,8%) | 420,82 | | |
| | 6.047.497,47 | 25.557.826,89 | | | |
| Investment | (61,2%) | (56,2%) | 322,62 | | |
| Costing + | | | | | |
| Investment | 9.876.298,98 | 45.498.968,12 | 360,69 | | |

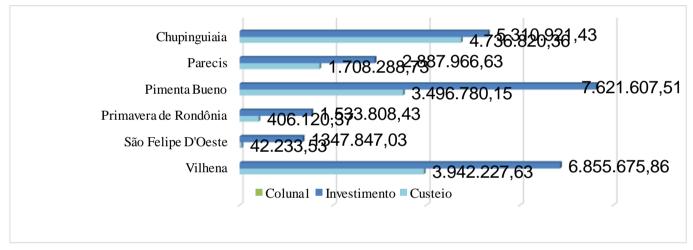
Table 4 - Volume of resources for Livestock in the Microregion of Vilhena.

Source: Statistical Yearbooks of Rural Credit 2000 and 2010.

It can be seen that the volumes of financial resources released by the rural credit line, in the years analyzed, prevailed in a higher amount for agriculture, that is, even with the reduction of contracts carried out in 2010, for the agricultural segment, obtaining the resources was R\$ 64,405,259.31 while for livestock, in the same year, it was R\$ 45,498,968.12, which can be deduced that there was an intensification of this economic activity in the micro-region. However, it is important to note that obtaining resources was mostly concentrated on maintaining the agricultural activities that were observed in 2000

Based on the data analyzed and based on the concept that the cost is linked to the maintenance of what already exists and the investment, it is possible to affirm that there was, in general, investment aimed at strengthening the cattle-raising activity in the region. These data confirm the hypothesis of cattle ranching in the municipalities of the microregion of Vilhena. However, this reality proves not to be uniform. It intensifies in some municipalities and in others it does not. However, all municipalities had a greater tendency to invest in livestock activities.





Source: Statistical Yearbooks of Rural Credit 2000 and 2010.

It can be observed that the municipality of Chupinguaia received more resources in relation to other municipalities in the "funding" credit modality, which implies that the activity was already strongly supported and promoted in this municipality by the rural credit policy provided by the federal government. The municipality received an excellent incentive for investment in the sector, this being in the amount of R\$ 5,310,921.43. Therefore, in relation to the municipality of Chupinguaia, the livestock activity shows that, in 2010, the cost resources were used to maintain the livestock process, which can be reinforced when analyzing the investment data, which indicates that such activity continued to grow. It was also observed that the municipalities of Parecis, Pimenta Bueno and Vilhena obtained very significant resources in the credit subsidized by the federal government to maintain the livestock activity, as well as an appreciable increase in investments in new areas, characterizing the expansion and continuation of their activities.

Based on the numbers of contracts for livestock compared to agriculture, the latter was losing space and investments based on the period of time analyzed. Therefore, it was observed that all 6 (six) municipalities in the Microregion of Vilhena started to receive many tax incentives for livestock projects, not only for their maintenance, but also for the expansion of livestock activities. In fact, the fact that some municipalities have been strongly stimulated since the first year analyzed, as is the case of the municipalities of Pimenta Bueno, São Felipe D'Oeste and Vilhena, stands out. It is noteworthy that for the aforementioned municipalities there was a clear decrease for "investment" in the second year analyzed (2010), however even with the reduction in the cases measured it was possible to observe that the modality "investment" was higher than "costing", therefore this small obstacle was not an obstacle to the expansion of the cattle raising activity.

V. FINAL CONSIDERATIONS

In 2000, agriculture had more contracts signed, as well as a greater volume of financial resources. In 2010 there is a clear inversion of these data, where now the one with the largest number of contracts signed was cattle raising, but despite the greater number of contracts directed to cattle raising, the volume of resources is still higher for the agricultural activity, which can infer that there was concentration of resources in few properties as well as specialization and more accentuated technological level. The largest portion of the volume of resources obtained for the agricultural activity in 2010 was for the "funding" modality, which only characterizes the maintenance of the current production cycle for that year.

The financing of projects for "investment" in the period, in the municipalities of the Vilhena micro-region for the two years analyzed, both the quantity of contracts and the resources made available overlap the costing.

Among the six municipalities that make up the Microregion of Vilhena, 100% obtained a strong stimulus in the rural credit sector for the cattle raising activity in the years analyzed, and the municipalities of Pimenta Bueno, São Felipe D'oeste and Vilhena reduced the numbers of contracts from 2000 to 2010, however, increased the resources made available for "investment" in the livestock activity. This allows for evidence of a clear cattle raising process in the region.

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