

The rural community in Northeast Brazil: a scenario of reflection to formulate local development and sustainable entrepreneurship policies

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This article analyzes experiences of sustainable entrepreneurship in the José Gomes rural community in Northeast Brazil, reflecting on the relevance of local development policies in the construction of local collective projects. This qualitative, exploratory, and descriptive study adopted rapport techniques, semi-structured interviews (82 dwellers), direct observation, field diary, and bibliographic research. Local development policies were understood as mechanisms for advances and improvements in the quality of life, economic organization, and environmental conservation, which must be incorporated into municipal planning and governmental actions. The results pointed to socio-productive potentials and structural and infrastructural limitations, which hamper the possibilities of spreading sustainable entrepreneurship and consolidating local development.

Keywords: management; ethnoknowledge; triple bottom line; environment.

Comunidade rural do Nordeste brasileiro: um cenário de reflexão para a formulação de políticas de desenvolvimento local e empreendedorismo sustentável

Este artigo pretende analisar experiências de empreendedorismo sustentável na comunidade rural José Gomes, Nordeste do Brasil, e promover uma reflexão sobre a relevância das políticas de desenvolvimento local na construção de projetos coletivos regionais. Este estudo caracteriza-se como exploratório e descritivo na abordagem qualitativa. Para tanto, foram utilizadas técnicas *rapport*, entrevistas semiestruturadas (82 moradores), observação direta e diário de campo, além de pesquisas bibliográficas. A pesquisa abordou as políticas de desenvolvimento local como mecanismos de avanço e melhoria na qualidade de vida, na organização econômica e na conservação do meio ambiente, que devem ser incorporadas ao planejamento municipal e às ações do poder público. Os resultados apontaram potencialidades socioprodutivas e limitações estruturais e infraestruturais que esgotam as possibilidades de difusão do empreendedorismo sustentável e a consolidação do desenvolvimento local.

Palavras-chave: gestão; etnoconhecimento; *triple bottom line*; meio ambiente.

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Comunidad rural del Noreste brasileño: un escenario de reflexión para la formulación de políticas de desarrollo local y emprendimiento sostenible

Este artículo pretende analizar experiencias de emprendimiento sostenible en la comunidad rural José Gomes, Nordeste de Brasil, y promover una reflexión sobre la relevancia de las políticas de desarrollo local en la construcción de proyectos colectivos regionales. Se utilizaron técnicas de *rapport*, entrevistas semiestructuradas (82 residentes), observación directa y diario de campo, además de la investigación bibliográfica. Las políticas de desarrollo local se entendieron como mecanismos para el avance y mejoramiento de la calidad de vida, la organización económica y la conservación del medio ambiente que deben incorporarse a la planificación municipal y a las acciones del poder público. Los resultados apuntaron potencialidades socioprodutivas y limitaciones estructurales e infraestructurales que agotan las posibilidades de difundir el emprendimiento sostenible y consolidar el desarrollo local.

Palabras clave: gestión; etnoconocimiento; triple resultado final; medio ambiente.

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1. INTRODUCTION

In its definition, a community can be understood as a historical and social phenomenon that assumes different meanings in time and space, with concepts based on multiple references, such as territoriality, interests, social and political organization, common values, and sense of belonging to a particular community, among others. In several regions of Brazil, the term “rural community” is used to designate a group of people who live in rural areas and who share the same events, traditions and habits (J. M. Silva & Hespanhol, 2016).

The analysis of studies about contemporary rural communities shows that communities are spaces of life and work, traditions and identities, which play important roles in the social, environmental, cultural and economic perspectives. They denote a political condition for the rural space, recognized in government platforms and agendas for territorial development.

Thus, recent changes that affect the basic economy of Brazil, resulting from the process of territorialization of capital, have awakened redefinitions of the rural environment, which is now seen as a dynamic space for local development (LD) and elimination of poverty, which is part of the globalized world, overcoming the pragmatic conception of a solely productive sector.

It should be noted that the LD process faces difficulties. It is not possible to ignore the asymmetries that weaken the method of social inclusion of rural communities in governance models induced by public policies (Ortega, Garlipp, & Jesus, 2008). As a consequence of this asymmetric political, economic and social power, Barros, Henrique, and Mendonça (2020) understand that Brazil, in the dawning of the 21st century, is not a poor country, but an extremely unfair and unequal country, attesting to the importance of effectively implementing agreed development policies in the new dynamism of the rural space.

Taking this into account, it is argued that the prominence of public policies (PP) aimed at strategies to promote sustainable entrepreneurship (SE) in rural communities is seen as a means to leverage

the LD of these spaces, as it is a variant of the spirit of social conquests that creates initiatives and actions that mobilize the local capacity and collectivity with a view to the development of rural areas.

Sustainable entrepreneurship is understood as a mechanism capable of adding value to the productive potential of rural communities, with the involvement of environmental, social and economic resources. The objective is to promote LD, generating sources of income, streamlining social opportunities, and giving visibility to the local economy, considering the limited scope or insufficiency of effective and proactive actions of public programs and projects for rural workers, particularly in the countryside of the Northeast region of Brazil.

Shepherd and Patzelt (2011) emphasize that this type of business is focused on preserving nature, supporting life and the community, in the pursuit of perceived opportunities to bring into existence future products, processes and services for gain. Sustainable entrepreneurship is, thus, largely interpreted as a generator of economic and non-economic gains for individuals, the economy and the community.

Thus, in this study, the José Gomes community, located in the municipality of Cabeceiras do Piauí, Northeast Brazil, was chosen to discuss and illustrate the importance of rural development policies as a crucial variable for SE. The study aimed to answer the following guiding questions: from the perspective of rural communities, how have rural development policies contributed to the dissemination of SE in José Gomes? Have these policies been sufficient and satisfactory to meet the most urgent social and economic demands of the community?

Therefore, the objective was to discuss the importance of LD policies as variables for the mobilization of SE in José Gomes in order to promote a reflection on the relevance of development policies in the construction of local collective projects. The importance of LD policies in Brazil has been clearly acknowledged in the growing body of academic productions on this theme in recent years. Among these productions, the works of Henig and Santos (2016), Lima and D'Ascenzi (2018), Nakabashi (2018), and Secchi (2013, 2020) stand out, presenting analysis of aspects inherent to the consolidation of economic and social development in rural and urban communities with a view to eradicating poverty and strengthening the social capital, freedoms and citizenship.

2 THEORETICAL BACKGROUND

2.1. Local Development (LD) and Sustainable Entrepreneurship (SE) in rural areas

The definition of development, for many years, was confused with growth, based on economic fundamentals. However, economic growth is based on the assumption that the more material ascension is maximized, the greater the improvement in the social models of a certain population, that is to say, the increase in social benefits is assumed to be a natural result of economic growth (Sachs, 2008). Magalhães and Mota (2012) point out that there is a recurrent mismatch between economic growth and development, since growth is not always accompanied by social changes. Furthermore, it is necessary to point out that there is a trend of concentration of wealth and income in the hands of a few, which is also highly criticized in terms of this maximization of the economy.

The analyses by Coffey and Polese (1984), Dawkins (2003), Handayani (2013), and O. M. Nunes and Karnopp (2015) defend the idea that development is an endogenous process of change that leads

to economic dynamism and improved quality of life of the populations of small territorial units and human groups. To be consistent and sustainable, development must mobilize and exploit the social potential and contribute to raising social opportunities, economic viability, and competitiveness. At the same time, it must ensure the conservation of natural resources, because they are the basis of the achieving capacity of populations and indispensable for their quality of life.

Thus, LD can be achieved more easily by taking advantage of traditional resource management systems, through the organization of a participatory process to identify the needs, potential resources, and forms of use of biodiversity as a way to improve the quality of life of peoples (O. M. Nunes & Karnopp, 2015).

Still according to O. M. Nunes and Karnopp (2015), LD involves two factors that are interrelated: the region and the State. The development potential of a region depends on the existing productive resources vis-à-vis their degree of use. A region may have abundant productive resources, making use of them in a way that leads to LD depends on bottom-up social activation and the search for autonomy of the region through the implementation of a set of political, institutional and social elements capable of directing the growth based on exogenous forces.

In view of the above, it is inferred that LD and its endogenous relationship of appreciation of local potential provide significant changes for the promotion of SE in rural communities, especially poor ones, that is, those with low economic development.

It should be noted that SE is a branch of traditional entrepreneurship defined by A. F. Baggio and D. K. Baggio (2014) as the art of making things happen with creativity, motivation, the art of carrying out any personal or organizational project with synergy and innovation, constantly challenging the opportunities and risks.

Sustainable entrepreneurship allows for a proactive attitude in the face of problems that need to be resolved and encourages individuals to fully take advantage of their rational and intuitive potential, in the pursuit of self-knowledge, continuous learning, and openness to new experiences and new paradigms (A. F. Baggio & D. K. Baggio, 2014).

Barot (2015) and Hessels and Naudé (2019) argue that the main purpose of SE is to generate employment and income opportunities, promoting economic development in local communities.

Based on the above analysis and in line with Hoogendoorn, Zwan, and Thurik (2019), it is inferred that SE is undoubtedly essential for the viability and steady growth of rural economies. Its dissemination in the world dates back to the end of the 2000s. On this theme, studies conducted in Germany, Canada, the United States, the Netherlands, and the United Kingdom stand out.

In Brazil, studies carried out by Batista, Macêdo, A. J. Silva, and Barros (2020, 2021a, 2021b) are worth mentioning. Their empirical results regarding the José Gomes community revealed the endogenous knowledge, nature and culture of community members, especially when it comes to the different types of vegetables and subsistence agriculture practices, which are intrinsic factors to enhance social entrepreneurship and LD. These authors point out that when entrepreneurship is linked to sustainability, development prospects come through perceived opportunities couples to preservation of nature, generating valuable products and services for the economy and society. They also underline that the interpretation that entrepreneurship and LD are similar and effective to solve social and environmental problems has been gaining resonance in academia and society in general

and that, due to sustainability, this scenario emerges as a holistic concern, mainly arising from the environmental crisis and consequent menaces to the future of living beings (Batista et al., 2020).

In this way, it is understood that SE and LD are intrinsically interconnected and the business is a point of convergence of social interests that does not exhaust the debate about environmental issues, the importance of social organization, the appreciation of local potential, sociability, and quality of life of rural populations, which suggests greater attention to the public agenda on the subject.

2.2. Public Policies (PP) in rural areas

Public policies can be defined as the field of knowledge that seeks, at the same time, “‘putting the government into action’ and/or analyzing this action [...] and, when necessary, proposing changes in the direction or course of these actions” (C. Souza, 2006, p. 7). Jacometti, Castro, Gonçalves, and Costa (2016) point out that public policies are associated with the idea of governance and their actions lean towards social coordination with a standardization of rules.

In the context of PP, the concepts of public problem and public policy are important. A public problem consists of the distance between the *status quo* and a possible ideal situation for public reality (Sjöblom, 1984; Secchi, 2013). Public policy, on the other hand, is a guideline to face a public problem (Secchi, 2013, 2020). Secchi (2020) also reinforces that public problems and PP exist in different areas of knowledge, including education, technology, innovation, environment, sanitation, employment, and income. The objective of a public policy is to combat, reduce and even solve the public problem.

According to Secchi (2013), the policy-making process or public policy cycle involves seven phases, namely: identification of the problem; creation of an agenda; formulation of alternatives; making decisions; implementation; evaluation; extinction. The present study is limited to presenting the elements that encourage the process of formulating policies for the José Gomes community and, thus, data regarding the other stages, such as implementation and evaluation, will not be presented.

It is noteworthy that the PP implemented in Brazil have the minimization of poverty as their main goal. Nakabashi (2018) argued that, as poverty hampers economic development, PP aimed at reducing its prevalence in the country have the potential to promote economic growth and social well-being.

J. A. Nunes and Mariano (2015) clarify that the institutional framework of these policies are the 1988 Constitution of the Federative Republic of Brazil and the Organic Law of Social Assistance (LOAS) (Lei nº 8.742, de 7 de dezembro de 1993), which gave new directions to the treatment of social assistance in Brazil. Since then, several direct cash transfer programs have been instituted, focusing on the population in situation of poverty or those who do not have basic resources for their survival. Of these, the Bolsa Família Program (PBF), the Continuous Cash Benefit (BPC), and the Child Labor Eradication Program (PETI) stood out as the main means of income transfer from the Federal Government, in addition to retirement.

With regard to policies aimed at family agriculture, Carneiro and Maluf (2003) argue that these policies play a multifunctional role¹ because they break with the eminently sectoral character, expand the field of social functions attributed to them, and cover three levels of analysis, that is, the rural

¹ It is an instrument for analyzing agricultural systems and their relationship with other sectors of the economy and society as a whole, so that its treatment cannot be guided merely in terms of market relations (Ipea, 2015).

families, the territory, and society (social environment). This vision makes it possible to change the terms in which agriculture is inserted in the problem of sustainable territorial development at the same time that it suggests that PP and the social transfer of benefits to farmers should be redesigned.

Among these transfers, the social transfers which provide benefits for farmers stand out, because these actors contribute to LD – by reproducing the socio-economy and promoting food security for society and for the own families – and maintain the social and cultural fabric, besides preserving the natural resources and the rural landscape. According to the Institute of Applied Economic Research (Ipea, 2015), this segment of agriculture has been historically neglected in the formulation of PP in Brazil.

The National Program for Strengthening Family Agriculture (PRONAF) stands out among the policies to support family agriculture. This program was created in 1996 with the objective of promoting the sustainable development (SD) of family farming, through the financing of individual or collective projects that generate income for these farmers and for Agrarian Reform settlers (Companhia Nacional de Abastecimento [Conab], 2021).

Family agriculture corresponds to 90% of the economy of municipalities with up to 20,000 inhabitants, occupying a total area of 80 million hectares, with about 12 million farmers whose main occupation is agriculture. They are responsible for 60% of the production of milk, 59% of pigs, 50% of poultry, and 30% of cattle, as well as 87% of cassava, 70% of beans, 46% of corn, 38% of coffee, 34% of rice, and 21% of wheat in the entire country (Instituto Brasileiro de Geografia e Estatística [IBGE], 2017).

The states of Northeast Brazil are the ones that benefit most from PRONAF, especially Bahia, Ceará, Maranhão, Pernambuco, and Piauí, which receive up to approximately 53% of the total of 220 million Brazilian reais. The most common products declared by producers are corn, beans, beef cattle, and cassava (Conab, 2021).

It is evident that the rural space has undergone profound changes in Brazil. The new conceptions of the rural space that have emerged go beyond the productivist view of land use. Robson, Gasson, and Hill (1987) point out that it is necessary to pay attention to what The Common Agricultural Policy² points out as the emergence of the “new rural space” in Brazil, since it is imperative to guarantee not only food for the population, but also the sovereignty of small farmers, including those who carry out other types of rentable activities, for example, part-time activities.

Therefore, it is understood that strategic planning is necessary for the success of rural development policies. The ultimate goal must be the social organization of local communities and the appreciation of their productive potential and cultural and natural heritage.

2.3. Strategic analysis as a policy-making tool

Formulating PP for the rural environment is a process that requires strategic planning. The analysis of the social, economic, cultural, and environmental scenarios in rural communities, such as that of José Gomes, allows an accurate vision of the spatial reality and the possibilities of effective changes in the long term.

² Common policy of the European Union created in 1962 aimed at the agricultural development policies for member countries.

The SWOT matrix, designed between the 1960s and 1970s by Albert Humphrey (Gurel & Tat, 2017), stands out for this purpose. Verdejo (2006) clarifies that, when used in rural communities, this matrix allows identifying, analyzing and visualizing momentary situations of the place, making it possible to ensure organizational toning. The matrix explores the internal and external environments regarding the strengths, weaknesses, opportunities and threats, and it is one of the most used strategic tools in the world (Culp, Eastwood, Turnar, Goodman, & Ricketts, 2016; Ghazinoory, Abdi, & Azadegan-Mehr, 2011; Helms & Nixon, 2010).

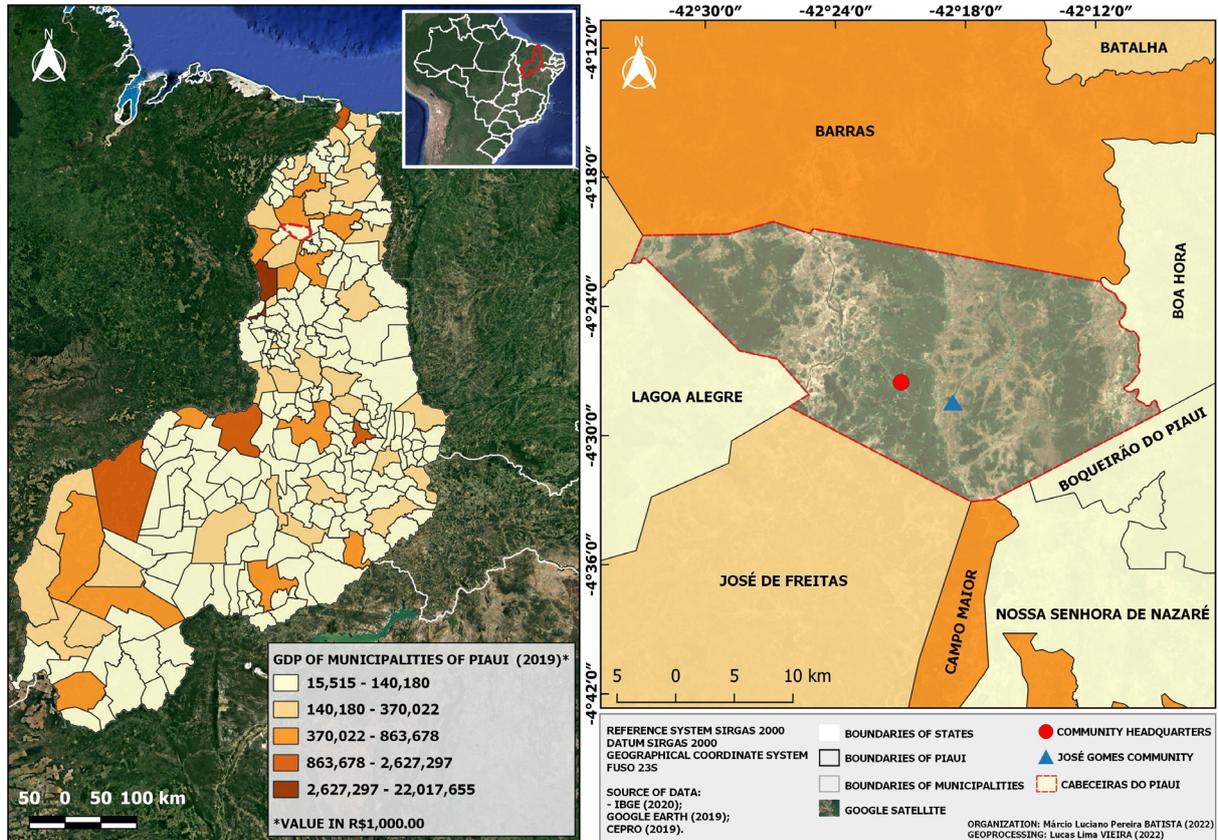
It is worth mentioning that the use of SWOT was not a unilateral process that came exclusively from the researcher's viewpoint about the community. The engagement of community members was essential to learn about their perspectives, expectations and needs. In this sense, the strategic analysis was elaborated so as to reflect the local reality, especially with the involvement and participation of all, as it was done in the study by Batista et al. (2020) in José Gomes, which enabled a critical reflection of the environment studied with collection of promising data for their analyses.

The José Gomes community is located in the municipality of Cabeceiras do Piauí (Figure 1), in the northern side of the state of Piauí, 96 km from the capital, Teresina. The municipality has an area of 608.525 km² and a population of 9,928 inhabitants, 1,657 in the urban area and 8,271 in the rural area, with a demographic density of 16.31 inhabitants per km² and a Municipal Human Development Index (MHDI) of 0.583 (IBGE, 2010).

According to the Center for Economic and Social Research of Piauí (Cepro, 2021), in 2019, Piauí had a 0.7% and 5% share of the Brazilian and Northeastern gross domestic product (GDP), respectively. Teresina, Parnaíba, Picos, Uruçuí, and Floriano are among the ten municipalities with the highest GDP, being responsible for 61.91% of the state's economic production. With regard to economic activities, 79.7% corresponded to the service sector, 8% to agriculture, and 12.3% to industry.

In the case of Cabeceiras do Piauí, the economy concentrated on resources arising from public administration and agriculture, especially traditional crops for regional consumption cultivated through the extensive system, characterized by the use of rudimentary technology and low productivity, and the intensive system, mainly reliant on family labor force, reaffirming the identity of the local culture. In line with these data, Cepro (2021) found that Cabeceiras do Piauí has little economic expressiveness and is among the five municipalities with the lowest GDP per capita in Piauí.

FIGURE 1 LOCATION OF THE JOSÉ GOMES COMMUNITY, CABECEIRAS DO PIAUÍ, PI



3. METHODOLOGY

3.1. Data collection and analysis

As a means of guaranteeing the veracity and security of the information collected, as well as the anonymity of the interviewees, this research was approved by the Research Ethics Council (REC) of the Federal University of Piauí (UFPI), Opinion number 2,708,249, and registered in the National Management System of Genetic Heritage (SisGen) under number AD8160E.

The rapport technique was used in this study (Bernard, 1988). According to Albuquerque, Lucena, and Lins (2010), this technique facilitates contact with informants and fieldwork, as it aims to gain the trust of the community to obtain information. To achieve this goal, some steps recommended by the authors were followed: delimitation of the study area; visit to all households, highlighting the importance of the work and its purpose; identification of the researcher; invitation of residents to a meeting at the “house of prayer” (place for religious rites), in which all the processes to be developed with the community were presented and feedback was provided throughout the study; finally, signature

of the Informed Consent Term (ICF) by the community members who were interested in participating in the research, reaffirming the researcher's ethical commitment to them.

The interviews were carried out with the aid of semi-structured forms (Bernard, 1988). A total of 82 residents were interviewed. In the interviews, it was sought to understand the social conditions, socio-productive and cultural practices, the products generated, and the interactions with the local ecosystem, in addition to other variables. All households were visited (42), following what Begossi, Lopes, Oliveira, and Nakano (2009) propose, that in communities with up to 50 residences, all should be included in the interviews. Direct observation and field journal were also techniques applied in this study (C. I. Silva, 2000). Meihy (2005, p. 187) says that "all problems of acceptance of the ideas of the interviewees are recorded in the field journal, in addition to all theoretical reflections resulting from debates on the aspects of the subject [...]", thus allowing the situational analysis of the studied community in order to propose solutions and suggestions about policies for the promotion of LD.

This study is also characterized as a bibliographic research, since searches were carried out in several databases. We also included documents and studies already conducted in the José Gomes community, such as the works of Batista et al. (2020), who diagnosed the economic, social and environmental viabilities through the recognition of weaknesses, strengths, opportunities, and threats present in the rural community José Gomes, in order to evaluate whether the increase and consolidation of local SE is possible or not. Batista et al. (2021a, 2021b) surveyed the endogenous knowledge, nature and culture in the context of sustainable LD in the rural community of José Gomes and verified that the knowledge and use of medicinal and food plants by residents of this rural community in the state of Piauí was a possibility to develop SE and thus reach LD.

In the study set by Batista et al. (2020), the SWOT matrix revealed potentialities and limitations for the dissemination of SE and the promotion of LD (Box 1).

Finally, this study is also classified as exploratory and descriptive in the qualitative approach.

4. RESULTS AND DISCUSSION

The origin of the community is related with the Valério family, because, according to one of the oldest residents of the community, "[... and then we decided to come and live here, we were the first residents, in 1945...]" (sic). "Before that, it was called Alenqué (this was the name because there was a man who lived around here and everybody called the place that way, so when we moved in, dad changed the name to José Gomes and that's how it is until today" (sic) (O.V.S, 88 years old). Now, the community is inhabited by almost 50 families and family agricultural production for subsistence and income generation is predominant.

The results of the SWOT analysis presented by Batista et. al (2020) in one of his studies in José Gomes (Box 1) and empirical research data that, by combining the quadrants (internal and external environments) with the main data obtained, led to insights and paths that may bring solutions for problems. It is possible to take advantage of favorable opportunities to mitigate and/or eliminate weaknesses, avoiding the existing threats, based on the results of the analysis, so that it will be possible to propose local policies to promote LD and SE in the José Gomes community (Box 1).

BOX 1 **SWOT VARIABLES IN THE JOSÉ GOMES COMMUNITY, CABECEIRAS, PI, AND THE POSSIBILITIES OF IMPLEMENTING SUSTAINABLE ENTREPRENEURSHIP**

	STRENGTHS	WEAKNESSES	POSSIBILITIES FOR SE
INTERNAL ASPECTS	Presence of edible vegetables	Low schooling	<p>They must be based on the three pillars of sustainability, the so-called triple bottom line (social, environmental and economic axes), aligned with strategic planning.</p> <p>- Social axis: attributes that favor the social well-being of community members, such as the development of safe activities and services and the encouragement to strengthen social relations that lead them to seek knowledge, etc.</p> <p>- Environmental axis: educational activities aimed at the protection and/or conservation of natural resources existing in the community.</p> <p>- Economic axis: small actions that can lead the community to adjust economically, such as the rational use of water, energy, and the environment.</p>
	Presence of medicinal vegetables	Low-income of the residents	
	Theoretical and practical knowledge about agriculture transmitted from parents to children	Lack of knowledge about sustainable entrepreneurship and how to become an entrepreneur	
	Productive diversification	Lack of interest on the part of local actors	
	Family labor force	Lack of community development plans	
	Cultivable/fertile land	Little access to information and technology	
		Little organization and articulation for productive management	
	OPPORTUNITIES	THREATS	
EXTERNAL ASPECTS	Support for the marketing of the products generated	High taxes	<p>- Environmental axis: educational activities aimed at the protection and/or conservation of natural resources existing in the community.</p> <p>- Economic axis: small actions that can lead the community to adjust economically, such as the rational use of water, energy, and the environment.</p>
	Rural credit	Low availability of training, technical advice and technology	
	Growth of ecological consciousness	Inequality in income production	
	Offering vocational training courses in the production and marketing of plant products	Rising prices of products used in agriculture	
	Promotion of the dissemination of products generated in the community	Difficulty in accessing financing	
	Public policies aimed at supporting income generation	Instability of the country's economy	
		Climate change	
	Pests affecting the vegetation		

Source: Adapted from Batista et al. (2020).

4.1. Analysis of the internal environment

It is important to examine the internal environment because this analysis allows us to detect the existing strengths and weaknesses and, from this, to enhance the strengths and even develop strategies to reduce or eliminate the weaknesses.

4.1.1. Strengths

For J. G. R. Matos, R. M. B. Matos, and Almeida (2007), the strengths are pillars and attributions provided by the environment to explore opportunities and minimize threats. From the perspective of land productivity, Ali, Agiekum, and Adadi (2021) qualify strengths, such as adequacy of environmental conditions, precipitation, temperature and soil conditions, as fundamental for the agricultural development of a country. Batista et al. (2021b) argument that the knowledge about plants and their use represent concrete elements for the social reorganization of José Gomes and for the engagement of this community with changes. This is because the local residents know and use these vegetables to produce various products, such as cakes, sweets, jams, teas, licks, flour, and others. Furthermore, Romay, Viana, Hamacher, M. L. Souza, and Carmo (2017) emphasize that the appreciation of the knowledge of local producers, native to the region, is indispensable for sustainable rural planning.

The empirical results of the field survey allowed us to understand the strengths as a means of taking advantage of the mechanisms that nature offers, such as food and medicinal plants, by encouraging their consumption and the production of products, as well as encouraging the possibility of creating markets for the local farmers.

Hingley, Boone, and Haley (2010) point out that renewing the interest of consumers in what they eat has a multiplier effect that benefits both local producers and regional food retailers. Moreover, the consumption of local foods brings environmental, economic and social benefits.

Regarding the experience of farmers and agricultural productivity, the literature shows a positive linear relationship and emphasize that the complementary contribution of scientific knowledge and the farmers' knowledge can lead to SD (Ali et al., 2018; Amfo & Ali, 2021). Also, the knowledge acquired by the community about agricultural practices is a key factor to take advantage of the opportunities that arise.

Therefore, the results are in line with Rezende's (2008) analyses in the sense that strong environmental aspects are the controllable variables that provide favorable conditions for the local reality, based on characteristics or qualities that can positively influence the environmental performance and, therefore, should be widely explored.

4.1.2. Weaknesses

Weaknesses are unfavorable internal conditions that affect the community, which should be worked on and improved, aiming at eliminating them. For Batista et al. (2021b), encouraging education, through the reactivation of a school unit in the community, is something that could improve the human capital and increase the level of education in the community. It was also observed during field collections that most men in the community prefer to go to the fields because by doing so they complement the

family income, but this contributes to lower the schooling index. In fact, the highest level of education is incomplete elementary education in the case of 71.96% of the residents in José Gomes.

In line with the above, Alves and Nishida (2003) state that dropping out school to enter the world of work is common among residents of rural communities, as a result of the social and economic context in which they are inserted. The authors also found the low income of the community to be another factor that contributes to the poverty in the community. According to Batista et al. (2020), a significant portion of community members (48.79%) lived with less than one minimum wage and the highest incomes were found among public servants, followed by traders and retirees.

Batista et al. (2021b) also reinforced that the MHDI has a role among these factors, favoring the impoverishment of the community. Finally, Salvato, Ferreira, and Duarte (2010) reported that the unequal income distribution is related to the concentration of individuals with low schooling (low human capital) and low physical capital and their lower income, as it is commonly observed in the North and Northeast regions of Brazil.

The abovementioned weaknesses could be mitigated through the implementation of public policies aimed at supporting the generation of income and promoting the dissemination of products generated within the community. This is preferable because, in the current Brazilian conjecture, self-employment and informality are predominantly incentivized by the government, since the precariousness of formal employment is intensified and the Brazilian economy is hampered by increasing uncertainties and instability, particularly aggravated during the COVID-19 pandemic.

Bastos (2021) argued that entrepreneurship among rural producers combined with public policies ensured that the sector fulfilled its function of supplying the domestic market and generating employment and income, and that rural credit continues to be an important instrument to support rural producers, but its volume is not sufficient to meet the demand of the sector.

Thus, weaknesses are absences that inhibit the performance capacity of a given environment and must be overcome to avoid failure (J. G. R. Matos et al., 2007).

4.2. Analysis of the external environment

The analysis of the external environment encompasses macro-environmental forces (demographic, economic, technological, political, legal, social, cultural) and micro-environmental factors (consumers, competitors, distribution channels, suppliers), in addition to identifying two things: opportunities and threats (Cobra, 2003).

4.2.1. Opportunities

For Callaes, Bôas, and Gonzales (2006), opportunities are current or potential external situations, trends or phenomena that can contribute to the consolidation of strategic objectives. The participation of the community in the PP of the Federal Government, such as PRONAF, the Food Acquisition Program (PAA) and the Minimum Price Guarantee Policy for Sociobiodiversity Products (PGPM-Bio), may favor the endogenous development of the community. Echeverri (2010) added that, since its creation in 1996, PRONAF has been structuring public actions for rural development in Brazil (and gained more robustness by becoming decentralized, when it became the competence of state and municipal authorities).

PRONAF aims at the most important needs of family farmers, taking into account, in a comprehensive way, the aspects that strengthen family farmers (financing, training and technology) and their productive environment (infrastructure). SEBRAE reinforce this resource by offering free courses and workshops that provide knowledge about planning, management, development, entrepreneurship, and technology for rural farmers, in order to promote community empowerment.

Finally, it is understood that the opportunities reflect everything that can positively favor the internal environment, bringing improvements regarding the fragilities present in the community and, thus, promoting the viabilities necessary for the implementation of the SE.

4.2.2. Threats

Threats directly impact the environment, as they constitute current or potential external situations or phenomena capable of impairing the execution of strategic objectives (Callaes, Villas-Bôas, & Gonzales, 2006). They are clearly detrimental to the maximization of LD. It was observed, through the field survey, that it is necessary to develop PP aimed at confronting this factor, as an imperative approximation of the public sphere with the locality. This may take place through specialized people who provide techniques to face these threats as well as information about these points that impair the progress of the implementation of SE, because most residents are lack specific knowledge, especially about the country's economy, how to acquire financing, the problems caused by climate, and biological control, among others.

It is pertinent to clarify that, although there may be PP aimed at this layer of society, there are barriers for their actual implementation, which are mainly caused by the lack of information for these people to access such policies. This is especially true when it comes to small farmers with sustainable entrepreneurial innovations that have a differentiated recognition in relation to common entrepreneurs.

To prove this statement, Mair and Martí (2006) and Didomenico, Haugh, and Tracey (2010) point out, in their studies, that the protection of the natural environment refers to a non-exclusive public good, which minimizes the low potential for capturing value, since the beneficiaries fear they will not have the necessary resources to pay for the loan. However, there are exceptions, and these forces are often drivers for minimizing threats in rural communities predisposed to LD and SE.

Based on the problems identified by the SWOT tool, it was possible to propose the elaboration of suggestions for the promotion of PP that empower the community to overcome the problems that prevent its development. Thus, it was possible to formulate an agenda – which according to Cobb and Elder (1971, p. 905) “is a set of political discussions, understood as legitimate issues that call the attention of the political system” –, one that is accessible to the municipal government as a way to include the problems solved during the discussion and, then, elaborate specific laws, within the municipality's budget, with alternatives formulated to solve such problems. Then, decisions on how to face the problems will be taken with the intention of formalizing policies for confrontation.

Thus, as a suggestion, plans for LD and SE that prioritize the problems and needs of possible solutions as achievable goals for the locality need to be created. Other suggestion is to manage strategies of sectors such as economic development, environment, community infrastructure, basic services, housing, community empowerment through agricultural training courses, and the use of

environmental resources as a participatory source in the process of LD, with a view to implementing SE. It is also suggested that the articulation in productive management be enhanced, so as to help local farmers to pay the debts and facilitate the credit, through municipal intermediation, and laws that expand the elimination of bureaucracy to finance public actions of the Federal Government be created, especially regarding the access to PRONAF resources in public banks.

It is also important to devise alternatives to slow down the rural exodus and consequent migration of the community to large urban centers in search for better living conditions, as by doing so people abandon their families, and this also minimizes the possibilities of LD. Other important goals are the reactivation of school education units in the community as a way to provide better educational and social conditions for the population and the creation of a community association for the residents to be better represented and more organized and, thus, have greater chances of obtaining resources that bring improvements to the community.

5. FINAL CONSIDERATIONS

It was possible to observe that the use of the SWOT matrix is pertinent to an efficient strategic planning, making it possible to obtain promising results, especially in environments where there is a need to find ways to improve the quality of life, the economic organization, and the conservation of the environment.

The results presented here revealed that PP that can diffuse SE and ensure LD in the José Gomes community are practically nonexistent. Although some important environmental, social and economic factors are present in the community, they are insufficient. The community is, thus, at the mercy of social and economic demands that satisfy their social well-being.

Therefore, in this research, we proposed suggestions/actions of PP to be presented to the government so that they can be studied and implemented in the studied community. They will leverage SE, providing LD and environmental, social and economic empowerment to the José Gomes community in Cabeceiras do Piauí, Northeast Brazil.

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