

Warehouse "Ovos da Caatinga" Production and Marketing of Eggs from Rural Hen for Sustainable Community Development in the Municipality of Juazeiro - Bahia

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Abstract— *The people of the Community of Canoa, in Juazeiro - Bahia, live with natural restrictions typical of the region of the Brazilian semiarid, with scarce and irregular rains, therefore, they seek in the potentialities of the region the resources for the maintenance of life in the locality. The breeding of small animals, such as chicken, has always been an economic activity practiced by rural families in the interior of the Semiarid northeast. In search of sustainability in the Caatinga, public institutions at the federal and state level invested in the construction of a small chicken egg warehouse in the community, to receive local production and market the product in the municipality of Juazeiro.*

Keywords— *Entrepreneurship, Development, Sustainable, Warehousing, Eggs.*

I. INTRODUCTION

This work brings a brief discussion about the processes arising in the area under study, which tends to expand with the search for the development of its products and services. In this perspective, it analyzes at the same time the conditions of these events that are still in the evolution phase, the implementation of new information and technical assistance, the feasibility of sustainability in the caatinga ecosystem enabling, social and commercial relations.

Therefore, in the Brazilian semiarid, specifically, in the Community of Canoa, municipality of Juazeiro - Bahia, the raising of chickens and the sale of eggs stands out for its importance in the generation of income, given that, this cultural organization of the community, whether it has a production capacity, management, above all, benefits for

the survival of these families living in atypical conditions because of the typical soil and climate conditions of the Brazilian Northeast.

To this end, the development of this production is usually related to the financial conditions, the profile of producers and the climatic factors, however, it is necessary to emphasize that these activities have instigated major changes in the social sphere, especially in the rural area. In this way, the transformations that have been happening in this environment significantly influence the work relations, the production and commercialization strategies of family farmers groups and the use of these resources [1].

This work aimed to understand the impacts of the egg warehouse for sustainable development in the researched community, justifying the relevance of this theme by the need to build a broader view of the local economic

potentialities of the Northeastern semiarid, considering understanding the dimensionality promoted by the impacts of sustainable entrepreneurial activities, always visualizing entrepreneurship as a tool for achieving and maintaining sustainable development.

Therefore, through these assumptions, this work highlights the skill of these farmers [2], comes from the sum of daily social practices of a democratic nature, resulting from the cooperation of knowledge shared between persons and groups of that community. Finally, analyzing the socioeconomic development of the community through its activities was fundamental to show the forms of persistence attributed to a sustainable productive model, collaborating for the local cultural and economic strengthening.

II. THEORETICAL REFERENCE

2.1 Entrepreneurship in Family Agriculture

To speak of entrepreneurship and its importance in family farming, it is necessary to emphasize initially that, entrepreneurship is considered a phenomenon capable of promoting economic development in a country. In Brazil, entrepreneurship began to gain ground in the middle of 1990, this term expanded mainly by the high mortality rate of small enterprises and the great economic instability arising from globalization, The large organizations needed to seek actions to acquire competitiveness, cost reduction, and to stay alive in the market [3].

To this end, the growth and diversification of entrepreneurial activities are largely due to economic crises, but it is also worth noting that opportunities do not stop arising and reinventing. Consequently, entrepreneurship is based on the idea of creation and the income generation initiative, configuring itself as a vehicle that contributes to economic growth [4], mainly, providing social and cultural benefits [5].

[6], an effective entrepreneurship policy has the power to transform any economic structure as well as people's behavior and performance of their work. However, it is essential to have a cohesive involvement between entrepreneurs and government, beforehand, understand the specificities of each region, so as to encourage and intervene in the process of rural production [4].

In this context, family farming has expressed an important role in economic development, since for more than three decades it has become increasingly stronger in Brazil, in the same way as entrepreneurship [7] [3]. The potential of family farming has been particularly

recognized by the fact that small farmers have access to a wide range of government spaces [8].

Thus, family farming has a great prominence in the rural environment, because the degree of its magnitude changes according to the regions and the natural ecosystems there. However, it has been conditioned and marked by other functions, becoming more and more common among society, gaining its place between man and nature [7]. In fact, family farming has been structured as a category of efficient public policy, which is constantly evolving from the perspective that it helps and spreads rural development, and is then seen as a social model, economic and productive for society [9].

In this way, the relationship between entrepreneurship and family farming provides not only the pooling of knowledge, but the strength of values and attitudes aimed at fostering the well-being of society as a whole, and a good entrepreneur should seek above all, the capacity to innovate and live with the insecurities of its environment [10].

Faced with this, entrepreneurship like any other area becomes significant to family farming, and the advancement of an activity is only possible when the entrepreneur plans his strategies and uses them to perform his craft. However, in the same way, the farmer must organize his ideas to develop his properties, so that they can enjoy all the available resources [11].

Starting, therefore, from these premises, and linked to the conceptions of the aforementioned authors, the development between both happens only when several variables come together in favor of the same objective. At this point, family farming has extreme relevance and just like any other organization has difficulties facing economic events. However, the family farmer has to take care of his production as a company, always using new techniques and innovations to obtain competitive advantage, as well as public policy assistance [12].

2.2 Characteristics of the Semiarid Region and the Rural Poultry

The rural environment and agriculture in the Brazilian semiarid, have been undergoing an intense process of transformation in recent decades. Faced with the changes, we highlight the rural exodus, that is, the migration of the rural population to urban areas, and the productive changes of agriculture, consequently, caused changes in the relations of farmers with the rural and urban environment, mainly, in the activities practiced and in the income. These changes bring with them debates in the economic, political, and academic milieu, among which the debate about the various activities that the family farmer, residing

in the rural milieu, stands out, combines agricultural activities with non-agricultural activities in a way that complements family income and social reproduction.

The rural semiarid did not escape from the transformations. Over the years there have been changes in the agricultural base, both in public policies, in migration, in the understanding that the population and the rulers have on the climatic characteristics of the region, and in the advance of desertification, water scarcity, among other aspects that we can highlight, these changes that, in course, require a multidimensional analysis to understand the diversity of relationships involving the man of the field.

Climatic conditions oscillate in time and space, being influenced by factors, whose rainfall trends and indices, provoke the development of studies (local and regional), and the impacts tend to be higher when subjected to climatic conditions of semiaridity. Various human activities are sensitive to these meteorological and climatic irregularities in the world. Drought causes rainfall irregularities and damages to economic activities and the quality of life of populations, which consequently causes a decrease, or even a complete loss of production.

The economy of the semi-arid region is particularly vulnerable to this phenomenon of droughts. A change in the distribution of rains or a reduction in the volume of rains that makes subsistence agriculture impossible is enough to disorganize all economic activity. Drought causes, above all, a subsistence agriculture crisis. Hence its characteristics of social calamity [13].

We can observe that, although the citation [13], is not so recent, is notorious his reflections in the current context, because each period of irregularity of the rains, occur several losses in agriculture or livestock, that reduces or keeps its production and/or its herd stagnant, and the rainfall is what determines the expansion of agricultural areas, pasture and water supply. Generally, agriculture suffers greater impacts, with deep reflections on social life, because the man of the field sees compromised his food production (corn and beans mainly). Adapting to this rigidity of the climate through the rational use of the soils of the water supplies, incorporating new technologies and innovative processes is the great challenge of today.

When we refer to caipira poultry farming [14], mentions that most productive systems come from family farming, distinguishing by the pursuit of sustainable economic and environmental developments. They also explain that chickens have characteristics that are compatible with lower resource environments and

represent an important source of income for small farmers. [15], disagree that in the sphere of agroecology, farmers family members opted for the creation of small animals, because they have favorable conditions for climatic and natural variations of agro-ecosystems. [16], reports that socio-environmental projects seek to structure not only management, but also economic sustainability.

The development of family farming seeks through the strategies of community organizations and associations, where the management model is based on the recognition of partners on their importance and their needs, ensuring the consistent administration of processes. Thus, it is observed that in these projects the ability to learn must represent fundamental competence in each associated organization, as well as the development of a flexibility profile, where each one is willing to change his routine. Thus, the management of boundaries and borders must be firm, preserving internal aspects of each of the associates, however, adjusting the processes of common interest as emphasized [16].

[17], demonstrates that socio-environmental projects point to a management of alliances respecting the respective borders with a structure serving as a guideline for all processes. The structure basically considers the following points: avoiding generalized solutions, seeking the answer and the appropriate procedure for each case; focus attention on really existing issues guaranteed full focus on reality; develop criteria to measure achievements and successes; be compatible with existing systems, aiming at integrated management; be accessible and easy to understand, seeking to be part of the daily life of each farmer.

[18], the creation of hens in free-range management reduces damage to the environment, adapting easily to each ecosystem that is implanted, both in relation to its facilities and equipment, in the form of food, or medicate birds. Of course, because it can be treated in a way that rationally uses renewable natural resources, making it agroecologically correct. It is understood that creation free-range chicken in rural communities represents great potential as a component to structure local development [19], filling a market with products originating from an alternative production system and thereby serving consumers with a more natural diet, in addition to offering families that create an alternative source of income.

III. METHODOLOGY

The present work was developed in the Community of Canoa (image 01), located in the municipality of Juazeiro-BA, 54.8 km from the headquarters and 453.3 km from the

capital of the state, Salvador, with access by highways BR-407 and BR-314, where is located the Warehouse "Ovos da Caatinga".



Image 01: Location of the Canoa Community in Juazeiro - BA

Source: Google Earth (2020)

Residents of the Community of Canoa live with natural restrictions typical of the semi-arid regions of Brazil, with high temperatures and scarce and irregular rainfall. Therefore, they seek in the potentialities of the region the resources for the maintenance of life in the locality.

This study is exploratory and descriptive, with a qualitative approach, based on the phenomenological method, which is used in qualitative research, and concerns itself with the direct description of the experience as it is, where reality is constructed socially and understood in the way it is interpreted, not posing itself as unique, and may exist as many as its interpretations [20].

In this sense, it is an exploratory research because it seeks to provide greater familiarity with the problem under study, aiming to make it more explicit [20]. It is also descriptive, since it aims to clarify particularities of a given group, capturing descriptive aspects [21]. As for nature, it has a qualitative approach, seeking to understand social phenomena with the smallest possible distance from the studied environment, seeking to understand and explain the dynamics of social relations [22].

IV. RESULTS AND DISCUSSIONS

The breeding of small animals such as goat, pig and chicken has always been an economic activity practiced by rural families in the semiarid or northeastern part of Brazil. When well cared for and managed, they provide important results in the feeding and especially in the income of these families, because they are easy to manage, water consumption is relatively low and they breed quickly [23].

Chicken farming is an old practice of the residents of the Canoa Community, only 10 km away from the headquarters of Massaroca District, which had been lost because of the introduction of farm chickens, but which through various public policies, which work with productive and social character in the region, from a project executed and encouraged by the Regional Institute



of Appropriate Small Agriculture (IRPAA), was gradually resumed.

Image 02: Construction of chicken coops in joint ventures in the region

Source: Reproduction/IRPAA (2013)

In the middle of 2009, the Canoa Community received with a certain fear a chicken breeding project, where it guaranteed the implantation of henhouses, feed for a certain period and technical training. In the beginning it was difficult to find who wanted the henhouses. It was difficult to convince breeders and breeders of goat and hen farming, a very common practice in the region, to dedicate part of their time in another activity to commercial poultry and egg farming, something that happened only for the consumption of the family. Even with many uncertainties, the few who accepted the novelty, plus the IRPAA, gradually convinced other people about the activity.

The first challenges were emerging, such as: term of return on investment, difficulties in finding marketing channels, little experience with poultry breeding and variation in the cost of eggs. In face of this, most of the breeders ended up giving up the idea. The few who still believed, even with enormous difficulties, were persisting in the development of the project. As time went by, chicken breeding and egg production became significant and attracted other people in the community to give up.

With the impetus of poultry farming and egg production, public institutions at the federal and state level, in search of sustainability in the Caatinga, aiming to generate a complementary income for several families of farmers in the region, which already had their economy

based on practices in the extraction and rearing of goats and sheep, invested in the construction of a small warehouse of eggs of peasant hen in the community in question, to receive the local production, to carry out the sanitization process, candling, grading, packaging, packaging and marketing of the product.

Named "Ovos da Caatinga", the warehouse (image 3) was inaugurated on February 22, 2019, budgeted with investment in structure, machinery and equipment of about R \$ 409 one thousand, through the Pro-semiarid, project executed by the Regional Development and Action Company (CAR), a public company linked to the Secretariat for Rural Development (SDR), whose resources come from loans contracted by the Government of the State of Bahia to the United Nations (UN) International Fund for Agricultural Development (FIDA). This project was advised by the IRPAA.



Image 03: Egg Warehouse "Caatinga Eggs"

Source: Reproduction/SDR (2019)

The egg warehouse is the first family agriculture enterprise in the Territory Sertão do São Francisco and pioneer in the State of Bahia to receive certification through the Municipal Inspection Service (S.I.M.), issued by the Municipal Agency of Economic Development, Agriculture and Livestock (ADEAP), an agency belonging to the municipality.

Currently, 12 family farmers in their small rural farms, develop the activity of farming caipira chicken for laying, to supply the egg warehouse. Each producer has an average of 40 birds, with a weekly production of 280 eggs. The total amount of producers is 3,360 per week, or 13,440 per month, totaling 1,120 dozen monthly (Entrepasto "Ovos da Caatinga", 2020).

The eggs are sold in commercial establishments of the municipality, such as horticultural plants, markets, bakeries, delicacies, free trade fairs and also, by direct sale to consumers, costing R\$ 8,00 to dozen and observe an important and growing market niche in healthy eating

trends. The expectation soon is for a significant growth of producers to practice the activity, in view of this, increased production, sale of eggs, family income and improvement of the quality of life of producers and the community.

The warehouse "Ovos da Caatinga" is a reference in the region, in constant development and has been contributing significantly to the generation of employment and income, with correct and sustainable environmental practices, settlement of this population in the locality where they live, generating pride and social belonging.



Image 04. Dozen Eggs "Caatinga Eggs"

Source: Reproduction/Internet (2019)

V. CONCLUSIONS

This work aims to understand the impacts of the egg store for sustainable development in the Canoe Community, and the relevance of the subject was given by the importance of the need to build a broader vision of the local economic potential of the semi-arid northeast and how this practice interferes with the social, economic and environmental sustainability of such communities.

The study showed that the poultry activity has contributed to the emergence of pluriactivity in the semi-arid region, favoring family groups that saw in non-agricultural activities the possibility of improving the quality of life.

There are taxing situations, where the alternative found by family farmers to maintain the rural way of life is to seek other activities besides agriculture. The semi-arid region presents itself as a diversified territory with multiple faces.

Public policies, when properly and satisfactorily implemented, guarantee the well-being of communities, thus contributing to the empowerment and strengthening of people and a more sustainable development.

The "Ovos da Caatinga" warehouse has been contributing in a significant way to the generation of employment and income, with correct and sustainable environmental practices, fixing this population in the place where they live, generating pride and social belonging.

The local economic potential is extensive, and entrepreneurship as a tool for achieving and maintaining sustainable development, coupled with public policies, contribute greatly to an adequate coexistence in the semi-arid northeast.

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