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THE IMPORTANCE OF INCENTIVES IN DAIRY FARMING FOR SMALL PRODUCERS

A IMPORTÂNCIA DOS INCENTIVOS NA PRODUÇÃO LEITEIRA PARA PEQUENOS PRODUTORES

LA IMPORTANCIA DE LOS INCENTIVOS EN LA PRODUCCIÓN LECHERA PARA LOS PEQUEÑOS PRODUCTORES

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Abstract: Bearing in mind that family farming plays an important role in the country's economy, so it is directly related to social and rural development, moving billions of reais in Brazil, also helping to generate jobs. The objective of this work was to evaluate the development of a dairy farm over 6 years assisted by development agency technicians. This work was directed to the public incentive in the dairy activity of small producers through the Call of Milk in the municipality of Ivinhema, in the Center-West of Mato Grosso do Sul. In this study, the rural development of a couple of farmers between 2014 and 2020, together with the advice of the Agrarian Development and Rural Extension Agency (AGRAER) of the state of Mato Grosso do Sul, which provide administratively, technical and management support in order to improve results and expand the activity of

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producers looking for assistance, and also for financing through the Program for Strengthening Family Agriculture (PRONAF). It was possible to observe the importance of these incentives in family farming since through PRONAF the farmers were able to increase the number of animals on the property and increase production to 650 liters per year and consequently improved income, which is provided by the amount of milk produced.

Keywords: Family farming, milk, rural worker.

Resumo: Tendo em vista que a agricultura familiar exerce um papel importante na economia do país, por isso está diretamente relacionada ao desenvolvimento social e rural, movimentando bilhões de reais no Brasil, auxiliando também na geração de empregos. O objetivo deste trabalho foi avaliar o desenvolvimento de uma fazenda leiteira ao longo de 6 anos assistida por técnicos de agência de fomento. Este trabalho foi direcionado ao incentivo público na atividade leiteira de pequenos produtores por meio do Chamado do Leite no município de Ivinhema, no Centro-Oeste de Mato Grosso do Sul. Neste estudo, foi analisado o desenvolvimento rural de um casal de produtores rurais entre 2014 e 2020, juntamente com a assessoria da Agência de Desenvolvimento Agrário e Extensão Rural (AGRAER) do estado de Mato Grosso do Sul, que fornecem suporte administrativo, técnico e de gestão a fim de melhorar os resultados e ampliar a atividade dos produtores que buscam assistência, e também por financiamento por meio do Programa de Fortalecimento da Agricultura Familiar (PRONAF). Foi possível observar a importância desses incentivos na agricultura familiar, pois por meio do PRONAF os produtores rurais conseguiram aumentar o número de animais na propriedade e elevar a produção para 650 litros por ano e consequentemente melhorar a renda, que é proporcionada pela quantidade de leite produzida.

Palavras-chave: Agricultura familiar, leite, trabalhador rural.

Resumen: Considerando que la agricultura familiar desempeña un papel importante en la economía del país, está directamente relacionada con el desarrollo social y rural, generando miles de millones de reales en Brasil y contribuyendo a la generación de empleo. El objetivo de este trabajo fue evaluar el desarrollo de una explotación lechera durante seis años, con la asistencia de técnicos de agencias de desarrollo. Este trabajo se

centró en el incentivo público a la actividad lechera de pequeños productores a través de la Convocatoria de Leche en el municipio de Ivinhema, en el Centro-Oeste de Mato Grosso do Sul. En este estudio, se analizó el desarrollo rural de dos productores entre 2014 y 2020, con el asesoramiento de la Agencia de Desarrollo Agrario y Extensión Rural (AGRAER) del estado de Mato Grosso do Sul, que brinda apoyo administrativo, técnico y de gestión para mejorar los resultados y expandir la actividad de los productores que buscan asistencia, así como financiamiento a través del Programa de Fortalecimiento de la Agricultura Familiar (PRONAF). Se pudo observar la importancia de estos incentivos para la agricultura familiar, ya que, a través del PRONAF, los agricultores pudieron aumentar el número de animales en sus fincas y la producción a 650 litros anuales, lo que, en consecuencia, mejoró sus ingresos, gracias a la cantidad de leche producida.

Palabras clave: Agricultura familiar, leche, trabajador rural.

INTRODUCTION

Brazilian dairy farming has international prominence, for being in sixth place in the ranking of milk production in 2017, with 24 million tons being produced (USDA, 2018). According to the Center for Advanced Studies in Applied Economics (2020) the Gross Domestic Product (GDP) of agribusiness increased by 2.42% in February 2020, and milk production is found in the activities of the primary segment.

According to Ferreira (2001), family farming plays an important role in the country's economy, being an activity performed with the objective of food production, rural development and the establishment of men in the countryside. Bovine milk is a product resulting from the nutrient fluid of the mammary gland and was a product with a high nutritional value, rich in proteins, vitamins, fats and minerals and with anticarcinogenic properties such as conjugated linoleic acid, sphingomyelin, butyric acid, ß catotene , vitamin A and D, in the composition of milk, it is possible to find lactose at the level of 4.5%; 87.2% water; proteins 3%; fats 3.6% and 0.7% of mineral salts (PASCHOA, 1997; ALMEIDA et al., 1999; SANTOS & FONSECA, 2002; TAMANINI et al., 2007).

There are different production systems that can interfere with the final productive result and that can lead to the questioning of the economic viability of the activity. One of the most interesting points to emphasize in this production is concerning the knowledge

and the application of the zootechnical indexes of the rural property (SANTOS & AZEVEDO, 2009).

For Zoccal et al., (2008), most small farms need to plan some indexes so that they can obtain satisfactory numbers. Thus, according to the authors' understanding above, the first step that can be taken is to calculate the production cost of the activity, and for that, the annotations of zootechnical indexes related to milk production and quality are essential (DE SOUZA et al ., 2019).

The need to economically analyze the dairy activity is important because through it the producer gets to know and use, efficiently and economically, the factors of production (land, labor, and capital) and, from there, locate the points of productive strangulation to correct them and then concentrate managerial and /or technological efforts to achieve success in the activity and achieve the objectives of maximizing profits and minimizing production costs (LOPES & CARVALHO, 2000). Peres et al., (2019) evaluating rural dairy properties in the city of Bambuí / MG concluded that the analyzed producers did not have a specialized herd for milk production and did not receive professional technical assistance, which undermines the zootechnical indexes of the activity and the financial return to the rural producer.

Based on the above, the objective was to evaluate 6 years of follow-up by AGRAER with a milk-producing family unit, through extension activities, incentives, and technical guidance and financing.

MATERIALS AND METHODS

The activities were carried out through the productive monitoring of a couple of farmers who live on their farm together with their four children between 3 and 13 years old, a 32-hectare property, located about 15 km from the center of Ivinhema, in the state from Mato Grosso do Sul. In this scenario, the wife has been the most dedicated to agricultural activities for 5 years, being able to count on the support of her husband between 3 am and 5 am and daily after 6 pm.

The family was included in the call for milk in September 2014, when they sought government incentives through the Call for Milk program, as they were interested in increasing dairy activity on the property, despite having a small area, they had a minimal infrastructure for the production of milk, being at the time they were inserted in the milk call, September 2014, they milked about 50 liters of milk per day. With 02 bushels of corn

for silage and two bushels already ensiled, with a production forecast of about 200 tons of silage to maintain about 50 lactating Jersey cows throughout the year, avoiding the drop in production and productivity of the milk in the off-season, maintenance of nutritional and health status with positive effects on longevity and lactation period.

The municipality of Ivinhema has two dairies installed, to other large and medium-sized agro-industries outside the state interested in buying raw material from the municipality, due to a large number of milk producers and the prospects of increasing production and improving productivity and quality of milk. Farmers manually milked about 50 liters of milk per day and needed technical, administrative and management skills to achieve better results and expand activity.

Initially, the family benefited from the technical visits of the first and second year, carried out by the AGRAER (Agency for Agrarian Development and Rural Extension) team, where the main objective is to promote sustainable rural development. The owners of the site actively participated in all technical meetings and collective events promoted by Chamada do Leite.

RESULTS AND DISCUSSION

In 2016, with technical support and access to credit through PRONAF, farmers were able to invest and fund the implantation and reform of pastures, they acquired 50 dairy matrices, with that, through the Call for Milk, they managed to evolve in terms of productivity and milk quality, although PRONAF is an expensive program in terms of financial terms, according to Guanziroli (2007) it aims to protect the rural segment, allowing family farmers to invest and expand their areas, favoring the generation of their income.

Farmers obtained an average annual production of 650 liters of milk, to which they add value in part of the milk produced on the property for the manufacture of cheeses and derivatives for family consumption and to commercialize most of the product for a large dairy, through its warehouse. located in the region of Glória de Dourados, also in the state of Mato Grosso do Sul, which remunerates them taking into account the quantity and quality of the milk produced about R $ 1.35 in 2016, according to Aproleite (2018) the price indicator of the Cepea-Esalq for the time was R $ 1.69 / liters.

Through courses provided by the Development Agency and partner companies, farmers developed hygienic, prophylactic and sanitary care for the flock, final product

and utensils and were awarded a tribute and prize delivery for the dairy in question in virtue of maintaining for three continuous months as the best producers, about the quality of milk produced in the region, the percentage of fat, somatic cell count (CCS), total bacterial count (CBT) in addition to maintaining the constant production and delivery of the product to Industry.

As a positive result of its participation in the Public Call for Milk, it achieved an increase of about 1,300% in milk production with improved quality, improved pastures, from September / 2014 to December 2016.

Currently, in 2020 producers have 60 matrixes and receive a quantity of milk produced in the amount of R $ 1.50, which is a satisfactory result, since according to Embrapa (2019) on the price of milk, wherein 2018 the prices provided to farmers were below the average, as shown in figure 1, still claim that in 2019 52% of producers obtained production costs between R $ 1.10 / liter and R $ 1.30 / liter; 30% reached between R $ 1.30 / liter and R $ 1.50 liter, and only 12% reached the average of R $ 0.90 / liter and R $ 1.10 / liter, and 1% of these producers had a cost of R $ 0, 90 / liter.



Figure 1. Variation in the price of milk over the months of 2016 to 2019. Source: Embrapa (2019).

The so-called Public Milk Dairy enabled them to improve access to better strategies, obtaining better marketing prices, government incentives to improve production conditions for family farming are important and necessary since according to IBGE (2006) the Family farmers' participation in milk production in Brazil is estimated at 58.15%, which favors the growth of the Brazilian economy and helps in the formation of new jobs.

It is of great importance to carry out socio-productive studies and to verify the use of zootechnical indexes in rural properties, since the gathering of information on production techniques and conditions under which food is produced provides subsidies for the detection of critical points of processing and for to draw up guidelines for the qualification and training of labor to be used in quality production, making properties competitive in the market (BARQUETE et al., 2019).

The determination of the productive characteristics of rural properties concerning the nutrition, genetics, ambiance and health of their cattle through the application of applicable zootechnical indexes may indicate which actions would be most consistent with their productivity (COUTO et al., 2019).

For this reason, rural producers must have full access to technologies and information that make it possible to improve the production process on their property, which are incorporated into the role of technical assistance within the areas of research and academic extension.

Agricultural management is the key to the success of production in the agribusiness sector. However, it is not an easy parameter to apply and requires adequate daily discipline and the application of a standard routine that aims to meet the daily needs within the property, to minimize losses and maximize gains (PERES et al., 2019).

Whether familiar or not, a rural enterprise must be managed in an efficient system as a way of guaranteeing its insertion in the consumer market and, consequently, of its sustainability and competitiveness (BATALHA et al., 2005).

This statement is fully justified because of the existence of a series of factors that can significantly affect the productive and commercial performance of rural properties, such as : the production cycle, which, in addition to being irreversible, is dependent on biological conditions; climatic conditions, which condition most agricultural holdings (SOUZA et al., 1995).

Monção et al. (2019) with the objective of evaluating extension activities to guide and encourage family farmers in the municipality of Espinosa - MG regarding the use of technologies in a strategic way to increase the production of milk and /or meat along the year. year, he detected the importance of continuing lectures and technical guidance to producers in the region to increase animal /vegetable production, the offer of better-quality products and the source of income for those involved in the production system.

In conjunction with the data obtained, extension actions in rural areas are extremely important strategies in the transfer of technologies and knowledge generated

in academic centers to rural producers, as reported in the works of Monção et al., (2019), Oliveira et al., (2012; 2016; 2017) and Gabriel et al., (2015). These authors have carried out extension activities in several communities in the region of Grande Dourados and South of the State of Mato Grosso do Sul since 2007 and reported advances in significant developments in rural communities and, above all, for the municipality of Dourados.

Productive efficiency is and will always be a key point for the success of any enterprise, be it urban or rural. Thus, it is a decisive factor for the competitiveness of dairy farming. For that, it is necessary to have efficient management and to be very cautious for the rural producer when making decisions that will reflect on the profitability of his productive activity in periods of short, medium and long term.

CONCLUSION

It is possible to conclude that government incentives through agencies that work with rural development are necessary, as well as public call programs such as Chamada do Leite, for providing direct and exclusive assistance to individuals, that is, providing direct assistance to the rural producer to improve the family's income and quality of life, which contributes to the viability of the activity and the agricultural property, as well as stimulates the adoption and routine application of good practices. Results like these, are capable of transmitting security and confidence for farmers to continue in the activity since the expansion of the dairy activity in the last years is attracting large purchasing industries from other regions, considering the productivity, production and supply of the product.

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