



52ª Reunião Anual da Sociedade Brasileira de Zootecnia

Zootecnia: Otimizando Recursos e Potencialidades

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Impacto da aplicação de recursos da linha de crédito ABC – Agricultura de baixo carbono em propriedades de pecuária de corte de Santa Catarina¹

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Resumo: O crédito rural tem um papel importante para a pecuária de corte como ferramenta de acesso a recursos financeiros que supre a necessidade de investimento em tecnologias para intensificar os sistemas produtivos. Percebe-se que os poucos investimentos são feitos com recursos próprios, desfazendo-se de animais ou de patrimônio, principalmente pelas dificuldades financeiras enfrentadas pelos pecuaristas entre 1990 a 2008, quando os preços do mercado não acompanharam os custos de produção, tendo como consequências a decapitalização dos produtores rurais e a falta de perspectiva de receita. Diante deste cenário os pecuaristas em Santa Catarina, enfrentam dificuldades de ordem financeira para realizar investimentos em suas propriedades, e tem na linha de crédito do programa ABC uma oportunidade de mudar a matriz dos sistemas produtivos utilizando uma linha de crédito do governo federal com juros subsidiados pelo governo de Santa Catarina. Em 40 meses de execução do programa foram financiados 146 projetos no estado, mais de R\$24 milhões foram investidos em infraestrutura, melhoramento genético, aquisição de matrizes, máquinas, equipamentos, formação e manejo de pastagens. Diagnósticos de acompanhamento dos projetos apontam que 97,3% estão consolidados em conformidade com o projeto inicial, e apresentam significativas mudanças (ex. melhoria nos índices zootécnicos e na renda), nas propriedades que aderiram ao programa de desenvolvimento da pecuária de corte de Santa Catarina.

Palavras-chave: Melhoria sistemas produtivos, investimentos, pecuária familiar

Impact of resources application of the credit line ABC – Agriculture of low carbon in livestock farms from Santa Catarina

Abstract: Rural credit plays an important role for livestock as tool to access financial resources that meets the need for investment in technologies to intensify production systems. It is noticed that few investments are made by farmers, when it happens are from their own resources thought the sell of animals or property. These scenario is mainly by financial difficulties faced by farmers between 1990 and 2008, period where market prices have not kept up production costs, the consequences are decapitalization of farmers and the lack of income perspective. Thus the farmers in Santa Catarina faces financial difficulties to invest in their farms, and has in the ABC program credit line an opportunity to change the production systems matrix, using a federal credit line with subsidized interest rates by the Santa Catarina state government. In 40 months of the program were funded 146 projects, more than R\$ 24 million was invested in infrastructure, animal breeding, purchasing of females, machinery, equipment, establishment and pasture management. Diagnostics of projects monitored shows that 97.3% are consolidated in accordance with the initial proposition, and shows significant changes (i.e. Improvement in animal performance indexes and income), in the farms that have acceded the development program for beef cattle from Santa Catarina.

Keywords: improvement of productive systems, investments, family livestock

Introduction

The official rural credit from the federal government develops public policy in agriculture by financing with different programs, among them, the National Program to Strengthen Family Agriculture (PRONAF), as flagship of development activities for family farmers. However this facility is not effective and accessible to Cattlemen Family members, who have a very low gross income comparing to other livestock activities (e.g. poultry, pig and dairy cattle), mainly because they not meet the program's standards of property size, that need to be no more than four fiscal modules. Thus in the last 30 years there has been a complete exclusion of most Cattlemen Family from public policy and subsidized interest rates for rural development. Traditional farmers whose source of investment and working capital available resources are stock animals for sale, have lower investment capacity to increase productivity. The ABC program (Low Carbon Agriculture) benefits and supports producers to develop technologies that increase production rates, hence income, while promoting the reduction of greenhouse gases emission.



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As characteristics Santa Catarina presents apthous fever free status without vaccination, it prevents the entry of live animals for breeding and termination from States without the same health status; imports 40% of the meat consumed in the domestic market; presents a growing flow of tourists during the holidays to the coast. These sum of factors increase the demand for quality meat in the state. Than, the goal of the State Government of Santa Catarina by subsidizing the interest on the ABC program credit line, was to develop and increase the meat supply in the state, with increase investments on technologies in the production systems.

The objective of this work is to perform a diagnosis of the implementation of rural credit resources in beef cattle farms in the state of Santa Catarina who joined this program.

Material e Methods

Farmers refer to the financial agent of investment a technical project prepared by skilled technicians from private agricultural planning offices or public companies classified in the premises of the ABC program (GUIDE CNA 2012). The items financed by ABC Development Program of the Santa Catarina Beef Cattle are listed in a framework of interest subsidy zero, which are: investment on establishment and improvement of pastures; fences infrastructure to paddocks subdivisions; construction of salt lick troughs and drinkers; bunker silos; acquisition of PO bulls; semen; embryos for genetic improvement; remuneration for project design; technical assistance; services on precision agriculture; georeferencing; and costs of environmental compliance. Items subsidized by the program are directly linked to the production process and promote direct impact on key performance parameters in production systems dedicated to beef cattle.

After the frame made from these standards, the project is forwarded to annual surveys conducted by a technician from Epagri to monitor the implementation of the planned items. When the project submitted is in accordance to what has been proposed, the resources referring to the interest are released by the State Government of Santa Catarina, to the limit of R\$80,000.00 per beneficiary.

The diagnosis of grant and investments of resources was accompanied in all the state of Santa Catarina, using the primary data of technical projects. To evaluate the resources applied, field research was conducted through annual surveys and the application of a questionnaire to the beneficiaries, "Development Program of Santa Catarina beef cattle" – Report of the project execution compliance - RECEP, which addresses 10 questions pertaining to applied financial resources, herd evolution, implemented and managed pastures, infrastructure (fences, watery trough, etc.), breeding, environmental compliance and zootechnical performances indexes. Exploratory and descriptive data analysis was performed, involving three years of the program.

Results and Discussion

In 40 months of operation, 146 farmers accessed the ABC program Livestock interest Zero from Santa Catarina, with a resources volume of R\$ 24,962,110.49, which R\$ 17,905,338.96 classified in the Programme Zero interest. The total amount of subsidies to be paid by the government of Santa Catarina directly to beneficiaries during the project term is R\$ 4,765,316.73. Despite the farmers present a traditional profile facing investment in the activity only as buying more land, there was a great accession to the program. Investments in production systems promote the movement of capital within the chain of inputs, machinery and breeding of Santa Catarina, generating more income by increasing the performance parameters of the farms, jobs and generating taxes.

The analysis of the surveyed projects (Table 1) indicates maturity of farmers to the utilization of resource for improving production systems. The most part of resources 55% was applied on establishment and pasture recovery. It was invested 18% in infrastructure, mainly for paddocks subdivision with fixed or electrified fences, salt lick troughs and drinkers. Only these two items of investment on a production system can represent a higher offer of quality forage for the animals during the year, which in turn can increase the pasture carrying capacity, greater gains per animal and per area, and reduction of heifer's reproductive age with direct impact on profitability.

Investment on subdivisions provides opportunities to a suitable pasture management to optimize production and forage use. The correct management of sward structure, using appropriate residual leaf area index of different forage species allows to maintain active green leaves, allowing to maximize the absorption of solar radiation, and consequently greater fixation of atmospheric carbon (Nabinger et al., 2011). Greater plant biomass production (i.e. pasture) coupled with proper management can provide many environmental services, such as raising the stock of soil carbon (Assman et al., 2014; Gutierrez et al., 2006), and the microbial biomass input (Roux et al, 2011; Nabinger, 2011), thus contributing to the mitigation of greenhouse gases and sustainability of systems, purpose of the ABC program.

Acquisition of females accounted for 12% of the invested resources, associated with the acquisition of PO bulls, semen and embryos of 5% that has significant impact on the herd breeding and offer superior genetics animals able to produce quality meat to the market. Machinery and specific equipment accounted for 10% of the resources invested by the program. During the application of the questionnaire for diagnostic, producers reported



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the success of the program, taking into account the payment terms of the resources that are 3-year grace period and five annual installment debt, plus the interest subsidy during the eight years of the project duration. The payments made by kilogram of live weight of cattle shows heating and profitability in this chain of business.

Since the beginning of the program, there was a valorization in the market for the price of meat. As the first installment debt of the loan has a grace period of three years, indexing the value of live weight in reais, only with the appreciation that occurred during the period in the live weight provided gains of 34% on the amount. With the investments made properly, the increase in productivity increases the economic sustainability of the system.

Table 1 – Resources application percentage of 146 credit projects from ABC Zero Interest Program in Santa Catarina.

Issues assessed as planned the technical project	% Resources application and impacts on the system		
	Fully	Partly	Not applied
Invest funds	89,3	8,0	2,7
Herd evolution	97,3		2,7
Implementation and/or recovery of pastures	91,9	5,4	2,7
Fertilization and pasture management	97,3		2,7
Construction and infrastructure maintenance	92	8,0	
Application on genetic resources	97,3		2,7
Execution of environmental compliance	97,3		2,7
Evolution of zootechnical performances indexes	84	16	

Conclusions

Producers who had access to this program are verticalizing production, alongside environmental and economic sustainability of the system. The results demonstrate the consolidation of technologies used in beef cattle production on forage based system, and the return on invested capital, presented by the 100% rate of default in the payment of the financing. Thus the development of beef cattle in Santa Catarina is build on researched and adapted technologies, and a public policy that meets the needs of producers who were in the margin of agribusiness.

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