

Zootecnia: Otimizando Recursos e Potencialidades



# Belo Horizonte - MG, 19 a 23 de Julho de 2015

# Projeto de desenvolvimento da pecuária de corte da serra catarinense: resultados e oportunidades

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**Resumo:** Aumentar a produtividade da pecuária de corte por meio da melhoria dos índices zootécnicos, a mudança de concepção dos pecuaristas com ações de pesquisa e extensão utilizando tecnologias adaptadas para as condições regionais, assistência técnica, e organização dos produtores foram os objetivos do projeto. Implantado em 13 municípios de maior rebanho de bovinos de corte no Planalto Serano Catarinense, o projeto tem por diferencial atuar em uma visão sistêmica, levando-se em consideração os anseios das famílias e a realidade local. As propriedades foram ajustadas por meio de diagnósticos iniciais planejando ações de intervenção de curto, médio e longo prazo. Resultados apontam redução de idade de entoure em um ano (de três para dois anos), aumento de 25% índice de natalidade, comercialização de terneiros mais pesados, abate de novilhos ao sobreano com cruzamentos orientados para o mercado, e acabamento de carcaça maior. A organização dos produtores oportunizou a criação da aliança mercadológica "Campo das Tropas", abatendo bovinos jovens semanalmente, com rendimento de carcaça de 53,5%, e venda de carne diretamente ao consumidor. Isto representa um incremento de 12% em 2013 e 2014, sobre os valores médios de mercado. Resultados obtidos nas propriedades apontam o potencial da pecuária de corte para aumento da rentabilidade e sustentabilidade ambiental ao mesmo patamar de culturas intensivas.

Palavra chave: Natalidade, novilho precoce, aliança de mercado, sustentabilidade.

# Development project of beef cattle in the serra catarinense: results and opportunities

Abstract: Productivity improvement of beef cattle by better zootecnical indexes, change the conception of ranchers using actions of research and rural extension to adopt technology for regional conditions, technical assistance, and ranchers organization, were the goals in this project. Implemented in 13 municipalities that present the highest cattle herd in south plateau of Santa Catarina, the differential in this project is an actuation with systemic vision, taking into account family yearnings and local reality. The farms were adjusted with initial diagnostic and planning intervention actions in short, medium and large term. Results showed reduction of the reproductive age in one year (three to two years), improvement of 25% on natality index, heavier calves for sale, slaughter the yearling steers using crossbreed market-oriented and better carcass characteristics. Ranchers organization provided an opportunity to create a marketing alliance "Campo das Tropas", that slaughter young cattle weekly, with carcass yield of 53,5%, and directly sells the meat to final consumer. This represents increase of 12% in 2013 e 2014 over average prices practiced in the market. These results obtained in the farms show the potential of beef cattle production to improve profitability and environmental sustainability in the same level of intensive crops production.

Keywords: Natality, Young cattle, marketing alliance, sustainability.

#### Introduction

Santa Catarina has a favorable scenario to develop beef cattle industry with a quality differential, because presents a market that import 40% of meat consumed internally, presents a sanitary status of aphthous fever free without vaccination which prevents entry of live animals, and has a crescent tourist flux during summer to the lest coast with a high purchasing power.



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Beef production in Serra Catarinense was associated since the territory occupation, about 285 years ago with the troops way. In general an extensive beef cattle production is practiced in 87% of the rural establishments in the south plateau of Santa Catarina. However beef production is an natural vocation of the region due to the abundance of natural pastures that covers 916,6 thousand hectares (Araújo et al., 2007). This project looked for develop the vocation of regional beef production with the challenge to improve the production of quality steers and increase meat offer, leading knowledge and technologies to the ranchers. Also to change the concept of extensive beef cattle production for a higher productive activity, technified and developed, that increase quality meat offer in the State, and enable to build a market alliance for production chain organization.

#### **Material and Methods**

The project was executed in two components and different focus on production chain. Redes de Propriedades de Referência Tecnológica component looked for act with ranchers of low technologic level in order to apply technologies to improve production of quality calves. Integrated crop-livestock systems "Campo das Tropas" component aimed to involve consolidated beef production farmers with high technical indexes and technology access, to deploy a production good practices program and provide a differential meat quality to the market by commercial agreements that facilitate sales. The project was coordinated by the Empresa de Pesquisa Agropecuária e Extensão Rural de Santa Catarina (EPAGRI), Associação Rural de Lages, and the Fundo de Amparo a Pesquisa e Inovação de Santa Catarina (FAPESC). Farms diagnosis was a initial step of the work, in January 2012 it was done in 20 members farms of the project in the municipalities of south plateau from Santa Catarina: Palmeira, São José do Cerrito, Urupema, Urubici, Anita Garibaldi, Otacílio Costa, Bom Retiro, Bom Jardim da Serra, São Joaquim, Painel, Lages, Capão Alto e Correia Pinto. Improvement techniques with short, medium and large term in production systems were applied, tanking in to account family objective and local reality. Process technology and input technology was utilized in different proportions in the farms, with some interventions financed by the project. From the improvement deployed in the productive systems and the evolution of technical indexes, the farms start to be diffusion units in the community implanted through rural extension actions.

## **Results and Discussion**

Farms initial diagnosis data appointed that the traditional beef production presents poor technical indexes. Farms average area was 327,68 hectares, animal stocking rate of 0,43 AU/ha, with native grasslands representing feed basis of herds, cultivated pasture take up less than 4% of useful forage area (Pinto et al., 2014). Average age of first male service was 36 months, natality index 50%, weaning live weight 170kg/LW/head, calving intervals of 485 days. These factors arrangements provide a low profitability to the ranchers when compared to others agribusiness systems, and has taken over the last years the substitution of native grasslands for more profitable agriculture (i.e. soybean).

After 40 months of intervention actions in the farms dedicated to steers production in the Redes de Propriedades de Referência Tecnológica, it was obtained an increase of 33% in natality index, passing to an average weaning index from 50% to 75%. The application of technology processes in the productive systems as stocking rate adjustment in native grassland, paddock subdivision and livestock management, definition of reproductive station, created opportunities for a better forage quality and availability in the moment of higher animal nutritional requirement. Also, these systems improvements resulted in a better nutritional condition for cows and a higher milk production, as consequence, calves weaning 20% heavier than those observed in the initial diagnosis.

Consolidated technologies such as those presented above, represents the first step intervention on the productive systems before greater investments. Although simple, these technologies very often did not arrive until the farms and are not dominated by farmers due to the lack of diffusion actions in the past.

The utilization of inputs in the system, with higher financial investments like liming, fertilization, seeding cultivated pastures, improvement of native grasslands, can intensify the productive systems, offering forage in quantity and quality to livestock during the year. Calves rearing in improved natural grassland or cultivated pasture allowed reproductive age reduction in heifers, from tree for two years. The maintenance of these animals in improved native grasslands optimized pregnancy in the order of 87%. These results are near to the productive goal of 1 calve/cow/year, doubling the farmer's profitability.

In farms with intensive production systems of complete beef cattle cycle, and a greater proportion of the total area cultivated with introduced forage species, it was obtained weaning calves with 230kg LW, natality index of 92%, and a productivity of 468kg LW/ha in the pastures areas designated to fattening.



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The component integrated crop-livestock systems "Campos das Tropas" consolidated the beef production with the organization chain. The alliance opted by British crossbred cattle, because it offer good quality meat in terms of flavor, tenderness, marbling and precocity, and is well accepted by consumers. Slaughters are outsourced by renting the local slaughter unit. Therefore, farmers are "meat sellers" sending the meat directly to the market. Slaughtering and deliveries of five carcasses per week started in March 2013, with 220 carcasses destined to local supermarket in the city of Lages, SC. In January 2014 "Campo das Tropas" alliance started to deliver 10 carcasses per week with an expectation of more than 500 carcasses per year. The slaughtered animals are aged between 15 and 23 months. Steers are finished with an average weight of 470kg and carcass yield of 53.5%. The "Campos das Tropas" alliance has given an opportunity to adding 12% higher value than the average price in common market and the payment for heifers is same price by the males price. This is the result of organization and investment in product quality.

The rational use of natural pastures through the management and improvement helps to preserve biodiversity. Also, promote the soil and water conservation, mitigate the emission of greenhouse gases, and improve carbon sequestration (Nabinger et al, 2011). Production allied with environment conservation is the project premise that led us to receive in 2012 the Ecology Expression Award in the agricultural category, promoted annually by Editora Expressão and Industry Federation of Santa Catarina State (FIESC).

Ranchers has been sensitized with changes in the beef cattle scenarios, and responded with the involvement in diffusion actions promoted by the project. Through rural extension methodology used in the different components (Redes de Propriedades de Referência Tecnológica and Campo das Tropas) enabled to attend over 3,560 people, involving ranchers, technicians, students and leaders in the field days, talks, seminars, technical visits, excursions, promoted by the project in 40 months of actions execution.

#### Conclusions

The results observed in the farms during the project are encouraging in order to demonstrate that is possible to attend the local consumer market. Thus, the potential to transform the productive systems dedicated to beef cattle is based in the tripod: active market, motivated ranchers and qualified technicians.

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