

“Mirandês” Cattle Breed: Systems and Practices of the Farmers

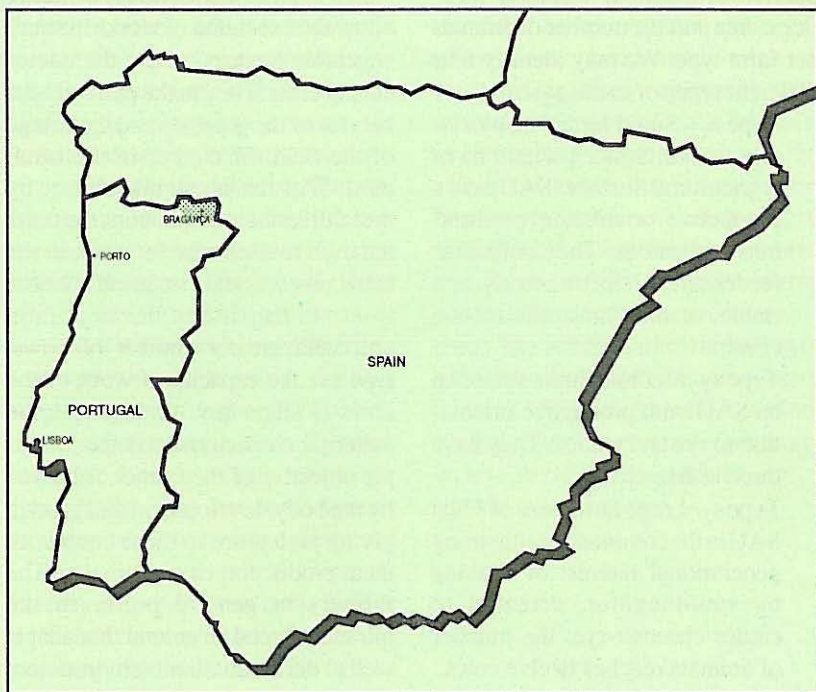
Northeast of Portugal

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INTRODUCTION

Over the centuries, the mirandesa breed has been very useful as traction animal and meat production. The latter, and in relation to other national breeds, their productive capacity occupies the first position and is famous for the quality of

“posta mirandesa”, a very special and appreciated dish by the rich gastronomy in the Northeast of Portugal. In spite of erosion suffered in the last decades, the “mirandês” cattle breed still has an important economic and social value.



MATERIALS AND METHODS

- Comprehensive inquiry to the family-farm systems in one specific community;
- Case study of the global operation in the family-farm system;
- Inquiry into the farmers' practices regarding the husbandry management of Mirandês cattle.

RESULTS

The rural community studied in the Northeast of Portugal is organised in systems families-farms that present interrelations and a diversity of characteristics in what is referred to as the farmer's age, family farm dimension, external resources, productive orientation, common practices, area and the number of animals per farm type. We may identify four different types of cattle systems.

Type s_1 - Small farm size by elderly retired farmers, with 9 ha of Agricultural Surface (SAU) and a productive orientation to chestnuts and cattles: They only raise feeder animals permanently in a stable, or they have one or two cows.

Type s_2 - Medium farms size of 16 ha SAU with productive orientation to rye and cattles: They have three to five cows.

Type s_3 - Large farms size of 33 ha SAU in the community with strong generational interest of farming by son/daughter, oriented to cattles-chestnut-rye: the number of animals reaches twelve cows.

Type s_4 - Farmers with sheeps, large family, with 29 ha SAU, with in most cases an orientation to sheep-cattles-rye or chestnut production: they have three to five cows.

The principal objectives of utilization in the mirandês breed are: their work capacity, growth of calf and meat production. The importance given by these farmers to each of these objectives varies according to the economic capacity of the farm and the situation of the family.

So, to the farms type s_1 and many of the type s_2 and s_4 , the most important objective is the animal capacity to work followed by raising feeder calves. The cows for working allow the execution of works in small vegetable gardens, where the tractor cannot enter. They make perfectly the harvest of the potatoes and the tillage of the field for the rye in the small plots. With the labour interchange by the familiars and neighbours, the cows are used to exchange for work in the lands, pastures and mecanical traction.

In the case of the large farm unit with greater number of cows, type s_3 , the capacity of work of the cows is secondary. In this type, the maternal characteristic is the principle objective of the farmer, followed by the body development and growth giving preference to those cows with meat production characteristics. The farmers in general prefer in the mirandês breed an animal that adapts well to the mountainous environment

with the aptitude to walk distances, resistance to diseases, rusticity, easy to care and maintain inexpensively and high utility for many functions. The selection of breeders falls to the maternal aptitude of cows and on the calfs: fertility, easy birthing and maintainance, and rapid growth rate and gain are the predominant selection characteristics.

It is highly significant the concentration of eldrly animals in the smaller economic size farms that don't raise their own replacement heifers because it is impossible for them to maintain the non-productive female for three years. The alternative for these producers is to buy an older cow for a low price from the larger type s_4 farms. As their need is a traction animal, they purchase animals capable to produce work immediatly with advantage to appreciate better the standard of aptitude for the traction.

The farmers better orientated for the meat production have been in the last few years choosing to cross breed. The equal price by weight for all the breeds, the larger weaning weight of the hybrids in comparison to the pure mirandês calves, the high demand for the feeder calf by stockmen and butchers constitutes a strong incentive for the generalization of the cross breed. The surveyed farmers explained that the average difference in prices between calf of mirandês breed and a crossed calf is the \$133 to \$167. It is common that the marchants purchase the best mirandês heifers

and refuse the worst. These last ones, for the necessity of substitution, they end up being raising for replacement of the cattle, thus maintaining a negative selection.

CONCLUSION

The mirandês cattles breed integrate a policulture-cattle production system, whose management is based on grazing and the valorization of a mixed forage production on the farm. The multiple practices and objectives of the farmers and their decision-making process are strongly connected to economic capacity of the farm and the vital cycle of the farm and the family.

To prevent extinction, the mirandês breed requires cattle improvement programs with a multidisciplinary approach and adapted to reality of cattle breeding in marginal regions where the stablished articulation is very important among farmer, animal, herd, cattle products, local forage care and ressources, and the interrelationship of the different cattle production systems. The actual market limitation of global products and the increasing of demand for products with high biological value, create a new oportunity to save the mirandês cattle breed.

BIBLIOGRAPHY

- CAPILLON, Alain; e MANICHON, Hubert - Guide d'analyse du fonctionnement d'une exploitation agricole à l'usage des agronomes, Institut National Agronomique Paris-Grignon, Paris.
- FLAMANT, J. C.; CABANES - AUDIOT, Annick; VALLERAND, F. -1991- "Les populations humaines gestionnaires des populations animales", in Brossier, J.; Valceschini, E. (ed.), *Les exploitations agricoles et leur environnement. Essai sur l'espace technique et économique*, Paris, INRA, pp. 143-160.
- FRAGATA, António -1992- Políticas Agrícolas, Diversidade e Estratégias dos Agricultores. Casos no Entre-Douro e Minho e Vale do Sousa, Tese de Concurso, DEESA/INIA, Lisboa.
- SEBILLOTTE, M. (1979) "Analyse du Fonctionnement des Exploitation Agricoles, Trajectoire D'évolution, Typologie", *Eléments pour une problématique de Recherche sur le Systemes Agraires et le Développement*, Toulouse SAD-INRA, pp. 39 - 40
- SOUSA, Fernando -1992- Sistemas Agrários e Melhoramento dos Bovinos de Raça Mirandesa, O Caso de Paçó, Tese de Mestrado, UTAD, Vila Real.
- VISSAC, B. -1991- " Pratiques collectives et organisation de l'élevage", in Brossier, J.; Valceschini, E. (ed.), *Les exploitations agricoles et leur environnement. Essai sur l'espace technique et économique*, Paris, INRA, INIA, pp. 83-100.

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