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CANARY ISLAND RABBIT BREEDING SECTOR, AN OVERVIEW

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ABSTRACT

This paper looks at the development and current situation of the rabbit breeding industry in the Canary Islands. The industry is at a mid level of technological development and is characterised by a direct local marketing of the product, on the one hand, and by distance from the Spanish mainland, on the other. The authors analyse how some REA (Special Supply Regimen for Islands) financial supports of the production and the increasing imports are changing the traditional structure of the industry, as well as considering the alternatives for maintaining competitivity in a growing market. At the present time rabbit meat represents 14% of meat production of the Canary Islands. The total number of breeding does is 57 000 for 8 000 bucks. Average does productivity is 25.8 slaughter rabbits per year at a live weight of 2.0 - 2.2 kg (68-72 days). Most of the breeders produced and slaughtered their own rabbits in relatively small units and sell the meat themselves. Despite the increasing of local rabbitries dimension (8 units with 400 to 1000 breeding does), Canary Islands are only 70% self sufficient for a quantity of 1.8 kg per capita consumed mainly outside of the family house (in restaurants or during the feast periods).

INTRODUCTION

According to the Ministry of Agriculture, Livestock, Fisheries and Food's Statistics Coordination Service, the Canary Island Rabbit breeding industry earned 1 331.7 millions pesetas in 1998 (about 8 millions Euros), which accounts for 5.25% of total livestock production and 14% of meat production. This income was the result of slaughtering 1 471 720 rabbits (2 959 tons of live weight). These figures show that the economic importance of the industry is due to a high product price (489 ptas./kilo average, *i.e.* about 2.94 Euros).

Meat imports in 1998 amounted to 800 tons according to overseas trade data. Most of this was refrigerated meat from mainland Spain. According to these figures, Canary Islands are 70% self-sufficient and annual per capita consumption is 1.8 kg.

The same source also tells us that the total number of rabbits was 57 050 breeding does, 8 007 bucks and 13 580 replacement females (table 1). About 75% of the rabbit population are located in small family farms and in medium-sized intensive rabbit farms.

From the data on the number of doe rabbits and meat production we can see that the average number of kits per doe & per year is 25.79, suggesting that it is a small and technically under-developed industry.

Table 1. Distribution by type of animal in Canary Islands

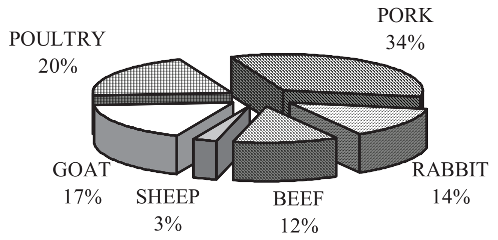
Province	*Total*	*Males*	*Breeding does*	*Replacements*	*Fatteners*
Las Palmas	68 035	1 007	7 050	3 580	56 400
S.C. Tenerife	200 000	7 000	50 000	10 000	133 000

Table 2. Distribution of total numbers of animals by islands

Islands	*Gran Canaria*	*Fuerteventura*	*Lanzarote*	*Tenerife*	*La Palma*	*La Gomera*	*El Hierro*
Nº animals	63 480	525	4 000	139 535	46 512	11 162	2 791

As can be seen from table 1, the province of Santa Cruz de Tenerife is the leader in this sector of the industry with 87.6% of the breeding females. Within the province, Tenerife is the leading producer with 52% of the total (table 2). These two tables show the evident imbalance between the two provinces.

Fig. 1 : Distribution of meat production in the Canary Islands by species (1988)



Despite this fact, the economic importance of rabbit production is significant as a proportion of total meat production (figure 1), partially due to the limited production of beef and partially due to the high price of rabbit.

DETERMINING FACTORS FOR THE DEVELOPMENT OF THE SECTOR

In general, the Canary Island rabbit producing sector is characterised by its small size, which, in part, is due to the fact that most rabbit meat is consumed in popular "*fiestas*" and in restaurants during the week-ends and a very small quantity of rabbit meat is traditionally consumed at home. Despite the low level of rabbit production, it has always been an interesting alternative livestock. The main factors in this are:

- The existence of a stable average consumption of rabbit meat throughout the year in the western islands (province of S/C Tenerife).
- High price of rabbit meat. This has enabled the industry to survive, even with low levels of technological input and productivity on rabbit farms.
- Limited investment and space required. The climate of the Canary Islands makes possible to breed rabbits outdoor, without need for any costly infrastructure.
- It is a business that can be run on a part-time basis, which, along with how the product is distributed, has led to a proliferation of small, non-professional rabbit farms.
- Lack of external competition. The highly fragmented and direct marketing of fresh meat in a traditional market that is very close to the rabbit breeder and the fact that consumers know exactly where the product has come from, have made it a very difficult market for mass imports. Thus the local producer has been indirectly protected. This kind of marketing has also led to the development of selling slaughtered meat rather than live animals, which implicitly limits the size of farms, as rabbit breeders have to organise the slaughter and marketing of the animals as well as the production process.

These aspects, which have been typical features of the industry for many years, have moulded a complementary-type livestock sector made up of intensive, family businesses that, by breeding pedigree breeds and using low levels of technological input, obtain few young rabbits per doe a year, and these are slaughtered in the farm and distributed directly by the rabbit producer in country bars and restaurants.

CHARACTERISTICS OF CURRENT RABBIT PRODUCTION

The current situation in the rabbit producing industry has changed slightly in recent years, although it retains most of its former structure, due, fundamentally, to two specific actions:

- The Programme of Specific Options for the Canary Islands because of the Distance and the Island Factor (POSEICAN from its initials in Spanish).
- And the appearance of integrating companies that channel slaughter and the marketing of the product.

In 1995, Special Supply Regimen (REA) grants were made available for buying breeding rabbits (5 000 pesetas for grandmothers and 4 000 pesetas for mothers), with quotas being established, which have been increased. These funds, which were not completely used in the early years, are now insufficient. The 1999/2000 quota for grandfathers was 2 750 and 6 000 fathers.

This has led to genetic improvements in the industry and an increase in experts and supply companies and there has been a fall in the use of pure breeds, which was the norm for self-replacement, and an increase in the use of hybrid breeding does. All these facts have enabled rabbit breeders to concentrate basically on the production process, which has led to a increase in the number of intensive farms and the expansion of the existing ones, fostering the professionalisation of breeders (indices on table 3). On the other hand, there is greater intervention in the sector and external dependence is increasing.

The technical levels of intensive rabbitries in the Canary Islands in 1999 are reflected in table 3, which show that they are in line with the average figures for Spain in 1998 (RAMON and ORIOL, 1999).

Table 3 : Technical and economic indices for farms of over 100 mothers

• Annual productivity per cage	43 - 52 kits (*)
• Main type of handling	Traditional
• Handling in weekly band	35% of farms with over 100 females
• Cages over occupation (120% & more)	6% of farms with over 100 females
• Artificial insemination	12% of farms with over 100 females
• Most frequent remating interval	7 to 14 days after parturition
• Most frequent weaning age	30 to 35 days after birth
• Feeding costs	Approx. 60%
• Live weight at slaughter	2.0 to 2.2 kg.
• Age at slaughter	68 to 72 days
• Number of kindlings per doe per year	7 - 8
• Total mortality	23-30%
• Fertility	80 - 82%
• Global Feed conversion ratio	3.4 - 4-2
• Does Replacement proportion per year	100-110 %

(*) Average results for Spain 1998

The Canary Island rabbit breeding sector is currently made up of the following types of farms (CASTAÑON *et al.,* 1998) :

- **A**: ***large intensive farms*** of between 400 and 1000 mothers: 5 in Tenerife and 3 in Las Palmas.
- **B**: ***medium-sized intensive farms*** of between 400 and 100 breeding does: 17 farms in Tenerife and 8 in Las Palmas.
- **C**: ***small intensive farms*** of between 25 and 100 breeding does altogether account for 2000 does (about 500 in Las Palmas and 1500 in Tenerife).
- **D**: ***Family farms***, of less than 25 breeding does, accounting for approximately 20%. Their objective is to cover self consumption needs and to sell off any production surplus.

One aspect that should be mentioned as it could bring about a change in Canary Island rabbit production, is the recent appearance in the Islands of hyper-markets. They always import rabbit meat in the Canary Island, but never in any significant quantity and it has always been distributed in a single commercial circuit (shops in urban areas), thus restricting its consumption.

This is now changing, as can be seen from the figures, with a slight increase in frozen meat imports from mainland Spain (from 590 tonnes between 1992 and 1996 to 800 tonnes in 1998). In principle, this is not a problem for Canary Island producers as local prices have been maintained for the moment. There is, however, a clear risk of a reduction in the price of imported meat as prices on the mainland are presently around 300 pesetas, *i.e.* only 61% of the local price.

In the light of this situation, the sector should be ready to take measures to make them competitive, in order to face the probable challenges they will have to face in the future. In this sense, these actions should generate synergies between rabbit breeders and the institutions involved.

One of the main problems to be solved is the lack of professional structural organisation and communication among producers, mainly due to the direct competition among them commercially, making it more difficult to consider global strategies.

CONCLUSIONS

Rabbit production in the Canary Islands is presently going through the most profound transformation since the mid 70's, when the rudiments of industrial rabbit breeding were first introduced. This is a key time, not only because of this change, but also because, for the first time The Livestock Department of the Canary Island Government is elaborating and drafting a Canary Island Livestock Development Plan which will establish the regulatory framework and the general guidelines for actions for the next eight years. In this sense, we consider the following lines of action to be essential:

- Promote professional associations through health defence groups (ADS from their initials in Spanish), training and technical courses, etc. to foster communication between breeders and other experts, thus improving productivity and competitivity.
- Install lines specialised for rabbits in Canary Island slaughter houses. Present lines are insufficient and, therefore, a constraint on rabbit production as they limit development and

encourage the maintenance of slaughtering in farms, which, in turn, prevents local production from gaining access to large supermarkets and hypermarkets.

- Establish a distinctive mark for local production, as observed in POSEICAN, to reduce fraudulent competition from imported refrigerated and frozen meat.
- Increase existing REA grants (affects the cost of feed by approx. 1 peseta per kilo) for importing raw materials for feeding to bring the price of a kilo of feed down to the same level as on mainland Spain (transport costs are presently around 6-7 ptas.).
- Create of selection or multiplication farms for producing breeding does in the Islands to offset the possible disappearance of REA grants for importation of selected breeding rabbits. Effectively at the moment the Canary Islands are totally dependant on imported does.

REFERENCES

CASTAÑON J., DORESTE F., PAETOW O., ELEJABEITI N., MATA J., CAMACHO A. 1997 Rabbit husbandry Productive Structure in the Canary Islands. XXII Symposium of Rabbit husbandry. ASESCU. Gran Canaria. Spain. 1 – 7.

RAMON J., ORIOL R., 1999 Technique and Economic Management. 1998 Revista Cunicultura. December 1999, 295-299.

STATISTICS CO-ORDINATION SERVICE. AGRICULTURE, LIVESTOCK, FISHERIES AND FOOD. Agriculture and Livestock Statistics Data 1998. Canary Island Government. 1998.