

THE EFFECT OF FLOCK SIZE ON THE STRATEGIES OF MANAGEMENT

S. Kukovics, A. Jávör, A. Molnár, M. Ábrahám

Abstract

The majority of sheep population were kept on big (state and cooperative) farms up to the end of 80' s. After the reorganization of the Hungarian agriculture the private breeders/owners became dominating and they owned the bigger part of ewe population in mid 90' s.

About 10% of the total number of sheep farms were studied regarding the management traits used and the data were summarized in 1994.

There were 9 categories created (700 farms with 1000 000 ewes) from "1-20 heads" up to "above 3 000" heads of ewes. The breed structure (merinos, meat-, milk- and native sheep breeds), the status of property (own and/or rented animals, barns and land), the utilized lambing seasons and lambing systems, the labour situation, the quality and origin of rams and feeds were analyzed accompanied by the distribution of membership in different organizations. The studied traits were significantly effected by the size of flocks.

Introduction

A great change has happened in the Hungarian sheep industry during the last ten years. The sheep population and the number of ewes was intensively reduced, the farming systems and the ownership of the flocks/farms has also been changed. The private farms with small or medium size of sheep flocks have become dominating.

Material and method

This study was mainly based on a questionnaire which was sent to 1 300 farms having different flock size of sheep. 700 forms arrived back and 634 ones could be used in processing. The farms were grouped by farm size categories and their data were evaluated.

Rad je priopćen na 46th Annual Meeting of European Association of Animal Production, Prague, Czech Republic, 4-7 September, 1995.

S. Kukovics, A. Molnár, M. Ábrahám, Research Institute for Animal Breeding and Nutrition, Gesztenyes str. 1-3, Herceghalom, 2053, Hungary; A. Jávör, Debrecen University of Agricultural Sciences, Böszörményi str. Debrecen, 4032, Hungary

This questionnaire covered a wide range of information from which only the farm size, breed structure, lambing seasons and lambing systems was picked out for this study.

The lambing management data were compared to the number and the distribution of exported lambs 1994.

Results

The 634 evaluated sheep farms were divided into 9 categories. The total number of ewes (95 000 heads) were about 10% of the national flock (Fig. 1.). The Merinos were highly dominating in each category followed by the meat breeds, Cigaja, dairy breeds, Racka and others breeds (Fig. 2.).

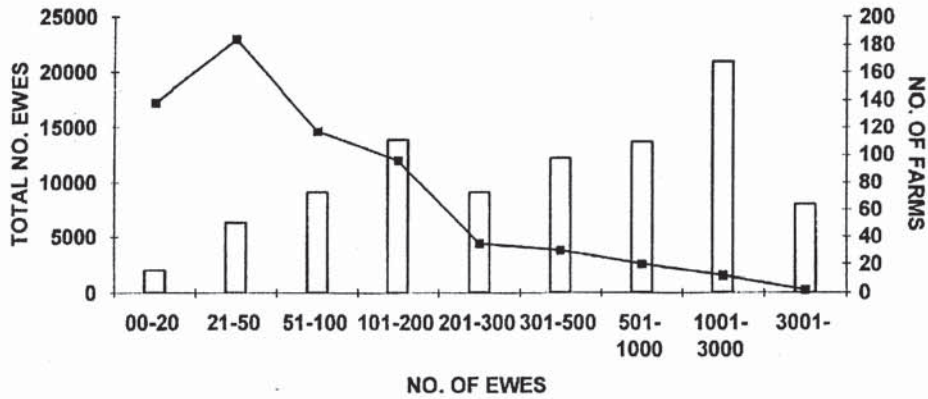


Fig. 1. - THE NUMBER OF FARMS AND EWES

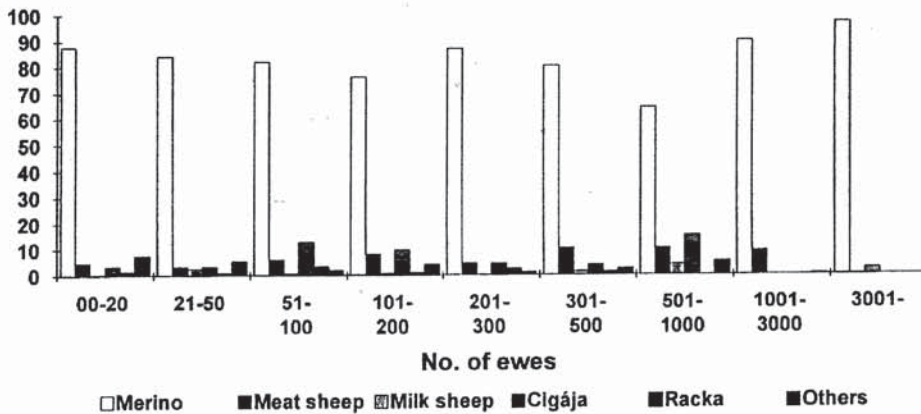


Fig.2. - BREED DISTRIBUTION (%)

One of the most important work on the sheep farm is the reproductive activity. There are three distinguishable lambing seasons utilized on the farms along with a small fourth one (Fig. 3.). The most important is between December and February, followed by the October-December, May-June and the others.

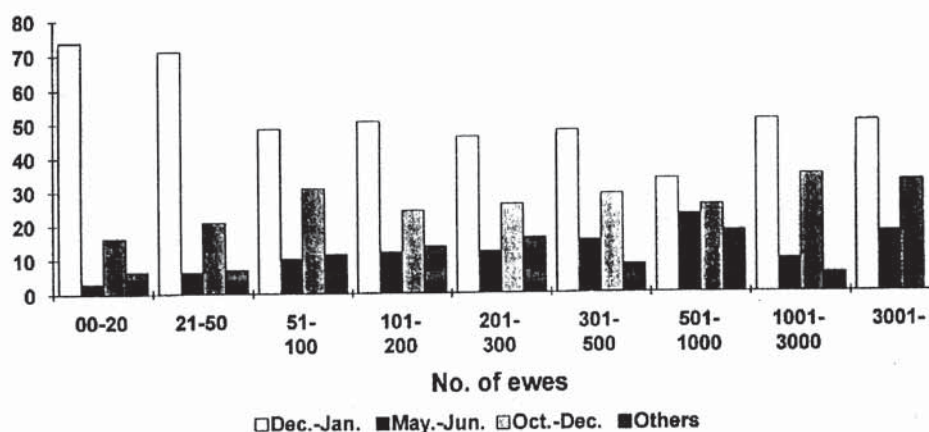


Fig. 3. - THE UTILIZED LAMBING SEASON (%)

Annual, but divided and frequent lambing systems are used on the farms and sometimes the divided-frequent lambing can also be observed. As the size of flock in increasing the percentage of the annual lambing is decreasing and the importance of divided and frequent lambing become higher (Fig. 4.).

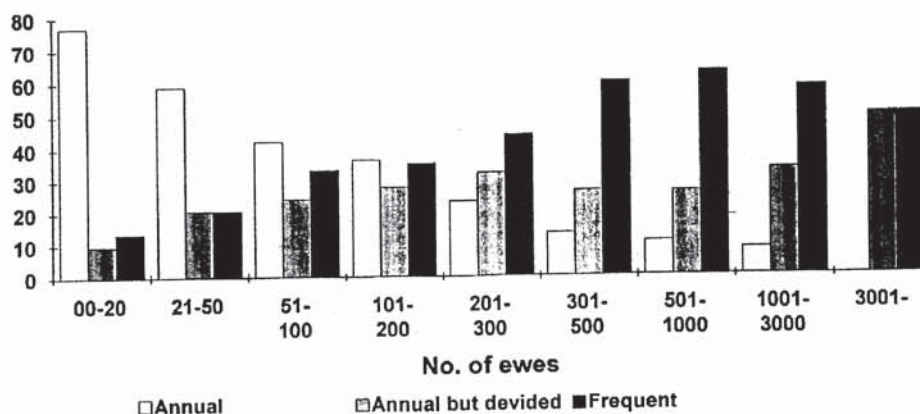


Fig. 4. - THE LAMBING SYSTEM (%)

However the lamb meat market was continuous in 1994, the three main exporting seasons can be observed on Fig. 5. The biggest number of lambs were sold before

Eastern, followed by the periods between the end of May and early July as well as between mid October and end of December.

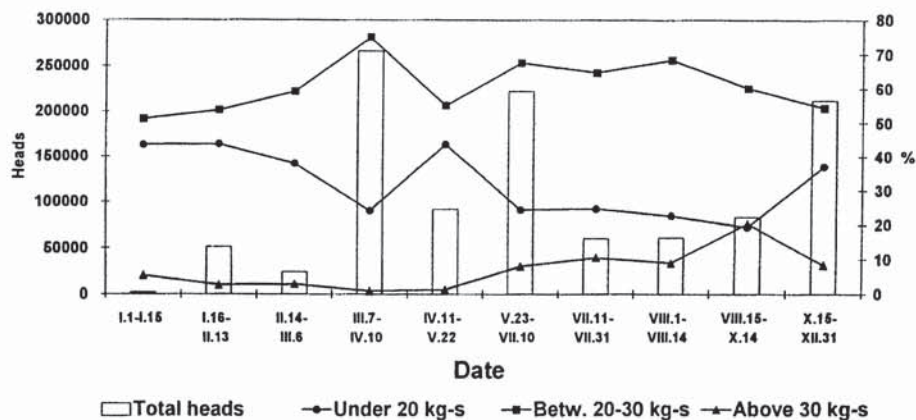


Fig. 5. - EXPORTED LAMBS FOR MEAT MARKET (%)

The highest ratio of lambs were sold between 20-30 kg bodyweight, followed by the milk lambs (under 20 kg-s). Very limited sheep were sold with the bodyweight above 30 kg-s in the first half of the year, however, the ratio of this category intensively increased between August and the end of December.

Italy had the dominating role in importing Hungarian lambs in 1994. This market required light lambs and carcasses and almost continuous lamb supply. So, the Hungarian producers sold mainly light lambs.

Conclusion

Italy has remained the only one dominating market for Hungary up to 1994 and the producers concentrate their production to meet their market demands.

1. The Merino sheep has the dominating role in breed structure independently from the farm size.

2. There are three main lambing seasons during the year, however, the lamb production is almost continuous.

3. The importance of the traditional (annual) lambing system is reducing along with the increasing number of ewes in the flocks.

4. There were three main lamb exporting periods in 1994 with different distribution of the body weights of the lambs sold.