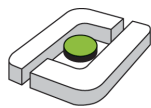


IFCN Beef

Production systems, spatial distribution and structure of beef finishing in Germany - an expert based analysis

Julia Brömmer, Claus Deblitz



Fachhochschule Osnabrück
University of Applied Sciences



Braunschweig, March 2006



Understanding Beef Farming
Around the World

Background

Cattle farming (dairy production, beef finishing, and cow-calf production) is very significant in Germany. At 38%, cattle keeping has a high share in agricultural production value and is the basis of existence for a large number of German farms. For this reason, research on all relevant aspects of this farm branch is absolutely essential in order to analyse German farms in the future and make international comparisons possible. Especially with regard to the CAP Reform, the question of interactions between production systems and competitiveness is gaining importance.

Following France, Germany holds second place in beef production in the EU-25. But the number of beef cattle in Germany, as well as the number of farms with beef cattle, has dropped continuously since 1990. In 2003, there were 13.6 million beef cattle held on about 198,000 farms in Germany. The average herd size of 61 animals per farm in the west of Germany and 166 animals per farm in the east of Germany varied greatly. Of the 13.6 million beef cattle, 4.3 million were dairy cows and 677,000 were suckler-cows. In order to determine the distribution of finishing beef, the category 'male animals older than one year', which essentially represent beef finishing in Germany, were studied. In 2003, 1.3 million such animals existed in Germany. Almost 90 percent of these animals were finished in the west German states (25% in Lower Saxony).

Objective and scope

The objective of this paper is to survey, systematically classify and present the production systems for cattle in Germany. The results should help to carry out farm analyses and to estimate the consequences of political decisions. No comparable study has been carried out in Germany to date. The survey will be augmented with an analysis of the spatial distribution and structures of beef finishing in Germany insofar as this can be determined on the basis of available statistics.

The survey of production systems will be carried out with the help of an expert-supported analysis. For this purpose, experts from all German federal states (with the exception of the City States Bremen, Hamburg and Berlin) were interviewed about beef finishing based on a self-developed questionnaire to provide comparable statements on the local production systems in the different regions.

The survey of the production systems was based on a questionnaire for each federal state, prepared in cooperation with experts and beef finishing consultants. After processing, all data mentioned in the evaluation was made available to the participating experts to check for accuracy. In order to assign the animal category "male beef and calves" to production systems, the questionnaire was broken down into the sections "short name" (production system), location, type of farm, animals, performance data, type of housing, feeding and sales channels. The names for the production systems served as the end product parameter (bull, calf, heifer) and age at the beginning of finishing (dairy calves, store cattle or backgrounders, weaner calves), for example "bull finishing initiated as calf." In the compilation of all data, only typical criteria for the characterization of each production system were considered.

Results

Production systems describe the concrete development of a product with information on the type and amount of products created and the production inputs required. The production systems for beef finishing in Germany differ greatly with regard to their performance parameters. The regional distribution and meaning of individual production systems is made clear through the relation to administrative units such as counties and regional governments, but also to natural areas. The following production systems are of significance in Germany.

Bull finishing initiated with calves is the most broadly practiced form of finishing in all federal states except Bavaria. It is characterized by the very young age of the finishing animals at inception (ca. 14 days old) and the longest finishing period of up to 690 days. Holstein Friesian calves are mainly used here, stemming for the most part from the accompanying branch of dairy cattle keeping on the own farm. To a lesser extent, crossbreeds, Red&white calves and calves from beef cattle are also finished in this system.

Bull finishing initiated with starters is practiced in Bavaria, Baden-Württemberg, North Rhine Westphalia, Lower Saxony, Mecklenburg-Vorpommern and Thuringia. The difference between this practice and that initiated as calf, is the somewhat higher animal age of between 28-90 days at the outset of finishing, and the breed used, mostly Simmental. The housing of larger finishing herds is easier in this system.

Bull finishing initiated with Store cattle / backgrounder can be found everywhere in Germany except in Schleswig-Holstein, Mecklenburg-Vorpommern, Brandenburg, Rhineland Palatinate and Saarland. It is the most labour-efficient form of bull finishing and widely practiced in Germany, especially by specialized finishing farms. Here mostly Simmental bulls and crossbreeds are used, and to a lesser extent Holstein Friesian animals. At an age of 120-165 days of age they are brought into the stable and go through a finishing period of 335-460 days.

Bull finishing based on weaner calves is a practiced form of beef production in ten of the thirteen federal states. This form has little or no significance in Lower Saxony, Saxony, Baden Württemberg and Bavaria. It is characterized by the use of animals stemming primarily from the attached suckler-cow keeping. Bulls of all beef breeds commence finishing at 180-330 days of age and at a weight of between 200-400 kg.

Steer finishing is carried out to a mentionable level in Mecklenburg-Vorpommern and Hesse. Oxen generally feature better meat quality than bulls, but have poorer feed conversion and less daily weight gain. Thus the finishing of oxen is tied to higher producer prices and only viable with special sales programs. Almost all breeds are used, and commence finishing either as calves or weaners, and are finished up to an age of 24 months.

Store cattle / backgrounder production is typically found in the federal states Lower Saxony, North Rhine Westphalia, Bavaria and Baden Württemberg. This form of beef finishing requires a high level of knowledge and ability in calf raising. As a pre-product for bull finishing as store cattle / backgrounders, the

animals must already be able to consume large amounts of basic forage rations at the time of their sale at 120-165 days of age.

Rosé finishing is almost exclusively found with calves and starters in Schleswig Holstein and Lower Saxony. In this special form of finishing, the end product beef has a very light colour due to feeding with maize and concentrates. The calves (mostly Holstein Friesian) are slaughtered at an age of nine months and have a live weight of between 380-420 kg. The meat is primarily marketed in Holland.

White meat calf finishing is a production system with a long tradition and is generally practiced in Germany on a contractual basis by farmers in Lower Saxony and North Rhine Westphalia for large companies. The Holstein Friesian calves are slaughtered at an age of about six months. They are fed almost exclusively with milk in addition to crude forage which is required by calf husbandry legislation.

Young cattle (heifer) grass finishing can be found in Baden Württemberg. The animals are slaughtered at an age of about ten months and generally come from organically-run suckler-cow husbandry farms. They are either directly marketed or sold through producer cooperatives.

Bull concentrate finishing is a special form of beef finishing in which a very high portion of concentrates (up to 80% in the ration of dry matter) is fed with straw. It is only practiced on a very limited basis in Germany in the states of Thuringia and Baden Württemberg. Here, Simmental-Store cattle / backgrounder is the most prevalent breed.

Perspectives

The effects of the CAP Reform will be felt by all finishing bull farms. An overall reduction in production and an increase in structural changes can be expected. The development of store cattle / backgrounder production is directly related to this. The oxen and pasture young beef finishing will only be viable in special regional marketing programs. The Rose and white meat calf fattening could tend to remain in existence due to its specific consumer orientation.