

## Reasons for Food Losses and Waste in Basic Production of Meat Sector in Poland

**Authors :** Sylwia Laba, Robert Laba, Krystian Szczepanski, Mikolaj Niedek, Anna Kaminska-Dworznicka

**Abstract :** Meat and its products are considered food products, having the most unfavorable effect on the environment that requires rational management of these products and waste, originating throughout the whole chain of manufacture, processing, transport, and trade of meat. From the economic and environmental viewpoints, it is important to limit the losses and food wastage and the food waste in the whole meat sector. The link to basic production includes obtaining raw meat, i.e., animal breeding, management, and transport of animals to the slaughterhouse. Food is any substance or product, intended to be consumed by humans. It was determined (for the needs of the present studies) when the raw material is considered as a food. It is the moment when the animals are prepared to loading with the aim to be transported to a slaughterhouse and utilized for food purposes. The aim of the studies was to determine the reasons for loss generation in the basic production of the meat sector in Poland during the years 2017 - 2018. The studies on food losses and waste in the meat sector in basic production were carried out in two areas: red meat i.e., pork and beef and poultry meat. The studies of basic production were conducted in the period of March-May 2019 at the territory of the whole country on a representative trial of 278 farms, including 102 pork production, 55-beef production, and 121 poultry meat production. The surveys were carried out with the utilization of questionnaires by the PAPI (Paper & Pen Personal Interview) method; the pollsters conducted direct questionnaire interviews. Research results indicate that it is followed that any losses were not recorded during the preparation, loading, and transport of the animals to the slaughterhouse in 33% of the visited farms. In the farms where the losses were indicated, the crushing and suffocations, occurring during the production of pigs, beef cattle and poultry, were the main reasons for these losses. They constituted ca. 40% of the reported reasons. The stress generated by loading and transport caused 16 - 17% (depending on the season of the year) of the loss reasons. In the case of poultry production, in 2017, additionally, 10.7% of losses were caused by inappropriate conditions of loading and transportation, while in 2018 - 11.8%. The diseases were one of the reasons for the losses in pork and beef production (7% of the losses). The losses and waste, generated during livestock production and in meat processing and trade cannot be managed or recovered. They have to be disposed of. It is, therefore, important to prevent and minimize the losses throughout the whole production chain. It is possible to introduce the appropriate measures, connected mainly with the appropriate conditions and methods of animal loading and transport.

**Keywords :** food losses, food waste, livestock production, meat sector

**Conference Title :** ICEEWM 2020 : International Conference on Environment, Energy and Waste Management

**Conference Location :** Amsterdam, Netherlands

**Conference Dates :** February 06-07, 2020