

THE IMPACT OF INTENSIVE DAIRY FARMING ON NATURAL ENVIRONMENT AND CLIMATE CHANGES

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Counteracting adverse climate change is becoming a more urgent problem to be solved by the international community. In efforts to stop climate change and extreme weather events, more and more attention is now paid to agriculture, and especially to animal husbandry, which plays a special role in the context of climate change.

Intensive livestock production has always been and continues to be a significant burden for the environment through the emission of air pollutants (dusts, gases, microorganisms) and animal excrements (mainly slurry) which, entering the soil and water environment, pose a significant threat to human health and animals. The most dangerous for the environment is ammonia due to its physical and chemical aggressiveness and emission to the atmosphere. Ammonia is colorless and affects the mucous membranes of the eyes, nose and mouth leading to their inflammation. The consequence is the reduction of local immunity that facilitates the penetration of pathogenic microorganisms into the blood and tissues. Hydrogen sulfide, which is formed from animal waste as a result of the bacterial breakdown of proteins containing sulfuric amino acids, is equally dangerous for animal and human health. Methane and hydrogen arise as a result of bacterial fermentation processes in the digestive tract of livestock, especially dairy cattle. Intestinal fermentation is a natural part of the digestion process. Of particular importance, due to the release of a dangerous greenhouse gas - methane, is the digestion of ruminants - cattle, sheep or goats.

In conclusion, it should be stated that the production of greenhouse gases is much lower than the emissions by people and machinery. In order to reduce the adverse impact of excess gases during intensive dairy production, rules must be respected regarding the way animal waste is collected and stored, and animals must be kept in line with welfare principles, without allowing too much compaction.