

SYSTEMIC APPROACH TO LIVESTOCK CONSTRUCTIONS IN THE CONTEXT OF ENVIRONMENTAL PROTECTION

B. V. Avarvarei¹, A. Jantea^{2*}, E. L. Chelariu^{3*}

¹*“Ion Ionescu de la Brad” Iași University of Life Sciences,
Faculty of Food and Animal Sciences, Iași, Romania*

²*Regional Directorate of Roads and Bridges, Roads and Bridges Laboratory,
Iași, Romania*

³*“Ion Ionescu de la Brad” Iași University of Life Sciences, Faculty of Horticulture,
Iași, Romania*

**e-mail: liliana.chelariu@iuls.ro, janteaandrei79@gmail.com*

Abstract

Modern livestock constructions represent a major area of interest in the development of contemporary agriculture, due to their role in supporting animal production, food security and rural development. At the same time, these constructions generate complex interactions with the environment, influencing air, water, soil quality, as well as biodiversity and the balance of local ecosystems.

The current paper presents aspects related to the need for a systemic approach to livestock constructions and the integration of environmental protection requirements into the design process. The main current problems of livestock infrastructure, the relationship between society, environment and livestock farming activities, as well as the importance of defining an area of influence of the livestock holding are highlighted.

It is emphasized that environmental impact assessment must constitute a preventive and integrated tool in technical design, contributing both to reducing negative effects on the environment and to improving constructive and functional solutions.

Key words: *livestock, livestock constructions, environment protection, systemic approach, impact evaluation*