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## Implications of Globalisation on Hygienic Measures in Animal Disease Control

KARL-HANS ZESSIN

*Free University Berlin, Germany*

### Abstract

A new political and economic paradigm has emerged with the turn of the century which also profoundly affects ways of animal disease control. With production of animal-products worldwide rapidly changing from traditional to intensive/industrial, the spectrum of diseases changes from mono-causal to multifactorial. The concurrent development of a global rules-based production and trading environment under WTO-SPS additionally introduces vital food safety concerns which regulate/limit the kind and extent of disease control measures.

The political dimension of animal disease control is indicated as measure aiming at controlling and eradicating diseases is in conflict with the idea of free international trade as being continuously discussed within e.g. the EU and WTO. If these problems are not solved, the free international trade tends to result in a situation where ambitions to improve animal health are discouraged and instead one may end up in a situation where the lowest disease status of a participating country will be considered as the standard.

Production management aspects of disease control, summarized under the term ‘hygiene’, both in regards to the “livestock revolution” geared towards production intensification, as well as regarding food safety issues, gain in importance and are at the forefront of animal infectious disease control or prevention programs. These management measures cover the multitude of man-derived factors which essentially focus on altering the susceptibility of host animals to disease agents and on agent’s ability to survive and transmit. The hygienic measures include structural, zootechnical and production-organisational elements or combinations of them.

The concept of the epidemiological triad is used to illustrate the role of hygienic factors for disease occurrence. It outlines the spectrum of possible hygienic interventions, ranging from single major techniques against mortalities and morbidities of ‘simple’ epidemic diseases to solving complex herd problems of suboptimal production or reproduction; the type of livestock system and available infrastructure essentially determines the scale and economic justification of hygienic measures. A hygiene concept has to be an integral part of an encompassing production and business management process. An appreciation of the relationship of the most important determinants for disease disorders can be gained by epidemiological-statistical methods.

With the current process of intensification of production, demands for measures to ensure production efficiency and increasingly also product quality are growing. Not all farmers will be able to follow these demands. While livestock is one of the fastest growing parts of developing country agriculture, it paradoxically is becoming less of a viable development path for many of the rural poor. The market for disease control, as that of food products,

consequently will split up into a premium and a 'discount' segment. Even further pressure on disease control techniques will be exerted when, additionally to product standards, also mandatory process standards of production are asked for.

**Keywords:** Disease control, food safety, globalisation, hygienic measures, production intensification