

Poultry health and disease control in developing countries

Veterinary roles in health and knowledge transfer across a poultry industry

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VETERINARY ROLES IN HEALTH (POULTRY AND HUMAN HEALTH)

As shown in Figure 1, the supply-and-demand forces within the market place provide the major driving force for development of modern poultry production. Any commercial enterprise seeking continuing success in the marketplace must therefore:

1. minimize its costs of production;
2. ensure that its products are safe for human consumption.

Veterinarians also have to fulfil these dual responsibilities in a modern intensive poultry industry by:

- **Achieving the most economical poultry production**

The veterinarian's role in poultry health involves close collaboration with several other professionals working in key roles in the poultry production operation.

- **Achieving product quality for protection of public health**

The veterinarian also has a role in ensuring that poultry prod-

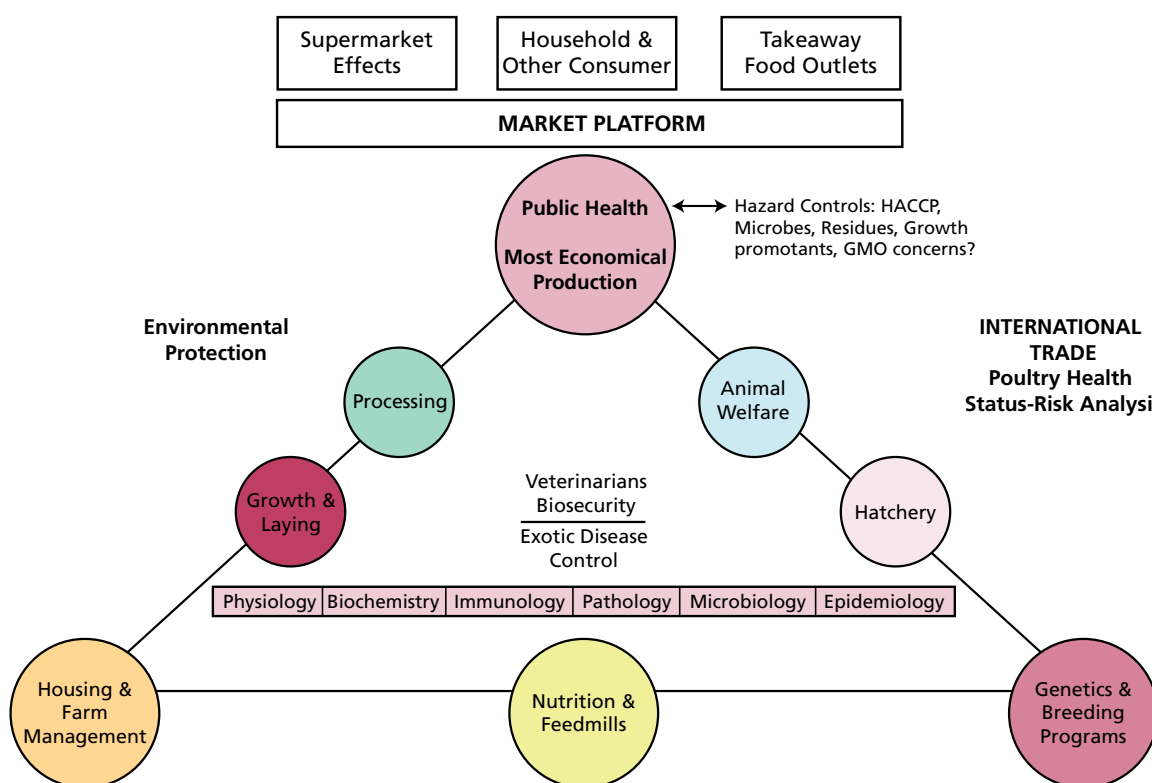
ucts are free from zoonoses (infectious diseases transmissible from animals to humans, such as Campylobacter, Salmonella and listeriosis) and that they are microbiologically safe and free from environmental residues. Experience proves that the profitability of a food industry or commercial organization is very quickly undermined by problems with unsafe poultry products.

AVIAN HEALTH-IN-PRODUCTION: PROFESSIONAL DEVELOPMENT AND KNOWLEDGE TRANSFER

Veterinarians are trained to develop their capabilities for understanding animal diseases, as well as the causes, prevention and control of a range of pathogens. To this end, veterinary undergraduate education includes the scientific disciplines of *physiology and biochemistry, immunology, pathology, microbiology* (including serology) and *epidemiology* – the science of the transmission of infectious diseases. Veterinarians need formal knowledge and

FIGURE 1

The roles and important interaction points (---) with other production professionals for poultry veterinarians operating in a modern intensive poultry industry



Source: Bagust, 2006; Avian Health Online™.

training in these disciplines so that they can understand and investigate problems in avian health. Avian veterinarians are also responsible for ensuring that appropriate *poultry health knowledge* is transferred to the technical personnel who share responsibilities in poultry production.

Avian veterinarians and other technical services personnel working in developing countries may wish to achieve higher levels of expertise in the performance of their commercial activities. Advice and guidance on undertaking professional development to internationally accepted standards of competency is available from relevant professional international bodies, such as the World's Poultry Science Association (www.wpsa.com) or the World Veterinary Poultry Association (www.wvpa.net).

Figure 2 illustrates how all the activities undertaken in poultry production can work together to achieve sustainable progress in an industry.

The wheels of knowledge transfer shown in Figure 2 are lubricated by communication and interfacing among the personnel involved, so in a country seeking to develop an effective and efficient poultry industry, it is essential that personnel learn to operate in this cooperative manner. A national networking structure is the logical starting point for achieving sustainable poultry health in production, particularly through strengthened control of infectious poultry diseases.

FIGURE 2

The wheels of knowledge transfer in a poultry industry



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