

VETERINARY

VETERINARY NUTRITION AND HEALTH



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The present attitude to profitable animal production is to develop sustainable concepts for animal production by which high efficiency can be maintained without compromising animal health and welfare, product quality and safety and the surrounding environment. The concept primarily aims to develop integrated theme encompassing feed composition and quality, animal nutrition, digestion and metabolism of nutrients, growth and lactation physiology, reproduction, immunology, disease mechanisms, bio-markers, disease prevention, animal behaviour and adaptability, stress biology, production and health management including animal production and health economy.

The studies on nutrition, management, and the influence of various production systems on resource management, environmental load, production quantity and quality, reproduction and animal health would aim to deliver better animal welfare. It would, in turn, develop knowledge that could be used to obtain overall nutrient balance and to improve the nutritional and environmental conditions for animal production, reproduction, health, welfare and the nutritive quality of animal products. Through research in animal immunology and disease mechanisms as well as in production diseases and interaction with genotype, nutrition, behaviour, management and production systems, India, a nation with diverse qualitative and quantitative animal resources, aims to improve animal health and disease resistance. Studies on animals' health and their behavioural needs in interaction with production environment and production factors would develop knowledge on the animal behavioural needs and adaptability that could be implemented in new production systems as well as improvement of existing production systems. We tend to develop methods for assessment of animal welfare in commercial livestock herds/flocks and poultry and small holder livestock herds/flocks/backyard poultry as well as methods and models for health economic evaluations. This integrated approach of improved animal welfare involves development of animal models to study nutrient metabolism and utilization, disease mechanisms, reproduction, human physiology and human medicine. The Mission is therefore, "to improve production, management and nutritional conditions for the animals, reproduction, health and welfare without compromising the surrounding environment and economic conditions." The obtained knowledge is to be used for counselling and guidance about sustainable animal farming to authorities and producers.

The intent of this book is to provide new knowledge and know-how that comes out of research from well known experts that are capable of meeting the future requirements for a responsible animal farming in which welfare, environmental impact and sustainable production are compatible elements through minimum usage of medicines, high nutritional food quality, high food safety and low environmental impact.



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