

ECONOMICS IN ANIMAL HEALTH – AN INTRODUCTION

Proposal for a two day post ISVEE workshop, preferably on Monday August 27 and Tuesday August 28, 2012.

SCOPE AND AIMS

Animal health issues play an important role in animal production specifically and in society as a whole. Therefore, well informed decision making is crucial. The use of economics in animal health aims at supporting decision making related to animal health management at different levels of society. Economics in animal health studies the allocation of scarce resources, like money, time and labour, for animal health management. It is the study on how to make well informed decisions where risks, costs and benefits of alternatives are estimated and compared. A rational and proportionate use of resources should be important criteria for the management of animal diseases. Economic drivers are also a central element of the introduction, maintenance and spread of disease.

This workshop aims at conveying the basics of economics and its use in animal health research and decision making to veterinarians, animal health scientists, animal health decision-makers and epidemiologists. Key decision-making and research tools that link epidemiology and economics will also be presented.

INTENDED AUDIENCE

Animal health professionals with an interest in the basic economic concepts and tools involved in the multidisciplinary process of animal health decision making, like veterinarians, animal health scientists, epidemiologists and animal health decision-makers.

COURSE CONTENTS

The course includes four broad topics, each studied in a half day:

1. Economics and production;
2. Decision-making and tools;
3. Impact of diseases;
4. Application of economic principles and discussion of broader perspectives;

Topic 1: For the estimation of losses due to animal diseases and benefits of improved disease control, it is necessary to have knowledge about livestock production economics. General aspects of livestock production economics will be explained with a focus on cattle, sheep, pig and poultry production, including the different agricultural structures in different countries.

Topic 2: Basic economic calculation/modelling methods will be explained and practiced. The workshop participants will become familiar with basic economic tools and methods involved in animal health decision making. After attending the workshop, participants should be able to contribute in an informed manner to economic decision making discussions and understand the concepts that apply when evaluating options for disease management

Topic 3: Basic principles about the estimation of the direct and indirect impact of (re)-emerging and endemic animal diseases and common tools for the economic evaluation of disease mitigation strategies will be explained and discussed. At the end of the workshop participants will have an understanding of the different levels of disease impact and how to estimate it. They will be familiar with the limitations, data needs and uncertainties related to the calculation of animal disease impact and the evaluation of mitigation strategies.

Topic 4: The principles taught will be put in context. First, they will be reinforced by applying them to animal health surveillance. Critical considerations in relation to public health will be presented. Further, the social and legal rules and norms underlying economic activity, externalities, transaction costs and moral hazard will be discussed.

PROGRAMME

DAY 1 MORNING – ECONOMICS AND PRODUCTION

- Resource allocation, resource pricing
- Estimating livestock output and costs

DAY 1 AFTERNOON – DECISION MAKING AND TOOLS

- The marginality of decision making and risk management
- Partial budget analysis
- Assessing the impact of diseases - introduction and (?)exercise

DAY 2 MORNING – IMPACT OF DISEASE AND CHANGE OVER TIME

- Assessing the impact of diseases - discussion of the exercise
- Cost benefit, cost-effectiveness and cost utility analysis

DAY 2 AFTERNOON – APPLICATION AND BROADER PERSPECTIVES

- Economics of surveillance
- Public health economics
- Economics and empirical data analysis
- New Institutional Economics – Externalities, transaction costs and moral hazard

COURSE MATERIALS AND FEE

Each participant will receive:

- hand-outs of the given lectures;
- a memory stick with the presentations, background papers and exercises (models);
- a copy of: Rushton, J. (2009) *The Economics of Animal Health and Production*. CABI Publishing, Wallingford, UK. Pages 364

The registration fee is € 250

TEACHERS



Jörn Gethmann is a veterinarian specialized in veterinary epidemiology and animal health economics. He is working as a senior scientist at the Institute of Epidemiology, Friedrich Loeffler-Institute. His work focuses on the management of animal diseases including animal disease economics. His recent research concentrates on the economics of Bluetongue disease, BSE and BVD.



Barbara Häslér has a first degree in veterinary medicine and specialises in the use of economics in animal health and veterinary epidemiology. Her research focuses on the evaluation of disease mitigation strategies in developed and developing countries, with a particular focus on animal health surveillance systems. She works as a Post-Doctoral Fellow at the Leverhulme Centre for Integrative Research in Agriculture and Health and the Royal Veterinary College.



Henk Hogeveen has been working for a long time on the crossroads of animal diseases, economics, epidemiology and farm management. He is currently working as associate professor at the chair group Business Economics of Wageningen University and is also associated with the Department of Farm Animal Health of the Faculty of Veterinary Medicine of Utrecht University. Within the field of animal health management he has developed a special interest for the support of decisions on animal health and animal welfare and has specialized mainly on production diseases.



Jonathan Rushton is an agricultural economist who specialises in livestock economics and development. His research focuses on livestock development and animal health issues in Africa, Asia, Europe, and Latin America in association with regional and international agencies and national governments. He works at the Royal Veterinary College as a senior lecturer in animal health economics and sits on the management committee of the Leverhulme Centre for Integrative Research on Agriculture and Health



Annet Velthuis is an agricultural economist and working as an Assistant Professor at the Business Economics Group of Wageningen University. Her research and education activities are mainly directed at economics of animal health and food safety. She has a PhD in quantitative veterinary epidemiology. She is also the National Liaison officer for the European Association for Agricultural Economics (EAAE).