

The economics of animal disease control

Coordinator: B D Perry

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One of the recurring questions – largely rhetorical – within the veterinary fraternity in South Africa concerns the relative impact and cost of some of the major epidemic and endemic diseases that confront us, particularly those caused by ticks and tick-borne diseases (TTBD). This excellent compendium of 16 papers dealing with the economics of disease control makes 2 points on this issue. First, that the question itself is not relevant to the debate as far as the economics of control is concerned. The reason, as pointed out by R S Morris in the introductory chapter, is that the guiding principle (equimarginal returns) should be 'to allocate funds progressively, moving resources to wherever the return on the next investment dollar is highest', and away from activities that generate a lower return. Second, if the reference list of the relevant chapter is a reliable measure, South Africa has contributed nothing significant to the much-studied economics of TTBD. This is clearly not true but it may be so that South Africa's vast experience and knowledge in this field is not easily accessible to the international community. One suspects that the answer lies in differences of approach – our essentially pragmatic/trial-and-error perspective *versus* a more systematic and academic approach espoused by Australians and Europeans operating in Africa. In the modern world, where the economics of production are increasingly important and complex, we probably have a lesson to learn from the latter group. Current plans to establish an integrated epidemiology unit at Onderstepoort that includes capacities for impact and risk analysis makes this compendium extraordinarily opportune from the South African perspective.

A particularly interesting statement, also by R S Morris, contends that the net economic benefit obtained from investment funds directed towards controlling animal diseases is commonly in the range of 200–1500 %, while the yields derived from investment in other activities in the livestock sector are commonly about 20 %. These are the sort of data that those of us in public service need to attract the attention of the purse-string holders.

The coordinator (B D Perry), the editorial staff of the OIE and especially the authors themselves, have produced a high-quality volume with an appropriate balance of subject matter. Rushton, Thornton and Otte's chapter covering methods (partial budgets, break-even analysis, cost/benefit analysis etc.) is the only one that deals in any detail with the technicalities of control economics. Other

chapters are concerned mostly with the application, using interesting examples, of control economics in both the developing and developed world and at different geographic levels, namely regions, countries, zones within countries and individual farms with different production systems. For that reason very few veterinarians dealing with production animals would not find this volume both interesting and instructive. There are many informative illustrations and no irritating editorial errors or inconsistencies were encountered. Two of the papers are not in English (Spanish and French) but they do have English summaries.

The appeal of different chapters in this volume will depend very much on the interests of the reader. To provide some indication as to the types and range of chapters the following are given as examples of the subject matter:

- Control and eradication of epidemic diseases.
- Endemic diseases and disease control programmes.
- Health and productivity in smallholder livestock systems in developing countries.
- Delivery of veterinary services.
- Implications of greater global trade in livestock and livestock products.
- Rinderpest control in Africa.
- Health and productivity in the commercial dairy.
- Privatising veterinary services in Africa.

The chapter on trends and predictions for global trade in livestock and livestock products by Leslie and Upton contains important considerations for South Africa. For example, they deduce that increasing global trade in livestock products will disadvantage net food importers while favouring high-income countries. South Africa is, fortunately, a net food exporter but on the livestock side the reverse is the case. We are 8th, according to tables contained in the chapter, among world importers of ovine meat (29 600 tonnes). They also predict that grassland-fed ruminant meat and milk is likely to capture market share from pig and poultry producers, presumably as a result of BSE-type issues currently troubling consumers in Europe.

For anyone involved in production animal health where financial considerations are important (and where is that not the case?) this volume will provide an invaluable source of information.

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