

Introduction

Looking *AHEAD* While Looking Back

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The “Southern and East African Experts Panel on Designing Successful Conservation and Development Interventions at the Wildlife/Livestock Interface: Implications for Wildlife, Livestock and Human Health” forum brought together nearly 80 veterinarians, ecologists, economists, wildlife managers, and other experts from Botswana, Kenya, Malawi, Mozambique, Namibia, South Africa, Tanzania, Uganda, Zambia, Zimbabwe, France, the United States, and the United Kingdom to develop ways to tackle the immense health-related conservation and development challenges at the wildlife/domestic animal/human interface facing Africa today, and tomorrow. This volume attempts to capture invitees’ uniquely grounded insights, and their ideas for making the long-overdue “one health” perspective a reality in practice.

In planning this forum, one of the Wildlife Conservation Society’s main objectives was to help facilitate collaborative work among a diverse array of highly skilled partners to bring sound science to bear on natural resource management decisions that directly affect the livelihoods and cultures of Africa’s people, including those decisions that impact the future of Africa’s protected areas and wildlife resources. Since the September 2003 forum, we have already seen strengthened as well as new partnerships, expanding circles of synergy and collaboration. The esteemed group assembled for this panel generated an impressive array of ideas for solving some of today’s most critical problems at the interface between wildlife health, domestic animal health, and human health and well-being. Some of these ideas are already being implemented, meeting the Wildlife Conservation Society’s hopes that this would indeed prove to be more than “just another meeting,” that it would be catalytic and positive for Africa.

This forum represented the launch of the Wildlife Conservation Society’s Animal Health for the Environment And Development (*AHEAD*) initiative, a program developed by WCS’s Field Veterinary Program in response to the growing recognition of the critical role of animal health in both conservation and development. Throughout the world, domestic and wild animals are coming into ever-more intimate contact. Without adequate scientific knowledge and planning, the consequences can be detrimental on one or both sides of the proverbial fence. But with the right mix of expertise armed with the tools that the animal health sciences provide, conservation and development objectives have a much greater chance of being realized – particularly at the critical wildlife/livestock interface where conservation and agricultural interests meet head-on. The *AHEAD* initiative focuses on several themes of critical importance to the future of animal agriculture, wildlife, and, of course, people: competition over grazing and water resources, disease mitigation, local and global food security,

zoonoses, and other potential sources of conflict related to the overall challenges of land-use planning and the pervasive reality of resource constraints. To date, neither nongovernmental organizations, nor aid agencies, nor academia have holistically addressed the landscape-level nexus represented by the wildlife health/domestic animal health/human health triangle.

WCS believes that “win-win” solutions to health, land-use, and broader socioeconomic challenges are attainable. *AHEAD*, created to foster a sharing of ideas that will lead to concrete and creative initiatives addressing conservation and development challenges at the livestock/wildlife/human health interface, can help catalyze these solutions. By bringing regional expertise together to compare lessons learned, fostering communications networks that are often lacking even among practitioners in relatively close proximity, and by bringing a global perspective to problems that can benefit from the experiences of other regions, this initiative can pay dividends for protected areas as well as buffer zone communities, for core areas as well as conservancies and corridors – the places where tensions and challenges at the livestock/wildlife interface are greatest. Conflicts between livestock and natural resources must be dealt with if there is to be any hope for peaceful coexistence between the two sectors upon which so many people’s livelihoods depend. The papers in this *Proceedings* make this quite clear.

There is probably no region on earth where animal health policies and their downstream consequences have had as tangible an effect upon the biotic landscape as in Africa, southern Africa in particular. In many parts of the world, land-use choices are often driven by government (domestic and/or foreign) incentives or subsidies that can favor unsustainable agricultural practices over more ecologically sound natural resource management schemes. Of course, livestock will remain critically important both culturally and economically in much of the region. But provided with a better understanding of disease epidemiology and grasslands ecology, land-use planners can begin to take the true costs associated with both disease control schemes and environmental degradation related to livestock management practices not well-suited to a particular ecosystem into account, and therefore more often favor a return to natural production systems. For example, in semi-arid parts of southern Africa, foot and mouth disease control programs, implemented to support beef production for an export market, may not be as profitable or as environmentally sustainable as a return to multi-use natural systems emphasizing endemic wildlife species (consumptively and non-consumptively). When it comes to animal health programs and policies in transboundary landscapes, where domestic as well as wild

animals have opportunities to cross international borders, making the right decisions becomes even more critical. Launching *AHEAD* with a focus on southern and East Africa, particularly with the World Parks Congress being hosted by South Africa, was indeed a very logical decision for us.

The benefits of a more holistic land-use management perspective also extend to pastoralists, people who derive the bulk of their subsistence directly from livestock – people who are often marginalized in African economies and political systems. By recognizing the ecological and economic significance of pastoralist land-use practices, conservation and development programs can lead to improved livelihoods via more strategic and efficient mechanisms for animal (and human) health care delivery, and for disease surveillance. Of course the extraordinary benefits of sound management at the wildlife/livestock/human interface reach well beyond pastoral communities. One need only look at global travails with SARS or avian influenza, foot and mouth disease, or “mad cow,” to see the tremendous social and economic importance of these issues.

With rapidly expanding trade through SADC (the Southern African Development Community), COMESA (the Common Market for Eastern and Southern Africa), and ongoing globalization trends, these issues will increasingly affect the development trajectories of many African countries. Clearly, animal health issues – and their implications for human health and livelihoods – must be addressed by any regional agricultural or natural resources management strategies, including those adopted by national parks authorities, if they are to succeed.

As we look around the world, impacts from interactions between livestock and wildlife (and habitat) are often profound. The issues at this interface represent an unfortunately all-too-often neglected sector of critical importance to the long-term ecological and sociopolitical security of protected areas and grazing lands worldwide. Whether we are talking about the ongoing tuberculosis crisis in and around South Africa’s Kruger National Park, or Yellowstone National Park’s brucellosis saga costing U.S. authorities millions of dollars to manage, these issues merit more proactive attention than they have received to date. With its initial focus on southern and East Africa and their diverse land-use mosaics, we hope that the WCS’s *AHEAD* initiative is poised to make a difference.

Part of the reason we convened this forum at the World Parks Congress was to help give animal health, and the health

sciences in general, a seat at the conservation table. By raising the profile of the management (and research) implications of the impacts of infectious diseases on the ecosecurity of East and southern African protected areas at the World Parks Congress, we hope we have also helped sensitize the donor community to the importance of this type of work. (Please see the appendix of this volume or www.iucn.org/themes/wcpa/wpc2003/english/outputs/durban/eissues.htm for the official IUCN World Parks Congress: Emerging Issues resolution on the subject.) The fact that IUCN encouraged us to hold this forum as part of the World Parks Congress tells me we are making some headway, *pole pole*, in terms of helping the broader conservation and development communities understand the core relevance of our work and expertise to their overall objectives. As socioeconomic progress demands sustained improvements in health for people, their domestic animals, and the environment, we hope we’ve been successful in drawing attention to the need to move towards a “one health” perspective – an approach that was the foundation of our discussions in Durban, and a theme pervading this *Proceedings*. We hope that conservation and development colleagues from within and, as importantly, *outside of* the health science professions will find this volume thought-provoking, insightful, practical, and applicable to their daily work.

My colleagues responsible for the contents of this exciting volume are true conservation heroes, working in the face of daunting obstacles, more often than not without adequate resources or adequate political support. I hope the “Southern and East African Experts Panel on Designing Successful Conservation and Development Interventions at the Wildlife/Livestock Interface: Implications for Wildlife, Livestock and Human Health,” these *Proceedings*, and the *Animal Health for the Environment And Development* concept behind them, will continue to foster positive change for the places and people we all care so much about.

Note: The entry point to the WCS *AHEAD* website is at www.wcs-ahead.org. It includes the complete agenda from the World Parks Congress (Durban) *AHEAD* launch, abstracts of presentations, the presentation slide sets, biographical sketches and contact details for most of the invitees, as well as a range of downloadable video and audio clips from the meeting. It also includes materials on *AHEAD* programs that were conceived in Durban and have continued to develop since the 2003 World Parks Congress.