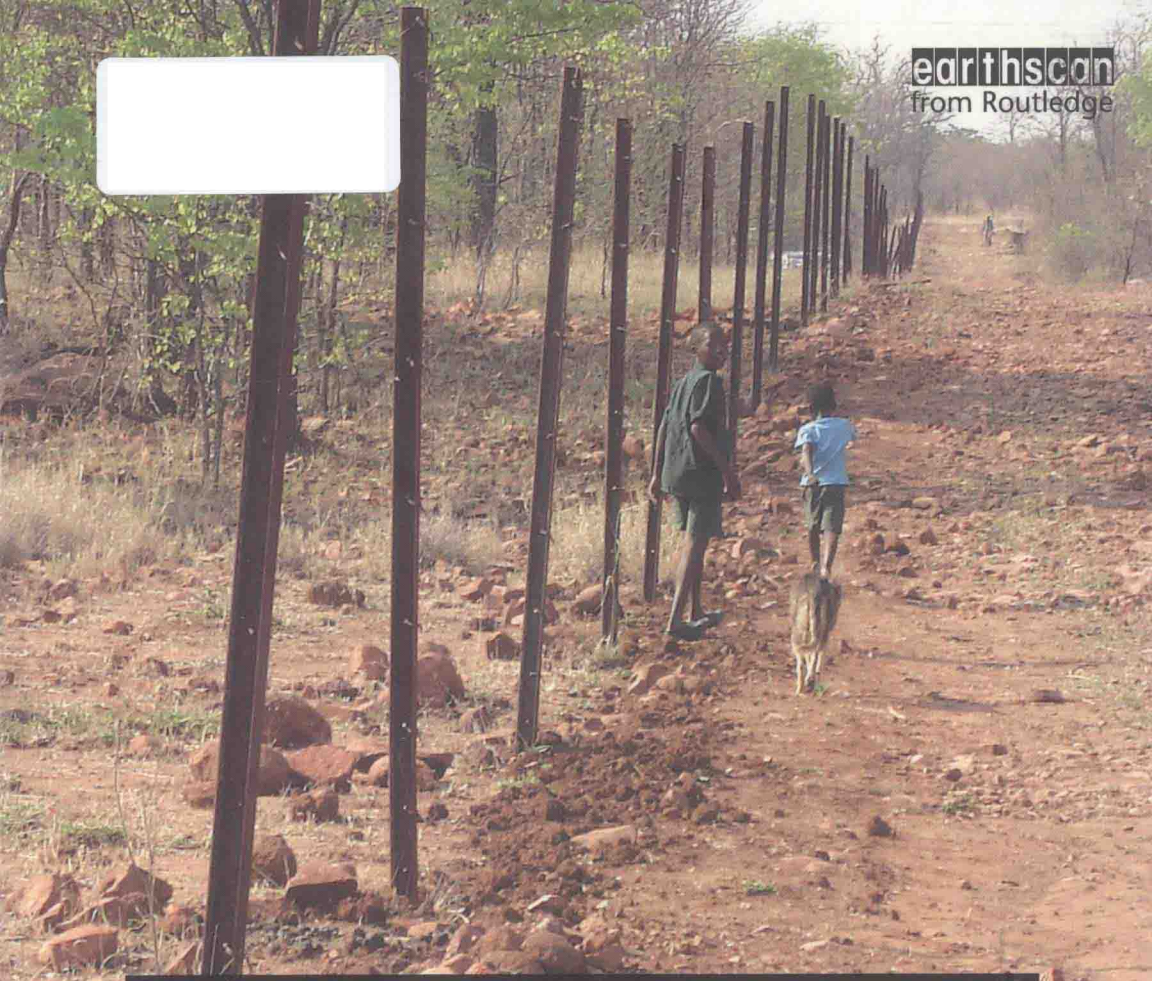

earthscan
from Routledge

TRANSFRONTIER CONSERVATION AREAS

PEOPLE LIVING ON THE EDGE

Edited by
Jens A. Andersson, Michel de Garine-Wichatitsky,
David H.M. Cumming, Vupenyu Dzingirai and Ken E. Giller

Transfrontier Conservation Areas

People living on the edge

Edited by
Jens A. Andersson,
Michel de Garine-Wichatitsky,
David H.M. Cumming,
Vupenyu Dzingirai
and Ken E. Giller

Routledge
Taylor & Francis Group
LONDON AND NEW YORK

earthscan
from Routledge

This first edition published 2013
by Routledge
2 Park Square, Milton Park, Abingdon, Oxon, OX14 4RN

Simultaneously published in the USA and Canada
by Routledge
711 Third Avenue, New York, NY 10017

Routledge is an imprint of the Taylor & Francis Group, an informa business

British Library Cataloguing in Publication Data
A catalogue record for this book is available from the British Library

Library of Congress Cataloging-in-Publication Data
Tranfrontier conservation areas: people living on the edge/edited by Jens A. Andersson . . . [et al.].
p. cm.
Includes bibliographical references and index.
1. Protected areas – Africa, Southern. 2. Transfrontier conservation areas – Africa, Southern. 3. Wildlife conservation – Africa, Southern.
I. Andersson, Jens A.
S944.5.P78T74 2013
333.720968 – dc23
2012011077

ISBN: 978-1-84971-208-8 (hbk)
ISBN: 978-1-84977-724-7 (ebk)

Typeset in Times by
Florence Production Ltd, Stoodleigh, Devon

Printed and bound by CPI Group (UK) Ltd, Croydon, CR0 4YY

Transfrontier Conservation Areas

The introduction of transfrontier conservation areas (TFCAs) in Southern Africa was based on an enchanting promise: simultaneously contributing to global biodiversity conservation initiatives, regional peace and integration, and the sustainable socio-economic development of rural communities. Cross-border collaboration and eco-tourism became seen as the vehicles of this promise, which would enhance regional peace and stability along the way. However, as these highly political projects take shape, conservation and development policy making progressively shifts from the national to regional and global arenas, and the peoples most affected by TFCA formation tend to disappear from view.

This book focuses on the forgotten people displaced by, or living on the edge of, protected wildlife areas. It moves beyond the grand 'enchanting promise' of conservation and development across frontiers, and unfounded notions of TFCAs as integrated social-ecological systems. Peoples' dependency on natural resources – the specific combination of crop cultivation, livestock keeping and natural resource harvesting activities – varies enormously along the conservation frontier, as does their reliance on resources on the other side of the conservation boundary. Hence, the studies in this book move from the dream of eco-tourism-fuelled development supporting nature conservation and people towards the local realities facing marginalized people, living adjacent to protected areas in environments often poorly suited to agriculture.

Jens A. Andersson is a rural development sociologist who has worked on smallholder farming and migration in Southern Africa. He coordinates the 'Competing Claims on Natural Resources' programme, a collaboration between Wageningen University and several universities in Southern Africa.

Michel de Garine-Wichatitsky is an ecologist and a veterinarian who has worked on livestock–wildlife interactions in Southern Africa. He coordinates the collaborative research platform 'Production and Conservation in Partnership'.

David H.M. Cumming is an ecologist who has been working in conservation in Southern Africa since the early 1960s. He is presently an Honorary Professor at the University of Cape Town, a Research Associate at the University of Zimbabwe, a freelance consultant, and advisor to the AHEAD-GLTFCA initiative.

Vupenyu Dzingirai is a social anthropologist based at the Centre for Applied Social Sciences at the University of Zimbabwe. He has worked intensively in the Zambezi Valley among indigenous communities threatened by development activities.

Ken E. Giller is a Professor at Wageningen University (Netherlands), working principally on sustainable intensification of smallholder farming systems in sub-Saharan Africa. He is leader of the 'Competing Claims on Natural Resources' programme.

Contributors

Jens A. Andersson is a rural development sociologist working on rural–urban migration, rural livelihoods and the social organization of smallholder farming and informal trade in Eastern and Southern Africa. Andersson was regional coordinator of the interdisciplinary research programme 'Competing Claims on Natural Resources: Overcoming Mismatches in Resource Use from a Multi-Scale Perspective', a research fellow in the Plant Production Systems Group of Wageningen University, The Netherlands, and research associate of the Centre for Applied Social Sciences, University of Zimbabwe.

Frédéric Baudron is a tropical agronomist working for the International Maize and Wheat Improvement Centre (CIMMYT) in Addis Ababa, Ethiopia. He has worked for both agricultural and biodiversity conservation projects, and at various levels of the research development continuum. His Ph.D., conducted with Wageningen University and the research platform 'Production and Conservation in Partnership', explored the potential for agricultural intensification to save space for wildlife in northern Zimbabwe. His research interests include farming system analysis, sustainable intensification, and participatory innovation development.

Alexandre Caron's current focus in the research unit 'Animal et Gestion Intégrée des Risques' of CIRAD is the ecology of infectious disease transmission at the wildlife/domestic interface. Shifting the standard veterinarian approach from a disease-centred or a host-centred focus to a process-oriented focus, this area of research explores the properties of transmission processes using behavioural ecology, community ecology and molecular epidemiology. He is currently based in Harare, attached to the research platform 'Production and Conservation in Partnership'.

Petronella Chaminuka is an agricultural and natural resource economist at the University of Limpopo in South Africa. She has experience in research and development, and has worked with a variety of research institutions and non-governmental organizations. Her Ph.D. research analysed options for land use development in rural communities residing at the periphery of protected areas in South Africa. She also explored the socio-economic challenges associated

with reconciling rural development and conservation goals. Her research interests include poverty analysis, land use modelling and participatory research for development.

Chaka Chirozva's current research interests are on innovative and decentralized knowledge generation approaches that promote inclusion of marginalized groups in governance of natural resources in areas such as game reserves (national parks), conservancies and transfrontier conservation areas. He is currently a lecturer at Bindura University where he teaches undergraduate courses in Social Anthropology and Organizational Behaviour.

David H.M. Cumming was previously Chief Ecologist and Deputy Director of Zimbabwe's Department of National Parks and Wild Life Management and later a senior conservation advisor for WWF. He is presently an honorary professor at the Percy FitzPatrick Institute, University of Cape Town, a research associate at the University of Zimbabwe, and an independent consultant in conservation and development. Current research interests include large herbivore impacts on biodiversity and ecosystem processes, and resilience and sustainability of transfrontier conservation areas.

Vupenyu Dzingirai graduated with a Ph.D. in 1998 at the University of Zimbabwe. He is an anthropologist with long-term experience in the Zambezi Valley with its conflicting development and conservation projects. His primary research interests include natural resource conflict and human mobility at various scales. Presently, he is based at the Centre for Applied Social Sciences, a communal resource management think tank at the University of Zimbabwe.

Hervé Fritz is Director of Research for CNRS and is based at University of Lyon 1, France. His main research interests are behavioural ecology, community ecology and ecosystem ecology. He has run research programmes in Southern Africa for 19 years and particularly in Zimbabwe. He is also Director of the Hwange Long Term Ecological Research site (LTER) studying the functioning of the broad socio-ecological system, including Hwange National Park and the Vice Chairman of the French–Zimbabwean research platform 'Production and Conservation in Partnership'.

Michel de Garine-Wichatitsky is a tropical ecologist and a veterinarian, working as Senior Researcher for CIRAD, based in Harare. His current research interests include ecological and epidemiological interactions between wild and domestic herbivores, and management of wild–domestic interfaces in the context of transfrontier conservation areas in Southern Africa. He is the coordinator of the research platform 'Production and Conservation in Partnership' and CIRAD representative in Zimbabwe.

Ken E. Giller is Professor of Plant Production Systems at Wageningen University. He leads a group of scientists with profound experience in systems analysis and simulation modelling scenarios of change. Ken's research has focused on smallholder farming systems in sub-Saharan Africa, and in particular problems

of soil fertility and the role of nitrogen fixation in tropical legumes. He was scientific leader of the interdisciplinary project 'Competing Claims on Natural Resources: Overcoming Mismatches in Resource Use from a Multi-Scale Perspective' (www.competingclaims.nl/).

Chloé Guerbois is a junior researcher in ecology and socio-ecology at the National Natural History Museum in Paris, France. She is finishing her Ph.D. on integrated and sustainable wildlife management through protected areas in collaboration with the CNRS within the Hwange Long Term Ecological Research site (LTER) and the research platform 'Production and Conservation in Partnership'. Her work is based on the development of multidisciplinary approaches aimed at understanding and integrating socio-ecological constraints affecting resources uses and dynamics at the edge of Hwange National Park.

Eléonore Hellard is a junior ecologist with a multidisciplinary approach. After studying primates' behaviour and conservation in South Africa and Kenya, she investigated the ecological and anthropogenic determinants of human-spotted hyaena conflicts in periphery of Hwange National Park in Zimbabwe, in connection with the research platform 'Production and Conservation in Partnership'. She is currently based in the University of Lyon 1, France, where she completed her Ph.D. in eco-epidemiology and focuses on the detection and consequences of multiple infections in natural populations.

Ferran Jori is a veterinarian graduated at the Autonomous University of Barcelona (UAB) with 22 years of international experience in Africa and Latin America in the fields of rural development, wildlife management and epidemiology. Employed by CIRAD since 1998, the last eight years on the study of infectious diseases at the wildlife–livestock interface. Since 2007, he is based at the University of Pretoria participating in several projects on this topic in the Southern African region.

Collen Matema is a Ph.D. candidate at the Centre for Applied Social Sciences at the University of Zimbabwe, supported by the research platform 'Production and Conservation in Partnership'. He is investigating wildlife utilization potential for poverty reduction in the face of climate change in marginal areas of Zimbabwe. His research interests are centred on poverty, livelihoods and adaptation especially in economically marginal environments adjacent to wildlife areas.

Steven Matema is a social ecologist and Ph.D. student with Wageningen University, the Netherlands. His Ph.D. is on competing claims on natural resources, studying the socio-ecological and political dynamics of natural resource conflicts in Mbire District, one of the oldest CAMPFIRE areas in Zimbabwe. His research interests are on the institutional and social dynamics of development interventions in Zimbabwe, rural livelihood strategies, conservation and governance in and around wildlife areas.

Jessica Milgroom's research interests include population resettlement, policy in practice, access to natural resources, farming systems, and the role of action research in development. She carried out extensive fieldwork on the resettlement of villages from the Limpopo National Park in southern Mozambique for her recently completed Ph.D. Previously she worked in Brazil, Mexico, Côte d'Ivoire and Spain on diverse topics in agricultural development including agroforestry and soil erosion.

Billy Mukamuri is a lecturer at the Centre for Applied Social Sciences (CASS), University of Zimbabwe teaching postgraduate courses institutions and natural resource management. He is currently the chair of CASS, and leads the thematic field on natural resources governance and institutions within the research platform 'Production and Conservation in Partnership'. He is conducting field research on social change and community development in marginal areas close to protected areas.

Chrispen Murungweni's research interests are on the contribution of livestock and crop to sustainable poverty alleviation programmes that aim to improve livelihoods of the rural poor. He is interested in attaining these research objectives through the process of agriculture research for development. He recently completed a Ph.D. in the 'Competing Claims on Natural Resources' programme in Wageningen University, and is now employed by the public service commission of Zimbabwe, under the Ministry of Agriculture and Mechanisation in the Department of Research and Specialist Services (DR&SS), stationed at Grasslands Research Institute in Marondera.

Amon Murwira is a spatial ecologist and geographic information scientist based in the Department of Geography and Environmental Science at the University of Zimbabwe in Harare. He leads the thematic field on conservation and agriculture within the research platform 'Production and Conservation in Partnership'. His research interests include the use of earth observation technology, particularly remote sensing in combination with other sciences to understand spatial processes that shape landscapes where human and wildlife are the main land uses.

Tendai Nzuma is a postgraduate student at the National University of Science and Technology, supported by the research platform 'Production and Conservation in Partnership'. He has interests in studying the behaviour and life processes of animals and wildlife. For the past few years, he has been specializing in wildlife research and management, including the collection and analysis of biological data to determine the ecological effects of present and potential use of land through CBNRM programmes like CAMPFIRE in Zimbabwe.

Davies M. Pfukenyi is a senior lecturer and veterinary epidemiologist based in the Department of Clinical Veterinary Studies, University of Zimbabwe in Harare. He collaborates with the thematic field on animal health and environment within the research platform 'Production and Conservation in Partnership'.

His research interests are focused on the epidemiology of zoonoses at the domestic–wildlife interface and vector-borne parasitic diseases. He is also interested in research on quality assurance control and systems for food safety.

Xavier Poshiwa is a researcher based at Grasslands Research Institute, Marondera, Zimbabwe and currently a Ph.D. candidate in the 'Competing Claims on Natural Resources' programme in Wageningen University. Xavier's research for the past eleven years focused on livestock nutrition, fodder and pastures development and rangeland management for the smallholder and small-scale commercial farming systems of Zimbabwe. His main research interests are nature conservation, pastures and rangeland management and livestock nutrition.

Wayne Twine is a senior lecturer in the School of Animal, Plant and Environmental Sciences at the University of the Witwatersrand, South Africa. His research focuses on interactions between people and the environment in common-property resource systems. This includes the investigation of natural resource use, rural livelihoods, resource ecology and local resource management in the former apartheid homelands of South Africa.

Fadzai Zengeya's research interest is in spatial ecology, with particular focus on the dynamics of movement and resource use by animals at the interface between human/livestock and wildlife and the application of geographical information system (GIS) and remote sensing in natural resources assessment and management. She is a Ph.D. candidate at the University of Zimbabwe, co-supervised by CIRAD and supported by the research platform 'Production and Conservation in Partnership'.

Foreword

It was one of the authors of this volume, Professor David Cumming, who with Rowan Martin more than a quarter of a century ago first drew me into the world of serious scholarship on natural resource management. As an ecologist, and at that time the chief ecologist of a government agency responsible for a national parks estate and the stewardship of Zimbabwe's natural resources, his scholarship was centred in conservation ecology. At the same time I was the director of a university department charged with the application of the social sciences to the institutional aspects of rural development, particularly in Zimbabwe's extensive communal lands. The resultant confluence of conservation and development issues was a powerful stimulus to my own scholarship and contributed over time to a new initiative at the University of Zimbabwe conjoining the natural and social sciences in a programme examining ecosystem processes from a multidisciplinary biophysical and social perspective.

Similar developments were taking place in other academic and research centres, tracking international debates on conservation. In a very broad but instructive generalization, it can be suggested that in the 1960s and 1970s the prevailing paradigm of conservation was one of segregation and protectionism, setting aside designated wild places and species from human predation at a time when human activity was becoming more extensive and pervasive. This was the 'fortress conservation' mentioned in this volume. Developed largely during the colonial era in Africa this paradigm suited the political elites of the day. It brought large areas of real estate under the direct control of the state, free of inconvenient indigenous populations. It was achieved at comparatively little opportunity cost, since at the time of their creation parks were generally in areas not in high agricultural demand. The paradigm satisfied the conservation ethos of colonial metropoles and served the recreational needs of the local urban elite.

The creation of national park systems preserved large areas of aesthetically valuable landscape across sub-Saharan Africa, which now form the cornerstone for its tourism industry and an important ecological research base. In most post-colonial states the new politico-economic elite have continued to support these systems as political and economic assets. The problem is that their benefits have not, in general, reached down to the rural small-scale farmers who are the neighbours to these parks. As Chapter 9 of this book comments, these parks and

their wildlife became 'a cost to be minimised rather than a benefit to be nurtured'. For these farmers, important political constituencies of governments, parks, wildlife and conservation in general are a low priority when compared to rural agricultural and industrial development. As a result these parks have tended to be underfunded and understaffed and are in some instances degrading. Many survive through the assistance of the international conservation agencies that have traditionally supported 'fortress conservation'.

While 'fortress conservation' was struggling to retain its pre-eminence as a conservation paradigm for Africa in the 1970s and 1980s, a competing paradigm emerged, defining conservation as sustainable use. This was not a new perspective, but it was in these decades that the paradigm saw serious attempts at application in post-colonial Africa. Its essence can be summarized by the following propositions: (a) that the successful stewardship of the rural African environment lay primarily in the hands of those who lived with it; (b) that their investments in the environment should be matched by the benefits they derived from these inputs, and (c), that this 'civil' management of the environment required localized regimes of resource management, legally defined and empowered to take management decisions regarding their natural resources, bearing the cost and enjoying the benefit of such management. This was communal common property proprietorship, or Community-Based Natural Resource Management (CBNRM) as it has frequently been called. CBNRM was not the only mode of management advocated under the sustainable use paradigm; it was also applied to state and private management regimes. However CBNRM, targeted as it was to the vast bulk of the rural African population, was often the paradigm's public face.

CBNRM, with its putative benefits of ecological sensitivity, economic expansion and institutional growth was popular with donors charged with rural development and during the 1990s funding for such initiatives was readily available. Well known are CAMPFIRE in Zimbabwe and similar programmes in other African countries. More broadly, the United Nations Development Conference at Rio and the subsequent Millennium Goals produced at Johannesburg made clear the prevailing view that development and conservation were to be considered as complementary rather than competitive in policy formation.

However, the implementation of CBNRM encountered a number of obstacles, and, with the exception of Namibia, performance fell well below promise. A wide range of factors contributed to this patchy performance and during the first decade of this century scholarship and experience brought more clarity to the obstacles facing successful CBNRM implementation. Among the many factors involved, two can be considered to be fundamental. The first is that the heterogeneity in social and natural resource conditions across rural Africa inevitably means that contexts conducive to communal regimes of resource management are not always to be found. The recent socio-economic history of some areas, with transient and mobile populations, high levels of socio-economic differentiation and poor resource to population ratios, has led to conditions inimical to local collective action. The social capital required for such enterprises is either absent or embryonic, awaiting a

restructuring in form and process that has yet to come. Chapters 4 and 5 of this volume provide examples of this situation.

The second impediment to the growth of effective communal governance of the commons lies in the formal, legal tenure status of local CBNRM regimes. At the moment these rights are tenuous at best. They have no clear rights to economically valuable resources. They lack the security required as an inducement to conservation investments. Regulations often preclude the opportunity for experiments in sustainable resource use. They have no negotiating rights and are open to the incursions of agreements made between the government and the private sector. They have no legal persona and are effectively perpetual legal adolescents. As I have said elsewhere (Murphree and Taylor, 2009, p. 109), 'Such conditions remove the incentive for the conjunction of human energy and resource richness . . . in the African landscape and puts in place short-term survivalist strategies which serve neither the interests of populations or the environment.' Unfortunately, genuine devolution involves a transfer of effective rights and responsibilities that governments are reluctant to contemplate, let alone implement. Only in Namibia has legislation pursued this course. Elsewhere innovative use of legislation on trusts or local political pressure under exceptional leadership has provided de facto devolution, but such instances are rare. As a result, initiatives to realize the potential of communal resource management have underperformed. The record has been so disappointing that some have advocated the abandonment of CBNRM approaches. Hutton *et al.* (2005) document this disappointment and the advocacy for a return to a 'fortress conservation' approach in an article entitled 'Back to the barriers? Changing narratives in biodiversity conservation'. This has not happened and CBNRM retains its iconic status, although with less vigour than previously. Conservation and development policy during the first decade of this century has in fact been static, caught between the impossibility of reverting to former and ineffective colonial policies on the one hand and the political centre's resistance to devolving land and resource ownership to the periphery on the other.

Into this static policy vacuum has now stepped the idea of transfrontier conservation areas. The idea has been around for some time, but there is no doubt but that it will be a driving policy preoccupation in the second decade of the twenty-first century. Ironically the 'frontiers' that the idea addresses were set up under colonial dispensations a little more than a century ago and tended to be situated in areas considered marginal for rain-fed agriculture and human settlement. It was not surprising, therefore, that these frontier areas often attracted the designation of nature areas, national parks or state lands. The transfrontier conservation area concept thus has a certain ecosystem logic behind it, although, as this book is careful to point out, one cannot generalize too broadly on this issue. Nor can one overgeneralize on the specific forms that the concept has taken to date. There are now transfrontier parks (TFPs) as well as transfrontier conservation areas (TFCAs), and in respect to the latter the boundaries, status and uses of these areas are frequently undefined, or differently defined. To add to the terminological confusion, these aggregations are sometimes loosely referred to as 'peace parks'.

What are the reasons put forward for the establishment of these transboundary conservation entities? Three categories of motivation are usually put forward. First, that their establishment along national borders will mitigate international antagonisms and promote a spirit of international cooperation on the African continent. Thus the 'peace parks' designation. This I think we must regard as largely palliative rhetoric. International cooperation in Africa is determined by economic and political considerations fashioned at the centre rather than the periphery. If there is border dissension or violence on the periphery, it is carried out by groups to whom the designation of 'peace park' is no deterrent. The phrase is, however, useful in winning the support of politicians, who can put their signature to the enterprise at little or no cost.

A more substantial group of arguments suggests that the transfrontier approach is an antidote to the inefficiencies and absurdities of colonially drawn boundaries which have in many instances cut across ecosystem units and inhibited or destroyed their integrity. Integrated management systems would, it is argued, increase efficiency, bring economies of scale and rationalize ecosystem management demands with transboundary management responses.

A third set of arguments suggests that transfrontier aggregations can overcome the socio-economic marginalization associated with relegation to boundary areas, turning these areas in many instances into new centres of agricultural and industrial growth, associated with transportation and communications networks that cut across previous barriers to commerce and social contact.

While we can largely dismiss the first rationale, we must take the second and third sets of argument seriously. The second set has considerable substance across a range of technical and structural issues. Indeed, if we look at the record of transfrontier initiatives to date we can see that project implementation on the ground is most evident in this sphere. This is not surprising. With the technical and structural research and planning firmly in their hands, the parks' bureaucracies concerned are well placed to plan and implement project aspirations with relative alacrity. Furthermore, the technicist nature of management activities is attractive to the international conservationist community and funding is, relatively speaking, abundant. Nevertheless, integration between two or more management authorities with different resources and styles is bound to be difficult and so even in this set of objectives progress is slow. It is perhaps fair to suggest that many of the transfrontier conservation areas appearing on Figure 1.1 of this volume will never be integrated management units and at best will be planning frameworks for intermittent consultation.

It is on the third set of arguments for the transfrontier initiatives, that which maintains that they can be the engines for socio-economic development in previously marginalized border areas, that we must focus our attention, since on the attainment of this development objective also rests the success of the conservation objectives discussed in the previous paragraph. For the politicians, planners, academics and management personnel who form the epistemic community that usually initiates the substance and implementation of conservation and develop-

ment programmes this is a critically determinative insight. Their experience and insights are necessary, but not sufficient for success. For transfrontier initiatives to be successful they must become an essential part of the livelihood agenda of those who live within them. They must become an investment of these populations in their own future through a process that links authority and responsibility in clearly defined management regimes, clearly articulated to other management regimes in the conservation area. Without this clarity of definition regarding responsibility, authority and linkages local populations will sabotage the development of the conservation area, either deliberately and openly or covertly and passively.

It is in this arena that the record of transfrontier conservation area initiatives is abysmal. Their establishment has been almost totally devoid of consultation with local populations. The same is true of planning. Structures of communication promoting 'interdependent knowledge production' (cf. Fortmann, 2008, p. 262) and relationships between parks management and the peoples among which they exist are tenuous. In other words, the most important aspect of transfrontier area initiatives has been largely neglected.

At the same time, embryonic efforts to address this failing are in evidence. The transboundary natural resource management fora mentioned in Chapter 8 are a step in the right direction, as is the multi-year local level scenario planning, iterative assessment and adaptive management project funded by IDRC and conducted by the Centre for Applied Social Sciences at the University of Zimbabwe. A further unanticipated offshoot of the Great Limpopo Transfrontier Conservation Area initiative has been the creation of AHEAD (Animal and Human Health for the Environment and Development), started by veterinarians concerned with the veterinary impacts of the initiative. This forum has now expanded to include human health and developmental issues, and has become the premier locus for the multidisciplinary examination of the GLTFCA. It is to be hoped that this multidisciplinarity will be expanded to methodological debates that examine the role of professional researchers and their relationships with local civil science. This third objective of the transfrontier conservation area and its requirements provides an ideal testing ground for what Keeley and Scoones (2003, p. 177) call 'the deliberative approach . . . which places more emphasis on developing methods and institutions that promote communication and address policy issues through inclusive processes of argumentation'.

This foreword has suggested that transfrontier conservation initiatives will feature prominently in conservation and development debates during the second decade of the current century and that the topic has important applied and methodological implications for scholars in the fields of conservation and development. The book provides a penetrating historical review of the shifting geographical, social and political contexts in which these initiatives are found, discusses the socio-economic and ecological factors that impact upon them and, in its final chapters, provides an extensive inventory of the opportunities and the conditions needed to move from opportunities to implementation. If you have an

interest in this seminal debate, get the book, read it, keep it handy on your shelf and use it!

Marshall W. Murphree
Professor Emeritus, Centre for Applied Social Sciences
University of Zimbabwe

References

Fortmann, L. (2008) *Participatory Research in Conservation and Rural Livelihoods Doing Science Together*, Wiley-Blackwell, Oxford, p. 262

Hutton, J., Adams, W. and Murombedzi, J. (2005) 'Back to the barriers? Changing narratives in biodiversity conservation', *Forum for Development Studies*, vol. 32, pp. 341–370

Keeley, J. and Scoones, I. (2003) *Understanding Environmental Policy Processes. Cases from Africa*, Earthscan, London, p. 177

Murphree, M.W. and Taylor, R. (2009) 'CBNRM in Africa: current constraints and opportunities', in D. Roe, F. Nelson and C. Sandbrook (eds) *Community Management of Natural Resources in Africa*, IIED, London, p. 109

Acknowledgements

This book is the product of collaboration between the inter-university research programme 'Competing Claims on Natural Resources' of Wageningen University in The Netherlands, the collaborative research platform 'Production and Conservation in Partnership' (RP-PCP) coordinated by the Centre de coopération Internationale en Recherche Agronomique pour le Développement (CIRAD), and the Centre for Applied Social Sciences (CASS) of the University of Zimbabwe. We are very grateful to all collaborators for inputs to the various chapters and to the reviewers who are acknowledged at the end of each chapter. We thank the International Research and Education Fund (INREF) of Wageningen University, CIRAD, the Ambassade de France in Harare, and Canada's International Development Research Centre (IRDC) for financial contributions to the production of the book.