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978-0-521-53566-3 — Science, Society and Power
Environmental Knowledge and Policy in West Africa and the Caribbean
James Fairhead, Melissa Leach
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Science, Society and Power

Environmental knowledge and policy in West Africa
and the Caribbean

In this book, James Fairhead and Melissa Leach bring science to the heart of debates about globalisation, exploring the transformations in global science and its contrasting effects in Guinea, one of the world's poorest countries, and Trinidad, a more prosperous, industrialised and urbanised island. The book focuses on environment, forestry and conservation sciences that are central to these countries and involve resources that many depend upon for their livelihoods. It examines the relationships between policies, bureaucracies and particular types of scientific enquiry and explores how ordinary people, the media and education engages with these. In particular it shows how science becomes part of struggles over power, resources and legitimacy. The authors take a unique ethnographic perspective, linking approaches in anthropology, development and science studies. They address critically prominent debates in each, and explore opportunities for new forms of participation, public engagement and transformation in the social relations of science.

JAMES FAIRHEAD is Professor of Social Anthropology at the University of Sussex and MELISSA LEACH is Professorial Fellow at the Institute of Development Studies, University of Sussex. They have jointly authored *Misreading the African Landscape: Society and Ecology in a Forest-Savanna Mosaic* (Cambridge University Press, 1996) and *Reframing Deforestation: Global Analyses and Local Realities – Studies in West Africa* (1998).

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‘To date, the discourse on “Science in Society” has focused mainly on the industrialised world. In this timely book, Fairhead and Leach redirect our attention to the discourses around scientific forest management in West Africa and the Caribbean, where they effectively demolish persistent stereotypes associated with science, governance, development and globalisation. Instead of the usual caricatures of heroes and villains, we are presented with carefully contrasted case studies elaborating the complex interplay of science and policy among communities, governments, businesses, and NGOs that constitute the multi-scale institutional vortex of “Tropical Forest International”. *Science, Society, and Power* presents a rich and detailed narrative accompanied by insightful analysis. It should provoke a much-needed re-evaluation of the “Risk Society” hypothesis, which characterises community engagement with science as a peculiarity of late modernity.’

Steve Rayner, Director, ESRC Science in Society Programme and Professor of Science in Society, University of Oxford

‘A remarkable and fascinating book. Fairhead and Leach combine the ethnographic study of two “developing” countries with a thorough grasp of wider theoretical debates over science and society. They bring a much-needed anthropological perspective to issues of scientific governance and the social relations of science and policy. Our understanding of the international and local dynamics of environmental practice is accordingly transformed. This book has significant implications for both social scientific understanding and the development of future forms of governance. At a time when the interaction of social life and scientific practice is more important than ever, *Science, Society and Power* addresses crucial issues and deserves a very wide readership.’

Alan Irwin, Professor of Sociology, Brunel University

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*Environmental knowledge and policy
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Contents

<i>List of figures</i>	page vi
<i>List of maps</i>	vii
<i>List of tables</i>	viii
<i>Preface and acknowledgements</i>	ix
1. Science and society: an ethnographic approach	1
2. Science and globalising governance	26
3. Science and policy in Trinidad and Guinea: comparative settings	53
4. Biodiversity and conservation in Guinea	82
5. Biodiversity and conservation in Trinidad	109
6. Sustainable timber production and forest management in Guinea	142
7. Sustainable timber production and forest management in Trinidad	162
8. Science and policy in society: mass media and education	187
9. Reflections on science, society and power	222
<i>References</i>	242
<i>Index</i>	262

Figures

1.1	Processing the upland rice staple in a Guinean village	<i>page</i> 10
1.2	View over Port of Spain from Trinidad's forest-clad Northern Range	12
3.1	Oil pipelines through Victoria Mayaro Forest Reserve	60
4.1	The Ziama forest reserve, Forest Guinea	86
5.1	Trinidad's Northern Range near Port of Spain, with forest cleared for agriculture	113
5.2	Ecotourism in Matura, Trinidad: night viewing of leatherback turtles	122
6.1	A village in Kissidougou prefecture, Guinea, in its peri-village forest island	143
6.2	Pit-sawing timber for local use in a Guinean village	149
7.1	Forest officers reviewing felled timber within the periodic block system, Victoria Mayaro Reserve	170
7.2	A medium-sized sawmill in south-east Trinidad	173
8.1	Extract from donor-funded storybook for environmental education	199

Maps

3.1	Trinidad and localities important to the case studies	<i>page</i> 54
3.2	Guinea and localities important to the case studies	55
5.1	Proposed system of National Parks and other protected areas in Trinidad	116
7.1	Forest reserves in Trinidad	163

Tables

3.1	Comparative human development statistics for Trinidad and Tobago and for Guinea, 2000	<i>page 66</i>
5.1	Land status within the OAS 1980 National Parks System, Trinidad	117
5.2	Tenurial status of selected parks as proposed in 1980, Trinidad	118
7.1	Silvicultural systems in Trinidad	165
8.1	Lessons concerning rural environment in secondary school teacher training material, Guinea	196
8.2	Lesson on deforestation in 'Moral and Civic Education', Guinea	198

Preface and acknowledgements

When we visited Trinidad and Tobago in 1999, the country was gripped by the staging of ‘Miss Universe’ which appeared to be holding up the execution of drug baron Dole Chadee and eight accomplices. The country has been trying to deal with the increasing use and trade of cocaine. On the islands drugs are also cultivated on many scales, including within forested state land, reserves and wildlife sanctuaries. The illegal drugs fields are protected by trap-guns operated by tripwires, their threat creating no-go areas for foresters and hunters alike given frequent media reports of those killed or maimed. People living near these areas are concerned that they are out of their control and influence; were they permitted access and use, they argue, they could assist policing. A radically contrasting vision was driving scientific inquiry and policy deliberations around the same protected areas. The country is under pressure from foreign donors and international environmental agreements to expand its protected areas and their zones of exclusion. Legislating for and implementing a national parks system had become a ‘green conditionality’ for a series of international development loans, on the grounds that this would benefit both the environment and the eco-tourism economy.

Earlier that year we had re-visited West Africa’s Republic of Guinea. The European Union had been financing the establishment of a vast new national park. In keeping with international orthodoxies around participation and community conservation, the park was working experimentally to support local hunters and their organisations to regulate wildlife use and protection. This peaceful community-focus was to contrast with the paramilitary forest guards who had been at the sharp end of Guinea’s earlier repressive approach to conservation. Yet with civil war raging in Sierra Leone and Liberia, bringing refugees and the threat of an expanded regional crisis, hunters also aired a radically different conception of themselves: as the nation’s second army, the bush counterpart to the government soldiers based in town.

Emergent international policy debates and the sciences enwrapped with them, stood, in both countries, in contrast with a multiplicity of alternative concerns and framings, at times as stark as in these examples. Over the previous decade, our earlier research in Guinea had exposed equally stark disjunctures between

x Preface and acknowledgements

the perspectives of those living close to the land, and those considering it through grids of Science, Administration and Policy. Where the latter treated islands of forest around villages as last relics of a diminishing tropical forest, the former spoke of ways they and their ancestors had established them in earlier savannas (Fairhead and Leach 1996). Where the latter interpreted large forest areas in relation to natural history – natural climax vegetation – the former considered them in relation to social history – as ancestral lands once farmed, then depopulated by war (Fairhead and Leach 1994, 1998). The very land use practices and the social world framing them which the scientific and policy world had considered so problematic could, and as we argued should, be thoroughly re-cast.

It is such experiences which have come to drive our focal concern with the practices of science in contemporary society, and their relationships with policy and power. In particular they problematise the ways in which increasingly internationalised scientific and governance regimes engage with national practices, shaping in turn the ways in which these engage with particular localities. These are the processes we explore in this book. While in some senses, it is about the environment, we are not considering the nature and extent of particular environmental problems, but rather, how environment comes to be problematised, and international dimensions to this. And while this book is in some senses about African and Caribbean states and localities in a contemporary world order, our focus on science and policy shows how conflicting visions exist at each of these levels, and how alliances continually emerge across them.

A comparative, multi-sited work of this kind incurs many debts of gratitude. First, we should like to thank those involved in the comparative research project of which this is a part. In particular, Kojo Amanor from the University of Ghana at Legon not only conducted a parallel study in Ghana, but also shared with us some important moments of fieldwork in Trinidad and Guinea, many hours of discussion of the findings, and much mutual learning. In Trinidad, we would particularly like to thank Thackwray Driver of the Ministry of Agriculture, Land and Marine Resources for introducing us to the island's scientific and policy worlds, and for his research collaboration, and Keisha Charles for her invaluable research assistance. We were affiliated to the Sustainable Economic Development Unit (SEDU) of the University of the West Indies, St Augustine, and would like to thank Denis Pantin and his colleagues for their warm welcome and hosting of seminars. At the government Forestry Division, we would especially like to thank the Chief Conservator Narine Lackhan and the head of FRIM, Anthony Ramnarine, as well as the staff of the North-Eastern and South-Eastern Conservancies who gave so generously of their time and opinions during our field visits. We are equally grateful to the many donors, NGO staff, farmers and hunters who spoke with us.

In Guinea, special thanks are due – once again – to Dominique Millimouno, our longstanding research collaborator, and to Ibrahima Boiro and his

colleagues at the Centre d'Etudes et de la Recherche en Environnement (CERE) at the University of Conakry to which this research project was formally affiliated. Numerous national, prefectural and local forestry and environment staff, as well as members of donor and non-governmental organisations, farmers, hunters, teachers and others spoke with us – often at length – during our interviews and field visits, and we are grateful to them all.

In Europe, we should like to thank the staff of the Forestry Department, United Nations Food and Agriculture Organisation (FAO) in Rome; of CIRAD in Montpellier, France, and of the Department for International Development (DFID) in London who discussed science and policy issues with us. The Washington-based Conservation International supported our participation in their West Africa biodiversity priority-setting exercise, while numerous other individuals and organisations responded generously to our e-mail inquiries. While we are grateful to everyone we interviewed during this research, we have sought to preserve their anonymity in what can be such sensitive scientific and policy fields by citing interviewees only by position, rather than name. Nevertheless in an arena of study of this kind, and given the tightly-interconnected policy worlds both internationally and in the focal countries, those involved will still be able to identify individuals. Realising that this would be the case, we endeavoured to make all those we interviewed in the course of the research aware of its aims, context and possible implications. It is also research that focuses on aspects of people's lives that are already in the public domain. Nevertheless as a study exploring the political and social dimensions to knowledge and practice, it may well play into personal and professional sensitivities. We apologise if this is indeed the case, and of course take full responsibility for any errors of fact or interpretation which may have influenced our analysis. Our hope is that those involved – as well as the wider constituencies to which they speak – will find the book interesting and useful.

The research for this book was funded by the Committee on Social Science Research (CSSR) of the UK Department for International Development, as part of our research project on 'Forest Science and Forest Policy: Knowledge, institutions and policy processes' (1998–2001). We are very grateful for this support, although it should be noted that opinions expressed here remain our own, and are not attributable to DFID. Several of the chapters have been presented in earlier versions at seminars, conferences and international meetings, where we should like to thank participants for their numerous doses of constructive criticism. We are particularly grateful to colleagues in the IDS Environment Group for their shared interests in and stimulating discussions about environmental policy processes over the years, and to Alan Irwin, Steve Rayner, Brian Wynne and anonymous reviewers for commenting on the draft manuscript. Lastly, special thanks are due to Cassandra, Rory, Xanthe and Francesca for the stages in this work that they shared, and to Elisa Eade for making this possible.

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For Cassie, Rory, Xanthe and Cesca