

State of the Apes 2015

Industrial Agriculture and Ape Conservation

Social and economic systems worldwide are changing rapidly. These changes are accompanied by an increasing global demand for natural resources, including land, water, minerals, energy sources, food and timber. Today's foremost challenge lies in finding the tools not only to address the complexity of these interrelated trends, but also to implement strategies to balance environmental needs with socioeconomic requirements. This volume of *State of the Apes* contributes to this search by presenting original research and analysis, topical case studies and emerging best practice from a range of key stakeholders to examine the interface between ape conservation and industrial agriculture. In assessing the drivers behind agricultural expansion and land investments, it sheds light on governance challenges and legal frameworks that shape land use.

Aimed at policy-makers, industry experts and decision-makers, academics, researchers and NGOs, this edition is designed to inform debate, practice and policy in ways that will help to reconcile the goals of industrial agriculture with those of ape conservation and welfare, and social and economic development.

State of the Apes

Series editors

Helga Rainer Arcus Foundation

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The world's primates are among the most endangered of all tropical species. All great ape species – gorilla, chimpanzee, bonobo and orangutan – are classified as either Endangered or Critically Endangered. Furthermore, nearly all gibbon species are threatened with extinction. Whilst linkages between ape conservation and economic development, ethics and wider environmental processes have been acknowledged, more needs to be done to integrate biodiversity conservation within broader economic, social and environmental communities if those connections are to be fully realized and addressed.

Intended for a broad range of policy-makers, industry experts and decision-makers, academics, researchers, and NGOs, the *State of the Apes* series will look at the threats to these animals and their habitats within the broader context of economic and community development. Each publication presents a different theme, providing an overview of how these factors interrelate and affect the current and future status of apes, with robust statistics, welfare indicators, official and various other reports providing an objective and rigorous analysis of relevant issues.

Other Titles in this Series

Arcus Foundation. 2014. *State of the Apes: Extractive Industries and Ape Conservation*. Cambridge: Cambridge University Press.

Foreign Language Editions

Arcus Foundation. 2014. *La Planète des Grands Singes: Les Industries Extractives et la Conservation des Grands Singes*. Cambridge, UK: Arcus Foundation. Available from: www.stateoftheapes.com

Arcus Foundation. 2014. *Negara Kera: Industri Ekstraktif dan Konservasi Kera*. Cambridge, UK: Arcus Foundation. Available from: www.stateoftheapes.com

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Foreword

Last year I visited the Indonesian part of Borneo. One of the highlights was a visit to an orangutan shelter on an island covered by rainforest. There I learned that an orangutan builds a new nest every day, using leaves and branches in the trees. These great apes move around from tree to tree and hardly ever come down to the ground. When it rains, they make “umbrellas” from big leaves. Orangutans share more than 96% of their genetic makeup with humans. In fact, the name orangutan means “person of the forest.” Many orangutans have lost their habitat because of deforestation. They have become homeless and dependent upon shelters to survive.

It is widely recognized that humans are altering the natural world at an unprecedented rate. Among the greatest challenges facing us today are understanding how human social and economic systems drive these changes and implementing strategies for reconciling economic development with the protection and conservation of the very resources upon which it depends. Future generations will judge us by how we have changed our behavior to ensure that we can live within the limits imposed on us by climate, water and land. They will also evaluate our efforts to ensure social justice and respect for dignity and life, while safeguarding the beauty and diversity of nature.

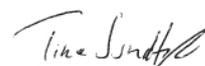
The *State of the Apes* series aims to identify and raise awareness of potential solutions for the conservation of biodiversity—and the environment more broadly—within the parameters of ongoing economic development. The tropical forests of Asia and Africa are the natural home of great apes and gibbons. By focusing on apes as flagship species for the conservation of these valuable forests, *State of the Apes* seeks to stimulate dialogue and collaboration, while also informing policy and practice.

Given that tropical forest loss is a significant contributor to climate change, the conservation of these resources is critical to protecting not only the great ape and gibbon populations but also the global human population. Even if tree crops replace the natural forest that has been removed, the impact on climate change will not be countered. And the loss of species diversity will be irreversible.

This volume highlights the deleterious effects of industrial-scale agriculture on ape populations as well as other wildlife species, forests and people in South and Southeast Asia to date. It warns that the shift from small-scale agriculture to industrial agriculture in Africa is likely to follow a similar path.

It also presents detailed case studies that show how governments, the private sector, local communities and civil society can work together to reconcile some of the conflicting agendas. In Liberia, for example, a recent agreement with the Government of Norway for results-based development aid holds significant promise for ensuring that decision-making on agricultural expansion takes biodiversity and land use planning into consideration, thereby protecting ape habitats, local communities and wildlife populations. And in Indonesia, major palm oil companies recently committed to establishing deforestation-free value chains.

Our survival depends on finding solutions that will help to preserve biodiversity while simultaneously securing human development and wellbeing. *State of the Apes* demonstrates that the conservation of flagship species—in this case, our closest relatives—can be achieved in conjunction with economic and social development, through integrated planning and sensitive policy and practice.



Tine Sundtoft

Minister of Climate and Environment,
Norway



Contents

| | |
|-----------------------------------|-------------|
| The Arcus Foundation | viii |
| Notes to Readers | viii |
| Acknowledgments | ix |
| Apes Overview | x |
| Introduction | 1 |

Section 1

Industrial Agriculture and Ape Conservation

1. Economic Development and Conservation of Biodiversity:

Understanding the Interface of Ape Conservation and Industrial Agriculture 13

| | |
|--|----|
| Introduction | 13 |
| The Role of Palm Oil in Poverty Alleviation and Land Tenure | 18 |
| Industrial Agriculture and Climate Change | 19 |
| Impact of Industrial Agriculture on Ape Populations | 24 |
| Rescue Centers and Problems Faced with Rescued, Translocated and Reintroduced Orangutans | 32 |
| Agricultural Industry Engagement in Ape Conservation and Mitigation Strategies | 33 |
| The Roles of Producers, Buyers and Consumers | 38 |
| Conclusion | 39 |

2. Encroaching on Ape Habitat: Deforestation and Industrial Agriculture in Cameroon, Liberia and on Borneo 41

| | |
|---|----|
| Introduction | 41 |
| Industrial Agricultural Concessions across Ape Ranges | 43 |
| Industrial Crops in Ape Ranges | 46 |
| Deforestation and Industrial Agriculture: The Cases of Cameroon, Liberia and Borneo | 46 |
| Conclusion | 67 |

3. From Habitat to Plantation:

Causes of Conversion in sub-Saharan Africa 71

| | |
|--|-----|
| Introduction | 71 |
| Expansion of Africa's Agro-Industry | 73 |
| Sources of Investment | 85 |
| Drivers of Expansion into Africa | 87 |
| Industrial Agriculture and Ape Habitat | 92 |
| Sustainable Development | 96 |
| Conclusion | 102 |

4. Legal Frameworks at the Interface between Industrial Agriculture and Ape Conservation 105

| | |
|----------------------------------|-----|
| Introduction | 105 |
| Findings from the Trend Analysis | 109 |
| Conclusion | 131 |

| | |
|---|------------|
| 5. From Process to Impact of a Voluntary Standard: The Roundtable on Sustainable Palm Oil | 135 |
| Introduction | 135 |
| Launching an Institution with a Global Vision: The Creation, Architecture and Operation of the RSPO | 137 |
| Case Studies: Industry Applications of RSPO Principles | 143 |
| Obstacles to Success: The RSPO's Operational Challenges | 152 |
| Reaching Agreements and Controlling Interpretation: Process-related Obstacles | 153 |
| The RSPO's Move Toward Enhancing Conservation Impact | 157 |
| Conclusion | 162 |
| 6. Impacts of Industrial Agriculture on Ape Ecology | 165 |
| Introduction | 165 |
| Different Crop Types: Different Impacts | 167 |
| Different Ape Species: Different Impacts | 167 |
| The Varying Impacts of Different Phases of Production | 172 |
| Remediation | 177 |
| Long-term Impacts | 179 |
| The Impact of Socioeconomic and Cultural Values on the Forest–Agriculture Interface | 183 |
| Human–Ape Interactions | 183 |
| Conclusions on the Need to Incorporate the Human Social Dimension in the General Picture | 187 |
| Survey Results: Summary of Main Impacts | 188 |
| Conclusions | 190 |
| | |
| Section 2 | |
| The Status and Welfare of Great Apes and Gibbons | |
| Introduction | 194 |
| 7. Ape Populations over Time: Case Studies from Gombe, Mount Halimun Salak, Sabangau and Wamba | 197 |
| Introduction | 197 |
| Bornean Orangutans in the Sabangau Peat Swamp Forest | 200 |
| The Chimpanzees of Gombe | 207 |
| The Bonobos of Wamba in the Luo Scientific Reserve, DRC | 215 |
| The Silvery Gibbons in Mount Halimun Salak National Park, Java, Indonesia | 221 |
| Final Thoughts | 226 |
| 8. The Status of Captive Apes | 229 |
| Introduction | 229 |
| Apes in Captivity in Range State Regions | 231 |
| Apes in Captivity in Non-range States of the Global North | 241 |
| Discussion | 256 |
| Conclusion | 258 |
| Annexes | 260 |
| Acronyms and abbreviations | 264 |
| Glossary | 268 |
| References | 275 |
| Index | 323 |

The Arcus Foundation

The Arcus Foundation is a private grant-making foundation that advances social justice and conservation goals. The Foundation works globally and has offices in New York City, USA and Cambridge, UK. For more information and to connect with Arcus visit:

- arcusfoundation.org.
- twitter.com/ArcusGreatApes; and
- facebook.com/ArcusGreatApes.

Great Apes Program

The long-term survival of humans and the great apes is dependent on how we respect and care for other animals and our shared natural resources. The Arcus Foundation seeks to increase respect for and recognition of the rights and value of the great apes and gibbons, and to strengthen protection from threats to their habitats. The Arcus Great Apes Program supports conservation and policy advocacy efforts that promote the survival of great apes and gibbons in the wild and in sanctuaries that offer high-quality care, safety and freedom from invasive research and exploitation.

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Notes to Readers

Acronyms and abbreviations

A list of acronyms and abbreviations can be found at the back of the book, starting on page 264.

Annexes

All annexes can be found at the back of the book, starting on page 260, except for the Abundance Annex, which is available from the *State of the Apes* website:

- www.stateoftheapes.com.

Glossary

There is a glossary of scientific terms and key words at the back of the book, starting on page 268.

Chapter cross-referencing

Chapter cross-references appear throughout the book, either as direct references in the body text or in brackets.

Ape Range Maps

The ape range maps throughout this edition show the extent of occurrence (EOO) of each species. An EOO includes all known populations of a species contained within the shortest possible continuous imaginary boundary. It is important to note that some areas within these boundaries are unsuitable and unoccupied.

Photographs

We aim to include photographs that are relevant to each theme and illustrate the content of each chapter. If you have photographs that you are willing to share with the Arcus Foundation, for use in this series, or for multiple purposes, please contact the Production Coordinator (awhite@arcusfoundation.org) or the Cambridge office.

Acknowledgments

The aim of this second volume of *State of the Apes* is to facilitate critical engagement on current conservation, industry and government practice and to expand support for great apes and gibbons. We are grateful to everyone who played a part, from meeting participants, to our authors, contributors and reviewers and those involved in the production and design of the book.

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Authors, contributors, reviewers and those who provided essential data and support are named at the end of each chapter. We could not have produced this book without them. Most of the photographs included were generously shared by their creators, who are credited alongside each one. We are also grateful to the organizations that allowed us to include extracts from previously published articles, books and reports. Many others contributed by providing introductions, anonymous comments or strategic advice, helping with essential administrative tasks and providing much-appreciated moral support.

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Each volume in this series is an extensive undertaking. We are committed to ensuring that these books are available to as many stakeholders as possible, not least by translating them into French, Bahasa Indonesia, and, beginning with this volume, Mandarin. We are delighted that GRASP has partnered with the Arcus Foundation in this endeavor, taking on the translations and the production of the translated editions, and we are thankful for their invaluable support.

**Helga Rainer, Alison White
and Annette Lanjouw**
Editors