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TRANSFORMING BORNEO

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TRANSFORMING BORNEO

From Land Exploitation
to Sustainable Development

CHUN SHENG GOH • LESLEY POTTER

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Preface I

I was twelve when, first in my lifetime, I was told to put on a white dust mask before stepping out of the house. A thick haze blanket shimmered across my hometown, Penang, blocking the sun's rays from reaching the surface. It was 1997, and the particle-laden air persisted for months. As I was told, the source of this greyish matter came from the land fires in Indonesia. The reason for the fires was reduced to a set of clichés in the understanding of the general public in Malaysia: the fire was set by the “irresponsible” farmers in Indonesia who used fire to clear forest land for farming. Interestingly, the region was experiencing drastic changes at the same time—in both financial and political landscapes. The most significant change would be the fall of Suharto's dictatorship following the financial crisis in 1998.

I was twenty-eight when I made my first trip to Central Kalimantan as a junior researcher at Utrecht University, working on a research project called “Large-scale Investment in Food, Fibre, and Energy: Options for the Poor”. Central Kalimantan is one of the most affected areas that generate massive haze during prolonged, severe droughts. With a local friend, Pak Agustinus, we rode across the province on a motorbike and went deep into the mountains, forests, plantations, and gold mining sites on large rivers and small streams. In these few months, I met a wide range of people, including indigenous people, migrants from other islands, urban settlers, local officials, entrepreneurs, activists, and plantation workers. I was, however, struggling to put all the pictures together—there are no simple ways of framing the fire events with complex on-ground socio-economic dynamics. While many uncontrolled fires were made unintentionally (such as a carelessly discarded cigarette butt), there were also reports about massive fires set purposely for land clearing. Ironically, many oil palm companies operating in these fire-prone areas are owned by Malaysians and have close patronage relationships with the government, if not actually government-linked.

Coincidentally, in later years I was involved in several projects related to agriculture and forestry in both Malaysian and Indonesian Borneo in different capacities, including policy design, industrial development, and research. These experiences have contributed to a greater understanding of the land-use dynamics in Borneo from various perspectives. I learnt that

people from different backgrounds, sectors, disciplines, positions, ethnicity, and nationality tend to have very different views on land-based development and conservation. On the one hand, advocates for “modernization” argue that Borneo should not be left behind in economic development. On the other hand, conservationists urge prioritizing environmental protection and restoration in Borneo. These have sparked plenty of debates and generated more heat than light on many occasions. However, the interconnected nature of economic productivity and conservation in Borneo implies that people have to work together and find the right combination of strategies to address the various issues related to land use and sustainability. Especially, the variation by places and timing of implementations must be carefully considered.

How to improve livelihoods without causing further environmental impacts but also repairing the damage done in the past? This big question has motivated Lesley and me to write a book about Borneo, specifically on land use and sustainable development. This monograph considers not only the seven subnational territories on the island but also Borneo as a regional entity that shares many similarities in both agroecological and socio-cultural aspects. This approach makes this book an interesting compilation of information and analyses that offers both ground-level views and high-level perspectives of land-based development on one island but two countries. We tried to identify the similarities and differences in regional experience and domestic priorities against national and global development. We drew interesting comparisons and lessons from what happened in 2000–20, describing the history, status, and future perspectives of transforming Borneo from land exploitation to sustainable development, as well as questioning how economies and societies were (re)structured within and beyond artificial boundaries.

In total, it took us about three years to complete the writing. It seems impossible to acknowledge everyone who has contributed to a book with a broad coverage like this one: some too many people have fed us the knowledge and information needed. We apologise for not being able to list all of those names.

Chun Sheng Goh
April 2022

Preface II

My experience with this book began rather later than that of Chun Sheng. During his post-doc at Harvard in 2020, he had compiled a draft, but lacking access to either the university library or interested staff because of COVID-19, he was unsure of some of the data and his conclusions. He asked me to check the manuscript, which I agreed to do, but then I began to discover gaps and to proceed to fill them. The result has been a substantial rewrite by both of us over the succeeding three years and our agreement to produce a joint volume.

Following completion of my PhD in Guyana (South America), for McGill University (Montreal), I moved to the University of Adelaide and began field studies in Borneo (mainly Kalimantan) in 1983. My initial introduction to Banjarmasin was to a city living on private generators, as the level of the hydropower dam was too low to be operational and there was a serious El-Niño drought. This soon developed in the logging regions of East Kalimantan into a large-scale forest fire, brought about by the “changed condition of the forest”, according to a leading commentator. After several field seasons resident in Banjarese and other villages in the Upper Riam Kiwa, I shifted my focus, from a concentration on the forests and the active deforestation and grassland formation still taking place, to attempted reforestation and replanting, eventually of oil palm, the new “golden child”. This brought a move to field sites in West Kalimantan, then a leading oil palm centre, especially to Dayak smallholder villages in Sanggau district. Consultancies also followed with the Centre for International Forestry Research (CIFOR). Later work also involved first-hand knowledge of various transmigration sites in Central Kalimantan, including the notorious “Million Hectare Rice Scheme”. I had meanwhile been involved in research in the environmental history of Borneo through archives in the Netherlands and collaboration in work of the KITLV anthropological group in Leiden. I managed to acquire some knowledge of Sabah, Sarawak and Brunei through overland travel and conference attendance, while residence on logging company sites, oil palm estates and in national parks like Kayan Mentarang (North Kalimantan) helped to fill in my “Borneo” experience and enabled me to understand the rapid changes taking place. I have been grateful to always find a welcome from local villagers and fellow researchers, who have

been keen to assist me to understand the complexities of life on this large island. My special thanks goes to Jennifer Sheehan of the Cartographic & GIS Services of the Australian National University (ANU) for drawing the maps for Figures 1.1, 2.1a and b, 2.2 and 5.4.

Lesley Potter
May 2022

Glossary

ADB	Asian Development Bank
AI	Artificial Intelligence
AMAN	Aliansi Masyarakat Adat Nusantara (Alliance of Indigenous People of the Archipelago)
APL	Areal Penggunaan Lain (Other use zone: non-forest)
APP	Asia Pulp and Paper
APRIL	Asia Pacific Resources International Holdings Limited
BAPPENAS	Badan Perencanaan Pembangunan Nasional (National Development Planning Agency)
BFCP	Berau Forest Carbon Partnership (East Kalimantan)
BIG	Badan Informasi Geospasial (National Geospatial Information Agency)
BIMP-EAGA	Brunei-Indonesia-Malaysia-Philippines-East-ASEAN-Growth-Area
BMF	Bruno Manser Fund (Sarawak)
BOLEH	Biodiversity Observation for Land and Ecosystem Health (Sabah and East Kalimantan)
BPDPKS	Badan Pengelola Dana Perkebunan Kelapa Sawit (Oil Palm Fund Management agency)
BRG	Badan Restorasi Gambut (Peatland Restoration Agency)
BPS	Badan Pusat Statistik (Indonesian Central Statistics Agency)
BSR	Basal Stem Rot (disease of oil palm)
CBD	Convention on Biological Diversity
CBM	Community Biodiversity Management (Sar)
CDM	Clean Development Mechanism
CIFOR	Center for International Forestry Research
CPO	Crude Palm Oil
CU	Credit Union

<i>Dayak Misik</i>	Dayak Indigenous peoples, generally in more remote areas (Central Kalimantan)
DOSM	Department of Statistics, Malaysia
DTE	<i>Down to Earth</i> (journal)
EFB	Empty Fruit Bunches (oil palm)
EIA	Environmental Impact Assessment
ES	Ecosystem Services
EU-ETS	European Union Emissions Trading Scheme
FAOSTAT	Food and Agricultural Organization Statistical Databases
FCPF	Forest Carbon Partnership Facility (East Kalimantan)
FELCRA	Federal Land Consolidation and Development Authority (Malaysia)
FELDA	Federal Land Development Authority (Malaysia)
FFB	Fresh Fruit Bunches (oil palm)
FGV	Felda Global Ventures (oil palm plantation corporation)
FLEGT	Forest Law, Enforcement, Governance and Trade Action Plan
FORMADAT	Forum Masyarakat Adat Dataran Tinggi Sarawak (Forum of Indigenous People of the Uplands of Sarawak, NGO).
FORCLIME	Forests and Climate Change Programme (Aid Agency funded, for eastern Indonesia).
FPIC	Free, prior and informed consent
FREL	Forest Reference Emission Levels (Indonesian government)
FS	Forever Sabah (NGO)
FSC	Forest Stewardship Council
GAR	Golden Agri Resources (oil palm company)
GEM	Global Energy Monitor
GFED	Global Fire Emissions Database
GHG	Greenhouse Gas
GIZ	German Aid Agency
GIZFORCLIME	Project on sustainable rubber in Kapuas Hulu (West Kalimantan)
HCS	High Carbon Stock
HCV	High Conservation Value

HoB	Heart of Borneo (see Figure 2.1b)
HTI	Hutan Tanaman Industri (Industrial Plantation Forest)
<i>hutan adat</i>	customary forest
<i>hutan desa</i>	village forest
ILUC	Indirect Land Use Change (EU)
IKN	Ibu Kota Negara (Capital City) (New capital in East Kalimantan)
INOBU	Earth Innovation Research Institute (Central Kalimantan)
IoT	Internet of Things
IPBES	Intergovernmental Science Policy Platform on Biodiversity and Ecosystem Services
IPOP	Indonesian Palm Oil Pledge
IR 4.0	Industrial Revolution 4.0
IPCC	Intergovernmental Panel on Climate Change
ISPO	Indonesian Sustainable Palm Oil
IUCN	International Union for Conservation of Nature
JA	Jurisdictional Approach
JATAM	Jaringan Advokasi Tambang (Mining Advocacy Network)
JCSPO	Sabah Jurisdictional Certified Sustainable Palm Oil
JICA	Japanese International Cooperation Agency
Jokowi	(President) Joko Widodo
<i>Kabupaten</i>	district, regency
<i>Kaharingan</i>	Animistic Dayak religion in Central Kalimantan
Kalbar	Kalimantan Barat (West Kalimantan)
Kalsel	Kalimantan Selatan (South Kalimantan)
Kaltara	Kalimantan Utara (North Kalimantan)
Kalteng	Kalimantan Tengah (Central Kalimantan)
Kaltim	Kalimantan Timur (East Kalimantan)
<i>Kecamatan</i>	subdistrict
<i>Kemitraan</i>	partnership
KFCP	Kalimantan Forests and Climate Partnership (Australia)
KKPA	Kredit Koperasi Primer untuk Anggota (Primary Credit Co-operative for Members) (oil palm smallholder scheme)

<i>Konsep Baru</i>	“Land Reform” Sarawak
<i>Kota</i>	Municipality, city
Kota Terpadu Mandiri	New town on former transmigration site.
Kotim	Kotawaringin Timur subdistrict (C. Kal.)
Kutim	Kutai Timur subdistrict (E. Kal)
<i>Lahan Kritis, Lahan Sub-optimal</i>	Degraded land, unproductive land
M2M	Machine to machine
MARDI	Malaysian Agricultural Research and Development Institute
MCO	Movement Control Order (during COVID-19) Malaysia
MoA	Ministry of Agriculture, Indonesia
MODIS	Satellite Imagery
MoEF	Department of Environment and Forestry, Indonesia
MPOB	Malaysian Palm Oil Board
MRP	Million Hectare Rice Project (also PLG: Pengembangan Lahan Gambut) (Central Kalimantan)
MSPO	Malaysian Sustainable Palm Oil
MSW	Municipal Solid Waste
MTCS	Malaysian Timber Certification Scheme
NBS	National Biomass Strategy (Malaysia)
NCR	Native Customary Rights (Sarawak)
NGO	non-government organization
NDPE	No Deforestation, Peat, Exploitation (pledge by some oil palm companies)
NKEA	New Key Economic Areas (Malaysia)
OMP	One Map Policy (Indonesia)
<i>padi paya(k)</i>	Wet swidden (West Kalimantan)
<i>padi pulut</i>	Sticky rice (West Kalimantan)
PEFC	Programme for Endorsement of Forest Certification
PES	Payment for Ecosystem Services
PHPL	Pengelolaan Hutan Produksi Lestari (Sustainable Production Forest Management)
PIR	Perkebunan Inti Rakyat (Nucleus Estate and Smallholder Scheme, Indonesia)

PIR-Trans	Perkebunan inti Rakyat Transmigrasi (as above, for transmigrants)
PKO	Palm Kernel Oil
PKS	Palm Kernel Shell
PLN	Indonesian State Electricity Company
POIC	Palm Oil Industrial Cluster (Sabah)
POME	Palm Oil Mill Effluents
RECODA	Regional Corridor Development Authority (Sarawak)
RED	Renewable Energy Directive (EU)
REDD (+)	Reducing Emissions from Deforestation and Forest Degradation. (REDD + includes conservation, sustainable management of forests and enhancement of forest carbon stocks).
RFID	Radio Frequency Identification Tags
RHAP	Regional Haze Action Plan
RIL	Reduced Impact Logging
ROW	Rest of the World
RSPO	Roundtable on Sustainable Palm Oil
SAIP	Sabah Agro-industrial Precinct
SALCRA	Sarawak Land Consolidation and Rehabilitation Agency
SBABB	Quality Oil Palm Seedlings Assistance Scheme (Malaysian Palm Oil Board)
SBC	Sarawak Biodiversity Centre
SCORE	Sarawak Corridor of Renewable Energy
SDC	Sabah Development Corridor
SDGs	Sustainable Development Goals
SFM	Sustainable Forest Management
SLDB	Sabah Land Development Board
SPOC	Sustainable Palm Oil Clusters (Malaysia)
SPU	State Planning Unit, Sarawak
STLVS	Sarawak Timber Legality Verification System
SVLK	Sistem Verifikasi Legalitas Kayu (Indonesian Legal Timber Verification System)
TLAS	Timber Legality Insurance System (Sabah)
Toba	Kecamatan in Sanggau district (West Kalimantan)
TORA	Tanah Obyek Reforma Agraria (Agrarian Reform) (Indonesia)

ULC	Underutilized Low Carbon Land
UN-COMTRADE	Database of detailed global annual and monthly trade statistics
UNCTAD	United Nations Conference on Trade and Development
UNFCCC	United Nations Framework Convention on Climate Change
WALHI	Wahana Lingkungan Hidup Indonesia (Indonesian Forum for the Environment; Friends of the Earth, Indonesia, NGO)
WTO	World Trade Organization
WWF	World Wide Fund for Nature
Yayasan Sabah	Sabah Foundation (an organization providing educational and economic opportunities for Sabahans).