

#### **Divided Environments**

What are the implications of climate change for twenty-first-century conflict and security? Rising temperatures, it is often said, will bring increased drought, more famine, heightened social vulnerability and large-scale political and violent conflict; indeed, many claim that this future is already with us. Divided Environments, however, shows that this is mistaken. Focusing especially on the links between climate change, water and security, and drawing on detailed evidence from Israel-Palestine, Syria, Sudan and elsewhere, it shows both that mainstream environmental security narratives are misleading and that the actual security implications of climate change are very different from how they are often imagined. Addressing themes as wide-ranging as the politics of droughts, the contradictions of capitalist development and the role of racism in environmental change, while simultaneously articulating an original 'international political ecology' approach to the study of socio-environmental conflicts, Divided Environments offers a new and important interpretation of our planetary future.

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## Divided Environments

An International Political Ecology of Climate Change, Water and Security

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'What are they after?'

'People say they came to look for water.'

'You - what did you hear them say?'

'There were too many people around them – I only heard a word here and there'  $\dots$ 

They all looked at the strange scene before them as if it were a dream or a hallucination, but the line of neatly parked tractors, and the deadly silence that reigned over the new land – for the wadi now looked like part of the desert beyond, except for the hills and the heaps of ruined trees – convinced them that it was real: a cruel, wicked sight that resembled death.

Beside the ruins on the broad plain they sat, determined to stay and wait....

The order came from afar, in a harsh but muffled voice, like a cry from a cave. 'Fire!'

Cities of Salt, by Abdelrahman Munif, trans. P. Theroux (Vintage, 1989), 26, 110, 614.



Unbiased at least he was when he arrived on his mission, Having never set eyes on the land he was called to partition Between two peoples fanatically at odds, With their different diets and incompatible gods. 'Time,' they had briefed him in London, 'is short. It's too late For mutual reconciliation or rational debate: The only solution now lies in separation. The Viceroy thinks, as you will see from his letter, That the less you are seen in his company the better, So we've arranged to provide you with other accommodation. We can give you four judges, two Moslem and two Hindu, To consult with, but the final decision must rest with you.'

Shut up in a lonely mansion, with police night and day Patrolling the gardens to keep the assassins away, He got down to work, to the task of settling the fate Of millions. The maps at his disposal were out of date And the Census Returns almost certainly incorrect, But there was no time to check them, no time to inspect Contested areas. The weather was frightfully hot, And a bout of dysentery kept him constantly on the trot, But in seven weeks it was done, the frontiers decided, A continent for better or worse divided.

The next day he sailed for England, where he could quickly forget The case, as a good lawyer must. Return he would not, Afraid, as he told his Club, that he might get shot.

'Partition', by W. H. Auden (1966)



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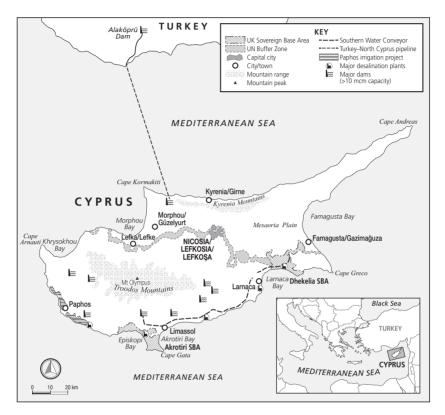
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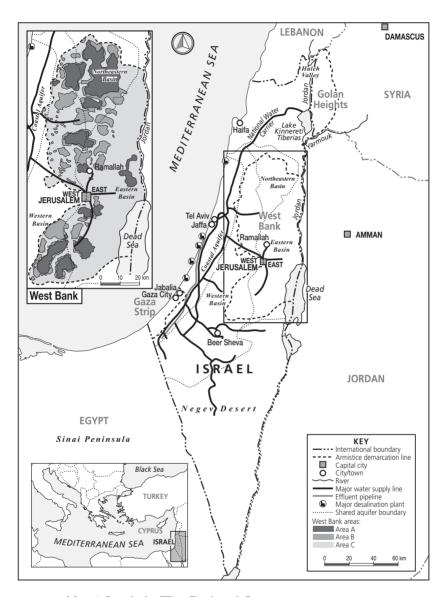
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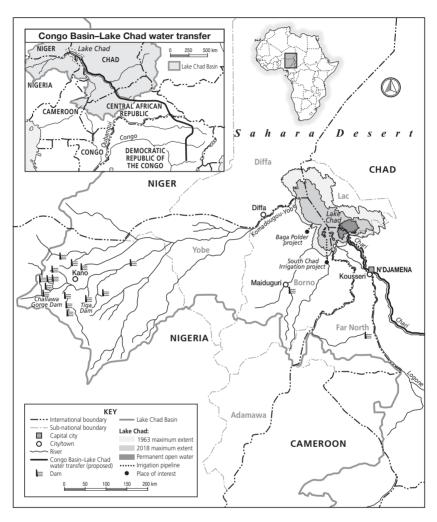
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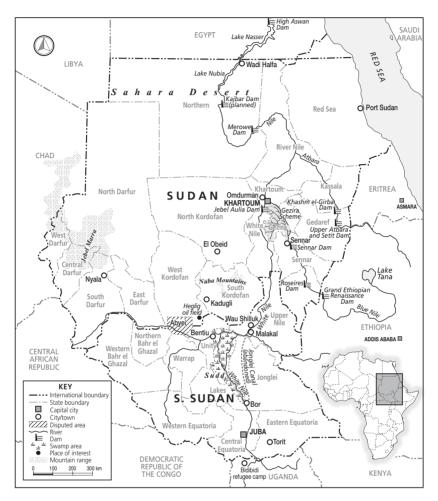
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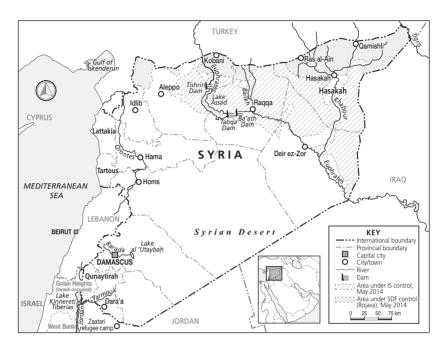
Map 3 The Lake Chad region





Map 4 Sudan and South Sudan





Map 5 Syria. Note that this map shows Rojava and Islamic State territory as of May 2014; since then, the extent of these areas has changed multiple times.



### Preface

If this book began anywhere, it was with a September 2008 email from Giorgos Kallis and Christos Zografos about a proposed three-year research consortium on climate change, water and security. The Climate Change, Hydro-Conflicts and Human Security (or CLICO) consortium, funded by the EU's Framework 7 programme and led by Giorgos and Christos, brought together researchers on climate, water politics and environmental security to explore the implications of climate change for water resources and security in the Mediterranean, North Africa and the Middle East. Such programmes are often more trouble than they're worth, bedevilled by the EU's predilection for research collaboration and integration above all else. Thankfully, Giorgos and Christos' politics meant that they managed CLICO with an exceptionally light touch, letting many flowers bloom. More than a dozen years on, this book is one belated result.

The initial idea behind this project, as proposed to the EU, was for a comparative analysis of water-climate-conflict linkages in three partitioned societies: Cyprus, Israel-Palestine and Sudan. The plan was for a book comprising three case study chapters sandwiched between broader theoretical reflections. But this was always too ambitious given the project timescale. And then a whole host of other things got in the way, not least several new jobs, two new babies, a failed coup d'état, relocations between countries, the standard teaching and administrative demands, periodic research assessment requirements and multiple other research projects. The consequence was that Selby and Hoffmann barely worked on the book during the five years after CLICO had concluded, in December 2012. Only in late 2017, after Selby had completed a separate stream of research on climate change and the Syrian civil war, was it decided that the book should be rethought and restructured, this time with a thematic structure and Syria added as a fourth 'divided environment'. Daoust joined the team in October 2018, leading to more sustained work on the manuscript plus the addition of Lake Chad as a fifth case, with the bulk of the manuscript being written between 2019 and 2021.

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#### xviii Preface

The text of *Divided Environments* is entirely new, though various sections draw on our previous individual and co-authored publications, summarising some while expanding on others. The final text was for the most part conceived, framed and written by Selby, mostly while sitting, during lockdown, at a picnic table next to the compost heap of his tiny Brighton garden: hence, where there are major analytical, theoretical or narrative flaws, these are in all likelihood his doing. By contrast, responsibility for the analysis of cases was divided. Hoffmann led and undertook most of the research on Cyprus. Daoust did the same for Lake Chad. Selby led most of the research on Israel–Palestine and Syria. Each author has led different segments of the research on Sudan-South Sudan. Above all, what follows is the product of innumerable conversations and exchanges to identify cross-cutting patterns, divergent trajectories, narrative inconsistencies and unanswered puzzles within and across our five cases. It is in this latter respect, above all, that the writing of this book has involved particularly close collaboration.

Our analysis is underpinned by extensive primary research which reaches back to 2010, some of it even earlier. This primary research, which cuts across all of our cases, has involved a combination of elite interviews (mainly with local water managers and policymakers, and international donor and NGO officials); informal discussions with farmers, aid recipients and community leaders; the organisation of local stakeholder workshops; participant observation in a wide range of expert forums; archival analysis of water negotiation files; and discourse analysis of media and policy representations of specific water and climate issues. Research was undertaken in Cyprus from 2010 to 2012 (by Hoffmann and Selby); in South Sudan during 2011–12 (by Hoffmann) and 2014–15 (by Daoust, as part of prior doctoral research); in Khartoum and Omdurman in 2013 (by Hoffmann); in N'Djamena in 2020 (by Daoust); and in Israel-Palestine on multiple occasions (by Selby). In addition, we have benefitted from a good many Skype and more recently Zoom interviews and from regular email correspondence and conference discussions with both local and international experts. Lastly, we wish to stress that much of our analysis is underpinned by close interrogations of existing primary and secondary sources - sources which often misrepresent water and climate security issues.

Our debts are many: over the course of the last decade, scores of people have provided inspiration, answered irritating questions, been coauthors, offered research support or helped shape the journal articles that underpin much of what follows. On climate and water politics, and political ecology more broadly, we particularly wish to mention Neil Adger, Jeremy Allouche, Jessica Barnes, Tor Benjaminsen, Andrea



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The research for and writing of this book was undertaken across the universities of Sussex (Selby until 2020, Hoffmann 2010–12, Daoust 2018–20), Bilkent (Hoffmann 2012–16), Stirling (Hoffmann from 2016), Sheffield (Selby from 2020) and St Francis Xavier (Daoust from 2020). At Sussex, we would particularly like to thank Saul Becker,



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In addition, we want to acknowledge those whose work has been a major influence but is not adequately cited in what follows. Space constraints have required us to condense our footnotes considerably, including cutting all explanatory text and indirect references (as well as grouping references together). Our apologies where the result is that influences are not properly recognised.

Last but not least, Jan Selby would like to thank Alison for her solidarity, love and general good sense. I know that this book has dragged on for far too long: I promise not to attempt another one like it again.



## **Abbreviations**

ADP Agricultural Development Project
AfDB African Development Bank
bcm/y billion cubic metres per year
CBS Central Bureau of Statistics
CCS Center for Climate and Security
cm/cap/y cubic metres per capita per year

CO<sub>2</sub> carbon dioxide

COP Conference of the Parties

CRED Centre for Research on the Epidemiology of Disasters

DIU Dams Implementation Unit (Sudan)
DSI State Hydraulic Works (Turkey)
ECSC European Coal and Steel Community

EM-DAT Emergency Events Database

FAO Food and Agricultural Organization of the United

Nations

G7 Group of Seven

GDP gross domestic product

GERD Grand Ethiopian Renaissance Dam

GIZ German Agency for International Cooperation

HRW Human Rights Watch
ICG International Crisis Group
IDF Israel Defense Forces

IDMC Internal Displacement Monitoring Centre

IDP internally displaced person

ILO International Labour Organization IMF International Monetary Fund

IPCC Intergovernmental Panel on Climate Change

IR International Relations

IS Islamic State

IWA Israeli Water Authority

JICA Japan International Cooperation Agency

JNF Jewish National Fund

xxi



> xxii List of Abbreviations

JWC Joint Water Committee (Israeli–Palestinian)

**LCBC** Lake Chad Basin Commission

1/c/d litres per capita per day

**LGAs** Local Government Areas (Nigeria) mcm/y million cubic metres per year

MFC Mechanised Farming Corporation (Sudan) NASA National Aeronautics and Space Administration

NGO non-governmental organisation

PA Palestinian Authority

PLO Palestine Liberation Organization

ppm parts per million

**PRIO** Peace Research Institute Oslo **PWA** Palestinian Water Authority

**RCP** Representative Concentration Pathway

RoC Republic of Cyprus

**SCIP** South Chad Irrigation Project (Nigeria)

SDF Syrian Democratic Forces SDG Sustainable Development Goal **SFG** Strategic Foresight Group

SPLM/A Sudan People's Liberation Movement/Army

TVA Tennessee Valley Authority UAR United Arab Republic United Nations UN

UNCCD United Nations Convention to Combat Desertification UNCCP United Nations Conciliation Commission for Palestine

United Nations Development Programme UNDP **UN-ECOSOC** United Nations Economic and Social Council UNEP United Nations Environment Programme

**UNESCO** United Nations Educational, Scientific and Cultural

Organization

**UN-ESCWA** United Nations Economic and Social Commission

for Western Asia

**UNHCR** United Nations High Commissioner for Refugees

**UNHRC** United Nations Human Rights Council UNICEF United Nations Children's Fund

United Nations Office for the Coordination of **UN-OCHA** 

Humanitarian Affairs

**UNRWA** United Nations Relief and Works Agency for Palestine

Refugees

UNSCO United Nations Special Coordinator for the Middle

East Peace Process

USDA United States Department of Agriculture



List of Abbreviations

xxiii

United States Office of the Director of National **US ODNI** 

Intelligence

WASH water, sanitation and hygiene

WDD Water Development Department (Republic of

Cyprus)

WEF World Economic Forum WFP World Food Programme WHO World Health Organization

Extinction Rebellion XR