Reproduced from Climate Change and the Bay of Bengal: Evolving Geographies of Hope and Fear, by Sanjay Chaturvedi and Vijay Sakhuja (Singapore: ISEAS—Yusof Ishak Institute, 2015). This version was obtained electronically direct from the publisher on condition that copyright is not infringed. No part of this publication may be reproduced without the prior permission of ISEAS—Yusof Ishak Institute.

Individual chapters are available at http://bookshop.iseas.edu.sg.

CLIMATE CHANGE

- AND -THE BAY OF BENGAL

The **ISEAS–Yusof Ishak Institute** (formerly Institute of Southeast Asian Studies) was established as an autonomous organization in 1968. It is a regional centre dedicated to the study of socio-political, security and economic trends and developments in Southeast Asia and its wider geostrategic and economic environment.

The Institute's research programmes are the Regional Economic Studies (RES, including ASEAN and APEC), Regional Strategic and Political Studies (RSPS), and Regional Social and Cultural Studies (RSCS).

ISEAS Publishing, an established academic press, has issued more than 2,000 books and journals. It is the largest scholarly publisher of research about Southeast Asia from within the region. ISEAS Publishing works with many other academic and trade publishers and distributors to disseminate important research and analyses from and about Southeast Asia to the rest of the world.

CLIMATE CHANGE

- AND THE BAY OF BENGAL

Evolving Geographies of Fear and Hope

Sanjay Chaturvedi and Vijay Sakhuja



First published in Singapore in 2015 by ISEAS Publishing 30 Heng Mui Keng Terrace Singapore 119614

E-mail: publish@iseas.edu.sg *Website*: bookshop.iseas.edu.sg

All rights reserved. No part of this publication may be reproduced, stored in a retrieval system, or transmitted in any form or by any means, electronic, mechanical, photocopying, recording or otherwise, without the prior permission of the ISEAS–Yusof Ishak Institute.

© 2015 ISEAS-Yusof Ishak Institute, Singapore

The responsibility for facts and opinions in this publication rests exclusively with the authors and their interpretations do not necessarily reflect the views or the policy of the publisher or its supporters.

ISEAS Library Cataloguing-in-Publication Data

Chaturvedi, Sanjay.

Climate change and the Bay of Bengal : evolving geographies of fear and hope / Sanjay Chaturvedi and Vijay Sakhuja.

- 1. Climatic changes—Bengal, Bay of.
- 2. Bengal, Bay of—Strategic aspects.
- I. Sakhuja, Vijay.
- II. Title.

OC903.2 B48C49 2015

ISBN 978-981-4459-58-7 (soft cover) ISBN 978-981-4517-93-5 (e-book, PDF)

Typeset by International Typesetters Pte Ltd Printed in Singapore by Markono Print Media Pte Ltd

CONTENTS

Prefi	асе	vi		
1.	Geopolitics in the Era of Climate Change: Rethinking Sovereignty, Security and Sustainability	1		
2.	Mapping the Bay of Bengal in the Era of Climate Change	30		
3.	Climate Change, Displacements and Imperatives of Human Security	62		
4.	Strategic Responses to Non-traditional Security Threats: The Role of the Military	105		
5.	Rescaling the 'National': Realities, Perceptions and Policies	137		
6.	Assessing Regional Responses: A Case for Reorientation	177		
7.	Conclusion: Towards a Bay of Bengal Community	199		
Bibliography				
Index				
About the Authors				

PREFACE

We are living in an era of transitions and transformations where very different understandings of security and sovereignty are at work. The multifaceted challenge of multiscalar climate change forces us to rethink the issues of space, scale and power in ways perhaps hitherto unimagined. This is not to suggest that the old cartographies emerging out of state-centric imaginations of inside/outside and 'national security' have completely disappeared but to explore the extent to which they make sense in the era of climate change and scarcities. Taking the semi-enclosed 'Bay of Bengal' and its littorals as a case study we argue in this book that they don't. For us the Bay of Bengal is also a valuable social science laboratory to establish and demonstrate that howsoever useful the 'global' metanarratives of climate change might be in their own right, a critical social science perspective compels us to rescale our attention and map out the complex spatial geographies of climate change.

A useful way forward in the direction suggested above is to recall that even though climate change had not been factored into the deliberations and outcomes of UNCLOS III, the 1982 Convention makes the specific provision in its Article 123, to the effect that,

States bordering an enclosed or semi-enclosed sea should cooperate with each other in the exercise of their rights and in the performance of their duties under this Convention. To this end they shall endeavour, directly or through an appropriate regional organization: (a) to coordinate the management, conservation, exploration and exploitation of the living resources of the sea; (b) to coordinate the implementation of their rights and duties with respect to the protection and preservation of the marine environment; (c) to coordinate their scientific research policies and undertake where appropriate joint programmes of scientific

viii Preface

research in the area; (d) to invite, as appropriate, other interested States or international organizations to cooperate with them in furtherance of the provisions of this article.

Since we wholeheartedly agree with the contention that there is no such thing as a 'view from nowhere', we find it appropriate to outline at the outset some of the key assumptions on which our analysis in this book is based. First and foremost, we believe that the debate on climate change cannot and should not be divorced from the debate on sustainable development. We argue that climate change and sustainable development are inextricably linked and thus should be approached and analysed together in a holistic manner. By doing so, we are less likely to miss out the long-standing histories of natural disasters, ecological degradation and deeply entrenched ecological irrationalities in our societies. At the same time what we should be aiming at is to broaden the understanding and deepen the debate on climate change by analysing how the anticipated consequences of climate change travel backwards and beyond the causes related to 'global warming' and are anchored in the dominant models of economic growth and development.

The second key assumption that guides our approach to analysis in this work is that the concept of sovereignty needs a radical reformulation in the context of climate change and ecological un-sustainability. A different geopolitics is at work beyond the limits of state sovereignty, which forces us to rethink the concept of boundaries (on land, sea and air) and in some cases even replace them by the concept of zones characterized by multilateral cooperation. It is forgotten sometimes that the Bay of Bengal is a semi-enclosed sea as defined under UNCLOS III, to which all the littoral states of the Bay of Bengal are signatories. By virtue of being signatories, the Bay of Bengal littoral states have certain obligations to meet. Article 122 of UNCLOS III stipulates that "For the purposes of this Convention, 'enclosed or semi-enclosed sea' means a gulf, basin or sea surrounded by two or more States and connected to another sea or the ocean by a narrow outlet or consisting entirely or primarily of the territorial seas and exclusive economic zones of two or more coastal States." We are curious to explore the extent to which the specific and unique regional specificities and circumstances of the Bay of Bengal have invited joint action, technical cooperation and other management mechanisms at the regional scale by the littoral states.

Preface

A careful reading of various national perspectives on, and responses to, climate change mitigation and adaptations gives an impression that the scales that matter the most are either 'global' (a scale at which the dominant climate change metanarratives are currently framed, debated and discussed) or 'national' with strong tendencies to look inwards rather than transnationally. What are conspicuous therefore by their absence are regional consciousness and collective response strategies embedded in the physical-human-ecological geographies of the Bay of Bengal.

For the purposes of this study we define geography as "literally, 'earth-writing' from the Greek geo (earth) and graphia (writing), the practice of making geographies ('geo-graphing') involves both writing about (conveying, expressing or representing) the world and also writing (marking, shaping or transforming) the world. The two fold in and out of one another in an ongoing and constantly changing series of situated practices, and even when attempts have been made to hold 'geo-graphing' still, to confine its objects and methods to a formal discipline, it has always escaped those enclosures." Further, "the idea that there is some eternal metaphysical core to geography independent of circumstances will simply have to go". In this vein we argue and illustrate in this book that the geographies of the 'Bay of Bengal', far from being fixed and rigid either in terms of physicality or our mental maps, are in fact 'marked, shaped and transformed' by the climate change. Correspondingly, what is needed now are innovative ways of 'conveying, expressing and representing' the semi-enclosed Bay of Bengal, from the perspectives of large marine ecosystem. At the same time, we uphold and argue that rather than presuming that there is an 'eternal metaphysical core' to the geography of the Bay of Bengal, we should be focusing more sharply on the centrality of those communities whose wellbeing and livelihoods depend on this large marine ecosystem.

We begin this study with an analysis of the dominant metanarratives of multiscalar climate change, some of which are rather alarmist and fear inducing, and show how the 'global' scale is being privileged over other scales, especially the regional and the local. The current predominant framings of the Bay of Bengal appear no exception to the trends that tend to eclipse the reality of one of the largest marine ecosystems in the world being subjected to transformations and uncertainties associated with climate change. We further argue that

x Preface

there is a need to rethink the traditional state-centric understandings of sovereignty and security innovatively within the dynamic humanecological interface. The chapter to follow maps out in some details physical-human geographies of the Bay of Bengal, which in turn are approached and analysed as integral to large marine ecosystem. What we chiefly intend to show here is that climate change is likely to act as an impact multiplier in the region with a long-standing history of vulnerabilities to cyclones, tsunamis and storm surges. In Chapter 3, our key concern is with climate-induced displacements — both current and potential — and emerging ethical as well as geopolitical issues and contestations. The analysis here reveals the urgency of further research and reflection on the complex development-disaster-displacement interface around which the phenomena of 'climate migrations' are likely to unfold with implications for diverse and competing understandings of security. In the next chapter, it is argued that climate change will compel states and their defence-security establishments to rethink and reassess the roles and missions of their conventional armed forces. Confronted with common security challenges, the conventional understandings of the 'adversary' will have to be suitably modified in order to effectively address the transnational threats to human-environmental security. In Chapter 5 our key argument addresses the critical importance of rescaling 'national' responses to climate change in two major directions. It needs to be scaled up in order to develop regional perspectives and scaled down to community-centric levels to address local realities. The chapter to follow focuses on the ongoing regional cooperative engagements amongst the Bay of Bengal littorals and explores the extent to which these multilateral initiatives have factored in climate change and its various facets into their regional strategies. We present a future possibility where a new maritime regionalism — embedded in the specificities of the Bay of Bengal and harnessing the existing synergies of current regional approaches — takes a firm hold on both popular imaginations and official-state policies.

Each of us owes combined and individual debts of gratitude. First and foremost, We would like to acknowledge our deeply felt gratitude and indebtedness to Ambassador K. Kesavapany, former Director of the Institute of Southeast Asian Studies (ISEAS) Singapore, for his visionary guidance and kind support, with which this study has been

Preface

conceptualized and completed. It has been an honour and a privilege for both of us to draw upon the formidable in-house expertise and outstanding wealth of library resources of ISEAS as Visiting Senior Research Fellows. We would like to extend our heartfelt thanks to all the researchers, fellows and members of both the administration and library staff at ISEAS for their invaluable assistance and encouragement.

Sanjay would like to thank Arun Grover, Vice Chancellor, Panjab University, Chandigarh, for his support and encouragement throughout the passage of this book writing. He would also like to thank all his colleagues and research scholars at the Department of Political Science, Panjab University.

Vijay would like to equally extend his warm appreciation to a number of scholars who gave their valuable time to discuss climate change issues and senior retired Indian Navy officers who provided valuable inputs on maritime matters contained in the volume.

Both of us would like to thank a truly amazing publication division and the editorial staff at ISEAS Publishing, especially Senior Editor Ms Rahilah Yusuf, for their patience and unstinted support to ensure successful fruition of the project.

Notes

- D. Gregory, "Geography". In *The Dictionary of Human Geography* (5th ed.), edited by D. Gregory, R. Johnston, G. Pratt, M. Watts and S. Whatmore. (Oxford: Wiley-Blackwell, 2009). p. 287.
- D. N. Livingstone, The Geographical Tradition: Episodes in the History of a Contested Enterprise (Oxford: Blackwell, 1992), p. 28.