

# **SURVIVING IN THE SUNDARBANS: THREATS AND RESPONSES**

An analytical description of life in an Indian riparian commons

## **DISSERTATION**

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by  
Anamitra Anurag Danda  
born on 1 January, 1969  
in Jhargram, India

This thesis has been approved by the promoter  
prof.dr. N.G. Schulte Nordholt

and the assistant promotor  
dr. M. Skutsch

## **Samenstelling promotiecommissie:**

<b>Voorzitter:</b>	prof.dr. P.J.J.M. van Loon	Universiteit Twente
<b>Secretaris:</b>	prof.dr. P.J.J.M. van Loon	Universiteit Twente
<b>Promotor:</b>	prof.dr. N.G. Schulte Nordholt	Universiteit Twente
<b>Ass. Promoter:</b>	dr. M. Skutsch	Universiteit Twente
<b>Referent:</b>	dr. A.K. Ghosh	Centre for Environment and Development, Kolkata
<b>Leden:</b>	prof.dr. J.Th.A. Bressers prof.dr. J.C. Lovett prof.dr. J.B. Opschoor	Universiteit Twente Universiteit Twente/University of York Vrije Universiteit Amsterdam/Institute of Social Sciences The Hague

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Contact address: Flat 4B, 102 Jodhpur Park, Kolkata 700068, India

e-mail: [moitradanda@vsnl.net](mailto:moitradanda@vsnl.net) or [dandaaa@hotmail.com](mailto:dandaaa@hotmail.com)

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## Acronyms and abbreviations

ADB	Asian Development Bank
ADO	Agriculture Development Officer
AGCs	Agriculture Growth Centres
BMC	Biodiversity Management Committee
BNWCS	Bali Nature and Wildlife Conservation Society
BPHC	Block Primary Health Centre
BPL	Below Poverty Line
BSF	Border Security Force
CITES	Convention on International Trade in Endangered Species of Wild Fauna and Flora
CPI(M)	Communist Party of India (Marxist)
CPR	Common-pool resource
CRZ	Coastal Regulation Zone
CSO	Civil society organisation
DDG	Decentralised Distributed Generation
EDC	Eco-development Committee
FAO	Food and agriculture organisation
FD	Forest Department
FPC	Forest Protection Committee
GoI	Government of India
GoWB	Government of West Bengal
GP	Gram Panchayat
Ha	Hectare
HDPE	High-density polyethylene
IBWL	Indian Board for Wild Life
ICDP	Integrated Conservation and Development Plan
IFAD	International Fund for Agricultural Development
iNGO	International NGO
IUCN	World Conservation Union
kW	Kilowatt
LPG	Liquefied petroleum gas

MARR	Multi-Access Rural Radio
MoEF	Ministry of Environment and Forests
MP LA	Member of Parliament Local Area Development
MT	Metric tonne
NFP	National Forest Policy
NSSO	National Sample Survey Organisation
OECD	Organisation for Economic Co-operation and Development
PA	Protected Areas
PHC	Primary Health Centre
PL	Post-larvae
PMGSY	<i>Pradhan Mantri Gram Sadak Yojna (Prime Minister's Village Roads project)</i>
PRI	<i>Panchayati Raj</i> Institutions
RCC	Reinforced Cement Concrete
RKM	Rama Krishna Mission
RSP	Revolutionary Socialist Party
SAD	Sundarban Affairs Department
SDB	Sundarban Development Board
SDMBRI	SD Marine Biological Research Institute
SHGs	Self-Help Groups
SHIS	Southern Health Improvement Society
SPV	Solar photovoltaic
STR	Sunderban Tiger Reserve
SUCI	Socialist Unity Centre of India
TERI	The Energy and Resources Institute
TSRD	Tagore Society for Rural Development
TSS	Tiger Shrimp Seed
TSSC	Tiger shrimp seed collection
UNCSD	United Nations Commission on Sustainable Development
UNEP	United Nations Environment Programme
UNWTO	UN World Tourism Organisation
WBREDA	West Bengal Renewable Energy Development Agency
WCED	World Commission on Environment and Development
WCS	World Conservation Strategy
WLL	Wireless in local loop
WPSI	Wildlife Protection Society of India
WWF	World Wide Fund for Nature

## Glossary of non-English words

- abad*: forest clearing for cultivation  
*abadkari*: forest clearer  
*adivasi para*: locality of tribal settlements  
*barga*: principle of sharing crop  
*bhagi*: principle of sharing related to production by the well-to-do with the poor  
*Bhawali*: wood cutter  
*bigha*: measure of land, about 1338 sq. m  
*Bon Bibi*: presiding deity of the Sundarbans, possibly of Islamic origin  
*bund*: earthen embankment  
*bundh*: form of protest – strike – by political parties and their affiliates  
*daadon*: advance sale  
*Dakshin Rai*: tiger-god of the Sundarbans  
*faqir*: Muslim holy man  
*ferry ghat*: platform for embarkation and disembarkation from boat  
*Ganga mayer masik*: menstruation of river goddess, a period for traditional fishermen to abstain from fishing  
*Gram Panchayat*: statutory, elected village council; last level of local self-government  
*haat*: open market  
*jaatra*: folk theatre  
*jottdar*: person responsible for bringing land under cultivation; literally, tiller  
*khal samiti*: committee of water appropriators  
*khal*: canal  
*kharif*: cropping season during monsoon months  
*khas mahal*: government's own estate  
*kutchra*: unpaved  
*majhi samiti*: committee of boatmen  
*meen byapaari*: Tiger shrimp seed trader  
*morol*: chief of traditional or caste panchayat  
*mouza*: revenue village  
*nayanjuli*: roadside ditches  
*Panchayat Samiti*: middle tier of local self-government (Development Block-level)  
*Panchayat*: literally, a council of five members; traditionally caste based, controlled by dominant caste  
*para*: locality  
*Pradhan Mantri Gram Sadak Yojna*: Prime Minister's Rural Roads Project  
*Pradhan*: elected chief of Gram Panchayat  
*rabi*: cropping season during dry winter months  
*Rajiv Gandhi Grameen Vidyutikaran Yojana*: Government scheme for rural electricity infrastructure and household electrification named after Rajiv Gandhi  
*ring bandh*: inner embankment  
*ryot*: settler-cultivator  
*Sarva Siksha Abhiyan*: programme for universalisation of education  
*shramdaan*: donation of voluntary labour  
*zamindar*: landlord responsible for paying land revenue to government  
*Zilla Parishad*: District-level local self-government  
*Zilla*: District

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---

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गुरु ब्रम्हा गुरुं विष्णु	Gurur Brahma Gurur Vishnu
गुरुं देवो महेश्वरः	Gurur Devo Maheshwarah.
गुरुं साक्षात् पर ब्रम्ह	Gurur Sakshat Para Brahma
तस्मै श्री गुरवे नमः	Tasmai Shree Gurave Namah.

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## Preface

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While studying for a postgraduate diploma in Environment Management, I heard the term *sustainable development* for the first time around 1994. The term, at that time, did not seem out of the ordinary or inspiring. However, during the programme what inspired and fascinated me were the stories that Prof. Satyesh Chakraborty told us in the guise of taking classes and delivering lectures.

Working under Dr. Dhrubajyoti Ghosh (also my teacher at the Environment Management Programme) at an environmental planning facility of the Government of West Bengal during 1995-1997, I came across the term *sustainable development* more often and started to get a sense of it. It was during this period that I realised that Prof. Chakraborty had indeed been introducing us to the concept of *sustainable development*. Though excited at the realisation, it remained at that till I had been to the Sundarbans a number of times between 1998 and 2000.

I visited parts of the Sundarbans for the first time in 1998 and was immediately hooked, the landscape fascinated me. Even the stories that I had heard of the Sundarbans had attracted me. Over time, I found the mindscape of the people of the Sundarbans even more fascinating. During the course of my work with a Swiss Project that involved collecting ethnographic data, this mindscape was partly revealed to me, and again more vividly, when working on an energy plantation project under Dr. Asish Ghosh. It was around this time that the question of whether the concept of sustainable development had any significance for a region like the Sundarbans, struck me. Regular interactions with Dr. Ghosh heightened my interest, both in the Sundarbans, and in the concept of *sustainable development*.

The energy plantation project mentioned above was spread across different locations on Mollakhali Island, and I realised that different groups were reacting differently to the initiative. Also, some groups were more successful than others in maintaining the plantations. I was curious to know the reasons for the differences. Earlier, I had noticed differences in coping mechanisms to ecological stress in the Sundarbans when coordinating the ethnographic field research; while some were making the most of a bad situation, others were apathetic. Looking up literature on the Sundarbans did not help much since the studies in general were concerned with the biotic aspects of the ecosystem. While dealing with the human population, this focus was invariably regarding the impact on the ecosystem due to anthropogenic activities and not on how the communities negotiated the various limitations that the ecosystem posed to human presence in the eco-region. I wanted to understand why different groups and organisations conducted themselves as they did in the face of a crisis. This was the inspiration and starting point for the research endeavour described in this book.

In the field, I observed that every time a community in the Sundarbans was faced with crisis due to loss of land and livelihood, pressure on the riparian common-pool resource greatly increased, which was in direct contrast with the state, national and global commitment to conserve the eco-region. I decided to assess whether the concepts of commons, collective action, and sustainable development were helpful in analysing the current situation in the Sundarbans, as suggested in the literature on commons. The ultimate goal was to understand the conditions under which strategies could be developed so that the aforementioned dilemma could be managed. A number of strategies have been outlined in this book. These could succeed if the micro-realities and the state of permanent impermanence are factored in, and the sectoral tunnel vision is replaced with a broader view.

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