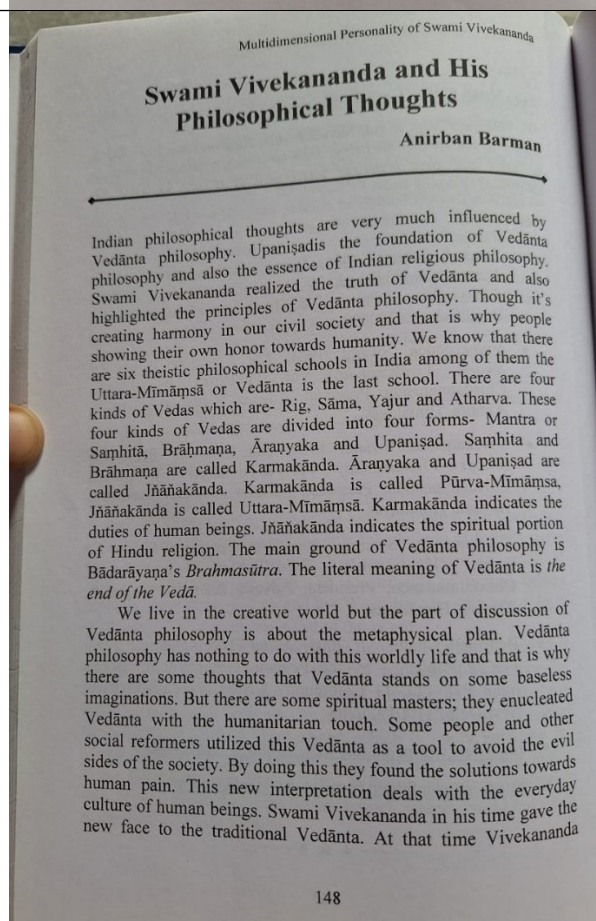


| | | |
|-------|---|-----|
| 13. | Śamkarācārya's Vedānta And Vivekānanda's Neo-Vedānta: An Appraisal – Riptika Das. | 110 |
| 14. | Swami Vivekananda On Reality And God – Avhijit Ghosh. | 119 |
| 15. | Swami Vivekananda: A Redeemer of Mankind – Banasri Kumar. | 131 |
| ✓ 16. | Swami Vivekananda And His Philosophical Thoughts – Anirban Barman. | 148 |
| 17. | Swami Vivekananda's Views on Nationalism and Internationalism – Mohammed Uzair. | 157 |
| 18. | Universal Religion of Swami Vivekananda and Its Impact on Education – Shruti Sharma. | 164 |
| 19. | Śivajñānē Jīvasēbā: Aspects of Swami Vivekananda – Anamika Kundu. | 171 |
| 20. | Swami Vivekananda: An Epitome of Nationalism – Dr. Basant Kumar Dash. | 184 |
| 21. | Vivekananda: The Forerunner of Indian Renaissance – Srikanta Pratihara. | 197 |
| 22. | The Concept of Man in the Philosophy of Swami Vivekananda – Mrinmoy Baruah. | 207 |
| 23. | A Unique Philosophical Thought of Swami Vivekananda about Life, Education and Values. --- Puja Ghosh. | 216 |
| 24. | Vivekananda's Thoughts on Women --- Sanjit Mandal. | 222 |
| 25. | Aspect and Application of Practical Vedānta: in the Light of Swami Vivekananda. --- Sonali Chakraborty. | 229 |
| 26. | Swami Vivekananda- The Pioneer of Applied Science and Technical education – Nirmalya Mandal. | 236 |
| 27. | Swami Vivekananda: Harmony as the Way of Life – Jayanta Das. | 248 |



INDIA AND THE PANDEMIC THE TRAJECTORIES OF COVID-19 & ITS COROLLARIES

Pranab Kumar Mishra
Arnab Baul

India and the Pandemic
The Trajectories of COVID-19 & its Corollaries

© Surya Sen Mahavidyalaya
Block B, Surya Sen Colony
Siliguri 734 004, W.B.

First Published 2021

ISBN 978-81-949754-2-7

Published by:

CRESCENT PUBLISHING CORPORATION

4806/24, Mathur Lane,
Ansari Road, Darya Ganj,
New Delhi - 110 002

Ph.: 011 - 23244131

Mob.: +91 - 9711991838, 9999021668

E-mail: crescentbook@gmail.com

Website: www.crescentpublishingcorp.weebly.com

Printed at:

Roshan Offset Printers
Delhi

CONTENTS

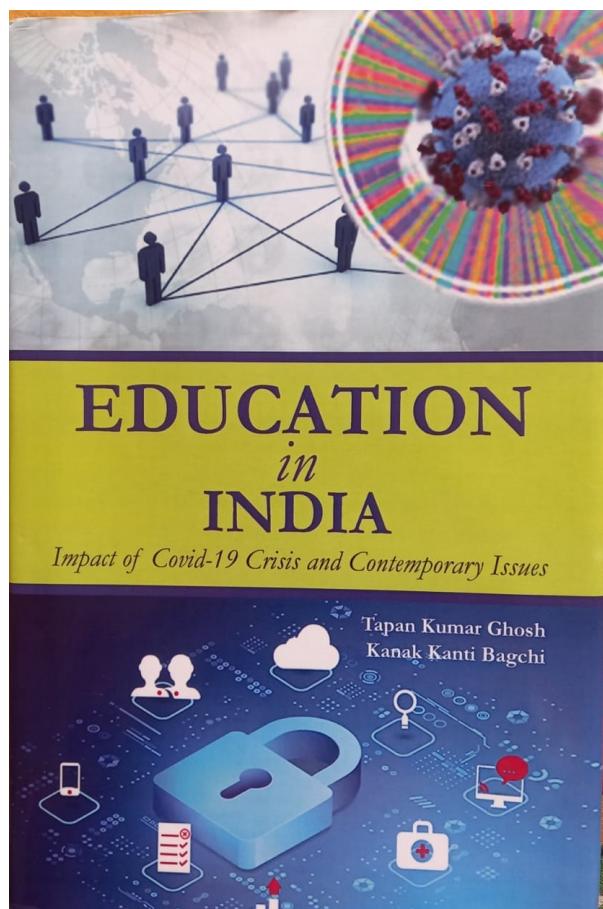
| | |
|--|----|
| Preface | ix |
| 1. India in Post Pandemic Earth <i>Kamalika Banerjee</i> | 1 |
| 2. Economic Dynamics of the Covid-19 Onslaught in India: Challenges and Potential <i>Mohor Chakraborty</i> | 19 |
| 3. Our Diseased Intimacy, Our Healthier Distancing <i>Asima Sarker</i> | 32 |
| 4. Blended Learning in The New Normal: Opportunities and Challenges in India <i>Romyani Goswami</i> | 44 |
| 5. Pandemic and Social Awareness: Comics as Alternate Literature <i>Rizia Begum Laskar</i> | 69 |
| 6. Covid 19: An Impetus to Privatization of Education <i>Priyanka Chhetri</i> | 85 |
| 7. Impact of Covid-19 on Teaching-Learning & Research Methodology Practices During Lockdown Period <i>Partha Sarathi Aich</i> | 93 |

3

OUR DISEASED INTIMACY, OUR HEALTHIER DISTANCING

Asima Sarker

For a virus whose pathogenic tendency is still a surprise to the doctors and scientists, undoubtedly 'safe distancing' comes as a measure and 'distances' are put to surveillance on account of the contagiousness of the disease. Post 2019 March, thus our societal arrangements are passing through a phase of re-adjustment, especially in context of India and more specifically Bengal, where, unlike the regards held by the Western societies for 'physical distancing' as manners, a kind of intimacy holds together the culture; "Jodi hoy sujon, tetul patay nojon" (If friends, then in a tamarind leaf nine can be together). On the other hand the scenario comes with growing concern for ethics. In the article "The Ethics of Social Distancing", Nicolas G. Evans answers "why social distancing might raise ethical issues"; he not only points at the agential role of the government and state and the infringing of freedom through quarantine as a measure, but also writes, "Applied broadly enough, and for enough time, social distancing can damage our ability to form communities, and limit our opportunities." (Evans, 2020). Thus the Covid scenario appears ethically alarming from a socio-cultural, ethical and humanist point of view; but the question that looms underneath this growing concern is whether the prevalent pre-Covid norms and ethics are effective apparatuses for understanding the phenomenon. The use of words 'apparatuses' and 'phenomenon' used in the aforementioned sentence hints towards a new dynamics and I intend to propose and



Editors: Tapan Kumar Ghosh
Kanak Kanti Bagchi

© First Published: 2021
Serials Publications (P) Ltd.

ISBN: 978-93-91844-22-6

All rights reserved. No part of this book 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 written permission from the editors and publisher.

Printed and Published by
SERIALS PUBLICATIONS PVT. LTD.
4830/24, Prahlad Street, Ansari Road, Darya ganj,
New Delhi-110002 (India)
Phone : 23245225, 23259207, 23272135
E-mail: serials@mail.com

| | | |
|-----|---|-----|
| vi | Education in India : Impact of Covid-19 Crisis and Contemporary Issues | |
| 8. | Impact of Covid-19 on Indian Education System: An Analysis | 133 |
| | <i>Bhajan Basak</i> | |
| | Part-2: Online Education: A New Dimension in Pandemic | |
| 9. | An Analytical Study of the Impact of Covid-19 on Edutech Sector in India | 149 |
| | <i>Mukul Matlipal, Harshal Kulkarni, Nitesh Kate and Abhishek Srivastava</i> | |
| 10. | Online Education: An Imperative Alternative With Compromised Academic Environment | 171 |
| | <i>Vaskar Barman and Dibyapriya Ghosh</i> | |
| 11. | Covid-19 and Online Classes: Exploring Different Aspects | 191 |
| | <i>Nilendu Chatterjee and Tonmoy Chatterjee</i> | |
| 12. | Digital Divide vs. Innovation: Fallout of E-Education in the Era of Covid-19 Crisis | 201 |
| | <i>Sumitra Naha (Das)</i> | |
| 13. | A Brief Review of the Online Education System in India | 213 |
| | <i>Subhabrata Chakrabarti</i> | |
| | Part-3: COVID-19 and Higher Education | |
| 14. | Covid-19 and its Consequences on India's Higher Education | 227 |
| | <i>Panchali Sengupta</i> | |
| 15. | Challenges Faced by University Teachers for Teaching Online During Covid-19 | 241 |
| | <i>Jayanta Deshmukh</i> | |
| 16. | Impact of Covid-19 on Higher Education: Policy Responses and Recommendations | 255 |
| | <i>Sumon Roy</i> | |
| 17. | Education of Lifelong Learning in the Age of Covid-19: A Review Perspective | 269 |
| | <i>Sidhartha Sankar Laha</i> | |

8 IMPACT OF COVID-19 ON INDIAN EDUCATION SYSTEM: AN ANALYSIS

Bhajan Basak

INTRODUCTION

The global outbreak of the COVID-19 pandemic has spread worldwide, affecting almost all countries and territories. The outbreak was first identified in the month of November, 2019 in Wuhan, China. The countries around the world cautioned the public to take responsive care. The public care strategies have included the habits of washing hand, wearing face masks, physical distancing, and avoiding mass gathering and assemblies. Lockdown and Strategies of "stay home and stay safe" have been put in place as the needed action to flatten the curve and control the transmission of the disease.⁵

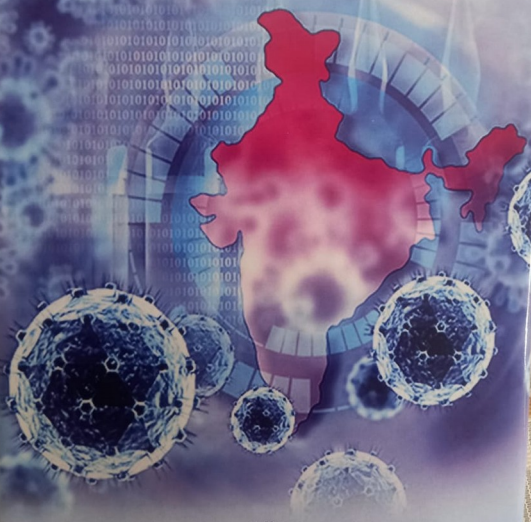
Government of India has announced the lockdown and closure of educational institutions as a logical solution to enforce social distancing Strategies among the students and other communities. The nationwide lockdown has had a tremendous impact on Indian education system, especially for students from rural areas. As the education system of India is dominated by the conventional classroom study. Thus, this pandemic situation made the functioning of the educational institutions in India turned into very difficult.

All the activities regarding education like examinations, school

⁵ Sintema, E. J. (2020, April 7). Effect of COVID-19 on the performance of grade 12 students: Implications for STEM education. *EURASIA Journal of Mathematics, Science and Technology Education*, 16(7). <https://doi.org/10.29333/ejms/7893>.

COVID-19 PANDEMIC AND ITS MULTIDIMENSIONAL IMPACT

The Road Ahead



Editors

Tapan Kumar Ghosh, Tonmoy Chatterjee and Indrajit Ghosh

Editors: Tapan Kumar Ghosh
Tonmoy Chatterjee
Indrajit Ghosh

© First Published: 2021
Serials Publications (P) Ltd.

ISBN: 978-81-950760-2-4

All rights reserved. No part of this book 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 written permission from the author and publisher.

Printed in India

SERIALS PUBLICATIONS PVT. LTD.

4830/24, Prahlad Street, Ansari Road, Darya ganj,
New Delhi-110002 (India)

Phone : 23245225, 23259207, 23272135
E-mail: serials@mail.com

PREFACE

On 11th March 2020, following to COVID-19 world entered a new era. To stop the spread of the virus, countries adopted various measures (SOPs), for instance, when go out, wear a mask, changed our routine, and distracted us from the pandemic. Such activities but also several economic following health the pandemic of economic activities within a nation to inequality, poverty, distortion and also services and non-services and public service such crisis makes the world with closed international

CONTENTS

| | |
|---|------|
| <i>Preface & Acknowledgements</i> | v |
| <i>Contributors</i> | xiii |
| Chapter-1: Introduction Tapan Kumar Ghosh, Tonmoy Chatterjee Indrajit Ghosh | 1 |
| Part-1: Studying the Impact of COVID-19 Pandemic with Scientific Background | |
| Chapter-2: COVID-19: A Pandemic Disease Soumajit Sinha and Bikramjit Raychaudhury | 33 |
| Chapter-3: A Rapid Testing System for COVID-19 Using Radiographic Images Debangshu Chakraborty and Indrajit Ghosh | 47 |
| Part-2: Impact of COVID-19 Pandemic on Socio-Economic Activities | |
| Chapter-4: Nexus between Rational Expectations and Pandemic Shock: A Macroeconomic Posture Tonmoy Chatterjee and Nilendu Chatterjee | 83 |
| Chapter-5: COVID-19 Infection and Non-pharmaceutical Interventions: An Inter-country Econometric Study in Search of Competency Hillol Kumar Chakrabarti, Soumitra Kundu, Soumya Sengupta and Sugata Sen | 101 |

2 COVID-19: A PANDEMIC DISEASE

Soumajit Sinha

Ananda Chandra College, Jalpaiguri, India
E-mail: soumajitsinhajpg1@gmail.com

Bikramjit Raychaudhury

Ananda Chandra College, Jalpaiguri, India
E-mail: glycosome@yahoo.com

Abstract: COVID-19 is a deadly disease caused by the novel coronavirus, which was first called 2019-nCoV, termed as SARS-CoV-2 by the International Committee on Taxonomy of Viruses, as it is exceptionally different from the virus that caused the SARS widespread in 2002 to 2003. World Health Organization (WHO) declared COVID-19 as an international emergency. As on 26th February 2021, COVID-19 has affected more than 113628805 human lives around the world and killed more than 2521018 people. And even where the virus hasn't yet spread, hospitals and clinics around the world are in a rush forward of coronavirus patients as a priority over everyday illnesses they treat. The label 'international emergency' has made governments of various countries to initiate vigilance plans and probably undergo emergency measures in an advanced way to protect the public, such as more strong travel and trade restrictions. It is being observed that this is the first time, a coronavirus, has been termed as a pandemic, "but at the same time, it is being believed that it will be able to be controlled if adopted proper measures. Since information about this virus is rapidly rising all around, it is the necessity of the time to remain updated about it. We should update ourselves on the etiology, pathophysiology, epidemiology, clinical manifestations and diagnosis, therapeutic strategies and management of this novel coronavirus to keep ourselves protected.

Keywords: COVID-19, SARS-CoV-2, Psychological Effects, Quarantine

About the Author

Dr. Bihramjit Raychaudhury did his graduation and post-graduation in Human Physiology from University of Calcutta and obtained Doctorate degree in Infectious Diseases from the Indian Institute of Chemical Biology (IICB-CSIR), Kolkata. He did Post-doctoral research in Parasitology from the prestigious Mc Gill University, Canada. Presently, he is working as an Assistant Professor & HOD, Department of Physiology, Ananda Chandra College, Jalpaiguri, West Bengal. He is a former Associate Professor and Head of Physiology in the University of Science and Technology, Chhatrapati (Banga Bandhu Memorial Hospital), Bangladesh.

Dr. Raychaudhury has 22 years of teaching and research experience including the supervision of several Ph.D. theses. He has published several papers in International journals and presented papers in various conferences of National and International repute. He had taught Physiology to Medical students, Honours and General courses for several years. A book chapter has published by him from an International Publisher in Croatia. As an experienced researcher, he carried out four major and minor research projects funded by National Agencies. He has research multiple collaboration with other Universities and National Institutes.

In addition to this, he is serving different Universities as a paper setter, evaluator and moderator for various courses. He is a good mentor and counsellor dedicated to health professions and careers.

MCQs in Sports & Exercise Physiology

Dr. Bihramjit Raychaudhury

MCQs in Sports & Exercise Physiology (With Answers)

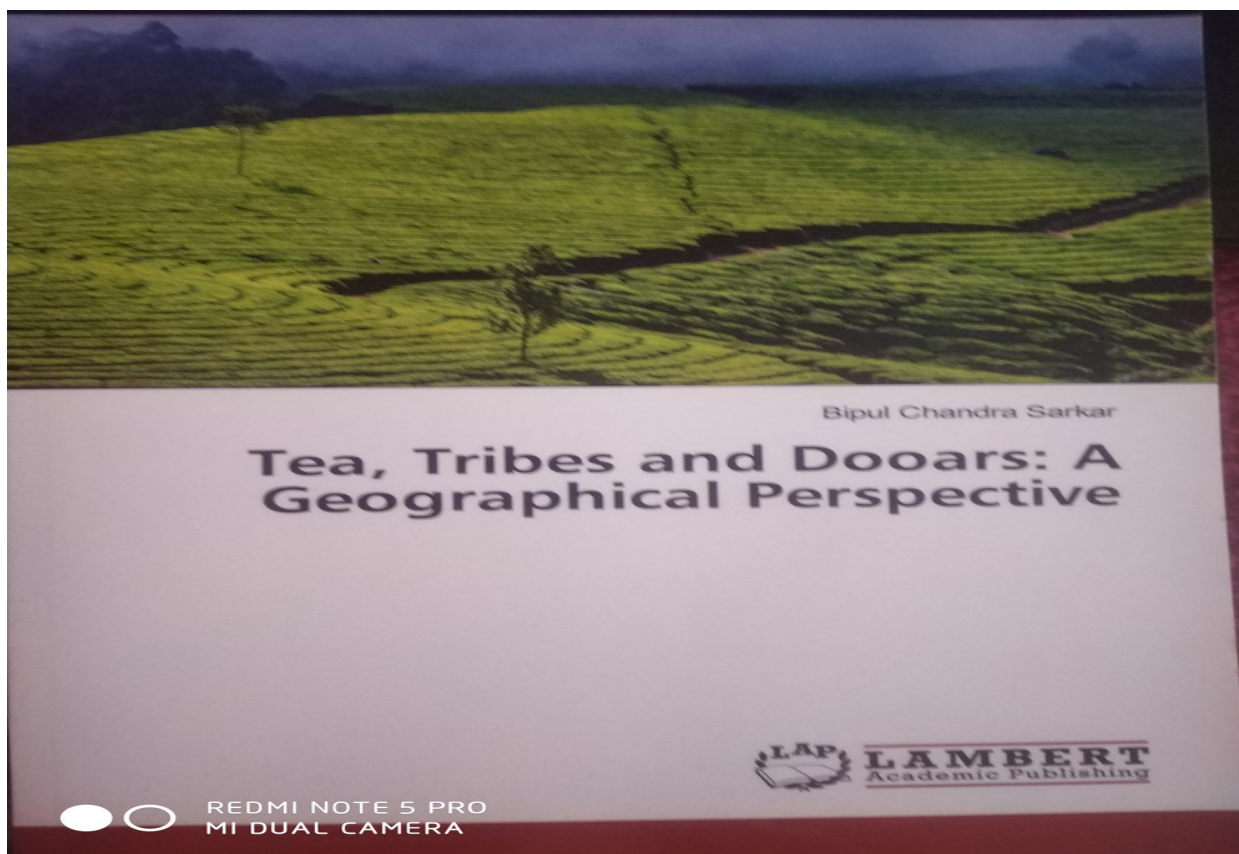
NOTION PRESS

India, Singapore, Malaysia.

ISBN 9781638063995

This book has been published with all reasonable efforts taken to make the material error-free after the consent of the author. No part of this book shall be used, reproduced in any manner whatsoever without written permission from the author, except in the case of brief quotations embodied in critical articles and reviews.

The Author of this book is solely responsible and liable for its content including but not limited to the views, representations, descriptions, statements, information, opinions and references ["Content"]. The Content of this book shall not constitute or be construed or deemed to reflect the opinion or expression of the Publisher or Editor. Neither the Publisher nor Editor endorse or approve the Content of this book or guarantee the reliability, accuracy or completeness of the Content published herein and do not make any representations or warranties of any kind, express or implied, including but not limited to the implied warranties of merchantability, fitness for a particular purpose. The Publisher and Editor shall not be liable whatsoever for any errors, omissions, whether such errors or omissions result from negligence, accident, or any other cause or claims for loss or damages of any kind, including without limitation, indirect or consequential loss or damage arising out of use, inability to use, or about the reliability, accuracy or sufficiency of the information contained in this book.



The book "Tea, Tribes and Dooars: A Geographical Perspective" is the description of tribal people living in Dooars region of the Himalayan foothills of North Bengal. Dooars is the term applied as gateway into Bhutan from India and vice-versa. The region was sparsely inhabited by indigenous Indo-mongoloid communities, e.g. Koch-Rajbanshis, Mech, Garo, Toto, Rabha etc. The British imperial power took initiatives to establish tea gardens in the Dooars in the second half of the 19th century, but local people were reluctant to work as tea garden workers, as a consequence different tribal community people were brought from the Chhotanagpur plateau, e.g. Oraons, Santal, Malpaharia, Kharia, Munda, Lohars, Mahali etc. Continuous pressure of population and assimilation of several groups i.e. two distinct group of tribal communities, Rajbanshis, Bengalis, Nepalese and others creates several problems to the livelihood of tribal communities who are gradually facing challenges of economic sustainability and socio-cultural identity crisis. The chapters of this book are dealt with the present socio-economic challenges of the tribal communities and other related aspects of their miseries.



Bipul Chandra Sarkar

Tea, Tribes and Dooars

A Geographical Perspective



Dr. Bipul Chandra Sarkar, Assistant Professor of Geography, Ananda Chandra College, Jalpaiguri, affiliated to the University of North Bengal wrote two books for UG students of Geography and published many research papers in reputed national and international journals. Two research projects funded by UGC and ICSSR have been completed by him.

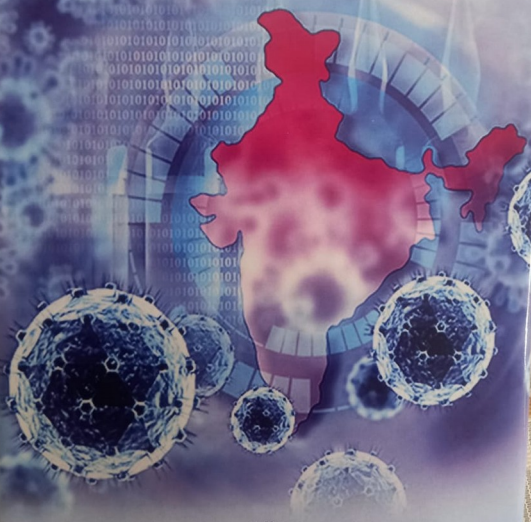


Bipul Chandra Sarkar

LAP LAMBERT
Academic Publishing

COVID-19 PANDEMIC AND ITS MULTIDIMENSIONAL IMPACT

The Road Ahead



Editors
Tapan Kumar Ghosh, Tonmoy Chatterjee and Indrajit Ghosh

Editors: Tapan Kumar Ghosh
Tonmoy Chatterjee
Indrajit Ghosh

© First Published: 2021
Serials Publications (P) Ltd.

ISBN: 978-81-950760-2-4

All rights reserved. No part of this book 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 written permission from the author and publisher.

Printed in India
SERIALS PUBLICATIONS PVT. LTD.
4830/24, Prahlad Street, Ansari Road, Darya ganj,
New Delhi-110002 (India)
Phone : 23245225, 23259207, 23272135
E-mail: serials@mail.com

PREFACE

On 11th March 2020, following to COVID-19 world entered a new era. To stop the spread of the virus, countries adopted various measures (SOPs), for instance, when go out, changed our routine, distracted us from work. Such activities but also several economic following health the pandemic of economic activities within a nation to inequality, poverty, distortion and services and non-services and public services such crisis makes it with closed internet.

CONTENTS

| | |
|---|------|
| <i>Preface & Acknowledgements</i> | v |
| <i>Contributors</i> | xiii |
| Chapter-1: Introduction | 1 |
| Tapan Kumar Ghosh, Tonmoy Chatterjee Indrajit Ghosh | |
| Part-1: Studying the Impact of COVID-19 Pandemic with Scientific Background | |
| Chapter-2: COVID-19: A Pandemic Disease | 33 |
| Soumajit Sinha and Bikramjit Raychaudhury | |
| Chapter-3: A Rapid Testing System for COVID-19 Using Radiographic Images | 47 |
| Debangshu Chakraborty and Indrajit Ghosh | |
| Part-2: Impact of COVID-19 Pandemic on Socio-Economic Activities | |
| Chapter-4: Nexus between Rational Expectations and Pandemic Shock: A Macroeconomic Posture | 83 |
| Tonmoy Chatterjee and Nilendu Chatterjee | |
| Chapter-5: COVID-19 Infection and Non-pharmaceutical Interventions: An Inter-country Econometric Study in Search of Competency | 101 |
| Hillol Kumar Chakrabarti, Soumitra Kundu, Soumya Sengupta and Sugata Sen | |

3

A RAPID TESTING SYSTEM FOR COVID-19 USING RADIOGRAPHIC IMAGES

Debangshu Chakraborty

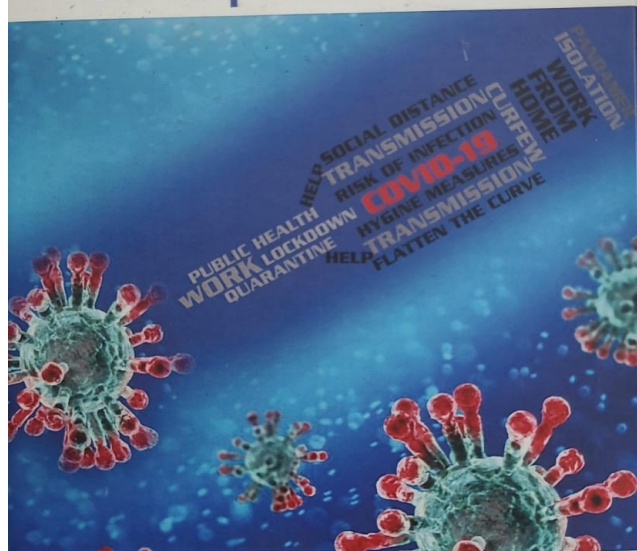
Ananda Chandra College, Jalpaiguri, India
E-mail: debangshuchakraborty25@gmail.com

Indrajit Ghosh

Ananda Chandra College, Jalpaiguri, India
E-mail: ighosh2002@gmail.com

Abstract: Coronavirus disease (COVID-19) is a highly infectious respiratory disease that spread over more than 200 countries and causes the most catastrophic global health calamity of the century. This pandemic has brought unforeseen challenges and obstacles with the possibility that the world will witness a very forceful increase in inequalities. Once a person is infected with COVID-19, the person will show some common symptoms such as fever, dry cough, tiredness, nasal congestion, headache, sore throat, diarrhoea, loss of taste, loss of smell, skin rashes, etc. All these symptoms are not fatal. But in the case of a critical situation, the patient suffers from blockage of breathing and chest pain due to the formation of fibrosis in the lungs. In such a situation, the patient needs rapid testing and emergency treatment. The gold standard for testing COVID-19 is Reverse Transcriptase-Polymerase Chain Reaction (RT-PCR) and Realtime Reverse Transcriptase-Polymerase Chain Reaction (rRT-PCR). These testing methods suffer from a handful of disadvantages. The sensitivity of this method is very poor and frequently gives the false-negative results. Moreover, this testing is a manual process with a high cost and turnaround time (six to eight hours). Testing based on radiography is the third alternative method for rapid diagnosis of COVID-19, where the radiologist analyses the chest X-ray or Computed Tomography (CT) image for diagnosis. The experience and expertization of radiologists play a pivotal role in proper diagnosis. The main problem of this

COVID-19 and Its Impact in India



Edited by
Dr. Md. Alamgir Khan

CHANDIDAS MAHAVIDYALAYA

Khujutipara, Birbhum, Pin-731215
West Bengal

Published by
Chandidas Mahavidyalaya
Khujutipara, Birbhum, Pin-731215
West Bengal
First Published: May, 2021

ISBN : 978-81-952787-4-9

Price : ₹ 250.00

Cover Designed by
Tapan Roy

Printed by:
Rays Dot Com
44/1A, Beniatola Lane
Kolkata-700009

International Workshop on the topic 'COVID-19 and Its Impact In India' was organised by Chandidas Mahavidyalaya, Khujutipara, Birbhum, West Bengal-731215 in online mode in collaboration with the Ananda Chandra College, Dist.-Jalpaiguri, West Bengal, India. Later Chandidas Mahavidyalaya carried out the task of publication of the whole proceedings of the workshop. In this process the responsibility of the facts stated, opinions expressed or conclusion drawn are entirely of the author/authors. The editors and the college authority do no longer accept any responsibility in this regard.

ii

Contents

| | |
|--|-----|
| Foreword Message | iii |
| Preface | v |
| Section A | |
| A1 Covid-19 and Higher Education in India <i>Dr. Sk. Ataur Rahaman</i> | 9 |
| Section B | |
| B1 Deconstructed Tourism under COVID-19 Crisis: Exploring Recovery Charter for Behavioural Reconstruction <i>Prof. Arup Kumar Baksi</i> | 22 |
| Section C | |
| C1 Exploring the issues of Ethical Challenges Arising in Higher Educational Institutions during Covid-19 <i>Prof. Mihir Kumar Shome & Uday Sankar Das</i> | 53 |
| C2 Keeping Motivated as a Challenge in Online Teaching Learning Digital Setting during the Covid-19 Crisis <i>Dr. Kamaran M.K. Mondal</i> | 77 |
| C3 Online Education in India during COVID-19: A Discussion <i>Dr. Sourav Chatterjee</i> | 87 |
| C4 E-learning for Enhancement of Educational Qualifications of Teachers of Govt. Aided Primary Schools in West Bengal: A Special Reference to Jalpaiguri District <i>Dr. Gour Sundar Ghosh</i> | 97 |

vii

E-learning for Enhancement of Educational Qualifications of Teachers of Govt. Aided Primary Schools in West Bengal: A Special Reference to Jalpaiguri District

DR. GOUR SUNDAR GHOSH*

Abstract

This paper highlights the ingress of Information and Communication Technology (ICT) in the higher education systems in India. This paper traces what types of ICT initiatives have been taken by the Government levels and other higher education institutions in India and how the academic community is getting benefitted from the application of ICT. From this study, it is found that 19 ICT initiatives have been funded and initiated so far by the Government of India, Ministry of Human Resource Development and these are developed & maintained by IITs, IISc, Central Universities (i.e. Delhi, Punjab & IGNOU), Technical Training Research Institute and autonomous Inter University Centre of UGC (i.e. INFLIBNET) to felicitate the stakeholders of academic fraternity of higher education systems in the country.

Keywords: E-learning, Govt. aided Primary Schools, Information Communication Technology, Jalpaiguri, West Bengal.

Introduction

E-learning is essentially imparting education through computer and network-enabled digital technologies which include among other things, computers, the internet, satellite television, audio, compact disk read-only memory (CDROM), and video resources. The term e-learning was first used in the professional

**Assistant Professor, Department of Education, Ananda Chandra College, Jalpaiguri, West Bengal. Email: goursundar.ac@gmail.com*

COVID-19 and Its Impact In India

97

CHALLENGES OF INCLUSIVE AND ADAPTIVE PEDAGOGY



Dr. Nita Mitra
Dr. Ratula Mukherjee

KUNAL BOOKS

4648/21, 1st Floor, Ansari Road,
Daryaganj, New Delhi-110002
Phones: 011-23275069, 9811043697, 9868071411
E-mail: kunalbooks@gmail.com
Website: www.kunalbooks.com

Challenges of Inclusive and Adaptive Pedagogy

© Editors

First Published 2021

ISBN: 978-93-91908-22-5

[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, mechanical, photocopying, recording or otherwise, without prior written permission of the publisher].

The opinions and views expressed are exclusively those of the authors and in no way the editors or the publisher is responsible for the same.

Published in India by Prem Singh Bisht of Kunal Books, and printed at Trident Enterprises, Noida, U.P.

(xxv)

| | |
|--|-----|
| 20. A Policy Perspective of Inclusive Education in India since Independence | 204 |
| <i>Sadar Shaikh</i> | |
| 21. Inclusive Education: A Social Work Approach | 209 |
| <i>Dr. Subhashree Sanyal, Kheyali Roy & Shaurya Prakash</i> | |
| 22. Inclusive Education | 218 |
| <i>Mrs. Payel Dey Sen</i> | |
| 23. "A Survey of Physical Barriers and Challenges for Inclusion of Students with Disabilities in the Elementary Schools in North Bengal" | 230 |
| <i>Dr. Gour Sundar Ghosh</i> | |
| 24. Inclusive Education: A Myth or Reality in India | 239 |
| <i>Dr. Akhtar Parveen</i> | |
| 25. The Role of the Legal Governmental Policies in the Acceleration of Inclusive Education in India. | 246 |
| <i>Arnab Singha Roy & Dipanwita Biswas</i> | |
| 26. A Study on Challenges of Inclusive School in India in 2021 | 255 |
| <i>Trisha Paul</i> | |
| 27. Inclusive Education: A Search for Better World | 262 |
| <i>Dr. Subhas Chandra Bhat</i> | |
| 28. Teaching Aids in Support of Learning of ADHD Learners | 266 |
| <i>Amal Sankar Mukherjee</i> | |
| 29. Convergence in Inclusive Education : A Conceptual Analysis | 272 |
| <i>Dr. Nita Mitra (Chanda)</i> | |
| Index | 282 |

CHAPTER

23

A SURVEY OF PHYSICAL BARRIERS AND CHALLENGES FOR INCLUSION OF STUDENTS WITH DISABILITIES IN THE ELEMENTARY SCHOOLS IN NORTH BENGAL

Dr. Gour Sundar Ghosh

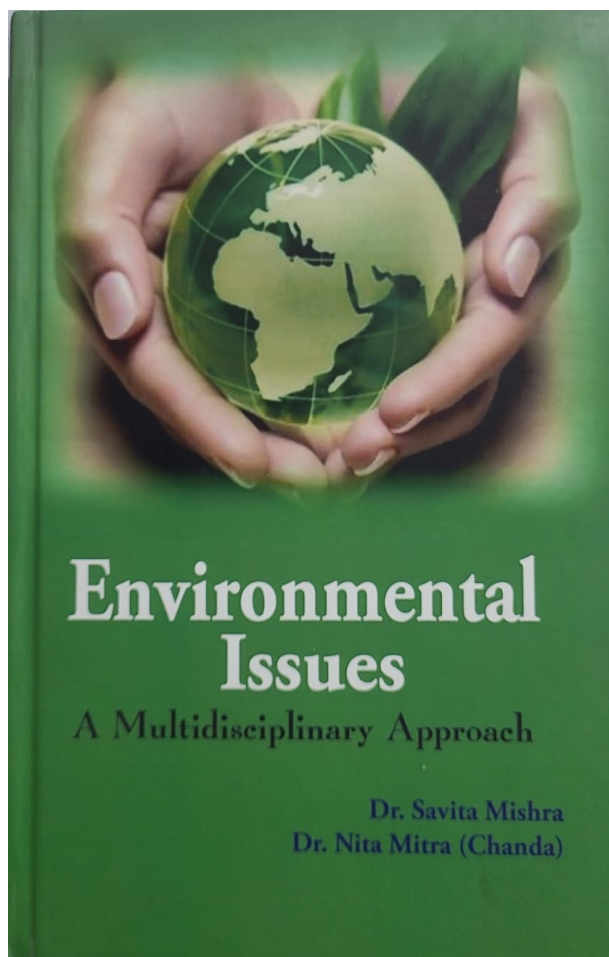
Abstract

Inclusion is a term which expresses commitment to educate each child to the maximum extent possible, in the school and classroom he or she would otherwise attend. The objectives of this study physical facility in the secondary school for students with disabilities and physical barriers in school are faced by students with disabilities. It is a fact finding exploratory a survey study. The study shows that all students whatever the type and extent of their disability, can be successfully included in mainstream school as long as certain safeguards are ensured. Inclusion of persons with disabilities in school is a process that requires collaboration among multiple individuals, with teachers, aids, parents, students and school systems playing important roles in resolving students' problems.

Keywords: *Inclusion, Disability*

Introduction

The United Nations Educational Scientific and Cultural Organization (UNESCO) first stated in 1994 that "Inclusive schools are the most effective way to counter discriminatory approaches and attitudes towards students. [In June 1994 representatives of 92 governments and 25 international organizations formed the World Conference on Special Needs Education, held in Salamanca, Spain. They agreed a dynamic new **Statement** on the education of all disabled children, which called for inclusion to be the norm. In addition,




The responsibility for facts stated, opinion expressed or conclusions reached and plagiarism, if any, in this book is entirely that of the author(s). Neither the publisher nor the editors will be responsible for them whatever.

ISBN : 978-81-951369-6-4

Copyright : Editors

Edition 2021



Published by

ABS Books
Publisher and Exporter
 B-21, Ved and Shiv Colony, Budh Vihar
 Phase-2, Delhi - 110086
 ☎ : +919999868875, +919999862475
 ✉ : absbooksindia@gmail.com
 Website : www.absbooksindia.com

PRINTED AT
 Trident Enterprise, Noida (UP)

Overseas Branches

ABS Books
Publisher and Exporter
 Yucai Garden, Yuhua Yuxiu
 Community, Chenggong
 District, Kunming City,
 Yunnan Province -650500
 China

ABS Books
Publisher and Exporter
 Microregion Alamedin-1
 59-10 Bishek, Kyrgyz
 Republic- 720083
 kyrgyzstan

All right reserved. No. Part of this publication may be reproduced, stored in a retrieval system, transmitted or utilized in any form or by any means electronic, mechanical, photocopying, recording or otherwise, without the prior permission of the copyright owner Author/Editors. Application for such permission should be addressed to the Publisher and Author/ Editors. Please do not participate in or do not encourage piracy of copyrighted materials in violation of the author's rights. Purchase only authorized editions.

Environmental Issues : A Multidisciplinary Approach
 By : Dr. Savita Mishra
 Dr. Nita Mitra (Chanda)

| | |
|---|-----|
| 8. Consequences of Environmental Factor (Air Pollution) on Human Health | 68 |
| Mohammad Athar | |
| 9. Holistic Wildfire and Climate View | 74 |
| Mukta Goyal | |
| Tanwangini Sahani | |
| 10. E-Waste Management : Global Environmental Issue | 86 |
| Dr. Savita Mishra | |
| 11. A Study on Perception of College Students Towards Emerging Environmental Issues in West Bengal | 95 |
| Abhisek Panda | |
| Aditya Majee | |
| Dr. Laxmiram Gope | |
| 12. Impact of Deforestation on Kharia Tribe in Purulia District | 106 |
| Usharani Mahato | |
| Dr. Sudip Bhui | |
| 13. Medicinal Plants in Northern Area of West Bengal : An Analytical Study | 117 |
| Chhandabani Chakraborty | |
| 14. Environment and its Importance in Association to Health and Education Among School Children and Adolescents | 124 |
| Sanjoy Ghosh | |
| Antara Bose | |
| 15. How Environment Has Affected During Lockdown | 134 |
| Mukta Goyal | |
| Mohit Sharma | |
| 16. Importance of Environmental Education as an Integral Part of the Curriculum | 142 |
| Ms. Shubhika Gaur | |
| Ms. Diya Chauhan | |
| 17. Environmental Impact on Dropouts in Primary Level of Dooars in West Bengal | 152 |
| Dr. Gour Sundar Ghosh | |

17.

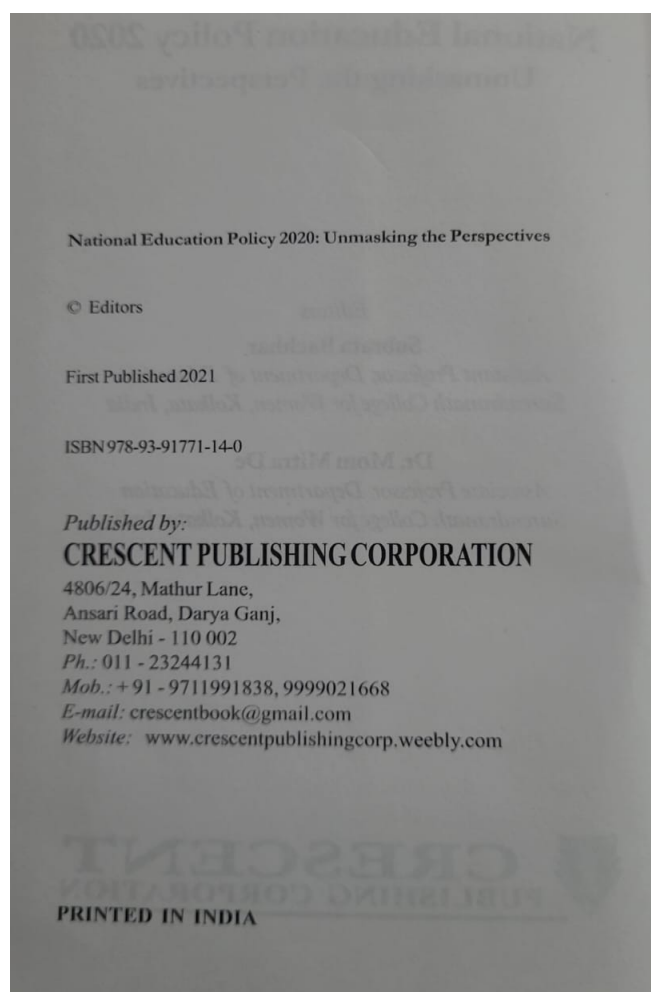
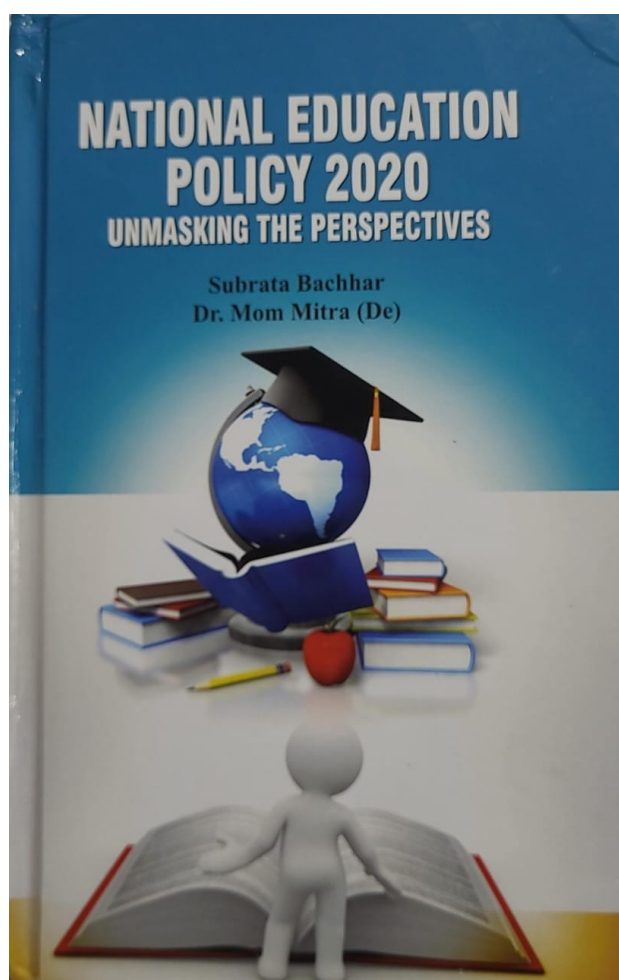
Environmental Impact on Dropouts in Primary Level of Dooars in West Bengal

Dr. Gour Sundar Ghosh*

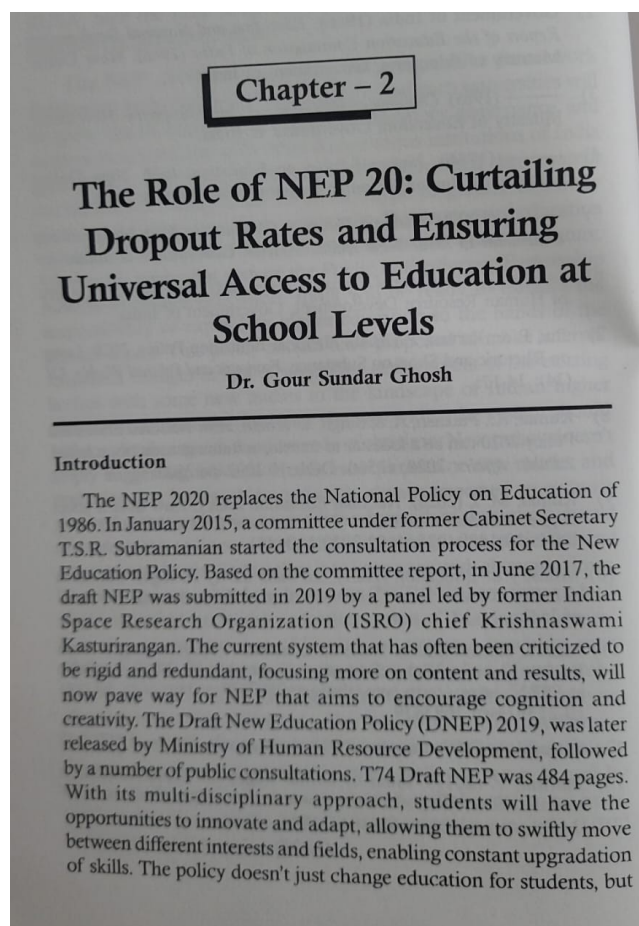
Introduction

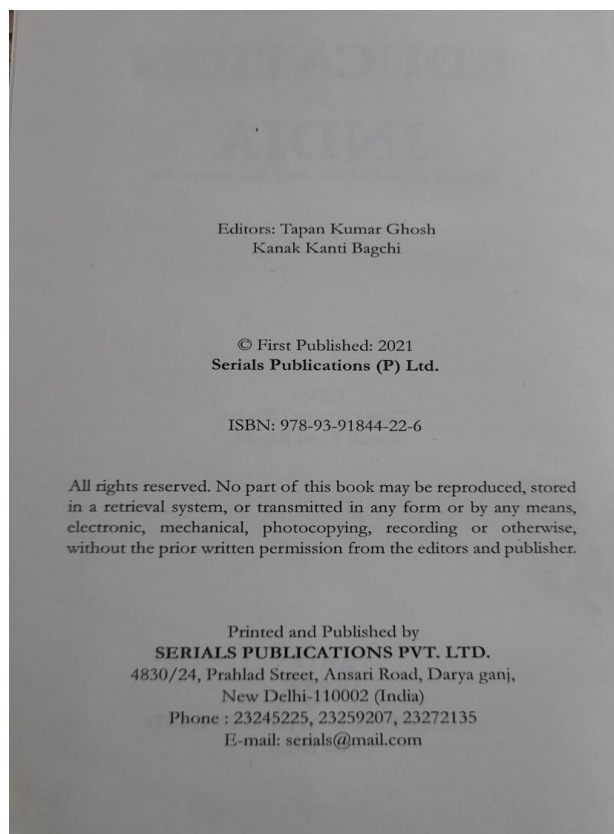
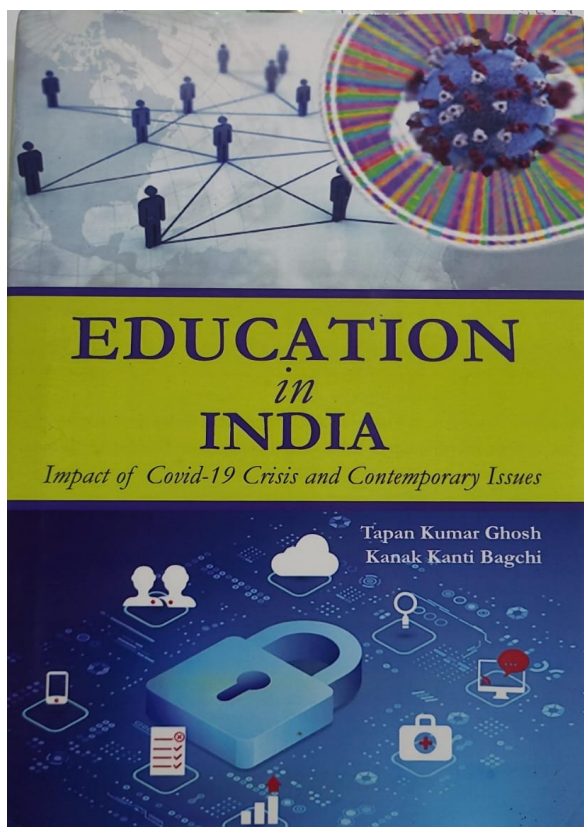
Over the past several decades, major challenges in education have threatened educators to rethink their roles and approaches. This involved political consensus within the society to translate the educational reforms to achieve the steadily rising living standards and economic growth. There is an urgent need to increase the literacy amongst the masses in society and marginal groups in particular. Education is an important avenue to gain knowledge and skills that enable the poor to exercise their rights in society. Currently, in the school education system, student dropout is one of the issues that have gained attention. This issue has serious consequences to the students' pursuit of education goals. Moreover, student dropout is not only a local issue but has also become a severe problem in many places around the world (Quinn & Rubb, 2006), especially in developing countries. According to Lewin and Sabates

*Assistant Professor, Department of Education, Ananda Chandra College, Goursundar.

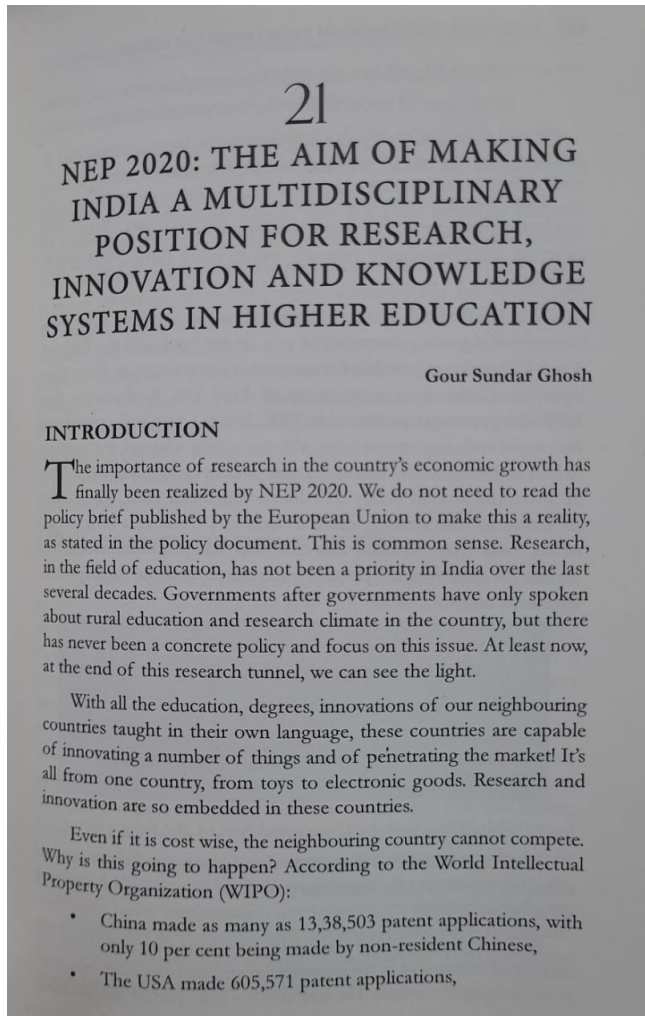


| Contents | | |
|--|----|------|
| <i>Preface</i> | | v |
| <i>Acknowledgement</i> | | vii |
| <i>Contributors</i> | | xiii |
| 1. NEP 2020: Unmasking the Intent and Content with Reference to Higher Education <i>Dr. Ajit Mondal</i> | | 1 |
| 2. The Role of NEP 20: Curtailing Dropout Rates and Ensuring Universal Access to Education at School Levels <i>Dr. Gour Sundar Ghosh</i> | 20 | |
| 3. National Educational Technology Forum under New Education Policy-2020: A Paradigm Shift in Higher Education in India <i>Dr. Rajshree Dutta</i> | 33 | |
| 4. Pedagogical Restructuring of School Education in the Light of National Education Policy 2020 <i>Lusika Datta & Dr. Usashi Kundu (De)</i> | 42 | |
| 5. Universalization of School Education and NEP 2020 <i>Aniruddha Saha</i> | 50 | |
| 6. Universalization of School Education and New Education Policy 2020 <i>Dr Biman Chandra Borah</i> | 72 | |





| Contents | vii |
|---|-----|
| Part-4: COVID-19 and School Education | |
| 18. Impact of Covid-19 on Primary Education System in India – An Analysis | 295 |
| <i>M. Madhumathi and Shivanna</i> | |
| 19. An Analysis of Covid-19 Impact on Rural Education in India | 315 |
| <i>Chinmay Sarkar</i> | |
| 20. Education in Covid-19 Pandemic with Special Reference to School Education in India | 323 |
| <i>Tushar Kanti Pal</i> | |
| Part-5: Education in India: Other Contemporary Issues | |
| 21. NEP 2020: The Aim of Making India a Multidisciplinary Position for Research, Innovation And Knowledge Systems in Higher Education | 339 |
| <i>Gour Sundar Ghosh</i> | |
| 22. Empirical Paradigm of Education Through Online: Pros and Cons | 351 |
| <i>Arijit Datta and Siddhartha Sankar Laha</i> | |
| 23. Contemporary Quality, Mental and Ethical Issues Relating to Education During Covid Times | 363 |
| <i>Surya Narayan Ray</i> | |
| 24. Covid-19 and its Effects on Teacher Education in India | 375 |
| <i>Kishan Agarwalla and Tapan Kumar Ghosh</i> | |



COVID-19 PANDEMIC AND ITS MULTIDIMENSIONAL IMPACT

The Road Ahead



Editors

Tapan Kumar Ghosh, Tonmoy Chatterjee and Indrajit Ghosh

Editors: Tapan Kumar Ghosh
Tonmoy Chatterjee
Indrajit Ghosh

© First Published: 2021
Serials Publications (P) Ltd.

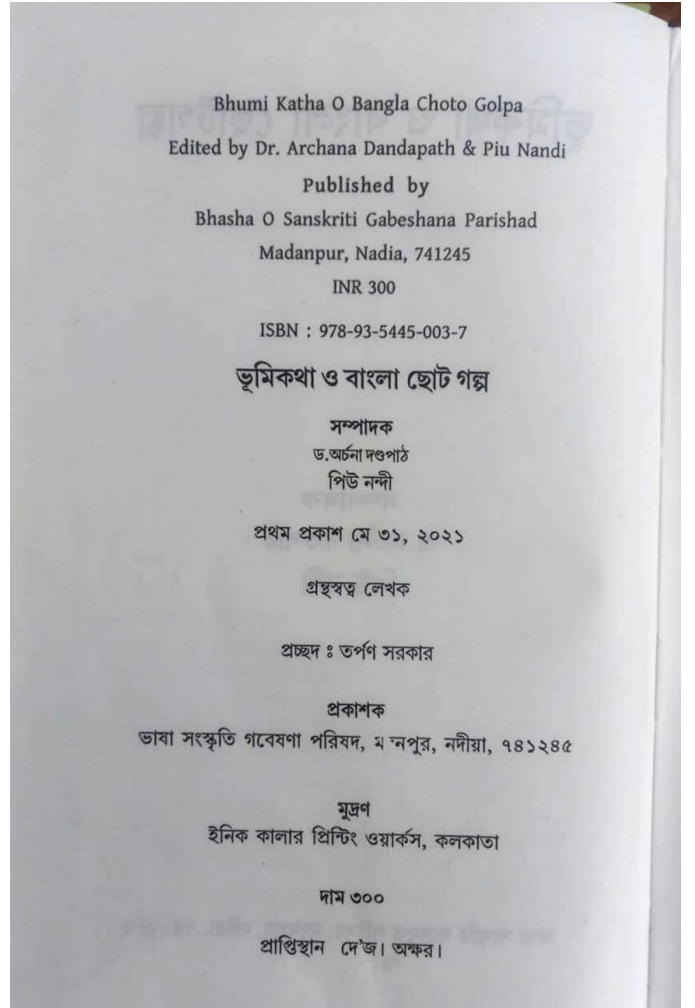
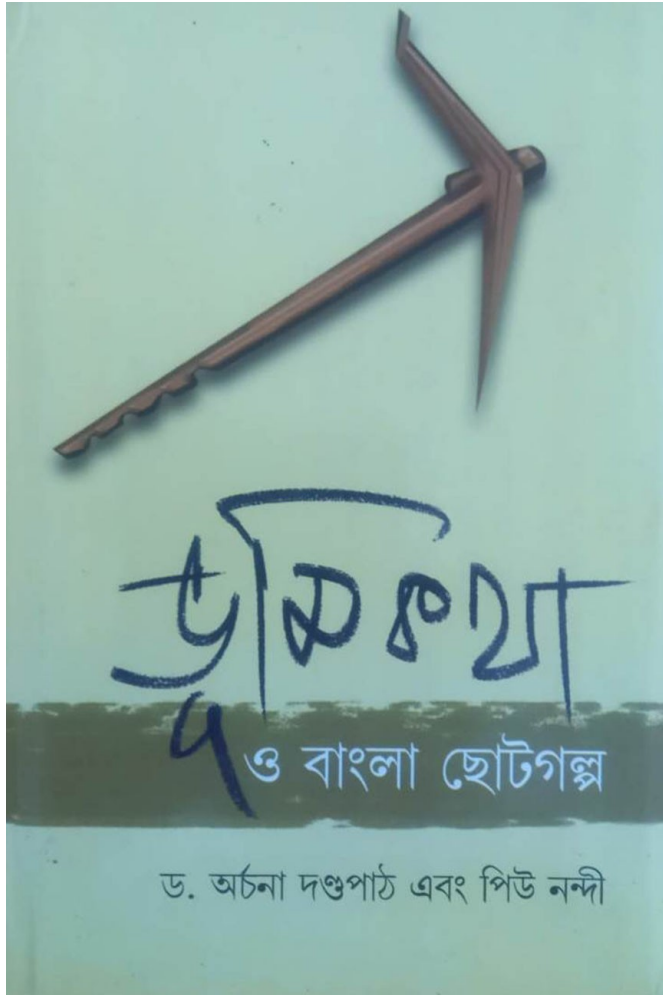
ISBN: 978-81-950760-2-4

All rights reserved. No part of this book 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 written permission from the author and publisher.

Printed in India
SERIALS PUBLICATIONS PVT. LTD.
4830/24, Prahlad Street, Ansari Road, Darya ganj,
New Delhi-110002 (India)
Phone : 23245225, 23259207, 23272135
E-mail: serials@mail.com

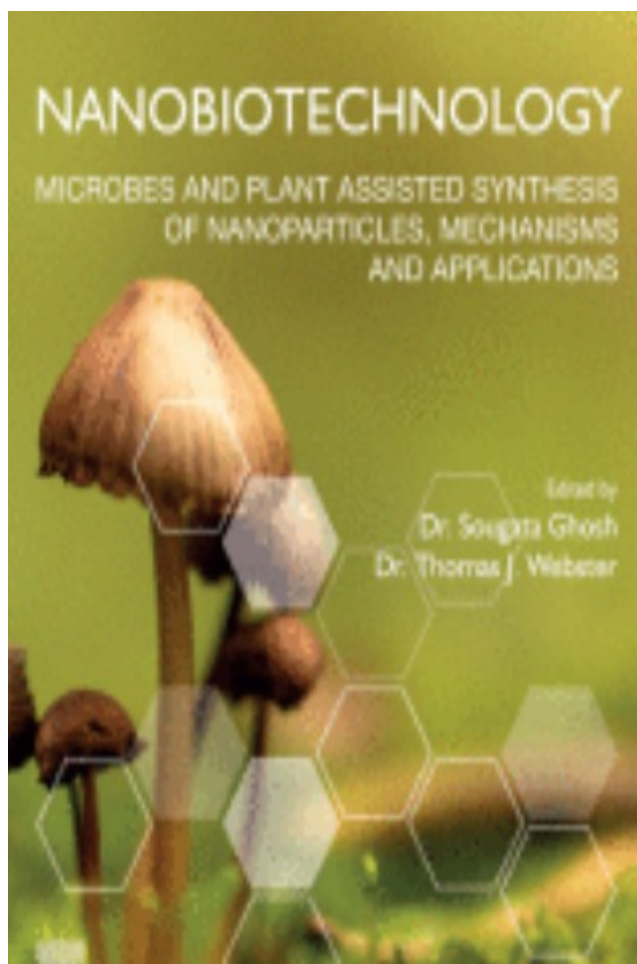
PREFACE

On 11th March 2020, following to COVID-19, the world entered a new era. To stop the spread of the virus, countries adopted various measures also implemented (SOPs), for instance, when go out, changed our routine, distracted us from used to. Such activities but a several economic following health the pandemic, economic activities within a nation, inequality, poverty, distortion and services and non-services and public service such crisis makes it with closed intern



| সূচিপত্র | |
|--|-----|
| নারায়ণ গঙ্গোপাধ্যায়ের ছোটগল্প : জমি-মাটি-ফসল ও বাঁচার স্বপ্নবিশ্ব | ৯ |
| —অধ্যাপক বিকাশ রায় | |
| ভূমি লালিত মানুষদের উৎকর্ষ : শরণ অমিয়ভূষণের গল্প - ড. মৃদুল ঘোষ | ২৭ |
| ভূমি আন্দোলন, ভূমিগুণের সংগ্রাম এবং মহাশোভা দেবীর 'অগ্নিগর্ভ' - ইন্দ্রাণী গাঙ্গুলি | ৩৫ |
| মহাশোভা দেবীর 'যক্ষা বাজে' : ভূমিগুণের ভূমি ভাবনা - মৌসুমী ব্যানার্জী | ৪৩ |
| মহাশোভা দেবীর 'স্রোতপদী' - ভূমি আন্দোলনের এক জীবন্ত দলিল - দিলীপ মণ্ডল | ৪৭ |
| হারুন সালেমের মাসি : মানবধর্মের কথামালা — অধ্যাপক অঞ্জন বন্দ্যোপাধ্যায় | ৫৩ |
| ভূঁইয়ারদের বিদ্যের কথকতা : শৈবাল মিত্রের গল্প - গীতু বেরা | ৫৯ |
| ভূমিসমস্যা ও কালিগদ চক্রবর্তীর 'জীর' - ড. মৌসুমী গাল | ৬৭ |
| কালিগদ চক্রবর্তীর নির্বাচিত গল্প : ভূমির উপর অধিকার প্রতিষ্ঠার লড়াই | |
| - ড. পদ্মকুমারী চাকমা | ৭৩ |
| অভিজিৎ সেনের কয়েকটি ছোটগল্প : প্রসঙ্গ জমি শাসন ও জমির শোষণ | ৮৫ |
| - দেবলীনা মজুমদার | |
| ভূমি আন্দোলনের ইতিহাসে অপারেশন বর্গা ও তপন বন্দ্যোপাধ্যায়ের দুটি ছোটগল্প | |
| - অমিত মণ্ডল | ৯৩ |
| মাটির অধিকারের লড়াই : জলের আয়না - রিক্ত ঘোষ | ৯৯ |
| অমর মিত্রের গল্প : মাটি ও মানুষের লড়াই - প্রণবকুমার দাস | ১০৩ |
| স্বপ্নময় চক্রবর্তীর 'ঢেঁড়া উপাখ্যান' - প্রসঙ্গ জমির সিলিং - জুই দেবনাথ | ১১১ |
| হস্তান্তরের ঢেঁড়া উপাখ্যান : গল্পকারের ভূমি ফলন - সোমনাথ চ্যাটার্জী | ১১৭ |
| স্বপ্নময় চক্রবর্তীর ছোটগল্পে ভূমিশায়ী মানুষ - ড. গুরুপদ অধিকারী | ১২৫ |
| প্রান্তিক মানুষের জীবন সংগ্রাম : প্রসঙ্গ স্বপ্নময় চক্রবর্তীর ছোটগল্প - ড. সঞ্জয় রায় | ১৩৩ |
| ভূমি আন্দোলনের আখ্যান : 'মোজা ডেমপাটি' — ড. জয়ন্ত বিশ্বাস | ১৪১ |
| ত্রয়ো গল্পকারের কলমে শোণিত ও বঙ্কিত ভাগচাষিদের অন্তর্লীন জীবনগাথা : বহু-কৌণিক | |
| দৃষ্টিকোণ ও ভিন্ন কাল পরিসরে - মধুরিমা সাহা | ১৪৯ |
| প্রান্তবাসী ভূমিহীন মানুষদের যন্ত্রণার আখ্যান : প্রসঙ্গ ভগীরথ মিশ্র ও রামকুমার | |
| মুখোপাধ্যায়ের নির্বাচিত ছোটগল্প - ড. অর্চনা দত্তপাঠ | ১৬১ |
| ত্রিপুরার বালো ছোটগল্পে ভূমি ও ভূমিপুত্র : একটি সংক্ষিপ্ত পর্যালোচনা - ড. মলয় দেব | ১৮৫ |
| শত্রু বা অর্পিত সম্পত্তি আইন : বাংলাদেশের ছোটগল্পে তার প্রতিফলন | |
| - ড. অনুপম সরকার | ১৯৬ |
| ভূমিসংস্কার — রূপায়ণের ভাবনায় বাংলা ছোটগল্প - পিউ নন্দী | ২০৫ |
| পরিশিষ্ট ক — বাংলায় কৃষক বিদ্রোহের ধারা - পিউ নন্দী | ২১৭ |
| পরিশিষ্ট খ — বাংলার ভূমিব্যবস্থা রূপান্তরের সরল পরিকল্পনা - পিউ নন্দী | ২২১ |

| স্বপ্নময় চক্রবর্তীর 'ঢেঁড়া উপাখ্যান'-প্রসঙ্গ জমির সিলিং | |
|--|-----|
| জুই দেবনাথ | |
| বাংলা কথাসাহিত্যিক স্বপ্নময় চক্রবর্তীর ছোটগল্পে সমাজ-ইতিহাসের প্রতিচ্ছবি প্রতিফলিত। তাঁর কলমের বহুমাত্রিক আঙ্গিক, পটভূমি পাঠকচিত্তকে ভাবায়, আলোড়িত করে। লেখকের কর্মজীবন বড় বিচিত্র। দেশলাইয়ের সেলসম্যান থেকে মেডিকেল রিপ্রেজেন্টেটিভ, ল্যান্ড রিফর্ম অফিসার, আবহাওয়া দপ্তরের রাডার চালক, দূরদর্শনের ফ্লোর ম্যানেজার, বর্তমানে বেতার প্রযোজক। তাঁর ভূমি-রাজস্ব দফতরে চাকরির প্রত্যক অভিজ্ঞতার প্রতিফলন ঘটে 'ঢেঁড়া উপাখ্যান', 'ভূমির নিত্যতা সূত্র' গল্পে। সাধারণত ভূমিসংস্কার বলতে স্বাধীনতা উত্তর ভারতবর্ষে কৃষির উন্নয়নের জন্য প্রাতিষ্ঠানিক ব্যবস্থাকে বোঝায়। পশ্চিমবঙ্গের ভূমিসংস্কার পর্বের প্রারম্ভিক দিক আলোচ্য গল্পদুটিতে উদ্ভাসিত। কৃষিকাঠামোয় পরিবর্তন সম্ভব সরাসরি সরকারি হস্তক্ষেপ ও স্বয়ংক্রিয়ভাবে সামাজিক-অর্থনৈতিক প্রক্রিয়ার কার্যকারিতা মারফত। সরকারি হস্তক্ষেপে ভূমি সংক্রান্ত আইন প্রণয়ন করে তা রূপায়ণের দায়িত্ব সরকারের হাতে। জমির উপর চাষির অধিকার রাখাই হল ভূমিসংস্কার। আর কৃষি কাঠামোয় সামাজিক-অর্থনৈতিক কার্যকারিতা বলতে কারিগরি কৌশলের উন্নয়ন, ঋণের বিকল্প সূত্রের ব্যবস্থাপনা গ্রহণ, সাক্ষরতা ও শিক্ষার প্রসার, গ্রামীণ সংগঠনগুলির শক্তি সৃষ্টিকরণ ইত্যাদি। তবে ভারতীয় পরিকল্পনায় ১৯৫০-৬৫ সময়কালে ভূমিসংস্কারের ওপরই সর্বাধিক গুরুত্ব আরোপ করা হয়েছিল। কার্যক্রমটি রূপায়ণের উদ্দেশ্যে ব্যবস্থাপিত প্রত্যক হয়েছে- প্রথমতঃ আইন প্রয়োগের মাধ্যমে ওপর থেকে ভূমিসংস্কার। দ্বিতীয়তঃ ভেলেসানা, নকশালবান্ডি আন্দোলন সমর্থিত সংগ্রামী চাষির কার্যকলাপে তলার থেকে ভূমিসংস্কার। তৃতীয়তঃ উপর থেকে সরকারি আইন প্রণয়নের মাধ্যমে তলার থেকে চাষিদের সংগঠিত করার মাধ্যমে ভূমিসংস্কার। চতুর্থতঃ জমিদার ও বড়ো ভূস্বামীদের কাছ থেকে উদ্ধৃত জমি সংগ্রহ করে ভূমিহীন চাষিদের মাধ্যে বন্টন করে তলার থেকে ভূমিসংস্কার করা। পশ্চিমবঙ্গ, কেরাল-এই দুটি রাজ্যে | |
| | ১১১ |



☐ Book chapter ☐ Abstract only

Chapter 16 - Detoxification and bioconversion of arsenic and chromium

Ronita Chandra and Avishek Banik

Pages 253-270

☒ Purchase ☐ View abstract ☐

☐ Book chapter ☐ Abstract only

Chapter 17 - Nanobiotechnology for E-waste management

Suneel Dodamani, Bhaskar Kurangi, ... Mahantesh Kurjogi

Pages 271-281

☒ Purchase ☐ View abstract ☐

☐ Book chapter ☐ Abstract only

Chapter 18 - Metal recovery using nanobiotechnology

Krishnendu Majhi, Moitri Let, ... Rajib Bandopadhyay

Pages 283-301

☒ Purchase ☐ View abstract ☐

☐ Book chapter ☐ Abstract only

Chapter 19 - Functionalized biogenic nanoparticles and their applications

Sougata Ghosh, Khalida Bloch and Thomas J. Webster

Pages 303-322

☒ Purchase ☐ View abstract ☐

Elsevier
Radarweg 29, PO Box 211, 1000 AE Amsterdam, Netherlands
The Boulevard, Langford Lane, Kidlington, Oxford OX5 1GB, United Kingdom
50 Hampshire Street, 5th Floor, Cambridge, MA 02139, United States

Copyright © 2021 Elsevier Inc. All rights reserved.

No part of this publication may be reproduced or transmitted in any form or by any means, electronic or mechanical, including photocopying, recording, or any information storage and retrieval system, without permission in writing from the publisher. Details on how to seek permission, further information about the Publisher's permissions policies and our arrangements with organizations such as the Copyright Clearance Center and the Copyright Licensing Agency, can be found at our website: www.elsevier.com/permissions.

This book and the individual contributions contained in it are protected under copyright by the Publisher (other than as may be noted herein).

Notices

Knowledge and best practice in this field are constantly changing. As new research and experience broaden our understanding, changes in research methods, professional practices, or medical treatment may become necessary.

Practitioners and researchers must always rely on their own experience and knowledge in evaluating and using any information, methods, compounds, or experiments described herein. In using such information or methods they should be mindful of their own safety and the safety of others, including parties for whom they have a professional responsibility.

To the fullest extent of the law, neither the Publisher nor the authors, contributors, or editors, assume any liability for any injury and/or damage to persons or property as a matter of products liability, negligence or otherwise, or from any use or operation of any methods, products, instructions, or ideas contained in the material herein.

Library of Congress Cataloging-in-Publication Data

A catalog record for this book is available from the Library of Congress

British Library Cataloging-in-Publication Data

A catalogue record for this book is available from the British Library

ISBN: 978-0-12-822878-4

For information on all Elsevier publications
visit our website at <https://www.elsevier.com/books-and-journals>

Publisher: Dennis Susan
Acquisitions Editor: Kostas K1, Marinakis
Editorial Project Manager: Ruby Gammell
Production Project Manager: Joy Christel Neumann Honest Thangiah
Designer: Miles Hitchen

Typeset by Thomson Digital



CHAPTER

18

Metal recovery using nanobiotechnology

Krishnendu Majhi, Moitri Let, Ashutosh Kabiraj, Shrabana Sarkar, Urmil Halder, Bhramar Dutta, Raju Biswas, Rajib Bandopadhyay*

Department of Botany, The University of Burdwan, Golapbag, Purba Bardhaman, West Bengal, India

*Corresponding author.

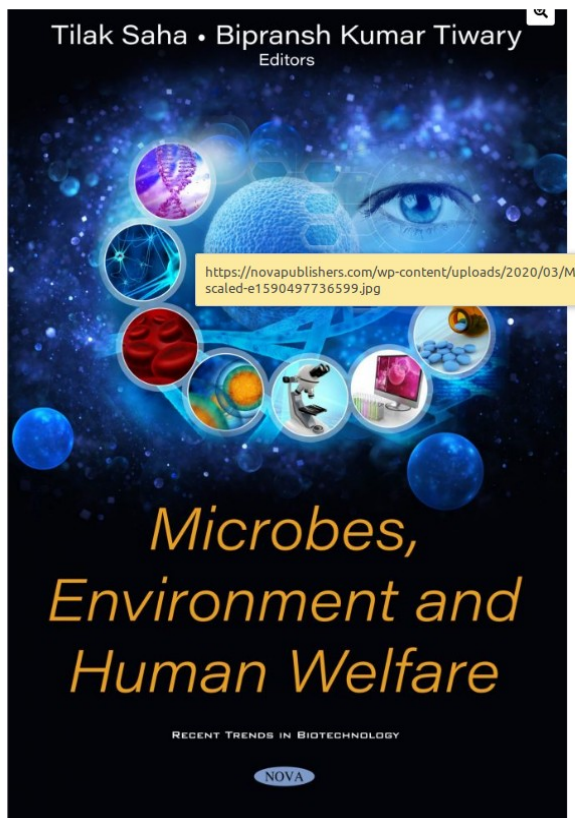
18.1 Introduction

Metals are important for the living world as they are an essential part for many biological processes in minute concentrations. Copper, calcium, magnesium, iron, selenium, etc. are major trace minerals in human health. Besides this, gold, platinum, and silver are more important for the global economy as they are the most precious metals. Though the above-mentioned metals are major bricks in the economic pillars, they can be considered as pollutants in environmental circumstances. The main problem is the concentration of metals in the environment. The presence of metals and heavy metals beyond permissible limits in the soil or water is considered as environmental pollution (Khan et al., 2007). The metal absorbance capability of plants or animals in water or in soil depends on the concentration initially placed there. Humans can then be affected by consuming plant products or fish as food. Platinum was once thought to not be reactive, but some salt ions are found to accumulate in living organisms (Kalavrouziotis and Koutoulakis, 2009) and cause hazardous effects. Aquatic weeds can be killed by the hazardous effects of palladium toxicity. Selenium can cause toxic effects in fish due to its high accumulation (Hamilton, 2004).

Presently, metal recovery is an innovative interest. Most precious metals like platinum and gold can be adequately recovered from a complex solution with a high hydrochloric acid (HCl) concentration. An organic solution containing microalgae is also used for precious metal recovery (Minoda et al., 2020). Nanobiotechnology can also help to remove the hazardous effect of metals from the environment. As two words, nanotechnology and biotechnology together represent the word nanobiotechnology, which deals with the production of nanoscale structures for enhanced encroachment in the field of biotechnology. In current era, the combination of nanotechnology and biotechnology has materialized as an essential division of material and modern science. It is getting worldwide attention due to its abundant applications in different fields including heavy metal recovery.

Nanoparticles (NPs) can be synthesized physically, chemically, or biologically. Chemically and physically synthesized nanoparticles are capital demanding, toxic, nonenvironment-friendly and hazardous to living organisms, whereas biologically synthesized metallic nanoparticles are low-priced, nontoxic, and eco-friendly in nature. As this procedure leads to a green bioprocess, this synthesis process is known as green synthesis. Nanoparticles made up of noble metals are extensively used in different types of bioremediation (Akhtar et al., 2013). In case of biological nanoparticles, rather than the whole cell of bacteria and fungi, specific enzymes can be used for the synthesis of nanomaterials later, which involve bioremediation procedures. Microorganisms can synthesize metallic nanoparticles by altering the solubility, which reduces toxicity in the course of reduction or oxidation, bioaccumulation and efflux systems, bio-sorption, and extracellular precipitation of metals (Huseini et al., 2007). This is the mechanism by which valuable metals can be recovered by nanobiotechnology. There are different factors like the environment, solutions used for metal recovery, reaction time, and pressure at that particular space, agitation, and proximity effect, which change the synthesis of nanoparticles. Therefore, at the time of precious metal recovery from complex sewage or effluents, these factors should be considered. In recent times, rather than conventional processes, eco-friendly microbes-based nanomaterial synthesis processes are much more preferable to researchers for different purposes (Sengani et al., 2017). After recovering valuable metals by forming nanomaterials based on biological organisms,

Nanobiotechnology, <https://doi.org/10.1016/B978-0-12-822878-4.00018-7>
Copyright © 2021 Elsevier Inc. All rights reserved.



4/13/24, 11:36 AM

Microbes, Environment and Human Welfare – Nova Science Publishers

Status: Available

1

Add to cart

Add to Wishlist

ISBN: 978-1-53617-945-3

Categories: 2020, Biology, Biotechnology, Life Sciences, Nova, Recent Trends in Biotechnology

Tags: 9781536179453, 9781536179460, biotechnology

Like 1

Table of Contents

Publish with Us

Table of Contents

Table of Contents

Foreword

Preface

Acknowledgments

Chapter 1. Antibiotic Resistance: Genesis, Germs and the Way Forward

(Sandipan Mukherjee, Department of Biosciences and Bioengineering, Indian Institute of Technology Bombay, Mumbai, India)

Chapter 2. Microbe-Mediated Remediation of Heavy Metal Contamination

(Palas Samanta, PhD, Apurba R. Ghosh, PhD, and Jinho Jung, PhD, Department of Environmental Science, Sukanta Mahavidyalaya, University of North Bengal, Dhupguri, West Bengal, India, and others)

Chapter 3. Microbial Phytases in Combating Phosphorus Pollution and Managing Agricultural Phosphorus

4/13/24, 11:36 AM

Microbes, Environment and Human Welfare – Nova Science Publishers

Agartala, Tripura, India)

Chapter 14. Microbial Phytases in Combating Phosphorus Pollution and Managing Agricultural Phosphorus

(Moushree Pal Roy, PhD, Department of Microbiology, Ananda Chandra College, Jalpaiguri, West Bengal, India)

Chapter 15. Application of Microbes in Biofuel Production: Principles and Practices

(Bikram Basak, Department of Earth Resources and Environmental Engineering, Hanyang University, Seoul, Korea)

About the Editors

Index

Nova Science Publishers, Inc.

Nova publishes a wide array of books and journals from authors around the globe, focusing on Medicine and Health, Science and Technology and the Social Sciences and Humanities.

We publish over 1,500 new titles per year by leading researchers each year, and have a network of expert authors, editors and advisors spanning the global academic community in pursuit of advanced research developments.

Headquarters:

Nova Science Publishers, Inc.

415 Oser Avenue, Suite N

Hauppauge, NY, 11788 USA

In: **Microbes, Environment and Human Welfare**
Editors: **Tilak Saha and Biprانش Kumar Tiwary**

ISBN: 978-1-53617-945-3
© 2020 Nova Science Publishers, Inc.

Chapter 14

MICROBIAL PHYTASES IN COMBATING PHOSPHORUS POLLUTION AND MANAGING AGRICULTURAL PHOSPHORUS

Moushree Pal Roy*, PhD

Department of Microbiology, Ananda Chandra College,
Jalpaiguri, West Bengal, India

ABSTRACT

Phosphorous (P) is an essential nutrient for plants and animals. Phytic acid (myo-inositol 1,2,3,4,5,6-hexakis phosphate, IP6) and its mixed cation salt, phytate, are the chief storage forms of P (60–80%) in plants. Phytates are strongly complexed in soil and constitute 20–50% of total soil organic P that is poorly available for plant absorption. They also chelate nutritionally important minerals such as calcium, iron, zinc, magnesium, manganese, copper and molybdenum thereby limiting their bioavailability. Hence, inorganic phosphate is commonly added to fertilizers for adequate plant growth. While nutritional demand is met, environmental problems arise due to leaching of unabsorbed fertilizer phosphate into water bodies, leading to agricultural pollution and eutrophication. Phytate mineralizing bacteria produce phytase that hydrolyse phytate to release inorganic phosphate for assimilation by the plants because plants acquire P only in inorganic form. Studies have indicated that, besides other factors, the ability of some rhizospheric bacteria to release the P from phytate in soil making it available for plant nutrition might contribute to their plant-growth-promoting activity. Such researches have been contributing in the successful application of phytase-producing microorganisms in agriculture for managing phytate-phosphorus under natural soil conditions. On the other hand, ruminants digest phytic acid through the action of phytases produced by the anaerobic gut fungi and bacteria present in their ruminal microflora. But monogastric

* Corresponding Author's Email: moushree.palroy@gmail.com

Complimentary Contributor Copy

THE IMPACT OF COVID-19 ON THE ECONOMY

DR. RAM KRISHNA MANDAL
DR. M.Q. KHAN

Raghav Publication

B-128 Kavita Colony Nangloi,
New Delhi -110041
Phone: 83778 23415, 9810340706
Email : raghavpublication@gmail.com
Visit us: www.raghavpublication.com

First Edition: 2021

ISBN: 978-93-85679-15-5

© Author

All rights reserved. This book or any part thereof must not be reproduced or reprinted in any form without prior permission from the author.

Price: ₹695.00

Published By : Raghav Publication, B-128 Kavita Colony Nangloi, New Delhi -110041
Phone: 83778 23415, 9810340706
Email : raghavpublication@gmail.com,
Visit : www.raghavpublication.com

Contents

| | |
|---|----------|
| Preface | v-vi |
| List of Contributors | vii-viii |
| 0. Introduction | 1-6 |
| 1. Ethiopian Tourism: Battling the Pangs of Socioeconomic Consequences Arising out of Covid-19 Pandemic (An empirical transformative research study) <i>Prof. Pranab K. Bhattacharya</i> | 7-20 |
| 2. Potential Economic Impact of Covid-19 and Policies <i>Dr. Sukanta Sarkar & Dr. Suman Kalyan Chaudhury</i> | 21-35 |
| 3. Covid 19 and the Fijian Response <i>Dr. Ravinesh Rohit Prasad & Dr. Mohammad Afsar Alam</i> | 36-46 |
| 4. COVID 19: Role of the Indian State <i>Dr Arundhati Bhattacharyya</i> | 47-55 |
| 5. The Marketing Revolution Of Green Foodstuffs In Nepal: Techno-Ready Seller <i>Balendu Hamal Thakuri</i> | 56-68 |
| 6. Enhancing Indian FDI: Role, Prospects and Challenges to Nepalese Economy <i>Arjun Kumar Baral and Rajendra Adhikari</i> | 69-83 |
| 7. Economic Impact of the COVID-19 Pandemic in India <i>Tapan Kumar Ghosh & Paramita Dasgupta</i> | 84-101 |
| 8. The Son of Soil Theory and Reservation of Jobs in Private Sector amidst Covid-19 Pandemic <i>Kaustav Choudhury</i> | 102-106 |
| 9. A Study on Impact of COVID-19 on Indian Tourism Sector <i>Pradeep Kumar Panda</i> | 107-118 |

Chapter-7

Economic Impact of the COVID-19 Pandemic in India

Tapan Kumar Ghosh & Paramita Dasgupta

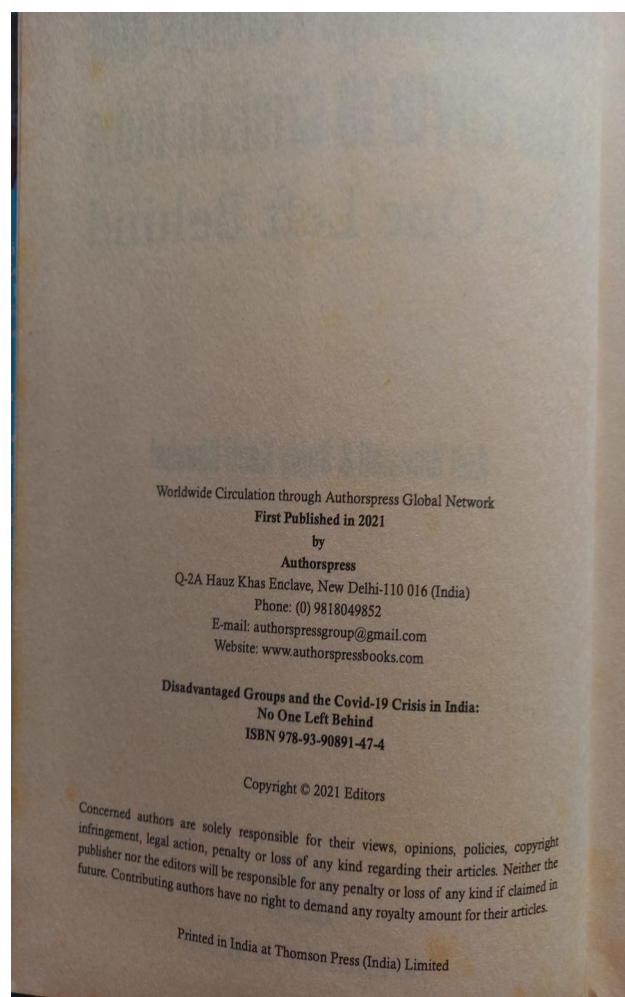
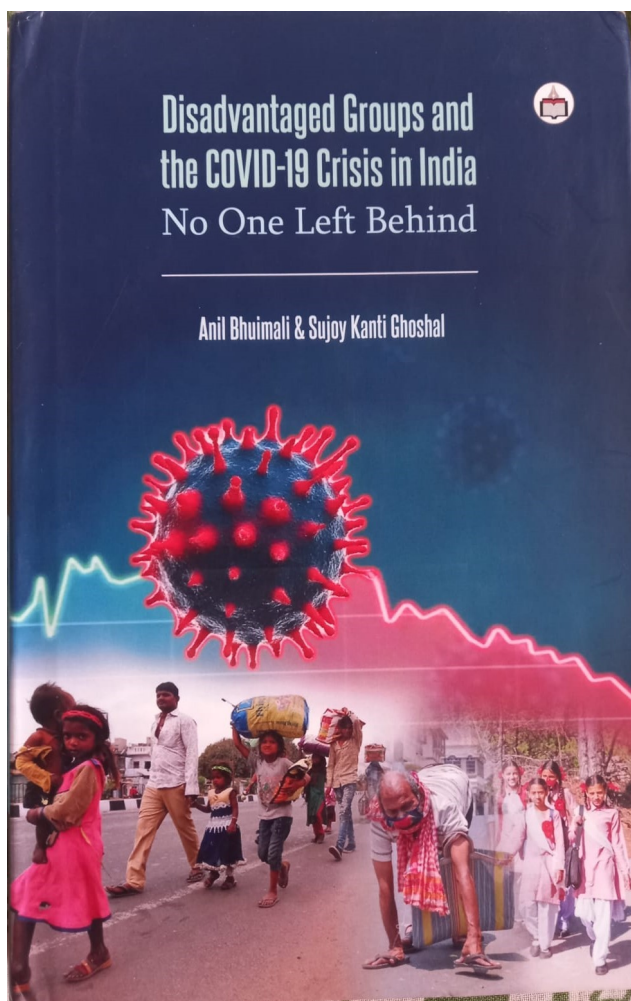
ABSTRACT

The economic impact of the COVID-19 pandemic in India has been largely disruptive. India's growth rate in the fourth-quarter of the FY2020 went down to 3.1% according to the Ministry of Statistics in India. According to the Chief Economic Adviser (CEA) of the Govt. of India this drop is mainly due to the COVID-19 pandemic effect on the Indian economy. Economists slashed GDP rates for the foreseeable future due to the obvious impact of the lockdown. It is also realized that the country might bounce back quickly because its industry composition, with unorganized markets being largely dominant. The most affected industries are services and manufacturing, travel and tourism, financial services, mining and construction etc. The paper acknowledges that the invisible virus will co-exist in India until a permanent vaccine is found. The paper recommends adopting focussed interventions with the most vulnerable groups such as Scheduled Castes, Scheduled Tribes and Other Backward Classes, not only for changing their behaviour but also improving their access to basic services who are socially deprived, and economically marginalized. The paper also discusses the self-reliance or Atmanirbhar Bharat Abhiyan, economic recovery of the Indian economy and migrant workers during the COVID-19 pandemic in India.

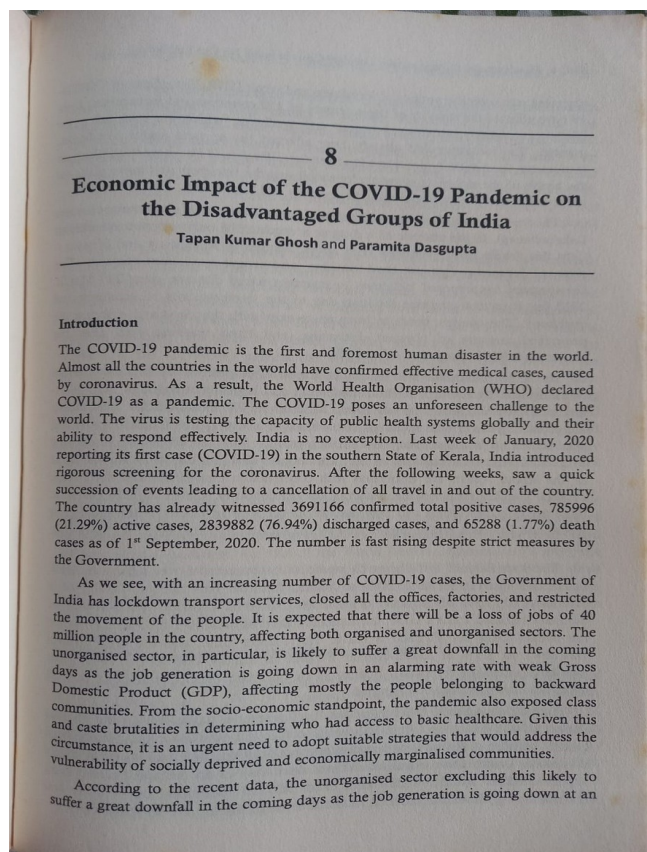
Keywords: Economic Impact, COVID-19 Pandemic, Economic Recovery, Vulnerable

1. INTRODUCTION

The COVID-19 pandemic is the first and foremost human disaster in the world. Almost all the countries in the world have confirmed effective medical cases, caused by coronavirus. As a result, the World Health Organization (WHO) declared COVID-19 as a pandemic. The COVID-19 poses an unforeseen challenge to the world. India is no exception. The



| Contents | |
|---|-----|
| <i>Preface</i> | v |
| <i>Introduction</i> | xi |
| 1. COVID 19 and the Under-Privileged Groups of India: A Study on Morbidity, Economics and Sustainability Sugata Sen; Soumitra Kundu; Soumya Sengupta; Hillol Kumar Chakrabarti | 1 |
| 2. Disadvantaged Groups and the COVID-19 Crises in India M. Thangaraj | 21 |
| 3. Can MGNREGA be a Tool for Rural Livelihood Recovery after COVID-19? Sidhartha Sankar Laha | 33 |
| 4. COVID-19 and India's Economic Outlook: Intensifying Challenges for its Labour Forces Sanjib Mandal | 47 |
| 5. A Swot on Consequences of Lockdown on Migratory Beekeeping: West Bengal – A Case Anil Bhuiamali, Sanghamitra Purkait and Manish Baidya | 66 |
| 6. The COVID-19 and Physically Challenged Persons (PCPs) in India – No PCPs to be Left Behind Sujoy Kanti Ghoshal | 99 |
| 7. The Plight of Migrant Labours in the Face of COVID-19 Pandemic Tulika Kar | 115 |
| 8. Economic Impact of the COVID-19 Pandemic on the Disadvantaged Groups of India Tapan Kumar Ghosh and Paramita Dasgupta | 133 |
| 9. Has Rural Economy given Disadvantaged Groups a Shelter during COVID-19 outbreak? Jayeeta Deshmukh | 150 |
| 10. The Corona Pandemic: Effective Situation on Education in India Paramita Ray | 165 |



COVID-19 PANDEMIC AND ITS MULTIDIMENSIONAL IMPACT

The Road Ahead



Editors

Tapan Kumar Ghosh, Tonmoy Chatterjee and Indrajit Ghosh

Editors: Tapan Kumar Ghosh
Tonmoy Chatterjee
Indrajit Ghosh

© First Published: 2021
Serials Publications (P) Ltd.

ISBN: 978-81-950760-2-4

All rights reserved. No part of this book 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 written permission from the author and publisher.

Printed in India

SERIALS PUBLICATIONS PVT. LTD.

4830/24, Prahlad Street, Ansari Road, Darya ganj,

New Delhi-110002 (India)

Phone : 23245225, 23259207, 23272135

E-mail: serials@mail.com

x COVID-19 PANDEMIC AND ITS MULTIDIMENSIONAL IMPACT...

Chapter-6: Multidimensional Impact of COVID-19 Pandemic in India 129
Paramita Dasgupta and Tapan Kumar Ghosh

Chapter-7: COVID-19 Impacts in India: Transforming Challenges to Opportunities 163
Vaskar Barman

Chapter-8: E-learning during COVID-19 in India: An Empirical Study 181
Nilesh Kate, Abhishek Srivastava
Chandraprabha Vaidya

Chapter-9: COVID-19 and Education - Today and Tomorrow: Impact Analysis, Policy Responses and Recommendations 209
Sumon Roy

Chapter-10: Analysis on the use of Digital Marketing and E-commerce as a Potential Growth Tool for India's Sports Good Cluster Post Pandemic 231
Vibhum Singh and Saba Khan

Chapter-11: Role of WHO, World Bank and IMF to Control the COVID-19 Pandemic 251
Kishan Agarwalla and Tapan Kumar Ghosh

Chapter-12: COVID-19 Outbreak and its Socio-economic Impact: A Case Study on Paharpur Gram Panchayat, Jalpaiguri, West Bengal, India 277
Shuvankar Kar and Mandira Ghosh

Chapter-13: Indian Economy's Manifold Shields against COVID-19 Pandemic: An In-depth Critique 289
Tulika Kar

Part-3: Impact of COVID-19 Pandemic on Labour Market

Chapter-14: Distress Returning of Migrant Workers and Local Labour Markets during COVID-19 Outbreak in India 311
Jayeeta Deshmukh

6 MULTIDIMENSIONAL IMPACT OF COVID-19 PANDEMIC IN INDIA

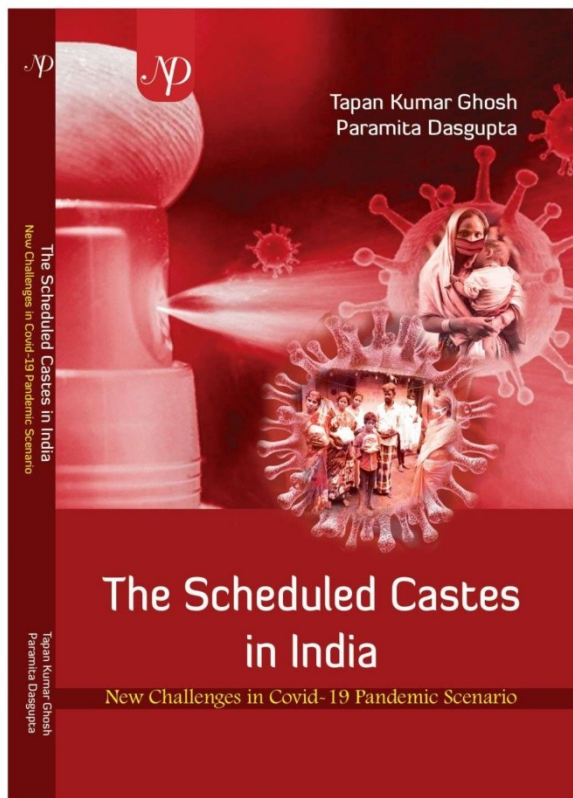
Paramita Dasgupta

Ananda Chandra College, Jalpaiguri, India
E-mail: paramitadasgupta23@gmail.com

Tapan Kumar Ghosh

Ananda Chandra College, Jalpaiguri, India
E-mail: tkg94342@gmail.com

Abstract: The World Health Organization (WHO) declared COVID-19 as a pandemic. The COVID-19 poses an unforeseen challenge to the world. India is no exception. The virus has reached every State and Union Territory of the country. The Government has imposed lockdown to maintain social distance since 24th March, 2020 but it cannot continue for long due to the immense loss of economy and livelihood. In India the life versus livelihood debate played out. The government first announcing that life would be prioritized over livelihood. Later it changed to an equal importance being given to life and livelihood. The pandemic changed daily lifestyles drastically. From the socio-economic standpoint, the pandemic exposed class and caste brutalities in determining who had access to basic healthcare. But the Government try to give the best services within their limitations. The Indian Government was optimistic in fighting and containing the virus with minimal affects to the country. The announcement of lockdown created widespread panic, specifically disadvantaged groups of society. India's nationwide lockdown amidst the COVID-19 pandemic has critically dislocated its migrant worker. Losing job and with public transportation shut down, thousands of migrants were forced to walk hundreds of miles back to their home. The economic impact of the COVID-19 pandemic in India has been largely disruptive. India's growth rate in the fourth-quarter of the FY2020 went down



The Scheduled Castes in India New Challenges in COVID-19 Pandemic Scenario

Tapan Kumar Ghosh
Paramita Dasgupta

NP
NEW DELHI PUBLISHERS
New Delhi, Kolkata

The Scheduled Castes in India - New Challenges in COVID-19 Pandemic Scenario by *Tapan Kumar Ghosh* and *Paramita Dasgupta* Published by New Delhi Publishers, New Delhi.

© Publisher

Edition: 2021

ISBN: 978-93-91012-14-4

All rights reserved. No part of this book may be reproduced stored in a retrieval system or transmitted, by any means, electronic mechanical, photocopying, recording, or otherwise without written permission from the publisher and authors.



NEW DELHI PUBLISHERS

Head Office: 90, Sainik Vihar, Mohan Garden, New Delhi - 110 059

Corporate Office: 7/28, Room No.-208, Vardaan House, Mahavir Lane, Ansari Road, Daryaganj, New Delhi-110002

Branch Office: 216, Flat-GC, Green Park, Narendrapur, Kolkata - 700103
Tel: 011-23256188, 011-45130562, 9971676330, 9582248909

E-Mail: ndpublishers@rediffmail.com/gmail.com

Website: www.ndpublisher.in



বহুস্বরা নারী

জীবন ও সাহিত্যে

সম্পাদনা
সংহিতা ঘোষ
সুস্মিতা গোস্বামী

Bohuswara Nari - Jibon O Sahitye
Edited by Sanghita Ghosh & Susmita Goswami
Published by Joyjit Mukherjee, SOPAN
206, Bidhan Sarani, Kolkata-700 006
Phone : (033) 2257 3738 / 9433343616 / 9836321521
E-mail : sopan1120@yahoo.com / publisopan@gmail.com
www.sopanbooks.in

প্রথম প্রকাশ

২০২১

© উইমেন'স স্টাডিজ সেন্টার, লেডি ব্রাবোর্ন কলেজ
Women's Studies Centre, Lady brabourne College

সর্বস্বত্ব সংরক্ষিত

প্রকাশক এবং স্বত্বাধিকারী লিখিত অনুমতি ছাড়া এই বইয়ের কোনও অংশেরই কোনওরূপ পুনরুৎপাদন বা প্রতিলিপি করা যাবে না, কোনও যান্ত্রিক উপায়ের (গ্রাফিক, ইলেকট্রনিক বা অন্য কোনও মাধ্যম, যেমন ফোটোকপি, টেপ বা পুনরুৎপাদনের সুযোগ সংবলিত তথ্য সংগ্রহ করে রাখার কোনও পদ্ধতি) মাধ্যমে প্রতিলিপি করা যাবে না বা কোনও ভিস্ক, টেপ, পারফোরেটেড মিডিয়া বা কোনও তথ্য সংরক্ষণের যান্ত্রিক পদ্ধতিতে পুনরুৎপাদন করা যাবে না। এই শর্ত লঙ্ঘিত হলে উপযুক্ত আইনি ব্যবস্থা গ্রহণ করা যাবে।

প্রকাশক

জয়জিৎ মুখার্জী

সোপান

২০৬ বিধান সরণী, কলকাতা-৭০০ ০০৬

দূরভাষ : (০৩৩) ২২৫৭৩৭৩৮ / ৯৪৩৩৩৪৬১৬ / ৯৮৩৬৩২১৫২১

E-mail : sopan1120@yahoo.com / publisopan@gmail.com
www.sopanbooks.in

মুদ্রণ

রবীন্দ্র প্রেস

১১এ, জগদীশনাথ রায় রোড, কলকাতা-৭০০০০৬

মূল্য

২৫০ টাকা

ISBN : 978-93-90717-35-4

সূচিপত্র

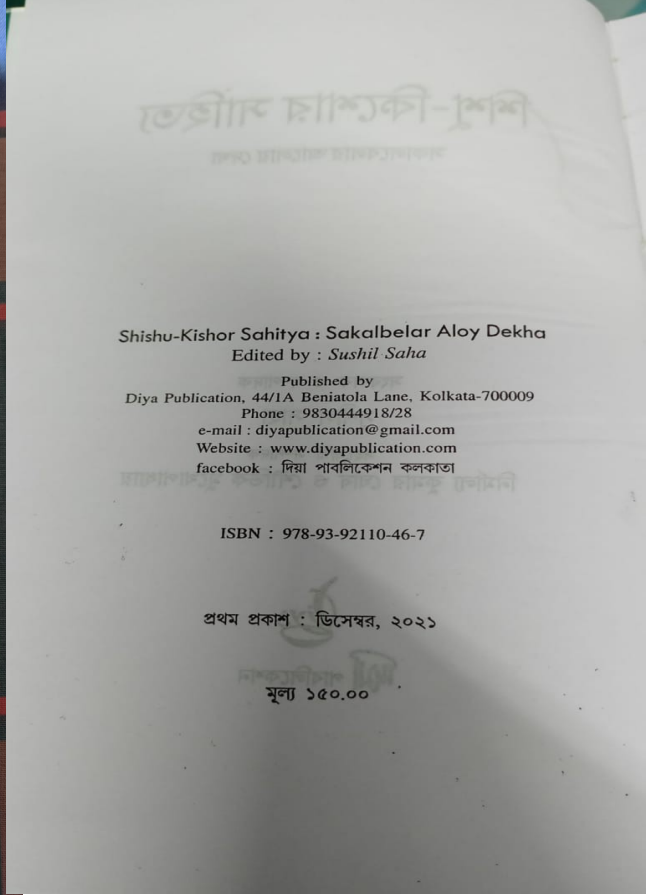
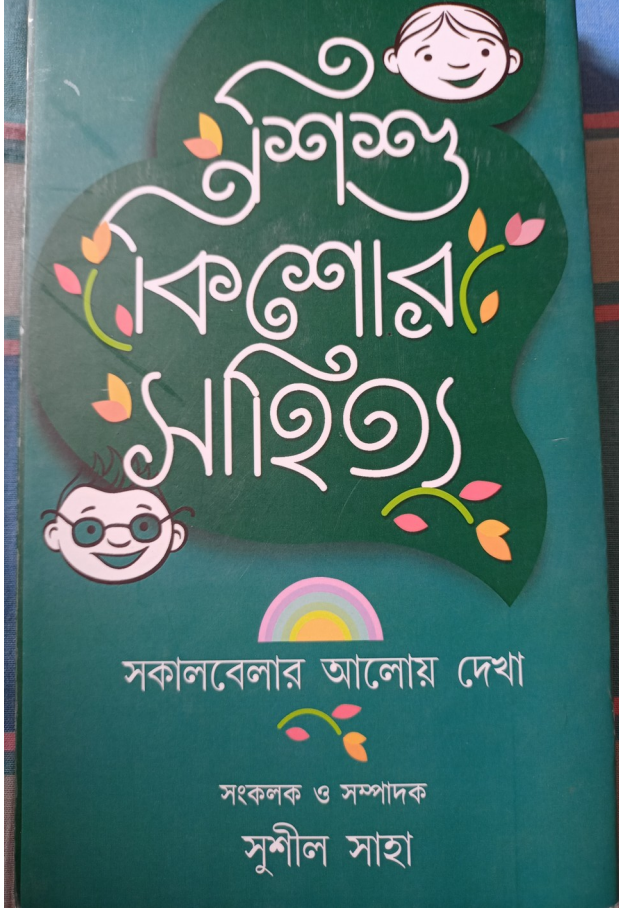
| | |
|---|-----|
| মা, ঠাকুমা ও খাইমা—নীরেন্দ্রনাথ চক্রবর্তী | ১৩ |
| মৌরী ধর্মপালের 'মালতী' : একটি মরমী প্রতিবাদ—গোপা দত্ত ভৌমিক | ১৮ |
| বাংলা সাহিত্যে শূর্ণনখা : সেকাল ও একাল—উদয় রতন মুখার্জী | ২৫ |
| সুভা—মৌ দশগুপ্ত | ৪১ |
| দ্য অটোবায়োগ্রাফি অফ অ্যান ইণ্ডিয়ান প্রিন্সেস : আত্মজীবনী দর্পণে সুনীতিদেবী—সত্যবতী গিরি | ৪৮ |
| আর্যনারী সমাজ ও 'পরিচারিকা' পত্রিকা : একটি সংক্ষিপ্ত পর্যালোচনা—দেবানন্দ চৌধুরী | ৫৮ |
| সংরক্ষণ ও রাজনৈতিক অংশগ্রহণ : প্রমীল ভারতীয় নারী ভাগ্যোদয়—শিউলি সরকার | ৬৬ |
| মণিপুরের ইমা কেইথেল : নারী ক্ষমতায়নের এক উজ্জ্বল অধ্যায়—শ্রাবণী ঘোষ | ৭৪ |
| নারী সুরক্ষা এবং তার আইনি পদক্ষেপ—পূখা পণ্ডিত (রায়চৌধুরী) | ৮৩ |
| কেয়া চক্রবর্তী : এক অকাল-নির্বাপিত অগ্নিশিখা—মহাশ্বেতা মুখোপাধ্যায় | ৯৩ |
| পথপ্রদর্শক শান্তা দেবী—অপর্ণা বন্দ্যোপাধ্যায় | ১০৩ |
| প্রথম প্রতিশ্রুতি : একাল ও সেকালের দ্বন্দ্ব—জয় দাস ও সুতীর্ণ সরকার | ১১২ |
| গোয়েন্দানীর গপ্পো—নির্মাল্য কুমার ঘোষ | ১১৯ |
| একুশ শতকে বাঙালি মহিলা কথাকারের দৃষ্টিতে মহিলা গোয়েন্দার অভিযান—রঞ্জনা ভট্টাচার্য | ১৩৪ |

একুশ শতকে বাঙালি মহিলা কথাকারের দৃষ্টিতে মহিলা গোয়েন্দার অভিযান

রঞ্জনা ভট্টাচার্য

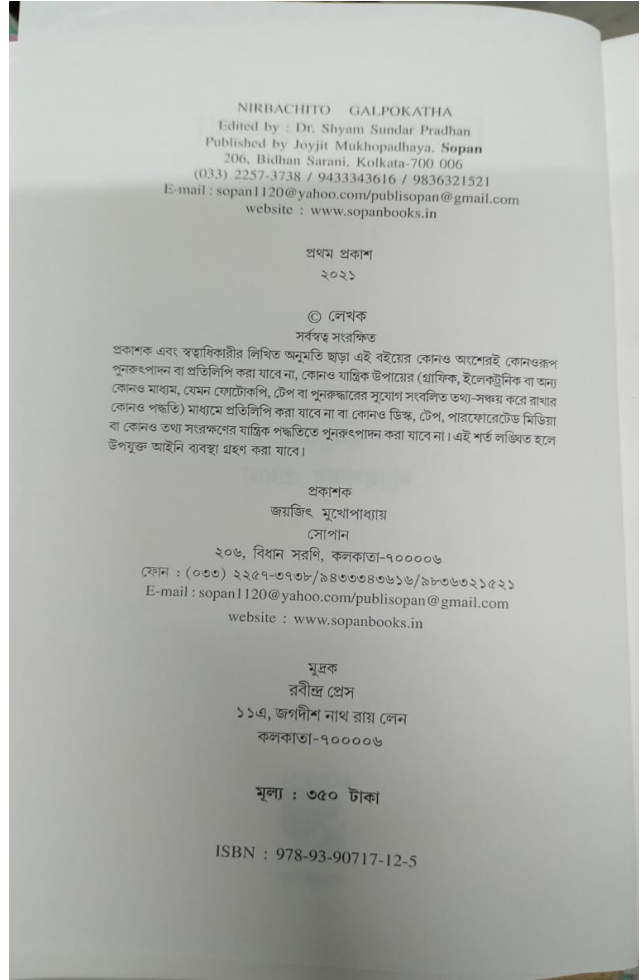
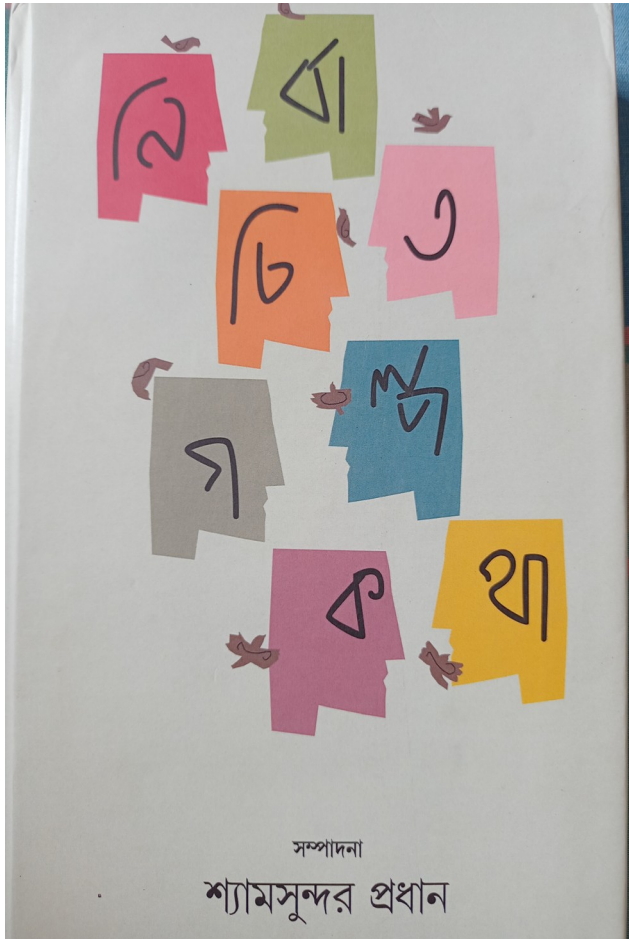
বাঙালার আধুনিক গোয়েন্দা কাহিনির সূত্রপাত বলা যায়, উনিশ শতকের শেষপ্রান্ত থেকে। উনিশ শতকের শেষভাগে দারোগা বরকতউল্লাহ 'বাকউল্লাহ দপ্তর'-এর একটি বাংলা অনুবাদ পাওয়া যায়। ১৮৯৩ সালে প্রিয়নাথ মুখোপাধ্যায়ের 'দারোগার দপ্তর'-এর প্রথম সংখ্যা প্রকাশ পায়। দারোগাদের চাকরি জীবনের অভিজ্ঞতা নিয়ে বাংলা গোয়েন্দা কাহিনি আধুনিককালে অনুপ্রবেশ করে। তবে সুকুমার সেন তাঁর 'ক্রাইম কাহিনীর কালক্রান্তি' বইতে উদাহরণ দিয়ে প্রমাণ করে দেখিয়েছেন প্রাচীন বৈদিক সাহিত্যে ক্রাইম কাহিনির বীজ নিহিত ছিলো। আধুনিককালের গোয়েন্দা কাহিনির মধ্যে পাশ্চাত্য প্রভাব স্পষ্টভাবে দেখতে পাওয়া যায়। বিশেষত আর্থার কোনান ডয়েলের শার্লক হোমসের প্রভাব সারা বিশ্বের গোয়েন্দা কাহিনির ভাবনাকে বদলে দেয়। শার্লক হোমসের গোয়েন্দাগিরির মধ্যে বৈজ্ঞানিকতা ব্রিটিশ পুলিশের ব্যবস্থাকেও নাড়িয়ে দিয়েছিলো। বাংলা গোয়েন্দা সাহিত্যের প্রথম পর্বে ইংরেজি গোয়েন্দাদের প্রভাব বেশ বেশি। তাদের বেশভূষা, চলন-বলনে বাঙালিয়ানা খুঁজে পাওয়া যায় না। পাঁচকড়ি দে, দীনেন্দ্রকুমার রায়, হেমেন্দ্রকুমার রায়ের রহস্য রোমাঞ্চ কাহিনি, দস্যুমোহনের অ্যাডভেঞ্চারমুখী গোয়েন্দা সিরিজের পর শরদিন্দু বন্দ্যোপাধ্যায়ের ব্যোমকেশের কাহিনীতে বাংলা গোয়েন্দা গল্প সাবালকত্ব লাভ করে। শরদিন্দু বন্দ্যোপাধ্যায় গোয়েন্দা গল্পকে ছোটদের গল্প থেকে মুক্ত করে বড়দের সীমায় নিয়ে যান। সুকুমার সেন শরদিন্দু অমনিবাস'-এর প্রথম খণ্ডের ভূমিকায় বলেছেন—

'ব্যোমকেশ হোমসের মতো উৎকর্ষিত প্রকৃতির নয়, বিজ্ঞানমনস্ক নয়, গুণী বোহাদাদার নয়, নোশোরেও নয়, সে বর্তমান শতাব্দীর (বিশ শতাব্দী), তৃতীয় দশকের বাঙালি যুবক— শিক্ষিত মেধাবী, তীক্ষ্ণদৃষ্টি, সংযতবাক, সহৃদয়; তাঁর চরিত্রে দাঙ্কিতা ও গাষ্টীর্থ ছাড়া এমন কিছু নেই যাতে তাকে সমান স্তরের সমান কালের বাঙালি ছেলের থেকে স্বতন্ত্র মনে করতে হয়।

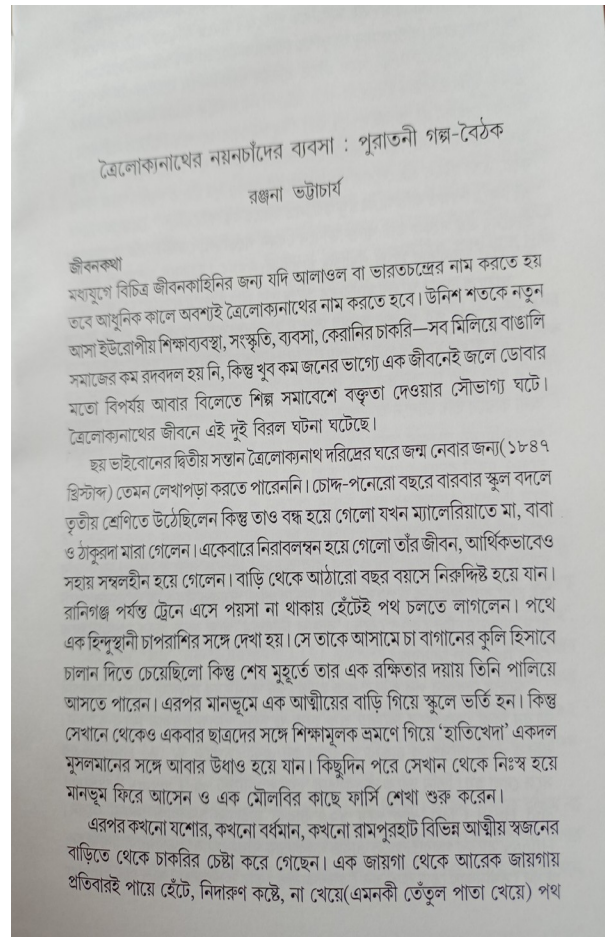


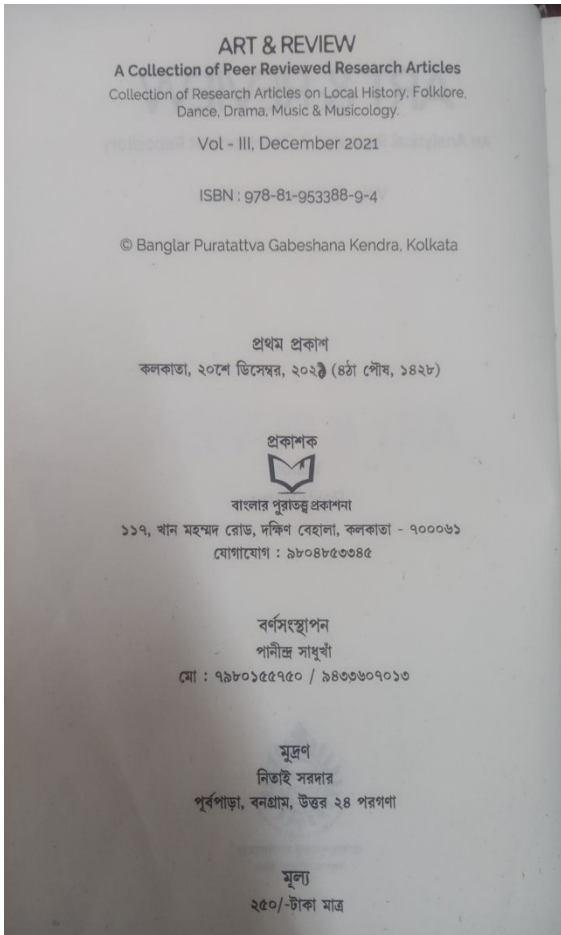
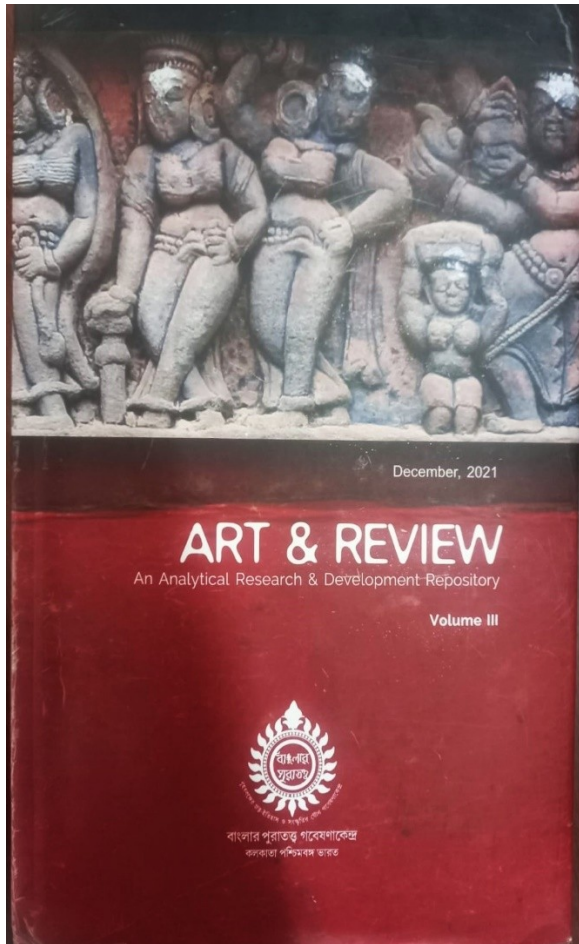
| | |
|---|-----|
| ছড়া সমগ্র—অন্নদাশঙ্কর রায় | ৮৭ |
| ‘লন্ডনের শীত’ : ছড়ায় শীতের লন্ডন/রঞ্জনা ভট্টাচার্য | ৮৭ |
| ‘বুড়ু ও খোকা’ : দেশভাগের টুকরো স্মৃতি/বিশ্বজিৎ ঘোষাল | ৯২ |
| অন্নদাশঙ্কর রায়ের ‘ছড়া’জগৎ ও পক্ষিরাজ’ ছড়ার অন্তর্বিবরণ/পুষ্পেন্দু নন্দর | ৯৯ |
| অন্নদাশঙ্কর রায়ের ছড়া : ‘কাটাকুটি খেলা’/রাজদীপ দত্ত | ১২৯ |
| ‘অবাক চা পান’ : সমাজতন্ত্রের শিশুপাঠ্য ভাষা/উদয় রতন মুখার্জী | ১২৫ |
| ‘ঢাকই ছড়া’/গোবিন্দ মন্ডল | ১৩৩ |
| ‘সোনার হরিণ’ ও পশুপ্রেমিকের কামা/পৃথ্বীশ মজুমদার | ১৪০ |
| বাদশাহী আংটি—সত্যজিৎ রায় | ১৪৩ |
| ‘বাদশাহী আংটি’ : সত্যজিৎ রায়ের স্মৃতি এবং ফেলুদা চরিত্রের নির্মাণ/শুভদীপ অধিকারী | ১৪৩ |
| ‘বাদশাহী আংটি’ : গোয়েন্দাগিরির নব পর্যায়/ব্রজী গায়ন | ১৪৯ |
| ‘দাদা থেকে গোয়েন্দা’ : ফেলুদা সম্পর্কে দু’চার কথা/শৌভিক মুখোপাধ্যায় | ১৫৪ |
| সবুজ দ্বীপের রাজা—সুনীল গঙ্গোপাধ্যায় | ১৬৪ |
| ‘সবুজ দ্বীপের রাজা’ অথবা গুলদা তালুকদারের গল্প/নির্মাল্য কুমার ঘোষ | ১৬৪ |
| ‘সবুজ দ্বীপের রাজা’ : উত্তর ঔপনিবেশিক পাঠ/রবিতা চট্টোপাধ্যায় | ১৬৬ |
| ‘সবুজ দ্বীপের রাজা’ সাহিত্য থেকে চলচ্চিত্র : বিবিধ প্রসঙ্গ/অরুণিমা দাস | ১৬০ |
| সুনীল গঙ্গোপাধ্যায়ের ‘সবুজ দ্বীপের রাজা’ : রহস্যের বোঁজ/তন্ময় মালিকার | ১৬৪ |

| | |
|---|----|
| ছড়া সমগ্র : অন্নদাশঙ্কর রায় | ৮৭ |
| ‘লন্ডনের শীত’ : ছড়ায় শীতের লন্ডন | ৮৭ |
| রঞ্জনা ভট্টাচার্য | ৮৭ |
| ‘তেলের শিশি ভাঙল বলে বুড়ুর পরে রাগ কর?’—এমন কোনো বাঙালি নেই যিনি এই ছড়া কখনো পড়েননি বা শোনেননি। অন্নদাশঙ্করের নামের সঙ্গে এই ছড়াটি যেন ওতপ্রোতভাবে জড়িয়ে আছে। এছাড়াও তাঁর রচিত বহু ছড়া আমরা ছোটো থেকে জ্ঞাতে-অজ্ঞাতে উচ্চারণ করে থাকি। ছড়াকার অন্নদাশঙ্করের পরিচিতি তাঁর ঔপন্যাসিক, ছোটো গল্পকার, প্রাবন্ধিক সব সত্তাকে ছাপিয়ে গেছে। | |
| সাহিত্যিকর্মে তিনি যেমন কৃতিমান ছিলেন, তেমনই কর্মজীবনে ছিলেন একজন উচ্চপদস্থ কর্মচারী। অন্নদাশঙ্করের জন্ম হয় ১৯০৪ খ্রিস্টাব্দে ব্রিটিশ ভারতে বর্তমান উড়িষ্যার ঢেঙ্কানলে। তাঁর পূর্বপুরুষের আদি বাসস্থান ছিল পশ্চিমবঙ্গের দুর্গলি জেলার কোতরং অঞ্চলে। তাঁর বাবা ছিলেন ঢেঙ্কানল রাজস্টেটের কর্মী নিমাইচরণ রায় ও মা ছিলেন কটকের প্রসিদ্ধ পালিত বংশের কন্যা হেমলিনী। পিতৃবংশের সকলে ছিলেন সাহিত্যরসিক ও আধুনিক মনোভাবাপন্ন। তাঁর বাবা নিমাইচরণ এক বখুর সঙ্গে মিলে ‘শ্রীচৈতন্যচরিতামৃত’ অনুবাদ করেন ওড়িয়া ভাষায়। তাঁর মায়ের পরিবার ছিল বৈষ্ণব ভাবাদর্শে অনুপ্রাণিত ছিলেন। তার ফলে প্রাচ্য ও পাশ্চাত্য সংস্কৃতির মিশ্র পরিবেশে তাঁর ছোটবেলা কেটেছে। | |
| ছোটবেলায় ঢেঙ্কানলেই তাঁর শিক্ষাজীবন শুরু হয়। ১৯২১ খ্রিস্টাব্দে পাটনা বিশ্ববিদ্যালয় থেকে ম্যাট্রিক পাশ করেন। এরপর সংবাদপত্রের সম্পাদনা শিখতে কলকাতায় ‘বসুমতী’ পত্রিকার সম্পাদক হেমেন্দ্রপ্রসাদ ঘোষের কাছে যান। কিন্তু শর্তহ্যস্ত, টাইপরাইটিং এবং প্রুক্রিডিং-এর কাজ তাঁর ভালো লাগে না। | |
| তিনি অত্যন্ত মেধাবী ও কৃতি ছাত্র ছিলেন। কটকের রায়ডেনশ কলেজ থেকে আই.এ পরীক্ষা দেন এবং পাটনা বিশ্ববিদ্যালয়ে প্রথম স্থান অধিকার করেন। ১৯২৫ খ্রিস্টাব্দে বি.এ পরীক্ষাতেও তিনি পাটনা বিশ্ববিদ্যালয় থেকে প্রথম স্থান অধিকার করেন। ১৯২৭ খ্রিস্টাব্দে এম.এ পড়তে পড়তে, আই.সি.এস পরীক্ষায় তিনি দ্বিতীয়বারে পূর্ববর্তী রেকর্ড ভেঙে প্রথম স্থান অধিকার করেন। তিনিই প্রথম ভারতীয় হিসেবে এ গৌরব অর্জন করেছিলেন। সেই বছরই সরকারি খরচে আই.সি.এস করতে তিনি ইংলন্ডে যান। সেখানে তিনি লন্ডনের ‘ইউনিভার্সিটি কলেজ’, ‘কিংস কলেজ’, ‘লন্ডন স্কুল অব ইকনমিকস’, ‘লন্ডন স্কুল অব | |



| সূচিপত্র | | ভূমিকা | ৯ |
|--|-------------------------|--------|---|
| চূড়ামণি ও নিমাই পণ্ডিত : | অর্পণ চক্রবর্তী | ১৯ | |
| নারায়ণ গঙ্গোপাধ্যায়ের 'বন-জ্যোৎস্না' : অগ্নিগর্ভ | অরুণকুমার সাহু | ২৮ | |
| সময়ের প্রেম পদাবলী : | বীরেন্দ্র মুখা | ৪১ | |
| জীবিত ও মৃত, রবীন্দ্রনাথ ঠাকুর : | বীরেন্দ্র মুখা | ৫৩ | |
| আলোচনার নতুন আঙ্গিক, মহেশ : | বিশ্বজিৎ পাণ্ডা | ৬৩ | |
| নারী ও নাগিনী : | বিশ্বজিৎ পাণ্ডা | ৭০ | |
| গল্পকার প্রেমেন্দ্র মিত্র ও 'সপোর সীমান্ত' : | চন্দন খাঁ | ৭৬ | |
| সেলিনা হোসেনের 'আমিনা ও মদিনার গল্প' : মুক্তিযুদ্ধের | দেবশিশু বন্দ্যোপাধ্যায় | ৮২ | |
| গাঢ় অন্ধকার এবং তারপর... : | গৌতম দাস | ৯৫ | |
| পরশুরামের কুঠার—একটি জীবনসত্য : | জ্যোতিপ্রসাদ রায় | ১০৫ | |
| অচিন্ত্যকুমার সেনগুপ্তের 'ধরা বিয়ে' : নারীর অন্তর্লীন | কোয়েল দত্ত | ১১৪ | |
| বেদনার আলোখা : | কুশানু পাল | ১২৩ | |
| নির্বাক প্রার্থনায় নতজানু বিশ্বাস 'মাদার ইন্ডিয়া' : | মুদুল ঘোষ | ১২৭ | |
| পাড়ি : সমরেশ বসু : | প্রবালকান্তি হাজরা | ১৩৭ | |
| সৈয়দ মুজতবা আলী'র নোনাঙ্গল : | রামকৃষ্ণ মণ্ডল | ১৬৭ | |
| 'স্বীর পত্র' : নারীর আত্মস্বতন্ত্রের ঘোষণা পত্র : | রঞ্জনা ভট্টাচার্য | ১৭৯ | |
| রবীন্দ্রনাথের ছোটগল্প : | সেতু চট্টোপাধ্যায় | ১৯২ | |
| মেঘমল্লার : এক অনিবার্য যন্ত্রণার কাহিনি : | সৌমেন বৈরাগ্য | ১৯৮ | |
| ত্রৈলোক্যনাথের 'নয়নচাঁদের ব্যবসা' পুরাতনী গল্প-বৈঠক : | সৌমী ঘোষ | ২০৪ | |
| 'কুঠারোগীর বউ' ভিন্ন ভাবনার রূপ : | শ্যামসুন্দর প্রধান | ২১৩ | |
| প্রভাতকুমারের 'খালস' গল্পে স্বদেশি আন্দোলন | শ্যামসুন্দর প্রধান | ২৩১ | |
| বনাম দাম্পত্য সঙ্কট : | তারক নাথ চট্টোপাধ্যায় | ২৪৬ | |
| মধু : জীবনসত্যের ভিন্ন শৈলী : | উদয় রতন মুখার্জী | ২৬২ | |
| চন্দ্র-সূর্য যতদিন : স্থল জৈববৃত্তির অতিরিক্ত সতীনসমস্যা : | | | |
| পাশাপাশি : প্রতিবেশী দুটি ভাড়াটে পরিবারের | | | |
| মিল-অমিলের বাস্তব চিত্র | | | |
| আশাপূর্ণা দেবীর 'ভাসের ঘর' : সংসার-সম্পর্ক- | | | |
| আত্মপ্রতিষ্ঠা-প্রতিবাদ : | | | |
| 'বিকল্প' : নরেন্দ্রনাথ মিত্র'র বিকল্প জীবনবোধ : | | | |





| | |
|--|-----|
| • রবীন্দ্রনাথের 'শান্তিনিকেতন' ভাষণমালা ও ব্রহ্মমন্দির — নন্দিতা সরকার | 118 |
| • The Predicament of women regarding the division of property; in ancient and Modern society. — Nupur Halder | 124 |
| • Dashavatar Tash: A Folk-art of Bengal Towards Extinction — Piu Mukherjee | 127 |
| • স্বামী বিবেকানন্দ : ব্যক্তি ও সমাজ — প্রাণ কুমার রজক | 131 |
| • বাংলা বৈষ্ণব সাহিত্যে বর্ষা — রাকিবুল হাসান বিশ্বাস | 136 |
| • ঠাকুর পুর্নিন দেববর্মা ও তাঁর মিউজিক কলেজ — রত্নদীপ রায় | 142 |
| • The Relevance of Nationalism in a Globalized World — Sandip Biswas | 146 |
| • Shantiniketan : An Ideal Place of Learning & Peace — Santanu Paul | 150 |
| • উত্তরবঙ্গের নদী দূষণ, ভাঙ্গণ ও প্রাকৃতিক বিপর্যয় ও প্রসঙ্গ জলপাইগুড়ি — সৌম্যদীপ্ত সিনহা | 154 |
| • Changes that took place due to colonialism were impending in some senses — an analysis of Achebe's Things Fall Apart — Syed Afzal Hossain, Kamrun Nahar | 158 |
| • বাবা সাপুর্নিনের সেলা — তমাল পাল | 163 |
| • মহামুগের বাংলা সাহিত্যে শিশু কিশোরের জীবন : একটি পর্যালোচনা — উর্বশী ব্যানার্জী | 165 |
| • ঈশ্বরচন্দ্র গুপ্তের লেখনীতে সমকালীন ভারতবর্ষের প্রতিচ্ছবি — সুরত সরকার | 170 |

| | |
|---|------------------------|
| উত্তরবঙ্গের নদী দূষণ, ভাঙ্গণ ও প্রাকৃতিক বিপর্যয় ও প্রসঙ্গ জলপাইগুড়ি সৌম্যদীপ্ত সিনহা* | |
| উত্তরবঙ্গ বলতে বোঝায় প্রাকৃতিক দিক দিয়ে সমৃদ্ধময় এক অঞ্চল। ভূ-প্রাকৃতিক বৈচিত্র্য উত্তরবঙ্গকে যেন অন্যতম প্রদান করেছে। একদিকে পাহাড়, অন্যদিকে জঙ্গল বেষ্টিত অরণ্যরাশি এবং তারই মাঝে বয়ে চলেছে নদী। নদী যেন উত্তরবঙ্গের প্রাণ। সমগ্র ভূমধ্য জুড়ে বোতামি নদীগুলির ন্যায় বয়ে চলেছে নদীগুলি। অন্যথা ছোট বড় নদী সমগ্র ভূমধ্য জুড়ে বাগু। বহুরের অন্যসময় শান্ত, কিন্তু বর্ষায় হয়ে ওঠে ভয়ঙ্কর। নদীকে কেন্দ্র করে জনবসতি গড়ে ওঠা এবং পরবর্তীতে বাণিজ্য বিস্তার এর মতো ঘটনাবলী সুপ্রাচীন। উত্তরবঙ্গও যেন ব্যতিক্রম নয়। সুদীর্ঘকাল ধরে নদীকে কেন্দ্র করে বাণিজ্য পণ্য পরিবহণ ও জনবসতি গড়ে ওঠার মতো ঘটনাবলী লক্ষ্য করা গিয়েছিল। অর্থাৎ কোন অঞ্চলের আর্থ-সামাজিক পরিহিত নদীর উপর অনেকাংশে নির্ভরশীল। সমগ্র উত্তরবঙ্গ জুড়ে বিস্তৃত নদীপথগুলির বর্ণনা ডিসাল্ট গোল্ডস্টার সহ বিভিন্ন সরকারী রিপোর্টে প্রকাশ পেয়েছে। অবশ্য সমগ্র উত্তরবঙ্গের নদনদীর চিত্র ও তার রূপরেখা সংক্রান্ত বিবরণ নিয়ে আলোচনা করতে গেলে পরিসরটি বড় হয়ে যেতে পারে। এক্ষেত্রে জলপাইগুড়ি এবং তৎসলের অঞ্চলের নদনদী, বর্তমান পরিহিত, নদীদূষণ ও ভাঙ্গন সংক্রান্ত বিষয়কে আলোচনার অন্তর্ভুক্ত করা হয়েছে। অবশ্য মনস্ত পটভূমির কাছে বিনয় অনুরোধ তারা যেন প্রকটিকে গবেষণাক্ষী হিসেবে না দেখে প্রকৃতি পর্ব হিসেবেই যেন বিবেচিত করে। | |
| এবারে বিষয়ের অভ্যন্তরে অভিনিবেশ করা যাক। প্রবন্ধের সূচনার প্রথমেই উত্তরবঙ্গের ভূ-প্রকৃতির বর্ণনা করতে গিয়ে নদীর বিবরণটি উঠে এসেছে। যেহেতু এক্ষেত্রে আলোচনার মূলবিষয় নদী সূত্রায় এক্ষেত্রে নদীগুলির সম্পর্কে সংক্ষেপে আলোচনা করার প্রয়োজন বোধ করছি। এক্ষেত্রে নদনদীগুলি সম্পর্কে বিস্তৃত আলোচিত হলে বিষয়টি অনেকটাই পরিষ্কার হয়ে উঠবে। অবশ্য আলোচনার ক্ষেত্রে যেহেতু জলপাইগুড়ি এক্ষেত্রে শুধুমাত্র জেলার নদনদীগুলির পরিচয় নিয়ে প্রদান করা হল : | |
| নদীর নাম | দৈর্ঘ্য ^(১) |
| রায়ডাক | ২৪ মাইল |
| কালজানি | ৭৬ মাইল |
| তোর্গা | ২৮ মাইল |
| মুজলাই | ৩৭ মাইল |
| ভুতুয়া | ৩৩ মাইল |
| ভায়না | ৩০ মাইল |
| জলঢাকা | ৩৬ মাইল |
| মুর্তী | ১৮ মাইল |
| ধরলা | ১০ মাইল |
| চেল | ২৯ মাইল |
| মাল | ১৬ মাইল |
| করলা | ৩৪ মাইল |
| জর্পা | ১৭ মাইল |
| তিস্তা | ১৭২ মাইল |
| তালমা | ১৬ মাইল |

*স্টেট এডভেড কলেজ টিচার, আনন্দ চন্দ্র কলেজ

আধুনিক বাংলার ইতিহাস হালফিলের গবেষণা



সম্পাদনা

গৌতম মুখোপাধ্যায় ■ শুভঙ্কর দে ■ সমর কান্তি চক্রবর্তী

Adhunik Banglar Itihas : Halfiler Gabeshona
A Collection of Articles on the History of Modern Bengal
Edited by
Prof. (Dr.) Goutam Mukhopadhyay
Dr. Suvankar Dey
Dr. Samar Kanti Chakrabarty

₹ 600/-

প্রথম প্রকাশ : জুলাই ২০২১

© সম্পাদকগণ

প্রচ্ছদ শৌভাষ্য : গজেন্দ্রকাম কালেকশন

অঙ্কন : ডব্লিউ টেলার

ISBN : 978-81-948533-8-8-1

সর্বস্বত্ত্ব সংরক্ষিত

চরিত্র এবং স্বরচিত্রের দ্বিধা অনুভব করে এই বইয়ের কোনও অংশেই কোনওরূপ পুনরুৎপাদন বা প্রতিদ্বন্দ্বিতা করা যাবে না, কোনও যান্ত্রিক উপায়ের (প্রাথমিক, ইলেকট্রনিক বা অন্য কোনও মাধ্যম, যেমন ফটোকপি, টেপ বা পুনরুৎপাদনের সুযোগ সংবলিত তথ্য সংগ্রহ করে রাখার কোনও পদ্ধতি) মাধ্যমে প্রতিদ্বন্দ্বিতা করা যাবে না বা কোনও ডিস্ক, টেপ, প্যারামেট্রিক মিডিয়াম বা কোনও তথ্য সংরক্ষণের যান্ত্রিক পদ্ধতিতে পুনরুৎপাদন করা যাবে না। এই শর্ত লঙ্ঘিত হলে উপযুক্ত আইনি ব্যবস্থা গ্রহণ করা যাবে।

প্রতিদ্বন্দ্বিতা

পে'জ, মে বুক স্টোর : ১০ বক্স চ্যাটার্জি স্ট্রিট, কলকাতা ৭০

ধানবিন্দু : কলকাতা জোয়ার ইন্সট, ব্লক ৪, স্টল ৫, ৬

বাংলাদেশ : উজান, নোকতা : ঢাকা

অনলাইন-এ - haritbooks.com

অধিকার-এর পক্ষে মুদ্রিত এ এম কর্তৃক ১২৫ অধিগঙ্গা রোড, কলকাতা ৭০০ ০৭০ থেকে প্রকাশিত (সি. ৯৮০০০০১০২২, ৮৬৯৭১৫৪০৭৮
e-mail : aaviskarbooks20@gmail.com), অক্ষর বিন্যাস ও মুদ্রণে
রেজ ডট কম ৪৪/১এ বেনিয়াটোলা লেন কলকাতা ৭০০ ০০১।

৬০০ টাকা

উপনিবেশিক কালে বীজত্ব জেলায় শিক্ষা বিস্তার
ও খ্রিস্টান মিশনারি-একটি পর্যালোচনা
রচিত মণ্ডল ১৫০
উনিশ শতকে বাংলার অধ্যাপকদের সমাজ-অর্থনৈতিক-শিক্ষা সংস্কারে
খ্রিস্টান মিশনারি সি. এস. মিত্রের ভূমিকা
সমগ্র বাগীচী ১৫৮
বাংলার ধর্ম ও গোষ্ঠীর ইতিহাস ১৬৭-১৯১
কাজলি মুসলিম সমাজের অবস্থা: ১৭৫৭-১৮৭০
বিদ্যোৎসাহ ১৬৭
মহাশূন্যে নবীরা জেলার লোকসংগীতে বৈজ্ঞানিকতার প্রভাব
সমগ্র মণ্ডল ১৭০
অনির্বচনীয় ইতিহাসগত: প্রসঙ্গ, স্বরূপ ও সত্যবনা
নাথু হীসলা ১৮১
বাংলার ক্রীড়া ও জনস্বাস্থ্যের ইতিহাস ১৯২-২১৮
শতকের বীজত্বের কল্যাণ: তীর্থযাত্রীদের ভূমিকা
অধ্যাপক দলদাস ১৯২
ইতিহাসগতভাবে বাংলার খেলার ইতিহাস
শুধুদীপ গাঙ্গুলী ২০০
শহর জলপাইগুড়ির ক্রীড়া জগতের এক উজ্জ্বল জ্যোতিষ্ক
ফ্রেডস ইউনিয়ন ক্লাব : একটি পর্যালোচনা
সৌমদীপ্ত সিনহা ২১২
বাংলার রাজনীতি, আন্দোলন ও ইতিহাস ২১৯-২৬৮
ঐতিহাসিক দৃষ্টিকোণে মন্ত্রিকর্ষ
গোবিন্দ মণ্ডল ২১৯
সাইমনকমিশন ও মানত্বের প্রতিবাদ আন্দোলন
পুষ্পেন্দ্র রাউত্র ২২৯
শান্তীলা দেবী : জাতীয়তাবাদী আন্দোলনে
এক অচিহ্নিত ভূমিকার উল্লেখ
সোমা মল্লিক ২৩৭
কবি নিবারণ চন্দ্র লস্কর এবং মানত্বের স্বাধীনতা আন্দোলন
সৌমেন দে ২৪৮
ভরত ছাড়া আন্দোলনে তমলুক মহকুমার মহিলা সমাজ
সঙ্গীত বঙ্গ ২৫৬
লেখক পরিচিতি ২৬৯

শহর জলপাইগুড়ির ক্রীড়া জগতের এক উজ্জ্বল জ্যোতিষ্ক ফ্রেডস ইউনিয়ন ক্লাব : একটি পর্যালোচনা

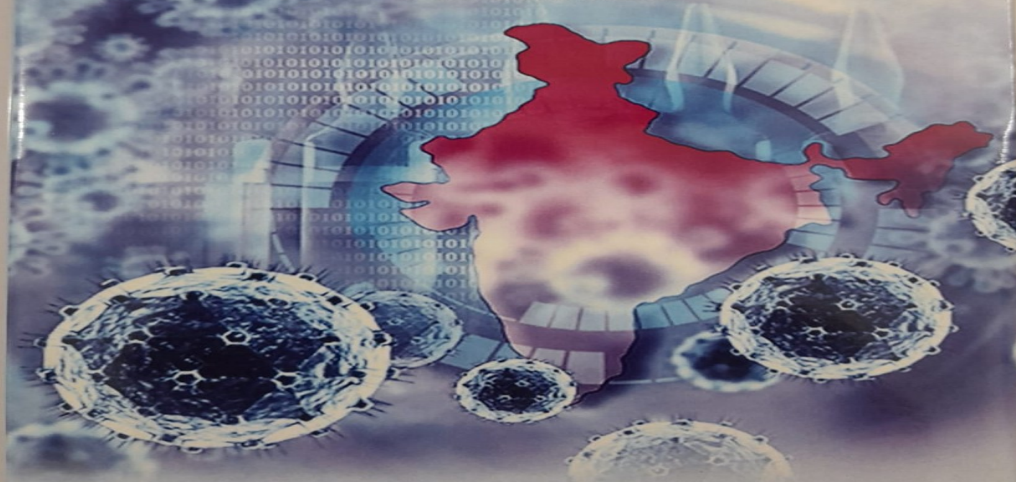
সৌমদীপ্ত সিনহা

ভূ-প্রাকৃতিক দিক দিয়ে অন্যতম সম্পন্ন জেলা জলপাইগুড়ি। পাহাড়-নদী-
বন-আর বিখ্যাত বিশ্বস্ত সমতলে রয়েছে এর বৈচিত্র্যের সমারোহে পাহাড়
মালভূমি এখানে মিশেছে হিমালয়ের পদতলে এজাপ অননা ও বৈচিত্র্য সমন্বিত
জেলা জলপাইগুড়ির আত্মপ্রকাশ ঘটে ১৮৬৯ সালের ১লা জানুয়ারী, প্রাথমিক
পূর্বে অর্থাৎ জনপদ হিসেবে আত্মপ্রকাশ করলেও ধীরে ধীরে জনসংখ্যা
বৃদ্ধিতে থাকে এবং পরবর্তীতে তা শহরের রূপ লাভ করে। শহর হিসেবে
প্রতিষ্ঠিত হওয়ার পর ধীরে ধীরে শিক্ষা স্বাস্থ্য খেলাধুলা ও সংস্কৃতি চর্চার এক
অন্যতম প্রাণকেন্দ্র হয়ে ওঠে জলপাইগুড়ি। আসলে চা-বাগিচার শহর হিসেবে
প্রসিদ্ধি লাভ করায় বনেবনানীর বিষয়টি প্রথম থেকেই ছিল লক্ষ্যীয়। যা
পরবর্তীতে সংস্কৃতি খেলাধুলা তথা শিক্ষার সহায়ক ভূমিকা পালন করতে সক্ষম
হয়। যদিও শহর জলপাইগুড়িকে কেন্দ্র করে খেলাধুলার সূচনা হয়েছিল শতবর্ষ
পূর্বে। অসংখ্য নিবন্ধের উদ্দেশ্য শহরের ক্রীড়ার প্রসারে এইইউসি ক্লাবের
ভূমিকা। এক্ষেত্রে শহর জলপাইগুড়িকে কেন্দ্র করে তার বুকে একাধিক ক্লাবের
অস্তিত্ব পাওয়া যায় যা থেকে একটি বিষয় সহজেই অনুমেয় যে ক্রীড়া
সম্প্রদায়ের ক্লাবগুলির তরফে সমর্থক মনোভাব যেমন লক্ষ করা গিয়েছিল
অনুগ্রহপাণ্ডে ব্যক্তিগত উদ্যোগের বিষয়টিও ছিল সমানভাবে প্রশংসনীয়।

শহর জলপাইগুড়ি প্রতিষ্ঠিত হওয়ার কিছুদিনের মধ্যেই শহরের বুকে প্রথম
গড়ে উঠেছিল টাইম ক্লাব। আসলে ব্রিটিশ শাসন ব্যবস্থা এবং অন্যদিকে চা
বাগানের বাগানের বনেবনানী উভয়ের সমন্বয়ে ক্লাব গঠনের মানসিকতা
কোথায় যেন সমর্থক কাজ করেছিল, সেই সাথে তৎকালীন পূর্বের কিছু
মানুষের অসম উৎসাহে ক্লাব গঠন তথা খেলাধুলার উৎসাহ আরো বেশ কিছুটা
কড়িয়ে নিতে তৎপর হয়েছিল। যার মধ্য দিয়েই ক্লাব গঠনের সূচনাপত্র।

COVID-19 PANDEMIC AND ITS MULTIDIMENSIONAL IMPACT

The Road Ahead



Editors

Tapan Kumar Ghosh, Tonmoy Chatterjee and Indrajit Ghosh

Editors: Tapan Kumar Ghosh
Tonmoy Chatterjee
Indrajit Ghosh

© First Published: 2021
Serials Publications (P) Ltd.

ISBN: 978-81-950760-2-4

All rights reserved. No part of this book 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 written permission from the author and publisher.

Printed in India

SERIALS PUBLICATIONS PVT. LTD.

4830/24, Prahlad Street, Ansari Road, Darya ganj,

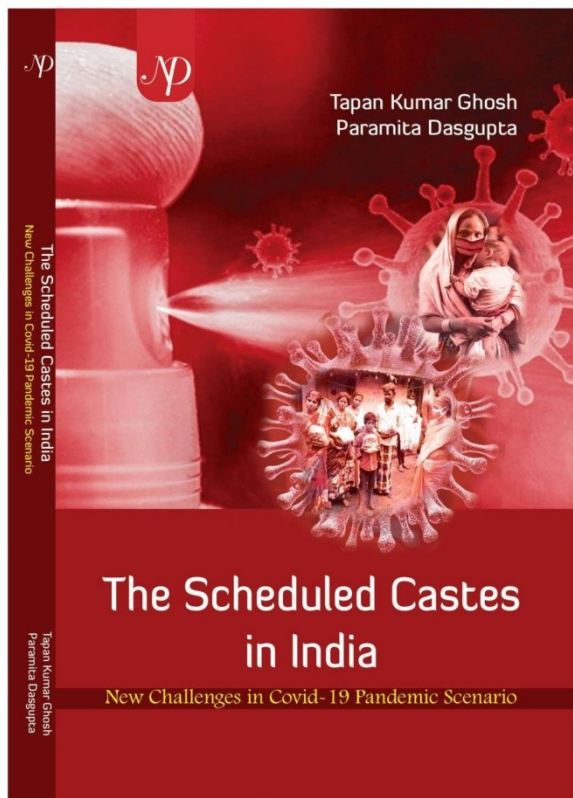
New Delhi-110002 (India)

Phone : 23245225, 23259207, 23272135

E-mail: serials@mail.com

PR

On 1
owin
world
To st
coun
also i
(SOPs
when
chang
distrac
used
of par
activit
severa
followi
the pa
econor
within
inequal
distorti
services
and pub
such cris
with clo



The Scheduled Castes in India

New Challenges in COVID-19 Pandemic Scenario

Tapan Kumar Ghosh
Paramita Dasgupta


NEW DELHI PUBLISHERS
New Delhi, Kolkata

The Scheduled Castes in India - New Challenges in COVID-19 Pandemic Scenario by *Tapan Kumar Ghosh* and *Paramita Dasgupta* Published by New Delhi Publishers, New Delhi.

© Publisher

Edition: 2021

ISBN: 978-93-91012-14-4

All rights reserved. No part of this book may be reproduced stored in a retrieval system or transmitted, by any means, electronic mechanical, photocopying, recording, or otherwise without written permission from the publisher and authors.



NEW DELHI PUBLISHERS

Head Office: 90, Sainik Vihar, Mohan Garden, New Delhi - 110 059

Corporate Office: 7/28, Room No.-208, Vardaan House, Mahavir Lane, Ansari Road, Daryaganj, New Delhi-110002

Branch Office: 216, Flat-GC, Green Park, Narendrapur, Kolkata - 700103
Tel: 011-23256188, 011-45130562, 9971676330, 9582248909

E-Mail: ndpublishers@rediffmail.com/gmail.com

Website: www.ndpublisher.in

THE IMPACT OF COVID-19 ON THE ECONOMY

DR. RAM KRISHNA MANDAL
DR. M.Q. KHAN

Raghav Publication

B-128 Kavita Colony Nangloi,
New Delhi -110041
Phone: 83778 23415, 9810340706
Email : raghavpublication@gmail.com
Visit us: www.raghavpublication.com

First Edition: 2021

ISBN: 978-93-85679-15-5

© Author

All rights reserved. This book or any part thereof must not be reproduced or reprinted in any form without prior permission from the author.

Price: ₹695.00

Published By : Raghav Publication, B-128 Kavita Colony Nangloi, New Delhi -110041
Phone: 83778 23415, 9810340706
Email : raghavpublication@gmail.com,
Visit : www.raghavpublication.com

Contents

| | |
|---|----------|
| Preface | v-vi |
| List of Contributors | vii-viii |
| 0. Introduction | 1-6 |
| 1. Ethiopian Tourism: Battling the Pangs of Socioeconomic Consequences Arising out of Covid-19 Pandemic (An empirical transformative research study) <i>Prof. Pranab K. Bhattacharya</i> | 7-20 |
| 2. Potential Economic Impact of Covid-19 and Policies <i>Dr. Sukanta Sarkar & Dr. Suman Kalyan Chaudhury</i> | 21-35 |
| 3. Covid 19 and the Fijian Response <i>Dr. Ravinesh Rohit Prasad & Dr. Mohammad Afsar Alam</i> | 36-46 |
| 4. COVID 19: Role of the Indian State <i>Dr Arundhati Bhattacharyya</i> | 47-55 |
| 5. The Marketing Revolution Of Green Foodstuffs In Nepal: Techno-Ready Seller <i>Balendu Hamal Thakuri</i> | 56-68 |
| 6. Enhancing Indian FDI: Role, Prospects and Challenges to Nepalese Economy <i>Arjun Kumar Baral and Rajendra Adhikari</i> | 69-83 |
| 7. Economic Impact of the COVID-19 Pandemic in India <i>Tapan Kumar Ghosh & Paramita Dasgupta</i> | 84-101 |
| 8. The Son of Soil Theory and Reservation of Jobs in Private Sector amidst Covid-19 Pandemic <i>Kaustav Choudhury</i> | 102-106 |
| 9. A Study on Impact of COVID-19 on Indian Tourism Sector <i>Pradeep Kumar Panda</i> | 107-118 |

Chapter-7

Economic Impact of the COVID-19 Pandemic in India

Tapan Kumar Ghosh & Paramita Dasgupta

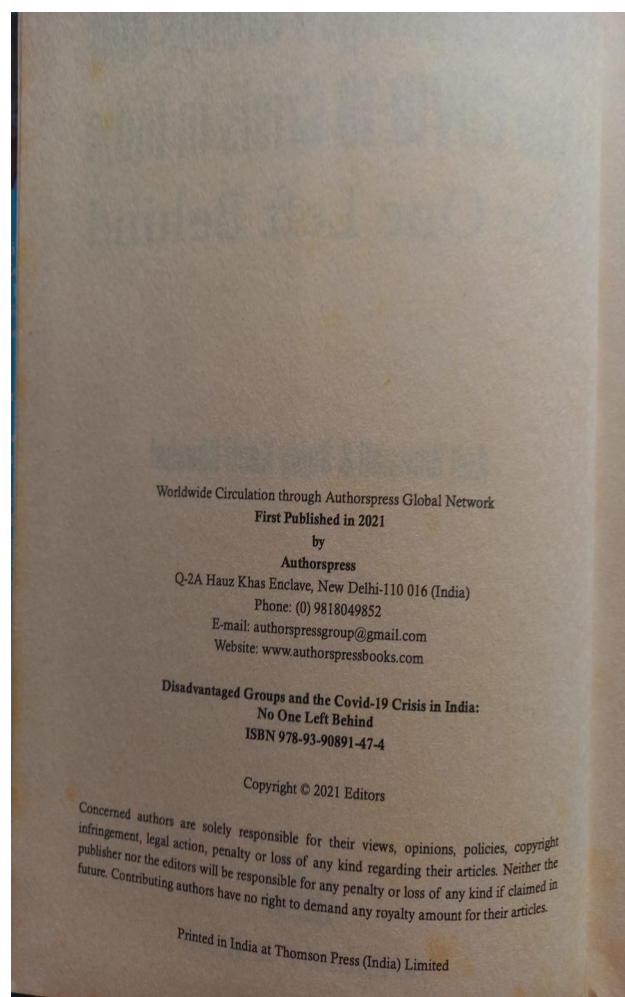
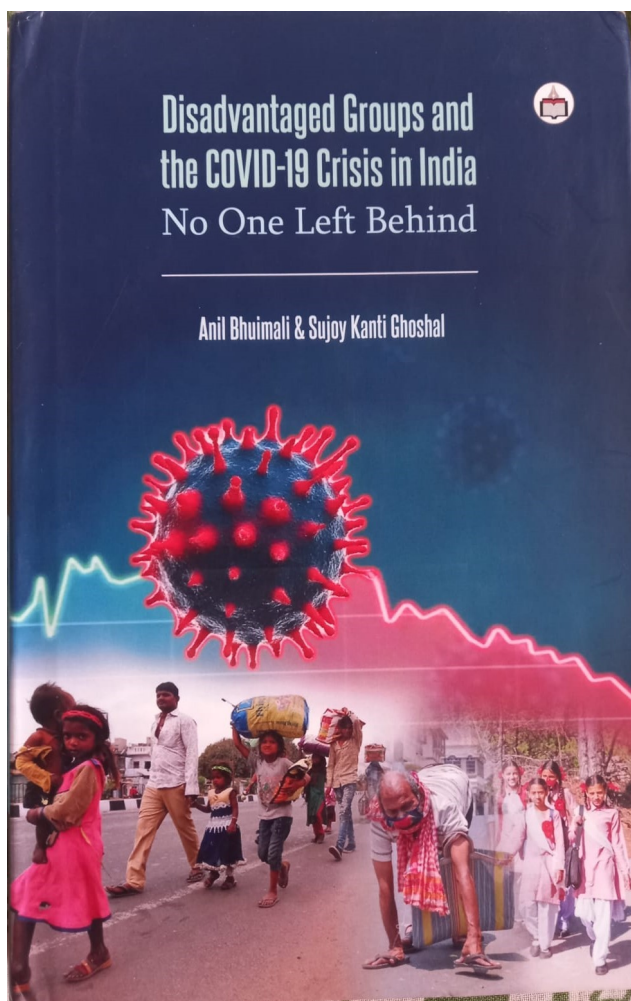
ABSTRACT

The economic impact of the COVID-19 pandemic in India has been largely disruptive. India's growth rate in the fourth-quarter of the FY2020 went down to 3.1% according to the Ministry of Statistics in India. According to the Chief Economic Adviser (CEA) of the Govt. of India this drop is mainly due to the COVID-19 pandemic effect on the Indian economy. Economists slashed GDP rates for the foreseeable future due to the obvious impact of the lockdown. It is also realized that the country might bounce back quickly because its industry composition, with unorganized markets being largely dominant. The most affected industries are services and manufacturing, travel and tourism, financial services, mining and construction etc. The paper acknowledges that the invisible virus will co-exist in India until a permanent vaccine is found. The paper recommends adopting focussed interventions with the most vulnerable groups such as Scheduled Castes, Scheduled Tribes and Other Backward Classes, not only for changing their behaviour but also improving their access to basic services who are socially deprived, and economically marginalized. The paper also discusses the self-reliance or Atmanirbhar Bharat Abhiyan, economic recovery of the Indian economy and migrant workers during the COVID-19 pandemic in India.

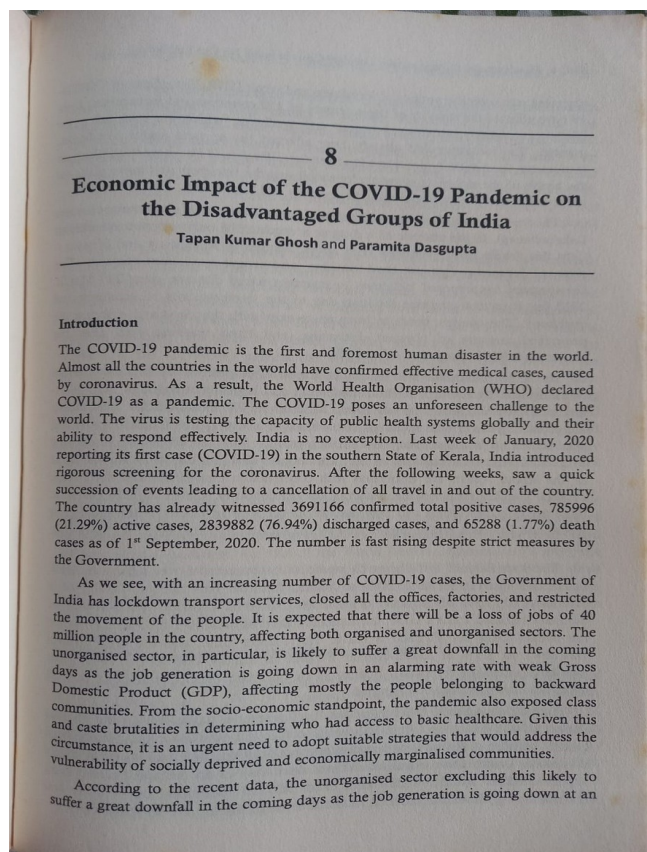
Keywords: Economic Impact, COVID-19 Pandemic, Economic Recovery, Vulnerable

1. INTRODUCTION

The COVID-19 pandemic is the first and foremost human disaster in the world. Almost all the countries in the world have confirmed effective medical cases, caused by coronavirus. As a result, the World Health Organization (WHO) declared COVID-19 as a pandemic. The COVID-19 poses an unforeseen challenge to the world. India is no exception. The



| Contents | |
|---|-----|
| <i>Preface</i> | v |
| <i>Introduction</i> | xi |
| 1. COVID 19 and the Under-Privileged Groups of India: A Study on Morbidity, Economics and Sustainability Sugata Sen; Soumitra Kundu; Soumya Sengupta; Hillol Kumar Chakrabarti | 1 |
| 2. Disadvantaged Groups and the COVID-19 Crises in India M. Thangaraj | 21 |
| 3. Can MGNREGA be a Tool for Rural Livelihood Recovery after COVID-19? Sidhartha Sankar Laha | 33 |
| 4. COVID-19 and India's Economic Outlook: Intensifying Challenges for its Labour Forces Sanjib Mandal | 47 |
| 5. A Swot on Consequences of Lockdown on Migratory Beekeeping: West Bengal – A Case Anil Bhuiamali, Sanghamitra Purkait and Manish Baidya | 66 |
| 6. The COVID-19 and Physically Challenged Persons (PCPs) in India – No PCPs to be Left Behind Sujoy Kanti Ghoshal | 99 |
| 7. The Plight of Migrant Labours in the Face of COVID-19 Pandemic Tulika Kar | 115 |
| 8. Economic Impact of the COVID-19 Pandemic on the Disadvantaged Groups of India Tapan Kumar Ghosh and Paramita Dasgupta | 133 |
| 9. Has Rural Economy given Disadvantaged Groups a Shelter during COVID-19 outbreak? Jayeeta Deshmukh | 150 |
| 10. The Corona Pandemic: Effective Situation on Education in India Paramita Ray | 165 |



Global Tariff War: Economic, Political and Social Implications

EDITED BY

DR RAMESH CHANDRA DAS
Vidyasagar University, India



United Kingdom – North America – Japan – India – Malaysia – China

Emerald Publishing Limited
Howard House, Wagon Lane, Bingley BD16 1WA, UK

First edition 2021

Copyright © 2021 Emerald Publishing Limited

Reprints and permissions service
Contact: permissions@emeraldinsight.com

No part of this book may be reproduced, stored in a retrieval system, transmitted in any form or by any means electronic, mechanical, photocopying, recording or otherwise without either the prior written permission of the publisher or a licence permitting restricted copying issued in the UK by The Copyright Licensing Agency and in the USA by The Copyright Clearance Center. Any opinions expressed in the chapters are those of the authors. Whilst Emerald makes every effort to ensure the quality and accuracy of its content, Emerald makes no representation implied or otherwise, as to the chapters' suitability and application and disclaims any warranties, express or implied, to their use.

British Library Cataloguing in Publication Data
A catalogue record for this book is available from the British Library

ISBN: 978-1-80071-315-4 (Print)
ISBN: 978-1-80071-314-7 (Online)
ISBN: 978-1-80071-316-1 (Epub)



Contents

| | |
|--|---------------|
| List of Figures | <i>xi</i> |
| List of Tables | <i>xiii</i> |
| About the Contributors | <i>xv</i> |
| List of Contributors | <i>xxiii</i> |
| Foreword | <i>xxvii</i> |
| Acknowledgments | <i>xxx</i> |
| Introduction | <i>xxxiii</i> |
| Section I: Economic Implications of Trade War | |
| Chapter 1 Trade War in the Twenty-first Century: A Historical Perspective | |
| <i>Asim K. Karmakar and Sebak K. Jana</i> | <i>3</i> |
| Chapter 2 Tariff War, Unemployment Rate, and Welfare | |
| <i>Nilendu Chatterjee and Tonmoy Chatterjee</i> | <i>15</i> |
| Chapter 3 Trade War and its Welfare Consequences: A Micro-theoretic Introspection | |
| <i>Mainak Bhattacharjee and Debashis Mazumder</i> | <i>31</i> |
| Chapter 4 Tradeoff Between Globalization and Restricted Trade: Some International Evidence | |
| <i>Richardson Kojo Edeme, Ebikabowei Biedomo Aduku, Nwokoye Ebele Stella and Chigozie Nelson Nkalu</i> | <i>43</i> |

Chapter 2

Tariff War, Unemployment Rate, and Welfare

Nilendu Chatterjee and Tonmoy Chatterjee

Abstract

The fight between two nations on each other's exportable on the basis of tariff is known as tariff war. Although an economic policy, very often motivated by nationalism and politics, a nation imposes tariff on the exports of another nation which, in retaliation, again imposes tariff on the exports of its trading partner. The prime cause of such war is certainly to enhance employment opportunities in the home nation. But politics and nationalism provoke the opposite nation to follow the same policy. Effects of such tariff war, whether beneficial or harmful, are yet to be seen. In this context, we have adopted a general equilibrium model to illustrate the probable effect of the above-stated trade war in a structure consisting both H-O nugget and export sector dualism. The effect of imposition of tariff on multinational corporation (MNC) that has its own origin nation and production activities in other nation as well where it faces the war of tariff is considered. But it gets relief in the form of tax reduction in its origin nation. Under such a scenario, the study has shown the effect of tariff in the presence of full employment in the economy as well as in the presence of unemployment. It is seen that the MNC will continue its production procedure in both nations and enjoy profit, under some conditions. Further, in the presence of unemployment it is seen that if rate of tax on the MNC rises, unemployment may fall and welfare can increase under certain conditions.

Keywords: Tariff war; general equilibrium; multinational corporation; full employment; unemployment; welfare

JEL classifications: F11; F13; F16; F62; I31

Productivity Growth in the Manufacturing Sector: Mitigating Global Recession

EDITED BY

MIHIR KUMAR PAL

Vidyasagar University, West Bengal, India

First edition 2021

Copyright © 2021 Emerald Publishing Limited

Reprints and permissions service

Contact: permissions@emeraldinsight.com

No part of this book may be reproduced, stored in a retrieval system, transmitted in any form or by any means electronic, mechanical, photocopying, recording or otherwise without either the prior written permission of the publisher or a licence permitting restricted copying issued in the UK by The Copyright Licensing Agency and in the USA by The Copyright Clearance Center. Any opinions expressed in the chapters are those of the authors. Whilst Emerald makes every effort to ensure the quality and accuracy of its content, Emerald makes no representation implied or otherwise, as to the chapters' suitability and application and disclaims any warranties, express or implied, to their use.

British Library Cataloguing in Publication Data

A catalogue record for this book is available from the British Library

ISBN: 978-1-80071-095-5 (Print)

ISBN: 978-1-80071-094-8 (Online)

ISBN: 978-1-80071-096-2 (Epub)

Table of Contents

| | |
|------------------------|-------|
| List of Figures | xi |
| List of Tables | xiii |
| About the Contributors | xvii |
| List of Contributors | xxiii |
| Foreword | xxv |
| Acknowledgment | xxvii |
| Introduction | xxix |

Section I: Manufacturing Productivity at the Global Perspectives

| | |
|--|----|
| Chapter 1 Is Productivity Growth in Manufacturing Sector a Driving Force Toward Mitigating Global Recession? A Cross-Country Explanation from Panel Data: 1990–2018 | 3 |
| <i>Abhijeet Bag, Sarbapriya Ray and Mihir Kumar Pal</i> | |
| Chapter 2 Effects of Labor Productivity and Growth of Manufacturing Sector on Overall Growth of the Nation – A Panel Data Analysis of the Major Economies | 17 |
| <i>Nilendu Chatterjee and Tonmoy Chatterjee</i> | |
| Chapter 3 Domestic Tariff and Manufacturing Trade: A Comparative Study on the United States and China | 31 |
| <i>Madhabendra Sinha, Abhijit Dutta and Partha Mukhopadhyay</i> | |

Chapter 2

Effects of Labor Productivity and Growth of Manufacturing Sector on Overall Growth of the Nation – A Panel Data Analysis of the Major Economies

Nilendu Chatterjee and Tonmoy Chatterjee

Abstract

Labor productivity always plays an important part in the growth of manufacturing sector of any nation, and certainly, in the growth of GDP as well. Now, the relationship between these three variables has been of interest to the researchers because few nations have experienced labor productivity-led economic growth, whereas for others it has been the other way round. In this chapter we have studied the relationship between labor productivity, manufacturing output, and growth of GDP, for 25 major economies across the globe, covering the period 2000–2015, with the help of simultaneous equation system for individual nations as well as panel data analysis, covering all the nations together. Study of this relationship has, hardly, been done before which is our prime motivation behind the study. Our findings suggest that in most of the nations, these variables have significant impact on one another but there are exceptions as well. Apart from that, there are variables like energy consumption, health status, life expectancy, foreign direct investment, etc., which are significant in influencing these variables. So, policy measure suggests that importance should be given not only on labor productivity or output of manufacturing sector but also on factors that can influence these variables.

Optimum Size of Government Intervention

Emerging Economies and
Their Challenges

Edited by
Ramesh Chandra Das

 **Routledge**
Taylor & Francis Group
LONDON AND NEW YORK

- 4 Government Expenditure, Good Governance, and Economic Growth in Sub-Saharan Africa: Where Are We? EZEQUILO ROMANUS UKWUEZE, OZOEMENA STANLEY NWODO, HENRY THOMAS ASOGWA, AND TOCHUKWU GEORGINA ONYECHE
- PART II**
Sectoral Aspects of Government Intervention in Economics and Groups
- 5 The Role and Application of Military Power as an Instrument of National Power in the 21st Century NANNA CHARLOTTE LORD-MALLAM
- 6 Military Keynesianism and the Economics of Regional Security and Defense Burden in the Middle East PARTHA GANGOPADHYAY, SIDDHARTH JAIN, AND MAMUN BILLAH
- 7 Agricultural Expenditure, Infrastructure Development, and Economic Growth in ECOWAS Countries RICHARDSON KOJO EDEME, JANEFRANCIS C IDENYI, NELSON C NKALU, AND ANGUS EZE AFAMEFUNA
- 8 Government Policies and Inflows of Foreign Direct Investment in Developing Asia: A Dynamic Panel Study MADHABENDRA SINHA, PRABAL CHAKRABORTY, SIDHARTHA SANKAR LAHA, AND ANIL BHUIMALI
- 9 Politics, Finance, and Infrastructure: Evidence From Emerging Economies AMIT CHATTERJEE AND DEVYOSHA SINGH
- 10 Does Budget Deficit Cause Current Account Deficit in SAARC Countries?: A Time-Series Econometric Investigation KANCHAN DATTA
- 11 Healthcare, Income Inequality, and International Trade: The Role of Public Expenditure TONMOY CHATTERJEE AND NILENDU CHATTERJEE

First South Asia edition 2022

First published 2022
by Routledge
2 Park Square, Milton Park, Abingdon, Oxon OX14 4RN
and by Routledge
605 Third Avenue, New York, NY 10158

Routledge is an imprint of the Taylor & Francis Group,
an informa business

© 2022 selection and editorial matter, Ramesh Chandra Das;
individual chapters, the contributors

The right of Ramesh Chandra Das to be identified as the author
of the editorial material, and of the authors for their individual
chapters, has been asserted in accordance with sections 77 and 78 of
the Copyright, Designs and Patents Act 1988.

All rights reserved. No part of this book may be reprinted or
reproduced or utilised in any form or by any electronic, mechanical,
or other means, now known or hereafter invented, including
photocopying and recording, or in any information storage or
retrieval system, without permission in writing from the publishers.

Trademark notice: Product or corporate names may be trademarks
or registered trademarks, and are used only for identification and
explanation without intent to infringe.

British Library Cataloguing-in-Publication Data
A catalogue record for this book is available from the British Library

Library of Congress Cataloging-in-Publication Data
A catalog record for this book has been requested

ISBN: 978-1-032-23413-7 (hbk)
ISBN: 978-1-003-02649-5 (ebk)

Typeset in Sabon
by Apex CoVantage, LLC

Digitally Printed at Replika Press Pvt. Ltd.

For sale in India, Pakistan, Nepal, Bhutan, Bangladesh and Sri Lanka only.

11 Healthcare, Income Inequality, and International Trade

The Role of Public Expenditure

Tonmoy Chatterjee and Nilendu Chatterjee¹

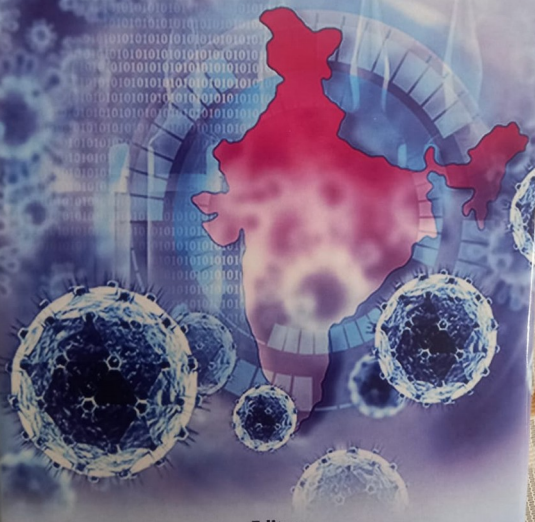
The literature on the social sector has been gaining more importance among social scientists because of the policy prescriptions that help economies to move toward economic development. Social sectors like health, education, and so on constitute the most crucial parts of any developing economy. Various articles and newspapers have pointed out that over the past decade or so, the healthcare sector has become one of the most favorable destinations for foreign investors.² Overall, the healthcare system, including not only private health facilities but also public healthcare, has generated many employment opportunities. Facts and figures on this topic motivated us to analyze healthcare in specific.³

Although private healthcare dominates, public healthcare remains important for us to consider, especially in the context of developing economies. The purchasing power of individuals in a developing economy is low, so they cannot afford private health services, because these are more expensive than public health services.⁴ The role of the public healthcare system and its importance are relevant in the context of the COVID-19 pandemic. Public hospitals across the countries of the world are flooded with COVID-19 patients. So there exists huge demand for public health services, but what about the supply of public healthcare? To match up the demand of public health services, its supply should be developed with modern, efficient, and sufficient health infrastructure facilities. However, supply of modern health infrastructure needs huge amounts of capital and funds. There exists enough evidence that the governments in most of the developing economies are less willing to finance modern health facilities.⁵ It also implies that the problem of disequilibrium will persist in publicly funded healthcare systems. To find a way out from this problem, states may allow large amount of foreign direct investment (FDI) into public healthcare. If health trade of mode 3⁶ is possible in public healthcare in a developing economy, then the aforementioned disequilibrium in publicly funded healthcare system might be eliminated (Lahiri, 2012; Marcella et al., 2005; Stevens et al., 2013).

In this chapter, we analyze the issues related to public healthcare and international trade in health services. We also claim that at the theoretical level exists almost no work related to FDI and public healthcare in a

COVID-19 PANDEMIC AND ITS MULTIDIMENSIONAL IMPACT

The Road Ahead



Editors

Tapan Kumar Ghosh, Tonmoy Chatterjee and Indrajit Ghosh

Editors: Tapan Kumar Ghosh
Tonmoy Chatterjee
Indrajit Ghosh

© First Published: 2021
Serials Publications (P) Ltd.

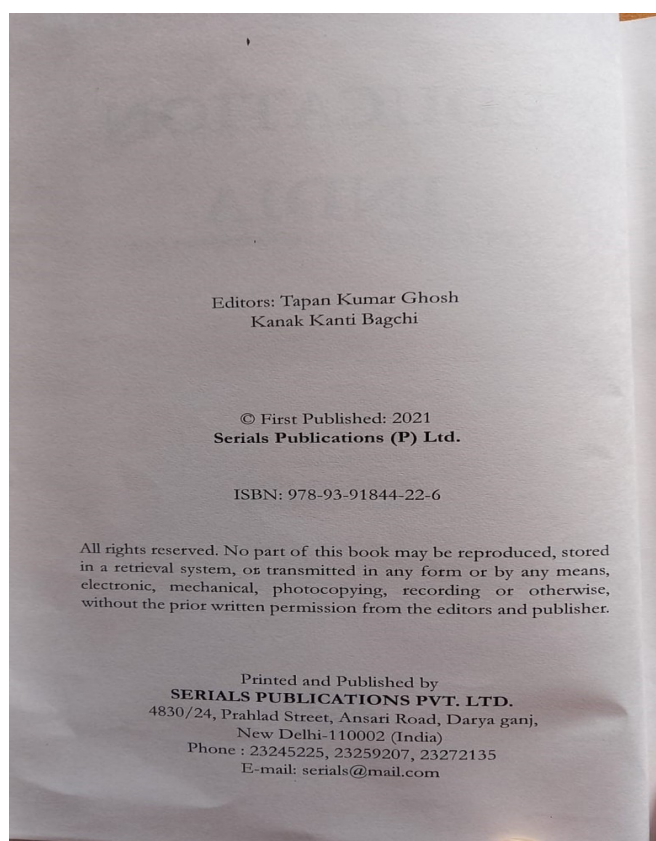
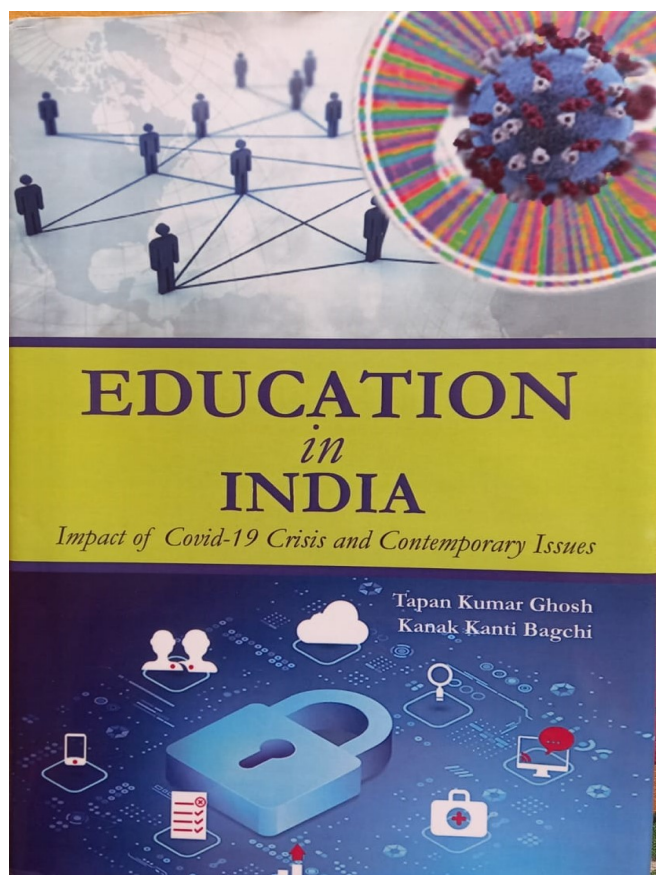
ISBN: 978-81-950760-2-4

All rights reserved. No part of this book 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 written permission from the author and publisher.

Printed in India
SERIALS PUBLICATIONS PVT. LTD.
4830/24, Prahlad Street, Ansari Road, Darya ganj,
New Delhi-110002 (India)
Phone : 23245225, 23259207, 23272135
E-mail: serials@mail.com

PREFACE

On 11th March 2020, following to COVID-19, the world entered a new era. To stop the spread of the virus, countries adopted various measures (SOPs), for instance, when go out, changed our routine, distracted us from used to. Such activities but a several economic following health the pandemic, economic activities within a nation, inequality, poverty, distortion and services and non-services and public service such crisis makes it with closed intern



| | | |
|-----|---|-----|
| vi | Education in India : Impact of Covid-19 Crisis and Contemporary Issues | |
| 8. | Impact of Covid-19 on Indian Education System: An Analysis | 133 |
| | <i>Bhajan Basak</i> | |
| | Part-2: Online Education: A New Dimension in Pandemic | |
| 9. | An Analytical Study of the Impact of Covid-19 on Edutech Sector in India | 149 |
| | <i>Mukul Mathpal, Harshal Kulkarni, Nitesh Kate and Abhishek Srivastava</i> | |
| 10. | Online Education: An Imperative Alternative With Compromised Academic Environment | 171 |
| | <i>Vaskar Barman and Dibyajyoti Ghosh</i> | |
| 11. | Covid-19 and Online Classes: Exploring Different Aspects | 191 |
| | <i>Nilendu Chatterjee and Tonmoy Chatterjee</i> | |
| 12. | Digital Divide vs. Innovation: Fallout of E-Education in the Era of Covid-19 Crisis | 201 |
| | <i>Sumitra Naha (Das)</i> | |
| 13. | A Brief Review of the Online Education System in India | 213 |
| | <i>Subhabrata Chakrabarti</i> | |
| | Part-3: COVID-19 and Higher Education | |
| 14. | Covid-19 and its Consequences on India's Higher Education | 227 |
| | <i>Panchali Sengupta</i> | |
| 15. | Challenges Faced by University Teachers for Teaching Online During Covid-19 | 241 |
| | <i>Jayeta Deshmukh</i> | |
| 16. | Impact of Covid-19 on Higher Education: Policy Responses and Recommendations | 255 |
| | <i>Samon Roy</i> | |
| 17. | Education of Lifelong Learning in the Age of Covid-19: A Review Perspective | 269 |
| | <i>Sidhartha Samkar Laha</i> | |

