

SOCIAL ACTION

A Quarterly Review of Social Trends

CLIMATE CHANGE AND ECOLOGICAL SUSTAINABILITY

- **Climate Change, Covid-19 and Cities: Societal Transformation**
Malti Goel & Neha G. Tripathi
- **Climate Change Resilience and Adaptation in Rural India through Active Panchayats**
Rajesh Kumar Sinha
- **Climate Change: A Double Whammy for Musahar Community in Bihar**
Siji Chacko
- **Farming Communities' Adaptations to Climate Change: Issues of Equity in a Semi-Arid Area of Rajasthan**
Anshuman Upadhyaya & Subhakanta Mohapatra
- **Perspective on Climate Change in India: Sustainability, Effects and Solutions**
A. Abdulraheem
- **Impact of Climate Change on Marginalised Groups**
Virendra B. Shahare
- **Why do Adivasis matter? Indigenous Peoples and Climate Change in India**
Anurag Augustine Ekka

A UGC-CARE APPROVED JOURNAL

SOCIAL ACTION

JULY – SEPTEMBER 2020

VOLUME 70

No.03

SOCIAL ACTION is published on the 15th of January, April, July and October. Those who do not receive copies in time should write to the Business Manager within three months of the date of publication. After that free replacement copies may not be available.

EDITORIAL BOARD

Prof. Surinder Singh Jodhka, Jawaharlal Nehru University, New Delhi 110 067

Prof. Virginus Xaxa, Delhi University, Delhi – 110 007

Prof. Susan Visvanathan, Jawaharlal Nehru University, New Delhi 110 067

Prof. Arvinder A. Ansari, Jamia Millia Islamia, New Delhi-110025

Prof. Babu P. Remesh, Ambedkar University Delhi, Delhi-110 006

Editor : **Denzil Fernandes**
Associate Editor : **Shabeen Ara**
Secretarial Assistance : **Anjeli Das**
Design & Layout : **Ruben Minj**

The material printed in this journal is copyright and should not be reproduced without the written permission of the Editor. © 2020 **SOCIAL ACTION**.

Articles in **SOCIAL ACTION** are indexed in ICSSR Research Abstracts, Sociology of Education Abstracts, Book Review Index, and Review of Publication Reviews. **SOCIAL ACTION** has been published continuously from 1951. A micro-film edition is available from University Microfilms International, Ann Arbor, Michigan 48106, USA.

Note: Social Action is listed in the UGC-CARE list of approved Social Science Journals.

Subscription Rates

Institutional/Personal	One Year	Two Years	Three Years
Ordinary Post	580.00	1160.00	1750.00
Registered Post	650.00	1295.00	1950.00
Foreign (Air Mail)	US\$ 100	US\$ 180	US\$ 250

Payments of Indian Subscriptions by DD/Postal Order/M.O. in favour **INTEGRATED SOCIAL INITIATIVES**, payable at Delhi only.

No part of this publication can be reproduced or transmitted in any form or by any means, without prior permission of the publishers.

The views published in its pages are those of their writers and not necessarily those of the Editorial Board.

SOCIAL ACTION

A Quarterly Review of Social Trends

JULY - SEPTEMBER 2020

VOLUME 70

NO. 03

Editor: Denzil Fernandes

CLIMATE CHANGE AND ECOLOGICAL SUSTAINABILITY

Climate Change and Ecological Sustainability (Editorial) <i>Denzil Fernandes</i>	iii
Climate Change, Covid-19 and Cities: Societal Transformation <i>Malti Goel & Neha G. Tripathi</i>	206
Climate Change Resilience and Adaptation in Rural India through Active Panchayats <i>Rajesh Kumar Sinha</i>	216
Climate Change: A Double Whammy for Musahar Community in Bihar <i>Siji Chacko</i>	230
Farming Communities' Adaptations to Climate Change: Issues of Equity in a Semi-Arid Area of Rajasthan <i>Anshuman Upadhyaya & Subhakanta Mohapatra</i>	250
Perspective on Climate Change in India: Sustainability, Effects and Solutions <i>A. Abdulraheem</i>	267
Impact of Climate Change on Marginalised Groups <i>Virendra B. Shahare</i>	283
<i>Why do Adivasis matter?</i> <i>Indigenous Peoples and Climate Change in India</i> <i>Anurag Augustine Ekka</i>	296
Book Reviews	316

SOCIAL ACTION

Themes for forthcoming issues

Abilities of Persons with Disabilities October-December 2020

(Last date to receive articles : 15 August 2020)

The Social Impact of COVID-19 Pandemic January-March 2021

(Last date to receive articles : 15 November 2020)

Labour Migration and Economic Development April-June 2021

(Last date to receive articles : 15 February 2021)

Articles of 4,500-5,000 words are printed on the above themes. To facilitate the processing, please send them by post and soft copy or email to avoid undue delay. Articles should reach the Editor at least two months before the month of publication at the address below. SOCIAL ACTION is published on the 15th of January, April, July and October.

Editor

SOCIAL ACTION

10, Institutional Area

Lodhi Road

New Delhi-110 003

E-Mail : socialaction@isidelhi.org.in

CLIMATE CHANGE AND ECOLOGICAL SUSTAINABILITY

Climate change has emerged as the biggest developmental challenge of the 21st century as over exploitation of planet Earth to promote rapid economic growth has led to an environmental crisis having serious socio-economic impact on marginalised communities around the globe. Widespread destruction of forests, extinction of various species of flora and fauna leading to loss of biodiversity, high emissions of carbon dioxide (CO₂) and greenhouse gases (GHG), depletion of the ozone layer, increase in temperatures, rise in sea levels, melting of icebergs and glaciers, has been altering the natural balance of local and global ecosystems. It is leading to extreme events such as droughts, floods, storms, cyclones and raging forest fires. Climate change due to environmental degradation will result in displacement, food insecurity, loss of livelihood and potentially devastating economic and social consequences on poor and vulnerable communities.

International efforts at combating climate change began with the Rio Earth Summit 1992, where a series of international environmental agreements, including the UN Framework Convention on Climate Change (UNFCCC), were adopted. Every year the Conference of parties (COP) meet to strengthen the global effort to combat climate change with ecological sustainability as the basis of all agreements. The Kyoto Protocol adopted at COP 3 in 1997 set emission targets for countries. The Copenhagen agreement at COP 15 attempted to set a goal of limiting global temperature increase to 2 degrees celsius and establishing a Green Climate Fund. The landmark Paris Agreement, which was adopted at COP 21, established common binding procedural commitments for all countries to decide its 'nationally determined contribution' (NDC) to mitigating climate change.

India actively participates in the UNFCCC and has supported the Paris Agreement in 2015. India's NDCs to be achieved by 2030 includes reducing emissions intensity of GDP by 33-35 per cent from 2005 level, installing about 40 per cent cumulative electric power capacity from non-fossil fuel based energy resources and creating an additional carbon sink of 2.5 to 3 billion tonnes of CO₂ equivalent through additional forest and tree cover. According to India's Voluntary National Review (VNR) 2020, India has achieved 36 per cent total electricity generation from renewable resources, 21 per cent reduction in emission intensity of GDP, 5.12 million tonnes CO₂ and GHG emission reduction. At COP 25 in Madrid in 2019, India

highlighted the need for climate finance, technology transfer at affordable costs and capacity building support from high-income to middle and lower-income countries. Jointly with France, India spearheaded the International Solar Alliance (ISA) signed by 86 countries to harness the vast potential of solar energy. India also launched the Coalition for Disaster Resilient Infrastructure to generate and exchange knowledge and build capacities and expertise in climate and disaster resilient infrastructure. In addition, India launched the Leadership Group for Industry Transition together with Sweden to promote collaboration on areas related to low-carbon growth. India has set an ambitious target of 450 GW of renewable energy generation capacity by 2030 and at present India stands third in renewable power generation, fourth in wind power and fifth in solar power globally.

India ranks fifth in the Global Climate Risk Index 2020 indicating that it is highly vulnerable to extreme weather events. Nearly 85 per cent of the landmass in India is vulnerable to climate-induced natural disasters, which affects the poor and marginalised communities disproportionately. Natural ecosystems are under stress with decline in biodiversity, pollution of waterbodies, land degradation, high levels of air pollution in several cities and inefficient waste management systems. Forest lands continue to be diverted for developmental projects and productive agricultural lands are released for real estate and industries. In this context, attempts to dilute Environmental Impact Assessment (EIA) and Social Impact Assessment (SIA) in order to implement industrial and developmental projects is a major concern.

In response to the ecological crisis of our times, this issue of Social Action highlights the issue of climate change and the need to have ecological sustainability as the basis for all national policies. This implies ensuring that all decision making processes follow the twin principles of ecological integrity and socio-economic equity. Malti Goel and Neha Tripathi discusses the challenges in integrating city planning in the context of the impact of COVID 19 pandemic on urban lifestyle in their article “Climate Change, COVID-19 and Cities: Societal Transformation”. They argued that during pandemic times and the lockdown periods energy demand is found to be directly proportional to the duration and stringency of the measures meant to curb the spread of the virus. They also provide solutions for post COVID-19 city planning and ecological sustainability. Rakesh Kumar Sinha’s article on “Climate Change Resilience and Adaptation in Rural India through Active Panchayats” deals with the role of Gram Panchayats in combating climate change. Through illustrations of some good practices, he highlights

the ways in which Gram Panchayats can be empowered to ensure climate change resilience and adaptation in rural India. In the article “Climate Change: A Double Whammy for Musahar Community in Bihar”, Siji Chacko explores the vulnerabilities and threats to the Musahar community in Bihar due to the impact of climatic changes such as floods and rising temperature. He proposes a climate policy toolbox to deal with multiple vulnerabilities faced by discriminated and marginalised communities living in natural disaster prone regions of the country. The article “Farming Communities’ Adaptations to Climate Change: Issues of Equity in a Semi-Arid Area of Rajasthan” is the outcome of a study conducted by Anshuman Upadhyaya and Subhakanta Mohapatra on adaptive practices in a drought prone region of Rajasthan. They conclude that the generation of income by shifting from climate sensitive to climate neutral livelihood options can bring equity for sustaining climate change adaptations in rural communities. Virendra Shahare’s article on “Impact of Climate Change on Marginalised Groups” highlights the disproportionate impact climate change has on marginalised communities due to their poor socio-economic and physical living conditions. In particular, he stresses on the impact of climate change on the health and livelihoods of marginalised communities. Finally, the article titled “Why do Adivasis matter? Indigenous Peoples and Climate Change in India” by Anurag Augustine Ekka analyses the multiple ways in which Adivasis are affected due to climate change and the actions of the government on tribal policies. He argues that Adivasis have indigenous knowledge and sustainable practices to combat climate change and for the preservation of the environment. However, the discrimination faced by Adivasis and exploitation of their resources have seriously undermined their role as agents of sustainable development in India.

All the articles in this issue focus on different aspects of the impact of climate change on marginalised communities and ways in which we can move towards ecological sustainability. It is hoped that the insights drawn from these articles may awaken each one of us to resolve to make personal commitments to combat climate change and promote ecological sustainability so that future generations may also enjoy the beauty and the fruits of our Common Home.

Denzil Fernandes