

# CLIMATE CHANGE AND SOCIAL RESPONSIBILITY

**Edited by** Rubee Singh, David Crowther,  
Amit Joshi and Vikas Kumar

DEVELOPMENTS IN CORPORATE  
GOVERNANCE AND RESPONSIBILITY

**VOLUME 25**

# CLIMATE CHANGE AND SOCIAL RESPONSIBILITY

# DEVELOPMENTS IN CORPORATE GOVERNANCE AND RESPONSIBILITY

Series Editor: David Crowther

## Recent Volumes:

- Volume 1: NGOs and Social Responsibility
- Volume 2: Governance in the Business Environment
- Volume 3: Business Strategy and Sustainability
- Volume 4: Education and Corporate Social Responsibility: International Perspectives
- Volume 5: The Governance of Risk
- Volume 6: Ethics, Governance and Corporate Crime: Challenges and Consequences
- Volume 7: Corporate Social Responsibility in the Digital Age
- Volume 8: Sustainability After Rio
- Volume 9: Accountability and Social Responsibility: International Perspectives
- Volume 10: Corporate Responsibility and Stakeholding
- Volume 11: Corporate Responsibility and Corporate Governance: Concepts, Perspectives and Emerging Trends in Ibero-America
- Volume 12: Modern Organisational Governance
- Volume 13: Redefining Corporate Social Responsibility
- Volume 14: Stakeholders, Governance and Responsibility
- Volume 15: Governance and Sustainability
- Volume 16: CSR in an Age of Isolationism
- Volume 17: The Equal Pillars of Sustainability
- Volume 18: Social Entrepreneurs: Mobilisers of Social Change
- Volume 19: Socially Responsible Plastic: Is This Possible?
- Volume 20: Achieving Net Zero: Challenges and Opportunities
- Volume 21: Corporate Resilience: Risk, Sustainability and Future Crises
- Volume 22: Innovation, Social Responsibility and Sustainability
- Volume 23: Social Responsibility, Technology and AI
- Volume 24: Society and Sustainability

DEVELOPMENTS IN CORPORATE GOVERNANCE AND  
RESPONSIBILITY VOLUME 25

# CLIMATE CHANGE AND SOCIAL RESPONSIBILITY

EDITED BY

**RUBEE SINGH**

*Institute of Business Management, GLA University,  
Mathura, India*

**DAVID CROWTHER**

*Social Responsibility Research Network, UK*

**AMIT JOSHI**

*Department of Management Studies, Kumaun University,  
Nainital, India*

AND

**VIKAS KUMAR**

*Faculty of Business Law and Social Sciences, Birmingham  
City University, UK*



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

Emerald Publishing Limited  
Emerald Publishing, Floor 5, Northspring, 21-23 Wellington Street, Leeds LS1 4DL

First edition 2025

Editorial matter and selection © 2025 Rubee Singh, David Crowther, Amit Joshi  
and Vikas Kumar.

Individual chapters © 2025 The authors.

Published under exclusive licence by Emerald Publishing Limited.

**Reprints and permissions service**

Contact: [www.copyright.com](http://www.copyright.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: 978-1-83662-473-8 (Print)

ISBN: 978-1-83662-472-1 (Online)

ISBN: 978-1-83662-474-5 (Epub)

ISSN: 2043-0523 (Series)



INVESTOR IN PEOPLE

# CONTENTS

<i>About the Editors</i>	ix
<i>List of Contributors</i>	xi
<i>Preface</i>	xiii
<i>Acknowledgements</i>	xv
<i>About the Book</i>	xvii

## PART I: CLIMATE CHANGE

<b>Shaping the Future of Work: A Review of Research on HR Strategies for Climate Change Mitigation and Social Impact</b>	3
<i>Rubee Singh, David Crowther and Kamalesh Ravesarangar</i>	
<b>Highlights of Circular Economy Actions in the Climate Change Policies: A Call for Action for Asia-Pacific Region</b>	23
<i>Narayanage Jayantha Dewasiri</i>	
<b>Adoption of Circular Economy Strategies for Climate Change Mitigation: Insights From Key Sectors</b>	43
<i>Rubee Singh</i>	
<b>Unmet Basic Needs in Venezuelan Migrants' Receptor Countries in Times of Climate Change</b>	63
<i>Jorge Isaac Lechuga-Cardozo</i>	
<b>Leveraging Environmental Communication and ICT for Climate Change Mitigation: Human Capital Development in India</b>	79
<i>Biplab Loho Choudhury, Archan Mitra and Vishal Jain</i>	

<b>Climate Change and Sustainability in the South Asian Region: Challenges and Issues</b>	111
<i>Mananage Shanika Hansini Rathnasiri and Dewanarayana Hiththaragedara Prasad Manuranga Gunathilaka</i>	

<b>Harnessing Renewable Energy Sources: Inclusion of Net-Zero Industry for Climate Change Mitigation</b>	127
<i>Rubee Singh, Seema Rani, Amit Joshi and Vikas Kumar</i>	

## PART II: SOCIAL RESPONSIBILITY

<b>Integrating Climate Change, Social Responsibility and Electronic Financial Inclusion: A Pathway to Sustainable Development</b>	147
<i>Ernesto D. R. S. Gonzalez, Rajeev Sijariya, Amit Kumar Singh and Vikas Garg</i>	

<b>Exploring Human Social Responsibility for Promoting Climate Change: An Analysis of Developed and Developing Countries</b>	165
<i>Jacinta Dsilva, Fahad Ziaul Ain Usmani and Mohamed Irfan Shaikh</i>	

<b>Climate Change Mitigation Strategies in Environmentally Sensitive Industries</b>	185
<i>Kishore Kumar, Rubee Singh, Mrinalini Choudhary and Ankita Sharma</i>	

<b>Challenges of Integrating Social Responsibility and Climate Change for the Sustainable Development Goals: Experience From the South Asian Context</b>	205
<i>P. G. S. A. Jayarathne, Narayanage Jayantha Dewasiri and Shahbaz Khan</i>	

<b>Navigating Climate Change-Migration Nexus in India: Trends, Drivers and Implications</b>	227
<i>Rekha Pillai</i>	

<b>Innovative Financing for Integrating Climate Change and Sustainable Development Goals in India: Issues and Challenges</b>	245
<i>Daravath Vikas Nayak, A. Arun Kumar, Rakesh Suryadevara and Lalit Mohan Tewari</i>	

<b>Farmer Adaptation and Mitigation in Saving Indonesia's Agriculture in the Face of Climate Change: A Scope Review</b>	<b>269</b>
<i>Wahyudi Hariyanto, Seno Basuki, Budi Utomo, Febtri Wijayanti, Martino Martino, Tedi Gunawan and Rudy G. Erwinsyah</i>	

This page intentionally left blank

# ABOUT THE EDITORS

**Rubee Singh** is an Assistant Professor of HR at Institute of Business Management, GLA University, Mathura, India. She is a Postdoctoral Researcher (DLit) at Kumaun University, Nainital, India. She holds a PhD in Management from Noida International University, India, and an MBA in HR from Dr A. P. J Abdul Kalam Technical University, India. She has published 20 academic books and more than 75+ research papers in SCI, ABDC-A, Scopus and UGC index journals. Her areas of research are net zero, circular economy, digital CE, sustainability, digital HRM, sustainable HRM, industry 4.0, artificial intelligence and CSR. She has been honoured with many prestigious awards, which include Best Researchers Award of the Year-2022 by GLA University, Child Ambassador Award of The Year 2022, Iconic Faculty Award 2019, International Young Researchers Award-2021, Young Scientist Award 2020 and Nari Ratan Award 2023.

**David Crowther** is a Professor of Corporate Social Responsibility at several universities around the world. He previously worked in government and industry for twenty years, a career culminating in his role as divisional managing director of a multinational. In 2002, he established the Social Responsibility Research Network, an international body which now has several thousand members. He also founded and is the Editor in Chief of the *Social Responsibility Journal*. He has published over 500 articles in academic, business and professional journals as well as over 70 books. His current research focuses on sustainability and governance in the modern environment.

**Amit Joshi** holds a PhD and an MBA and is a distinguished Academician and a Visionary Leader with a wealth of experience in both industry and academia. Currently serving as a Professor and the Head of the Department of Management Studies at Kumaun University, Nainital, India, his teaching and research expertise encompasses marketing, strategic management and knowledge management. Before transitioning to academia, he garnered valuable experience in export finance, working capital management, merchant banking, market research and concept selling. His teaching journey extends beyond India, having shared his knowledge and insights at universities in Saudi Arabia, Malaysia and Bahrain. Renowned as a captivating speaker, he has been invited to deliver lectures at esteemed institutions across several countries, reflecting his global influence and impact. His interdisciplinary research interests have led him to explore various fields, with a particular focus on tourism, evident through his numerous research articles and books.

**Vikas Kumar** is the Associate Dean for Research Innovation and Enterprise and a Professor of Operations and Supply Chain Management at the Faculty of Business, Law and Social Sciences, Birmingham City University, Birmingham, United Kingdom. He has over a decade of teaching and research experience. Prior to joining BCU, he was the Director of Research and Scholarship at Bristol Business School, University of the West of England. He has also worked in India, Ireland and Hong Kong. He earned his PhD in Management from University of Exeter, United Kingdom. He completed his graduation (BTech) at National Institute of Advanced Manufacturing Technology Ranchi (Formerly NIFFT), India. He has published over 250 journal articles and conference papers including A\*/A as per ABDC and 4\*/3\* as per ABS indexed journals. He has an excellent research track record with over 16,000 citations on Google Scholar and H-index of 67. His research interest areas include digital supply chains, industry 4.0/5.0, sustainability, circular economy, sustainable supply chains, food supply chains and operational excellence.

# LIST OF CONTRIBUTORS

<i>Seno Basuki</i>	National Research and Innovation Agency, Jakarta, Indonesia
<i>Mrinalini Choudhary</i>	School of Business, Shenandoah University, USA
<i>David Crowther</i>	Social Responsibility Research Network, UK
<i>Narayanage Jayantha Dewasiri</i>	Department of Accountancy and Finance, Faculty of Management Studies, Sabaragamuwa University of Sri Lanka, Belihuloya, Sri Lanka; Adjunct Faculty, University Center for Research and Development (UCRD), Chandigarh University, Punjab, India
<i>Jacinta Dsilva</i>	SEE Institute, The Sustainable City, Dubai, UAE
<i>Rudy G. Erwinsyah</i>	National Research and Innovation Agency, Jakarta, Indonesia
<i>Vikas Garg</i>	Christ University, Bengaluru, India
<i>Ernesto D. R. S. Gonzalez</i>	University of Talca and Paulista University, Brazil
<i>Dewanarayana Hiththaragedara Prasad Manuranga Gunathilaka</i>	International Distillers Limited, Kaduwela, Sri Lanka
<i>Tedi Gunawan</i>	National Research and Innovation Agency, Jakarta, Indonesia
<i>Wahyudi Hariyanto</i>	National Research and Innovation Agency, Jakarta, Indonesia
<i>Vishal Jain</i>	Department of Computer Science and Engineering, Sharda School of Engineering and Technology, Sharda University, Greater Noida, India
<i>P. G. S. A. Jayarathne</i>	De Montfort University, Leicester, UK
<i>Amit Joshi</i>	Department of Management Studies, Kumaun University, Nainital, India
<i>Shahbaz Khan</i>	Department of Industrial Engineering, University of Tabuk, Tabuk, Saudi Arabia
<i>A. Arun Kumar</i>	ICFAI Law School, ICFAI Foundation for Higher Education (Deemed to be University), Hyderabad, India

<i>Kishore Kumar</i>	School of Management, Bennett University, Greater Noida, India
<i>Vikas Kumar</i>	Faculty of Business Law and Social Sciences, Birmingham City University, UK
<i>Jorge Isaac Lechuga-Cardozo</i>	Tecnológico de Monterrey, Mexico
<i>Biplab Loho Choudhury</i>	Centre for Journalism and Mass Communication (CJMC), Visva-Bharati Santiniketan, Bolpur, India
<i>Martino Martino</i>	National Research and Innovation Agency, Jakarta, Indonesia
<i>Archan Mitra</i>	Department of Mass Communication, School of Media Studies (SOMS), Presidency University, Bangalore, India
<i>Daravath Vikas Nayak</i>	Loyola Academy, Secunderabad, India
<i>Rekha Pillai</i>	The British University in Dubai, UAE
<i>Seema Rani</i>	Department of Commerce, Kurukshetra University, Kurukshetra, India
<i>Mananage Shanika Hansini Rathnasiri</i>	Department of Marketing Management, Faculty of Management Studies, Sabaragamuwa University of Sri Lanka, Belihuloya, Sri Lanka
<i>Kamalesh Ravesangar</i>	Department of Accounting and Business, Tunku Abdul Rahman University of Management and Technology, Malaysia
<i>Mohamed Irfan Shaikh</i>	SEE Institute, The Sustainable City, Dubai, UAE
<i>Ankita Sharma</i>	School of Management, IILM University, Greater Noida, India
<i>Rajeev Sijariya</i>	Atal Bihari Vajpayee School of Management and Entrepreneurship, Jawaharlal Nehru University Delhi, India
<i>Amit Kumar Singh</i>	Department of Commerce, University of Delhi, India
<i>Rubee Singh</i>	Institute of Business Management, GLA University, Mathura, India
<i>Rakesh Suryadevara</i>	ICFAI Law School, ICFAI Foundation for Higher Education (Deemed to be University), Hyderabad, India
<i>Lalit Mohan Tewari</i>	DSB Campus, Kumaun University, Nainital, India
<i>Fahad Ziaul Ain Usmani</i>	SEE Institute, The Sustainable City, Dubai, UAE
<i>Budi Utomo</i>	National Research and Innovation Agency, Jakarta, Indonesia
<i>Febtri Wijayanti</i>	National Research and Innovation Agency, Jakarta, Indonesia

# PREFACE

Climate change is one of the most pressing issues of our time, with far-reaching consequences for our planet and its inhabitants. As we stand at the crossroads of environmental crisis and social responsibility, this book emerges as a crucial compilation of insights and perspectives from researchers and practitioners in the field on how societies, businesses and governments can collaboratively navigate the complexities of climate change while fostering sustainable development and social responsibility. The importance of climate change mitigation and social responsibility cannot be overstated. Understanding the mechanisms of climate change and climate variability, as well as monitoring these changes from a regional perspective, is crucial for effective mitigation in this time of growing threat of climate instability. The book explains the broad scope of climate change in the era of sustainability and technological changes, exploring what businesses can do to reduce their climate impact directly and through their wider influence. It outlines some obstacles they may face before making a sustainable commitment.

In this context, social responsibility also takes on a new urgency as it is no longer sufficient for organisations and individuals to prioritise profit and growth over people and the planet. We must recognise our duties to each other, to future generations and to the natural world. There is an urgent need to understand better how social responsibility is connected to climate change and ecological sustainability and to identify processes, methods and tools that can integrate these elements effectively. *Climate Change and Social Responsibility* is a timely and comprehensive volume that discusses about the multifaceted aspects of climate change, sustainability and social responsibility to offer a rich tapestry of historical context, future impacts, political and economic analyses, sustainable practices and innovative solutions. This book highlights the need to embrace social responsibility as a core aspect of our response to the climate crisis. Its exploration of social responsibility, environmental harmony and sustainable development goals (SDGs) offers a road map for a more resilient and equitable future.

As the global population continues to rise, there is an urgent need for a comprehensive understanding of the relationship between climate change and social responsibility. This understanding is essential for developing effective and constructive mechanisms to protect human lives and property from anticipated threats. Throughout the book, contributions from researchers across various disciplines provide rich insights into the physical, environmental, social, economic and political aspects of climate change. Readers will learn how climate change is transforming the world and promoting social responsibility. They will

gain knowledge on navigating climate change alongside social responsibility in the era of sustainability, including sustainable recommendations for adopting climate change practices. The book also covers topics such as climate change adaptation, climate change finance and future actions driving social responsibility in different industries.

Additionally, the book discusses the role of policy frameworks, financing mechanisms and international collaboration in facilitating the adoption of sustainable strategic policies for climate change on a global scale. It includes case studies of successful climate change initiatives, entrepreneurship, climate change ecosystems and social responsibility, analysing best practices and lessons learnt to inspire and guide future endeavours aimed at achieving sustainability in both developed and developing countries. This book targets a diverse audience, including academicians, researchers, scientists, environmentalists, land resource managers, climate change scientists and forest administrators. It also serves as a valuable resource for students in agriculture, forestry, ecology, soil science and environmental science, as well as policymakers. The multidisciplinary perspective provided offers a strategic view on climate change and social responsibility, addressing issues related to building sustainable environments and understanding how these activities can potentially impact global warming.

Throughout this book, 14 chapters are explored that touch on climate change and social responsibility, from the perspective of the readers. It is a compilation of chapters written by both emerging and eminent authors from different parts of the world, including Indonesia, Brazil, Venezuela, Sri Lanka, Saudi Arabia, the United Kingdom, Dubai, Malaysia and India. It provides a valuable and insightful compendium aimed at sustainability researchers, businesses, educators, policymakers and anyone else interested in socio-environmental issues and sustainable development principles for climate change.

We extend our gratitude to the authors for their invaluable contributions and to the editorial team for their dedication and meticulous effort in bringing this project to fruition. We express our deepest gratitude to all the staff of *Emerald Publishing and especially Book Series Editor: Prof David Crowther* for his support in publishing this book.

We also acknowledge the importance of indexing by Scopus, ensuring that this work reaches a wide and diverse audience. With contributions from esteemed authors from diverse backgrounds and regions, it provides a truly global perspective on the challenges and opportunities that lie ahead. We hope that this book will inspire and empower readers to embrace their social responsibility and join the quest for a climate-resilient world.

(Book Editors)  
Rubee Singh  
David Crowther  
Amit Joshi  
Vikas Kumar

## ACKNOWLEDGEMENTS

We would like to express our deepest gratitude to all those who have contributed to the creation of this book. First, we thank the researchers and experts who have shared their knowledge and insights with us, providing valuable information on the current state of *Climate Change and Social Responsibility*. We also extend our appreciation to the organisations and institutions that have supported our work, including government agencies, non-governmental organizations and academic institutions.

Finally, we would like to acknowledge the invaluable contributions of our colleagues and editors, who have worked tirelessly to ensure that this book is informative, engaging and accessible to a wide range of readers. We hope that this book will inspire further research and action towards climate change and social responsibility to promote sustainability as per United Nations agenda.

We would like to express our sincere gratitude to the experts and stakeholders who contributed their valuable insights and perspectives to this book. Their contributions have been instrumental in shaping our understanding of the challenges and opportunities involved in climate change with the use of social responsibility globally. We hope that this book will serve as a useful resource for policymakers, practitioners and researchers working towards a climate change future for the continent. Our appreciation extends to the anonymous reviewers whose keen eyes and thoughtful commentary have significantly enhanced the quality and depth of this book. Their perspectives and constructive critiques have been invaluable in refining our perspectives and arguments.

We are immensely thankful to the *Book Series-Editor, Prof David Crowther* and the entire team at Emerald Publishing for bringing out this publication in a very professional and timely manner.

(Book Editors)  
Rubee Singh  
David Crowther  
Amit Joshi  
Vikas Kumar

This page intentionally left blank

## ABOUT THE BOOK

This comprehensive book explores the complex relationships between climate change and social responsibility, offering a unique blend of historical context, future perspectives and innovative solutions. This book examines the political, economic and social dimensions of climate change, from the role of governments and international institutions to the impact on human migration and sustainable business models. *Climate Change and Social Responsibility* is a landmark publication that brings together experts' views from around the world to address one of the most pressing issues at this time.

Through contributions from distinguished scholars and practitioners worldwide, the book provides insights into critical topics such as global politics, sustainable business models, human migration and climate change industries. It highlights the importance of understanding climate variability from regional perspectives and promotes smart, resilient policies to combat climate instability. The contributors share best practices and case studies from different countries, highlighting the challenges and opportunities that come with transitioning to all greenhouse gases (GHGs).

This book is a must-read for scholars, policymakers, business leaders and practitioners seeking to understand the complexities of climate change and social responsibility. Its interdisciplinary approach and global perspective make it an invaluable resource for anyone working towards a more sustainable and equitable future. With its rich insights and expert analysis, *Climate Change and Social Responsibility* is a call to action for individuals, organisations and governments to embrace their social responsibility and join the quest for a climate-resilient world. Let this book be your guide on the path towards a sustainable future.

This page intentionally left blank

PART I

CLIMATE CHANGE

This page intentionally left blank

# SHAPING THE FUTURE OF WORK: A REVIEW OF RESEARCH ON HR STRATEGIES FOR CLIMATE CHANGE MITIGATION AND SOCIAL IMPACT

Rubee Singh<sup>a</sup>, David Crowther<sup>b</sup> and  
Kamalesh Ravesangar<sup>c</sup>

<sup>a</sup>*Institute of Business Management, GLA University, Mathura, India*

<sup>b</sup>*Social Responsibility Research Network, UK*

<sup>c</sup>*Department of Accounting and Business, Tunku Abdul Rahman University of Management and Technology, Malaysia*

## ABSTRACT

*Purpose: Addressing the urgent issue of climate change and its impact on society requires immediate attention and innovative solutions. This chapter explores research that examines previous studies about the strategies companies use in their human resources (HR) departments to lessen the impact of climate change and support good social results.*

*Methodology: This section conducted a thorough search of academic literature to find relevant studies on the connection between HR strategies, addressing climate change, and social impact. The inclusion criteria for this research targeted empirical studies on the relationship between HR practices and environmental and social outcomes. It employed particular keywords such as well-known academic databases.*

*Findings: This review discusses the important influence of HR strategies in addressing climate change and promoting positive social effects in companies. It evaluates successful HR practices that specifically endorse environmental and social goals through a comprehensive analysis of academic studies. The results*

---

Climate Change and Social Responsibility

Developments in Corporate Governance and Responsibility, Volume 25, 3–22

Copyright © 2025 Rubee Singh, David Crowther and Kamalesh Ravesangar

Published under exclusive licence by Emerald Publishing Limited

ISSN: 2043-0523/doi:10.1108/S2043-052320250000025001

*offer useful knowledge for HR professionals and business leaders looking to align their HR strategies with climate change.*

*Implications: The findings of this chapter can benefit a diverse audience such as scholars who deal with human resource management, knowledge management and organizational innovation, HR personnel, business stakeholders and the employees.*

*Originality: This review offers a novel viewpoint by exploring the less-studied area of HR's potential to drive positive environmental and social changes. While past research has acknowledged HR's significance, this review goes further by analysing the specific HR approaches that have been successful in tackling climate change and enhancing social welfare.*

**Keywords:** HR strategies; climate change; mitigation; social impact; future work

## 1.1 INTRODUCTION

Technological threats can be defined as the threats posed by environmental factors on organisations by leaders within organisations to efficiently manage their operations, bearing in mind their impact on people's well-being and possibly future generations. In general, organisational environmental regulators do not change their modus operandi and are utilitarian with present procedures, which could present problems in addressing environmental concerns. Organisations have undergone major transformation in the past 20 years due to the impact of technology, globalisation and more competitive environment that defines a new direction for human resource management (HRM) strategies and decisions. The importance of the human resources (HR), HRM practices and the strategies in organisational performance research has been supported (Wright et al., 2005). Consequently, a plethora of research has been conducted in this area with a rising interest in strategy and resource orientation in the field of HRM (Tulsi & Ji, 2020). In addition, special HR have been identified and appreciated in relation to organisational effectiveness.

At present, the degree and frequency of ecological problems have emerged as the highest, and thus, the position of organisations as climate change has become much more critical. With countries globally in a scramble for ways to implement solutions to climate issues, the United Nations has seen it reasonable to provide a roadmap through the Sustainable Development Goal 13 – Climate Action. In this lens, HRM as a strategic function has emerged as a critical cog in driving environmental sustainability within extant organisational structures. This academic study will set out to define and analyse what is being referred to as 'Green HRM' and demonstrate the marriage between that and the core of SDG 13, reaffirming the criticality of strategic HRM approaches to combating climate change. It is, therefore, apparent that the expanse of the function and activity known as HRM has shifted beyond the conventional operational perimeters and concerns to embrace a strategic scanning and response to present-day global issues. The concept of Green HRM can be said one of

the most significant changes in the practices of HRM which practices environmental sustainability as part of its organisational strategies. Pursuing environmental sustainability takes it a step further even to go past simply meeting environmental compliance and encompasses measures that minimise harm to the environment while adding value to society and the environment. Marketing scholars, economists, financial specialists and operations and supply chain management professionals are still concerned with the possibility of integrating SDGs into a company's aims and strategies. Nonetheless, there remains a research gap focused to the function of HRM specifically in relation to sustainable development (Longoni et al., 2018). While several business disciplines investigated manufacturing-operations-sustainability correlates, HRM and SDGs remain intertwined through people and resources because people's actions influence social and environmental contexts. These prior works have illustrated how the workforce and various divisions within the company are being transformed to accommodate these objectives. This movement has evolved from 'green movement', and it has encouraged participations dedicated to ecological and social issues. This ideological movement is instantiated by sustainable management and practices and sustainable human resource management (SHRM) in mind. Hence, according to intention, SHRM seeks to attain organisational objectives in conjunction with business development alongside maintaining environmental sustainability (Moktadir et al., 2020).

The economic activities for sustainable development were defined for the first time in the well-known Bruntland Report in 1987, that assumes to satisfy the present generation needs without compromising the quality of life of the future generations. It covers all in the broad perspective that includes the ecological, social as well as the economic aspects. Sustainable development means the advancement and growth of the human society alongside ensuring the sustainable use of the available natural resources, equal attention to the balance of the biological diversity and equal treatment of the citizens. It underscores the intricate correlation between the development process and the use of natural resources and aims at finding the sustainable path between the enhancement of people's well-being and the conservation of the natural environment. The following measures were established to combat this challenge: the use of innovation and modern technology, new solutions, activities involving people from communities. Over the years, institutions have influenced the formation of culture in communities in the current business world; corporations were ill-mannered in that they mostly did not consider the ethical impact to the society and the world. Globalisation, availability of information and growth of the world market have contributed towards this by making corporate executives focus on their self-gains preferably at the expense of the environment and the society. As a result, the ideas of corporations' social responsibilities and of the adoption of the regulations that define how those responsibilities should be met have emerged. Corporate social responsibility (CSR) has been encouraged by the governments, human rights organisations and environmental groups worldwide to bring about sustainable business and economic development, making profits by not compromising the environmental and human rights (Abdawi et al., 2019).

In addition, it was established that CSR is now necessary, which provides a long list of advantages both to the companies and societies.

There are organisations that have had to adopt an environmental management system or sustainability operations to minimise the impacts on the environment. The decision regarding the implementation of the action relates the achievement of the various objectives, which includes reducing costs, deriving higher revenues for the sustainability initiatives and enhancing the performance on environmental parameters (Chreif & Farmanesh, 2022; Fawehinmi et al., 2020). Such measures could entail certain endeavours such as including a reduction in the emission of carbon and efficient management of materials that goes into manufacturing the products. Some now indeed rather classical researches have underlined the fact that there exist particular SHRM activities in order to manage environmental management systems including the elaboration of particular environmental ones and, last but not least, the assessment of the consequences. In this respect, measures including recruitment, training, motivation and management of the personnel within an organisation have been recognised as other essential organisational prerequisites of environmental management framework. This is due to the premise that the concept or the idea of sustainable development undertaken with the provision of natural resource management entails a lot of ideology implication on academic activities and also practical consequences to the global normative frameworks, social-economical paradigms and the environmental conservation programmes. Thus, there is a need for an alternative approach to the integration of sustainable development due to the involvement of governments, organisations and communities; as knowledge-intensive activities, systematic reviews are useful as they provide evidence to leaders on which funds should be spent. On this note, a review of previous research work is found to be an effective strategy to unravel the confusing research matrix in this critical and sensitive interdisciplinary area.

## **1.2 THE UN SDGS WITHIN THE CONTEXT OF HRM**

Acknowledgement of the inadequate progress in addressing the major ecological, social and economic ‘grand challenges’ is widespread, resulting in ongoing uncertainty. These challenges encompass urgent global concerns like climate change, pandemic prevention, biodiversity loss, plastic pollution, poverty and social inequalities. Businesses and HRM are increasingly reliant on the UN’s ‘2030 Agenda for Sustainable Development’, containing 17 SDGs, to identify necessary actions (Agrawal & Bansal, 2022). While it’s vital to pinpoint grand challenges and establish ambitious targets, the meaningful contributions to these SDGs are unachievable without active involvement from business organisations and HRM policies and practices on a worldwide level. Even though UN member states have pledged to achieve the 17 SDGs by 2030, the progress is unsatisfactory, with none currently on track for completion by the specified deadline. Nevertheless, we contend that the grand challenges and businesses’ ability to implement effective strategies in addressing them will significantly influence the management landscape for

organisations and HRM in the future. Consequently, HRM may take on the role of proactive ‘survival strategists’ or mere ‘emergency responders’, as witnessed during the COVID-19 crisis (Arora-Jonsson, 2023). The significance of SDGs for business and HRM is gaining momentum. For instance, the UN Global Compact, the world’s largest corporate sustainability initiative, coordinates business support for global sustainable development and the achievement of SDGs. By January 2024, over 12,000 companies from 160 countries and diverse sectors had pledged their allegiance to the Global Compact. Its aim is to harness business for societal good, aligning business strategies with the attainment of UN SDGs (Aust et al., 2024). This increased interest in corporate sustainability has been recognised in management literature, emphasising the potential role of HRM structures, strategies and practices in aiding organisations in meeting sustainability goals (Ren & Jackson, 2020; Stahl et al., 2020). The International Labour Organization has introduced the concept of ‘human-centred’ HRM to support the accomplishment of the SDGs, including SDG 8 (Cooke et al., 2022). The stakeholder-friendly notion of decent work is founded on the argument for the common good, suggesting that focusing on human well-being, social justice and dialogue is crucial for long-term competitiveness, economic prosperity and a sustainable future and thus needs to be incorporated into all aspects of business strategic decision-making.

### 1.3 CLIMATE CHANGE AND SUSTAINABLE HRM

Climate change impacts all individuals, and the way people respond to global warming is influenced by both personal actions and the combined efforts of society. The decisions made by businesses have a major impact on shaping the steps taken to address climate change. HR professionals face the important responsibility of guiding organisations through one of the most urgent challenges of our era, as they are accountable for moulding the culture within the company (Kramar, 2022). Some businesses prioritise financial gain over environmental preservation, neglecting to make authentic strides towards changing harmful practices. This absence of responsibility results in actions that have damaging effects on the environment, even among those who are mindful of environmental issues. The global economy is greatly affected by climate change. As the earth’s temperature rises, operating costs also rise, which could impede global economic growth. If annual gross domestic product (GDP) growth decreases by one percent in a worst-case scenario, it will disproportionately affect developing economies. To prevent the long-term financial consequences of climate change, it is crucial to collectively enforce strict carbon emissions policies. By mitigating climate change sources through these policies, we can address a considerable portion of its effects. Moreover, adaptation policies can help mitigate the remaining impacts. Enforcing these strategies can help mitigate significant dangers and mitigate the economic repercussions of climate change. Ignoring climate change could result in a considerable decrease in annual GDP, plummeting from 0.9% to 0.8% by 2060 (Carleton & Hsiang, 2016). To facilitate the evolution of business methods, HR should comprehend the root cause of the issue. This necessitates grasping the

way the market and surroundings are seen as communal assets, which can sometimes give rise to conflicts of interest. In situations where one must be prioritised over the other, the market typically takes precedence (Shamim et al., 2016). Consequently, organisations must navigate the delicate balancing act of serving shareholders, employees and the planet. Despite the growing emphasis on ecological values among new generations in the labour force, reshaping successful business practices without exacerbating environmental deterioration remains a hurdle. Businesses are more inclined to support environmental initiatives when there is a distinct business advantage or benefit (Kianto et al., 2017).

A future-oriented HRM strategy incorporating sustainability principles in its operations is key to its effectiveness. This, in turn, involves recruiting, developing and managing employees in a manner that is sustainable and socially responsible. Therefore, organisations must focus on hiring adaptable professionals, ensuring fair play and workers' rights are promoted, nurturing talents as well as strengthening working relationships (Becker, 2011). More specifically, SHRM practices should focus on attracting and retaining motivated and skilled employees for a good work climate and opportunities for enhancement (Ehnert, 2009; Prins et al., 2020). Concerning integration of sustainability into HRM practices, three fundamental dimensions are crucial (Macke & Genari, 2019). The first dimension – concerned with talent attraction and retention – requires implementation of measures aimed at addressing labour market challenges such as scarcity of professional staff, increasing workforce diversity in globally operating firms or changing societal values (Ehnert, 2009).

The recent times have seen SHRM grab the attention of HRM scholars and practitioners due to its expected benefits for organisations, employees, consumers as well as the external environment. The literature identifies different forms of SHRM, each emphasising distinct internal and external outcomes (Aust et al., 2020; Kramar, 2014). First there is socially responsible HRM (SRHRM) which emphasises human and social objectives to foster sustainability in organisations. It involves engaging in socially responsible HR behaviour and policies that create social value for firms while improving their social standing. This is done by having a better understanding on how corporations impact people within and outside their boundaries (Shen & Benson, 2016). Therefore, it is important to note that the core objective of HRM initiatives still remains economic which are aimed at minimising adverse effects on companies, managing business risks, enhancing organisational attractiveness to talented individuals and its reputation while adapting to changing customer preferences with a view of maximising profits and shareholder wealth (Dyllick & Muff, 2016). So then again, SRHRM is part of the wider economic goals associated with HRM practice (Voegtlin et al., 2022).

The practice-based framework offers support for organising sustainable HRM components within organisations. According to the framework (Ehnert, 2009), both internal and external factors drive companies to develop a customised sustainability strategy. This strategy impacts corporate-level objectives, HRM-level sustainability goals and the necessary HRM-related actions (Bush, 2020). The framework aims to identify practices that promote sustainable HRM. Grounded in real-world evidence on sustainable HRM from company websites