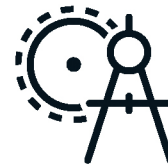




ROUTLEDGE  
HANDBOOKS



# Routledge Handbook on Labour in Construction and Human Settlements

The Built Environment at Work

Edited by Edmundo Werna and George Ofori

# ROUTLEDGE HANDBOOK ON LABOUR IN CONSTRUCTION AND HUMAN SETTLEMENTS

*Routledge Handbook on Labour in Construction and Human Settlements* presents a detailed and comprehensive examination of the relationship between labour and the built environment, and synergises these critical focus areas in innovative ways. This unrivalled edited collection of chapters analyses problems and presents possible solutions related to the employment and conditions of workers in the construction industry. It provides comprehensive coverage of the relationship between the global workforce and the built environment and is divided into four topical areas: how labour and the built environment relate to development; employment generation in the built environment; quality of employment in the built environment; and the impact of the built environment on labour in other sectors.

Underpinning the entire book is the premise that the way the built environment is produced, and its main products – buildings, cities and towns – have an impact on large numbers of workers. At the same time, the quality of the built environment requires construction workers who are well trained and with good working conditions. While cities and towns are the engines of economic growth, they will not be able to fulfil their economic potential if poverty in the workforce is not addressed. Those who are unemployed, underemployed or work in unfavourable conditions cannot fully contribute to production, and at the same time are limited in their ability to purchase goods and services – therefore limiting economic growth and restricting improvements in their living standards. In addition, investments in infrastructure, housing and inner-city redevelopment cannot be sustainable if labour issues – i.e., poverty – are not addressed. This book aims at analysing this complex set of issues comprehensively and will be essential reading to a wide range of researchers across the interdisciplinary intersections of construction, business and management, economic development, urban studies, sociology, political science and project management.

**Edmundo Werna** is a specialist in the built environment, including the construction industry and urbanism. He is widely recognised from his work on labour in construction and in human settlements during his 16 years at the ILO (International Labour Office, United Nations). He joined the London South Bank University in July 2020, after 22 years at the United Nations (United Nations Development Programme and ILO). He is currently also a

visiting researcher at Westminster and Oxford Brookes universities, and a member of the editorial boards of *Habitat International* and *International Journal of Urban Sustainable Development*.

**George Ofori** has been working on research in construction industry development since 1980. He has written four books on the construction industry and its development, and a more recent book on leadership in construction. He has experience in curating and editing collections of chapters in world-leading books on subjects in construction. Ofori is a Professor in the School of the Built Environment and Architecture at London South Bank University, UK. He was, until recently, the Deputy Chair of the Board of CoST, the Infrastructure Transparency Initiative and a Member of the Board of Trustees of Engineers Against Poverty.

ROUTLEDGE HANDBOOK  
ON LABOUR IN  
CONSTRUCTION AND  
HUMAN SETTLEMENTS

The Built Environment at Work

*Edited by Edmundo Werna and George Ofori*

Designed cover image: © Getty Images

First published 2024

by Routledge

4 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*

© 2024 selection and editorial matter, Edmundo Werna and George Ofori; individual chapters, the contributors

The right of Edmundo Werna and George Ofori to be identified as the authors 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*

Names: Werna, Edmundo, editor. | Ofori, George, editor.

Title: Routledge handbook on labour in construction and human settlements : the built environment at work / edited by Edmundo Werna and George Ofori.

Description: New York, NY : Routledge, 2024. | Includes bibliographical references and index.

Identifiers: LCCN 2023030298 (print) | LCCN 2023030299 (ebook) | ISBN 9781032201863 (hardback) | ISBN 9781032202082 (paperback) | ISBN 9781003262671 (ebook)

Subjects: LCSH: Construction workers--Employment. | Construction industry--Employees--Health and hygiene. | Work environment. | Labor policy. | Human settlements--Social aspects.

Classification: LCC HD9715.A2 R6838 2024 (print) | LCC HD9715.A2 (ebook) | DDC 331.2/046900973--dc23/eng/20230731

LC record available at <https://lcn.loc.gov/2023030298>

LC ebook record available at <https://lcn.loc.gov/2023030299>

ISBN: 978-1-032-20186-3 (hbk)

ISBN: 978-1-032-20208-2 (pbk)

ISBN: 978-1-003-26267-1 (ebk)

DOI: 10.1201/9781003262671

Typeset in Times New Roman  
by MPS Limited, Dehradun

*(from Edmundo Werna)*

*This is for Aquilea and Augusto. For doing all you could in the family.  
It worked!*

*(from George Ofori)*

*This is for Jonah and Cassius.  
You have been an inspiration and bright sparks in our family.*



Taylor & Francis

Taylor & Francis Group

<http://taylorandfrancis.com>

# CONTENTS

<i>List of tables</i>	<i>x</i>
<i>List of figures</i>	<i>xi</i>
<i>List of boxes</i>	<i>xiii</i>
<i>List of abbreviations</i>	<i>xiv</i>
<i>List of contributors</i>	<i>xix</i>
<i>Preface</i>	<i>xxvi</i>
1 Introducing the <i>Routledge Handbook on Labour in Construction and Human Settlements: The Built Environment at Work</i> <i>George Ofori and Edmundo Werna</i>	1
2 The built environment, construction, development and their implications for labour <i>George Ofori</i>	12
3 Characteristics of the construction industry and construction process, and implications for labour policies and practices <i>George Ofori</i>	39
4 Employment generation in the construction sector: Volatility and prospects <i>Arup Mitra</i>	63
5 Differing approaches to embedding low energy construction and climate literacy into vocational education and training <i>Linda Clarke, Melahat Sahin-Dikmen, Christopher Winch, Vivian Price, John Calvert, Pier-Luc Bilodeau, and Evelyn Dionne</i>	76



Contents

6	Green jobs and climate justice in the built environment: Lessons from American cities	97
	<i>Edmundo Werna, Mônica A. Haddad, Erin Ritter, and Anne Wurtenberger</i>	
7	Labour contracting, migration and wage theft in the construction industry in Qatar, China, India, US and the EU	114
	<i>Jill Wells</i>	
8	The precariat of the built environment: Decent work and the myth of Sisyphus	137
	<i>Andrés Mella</i>	
9	Human resource management and development in construction: Strategic considerations	158
	<i>Yaw A. Debrah, Aziz Christian Jabaru, Richard B. Nyuur, Florence Ellis, and Juliet Banoeng-Yakubo</i>	
10	Culture in construction: A driver as well as a barrier for the improvement of labour situations within construction industry	177
	<i>Wilco Tjihuis</i>	
11	Gender, construction work, and organisation	192
	<i>Maria Johansson and Kristina Johansson</i>	
12	Mistreatment of migrant construction workers: Trajectory from the past to the present and into the future	207
	<i>Abdul-Rashid Abdul-Aziz, AbdulLateef Olanrewaju, and Poline Bala</i>	
13	The smart city as the factory of the twenty-first century? How urban platforms reshape the nexus between the built environment, livelihoods, and labour	224
	<i>Jeroen Klink and Ângela Cristina Tepassê</i>	
14	Housing markets and labour markets: Towards a new research agenda for the Global South	242
	<i>Edmundo Werna, Ramin Keivani, and Youngha Cho</i>	

*Contents*

15	Social innovation of workplaces in the built environment: How public spaces have become central workplaces – Lessons from Kampala City, Uganda <i>Andrew Gilbert Were, Stephen Mukiibi, Michael Majale, and Barnabas Nawangwe</i>	263
16	Building resilient workplaces: Prioritizing safety and disaster risk reduction for the global workforce <i>Jane Katz, Emma Harwood, and Olivia Nielsen</i>	275
17	Impact of community on construction projects: Lessons from South Africa <i>C.O. Aigbavboa and I.O. Akinradewo</i>	297
18	Labour, the built environment and human settlements: Lessons from the book <i>George Ofori and Edmundo Werna</i>	313
	<i>Index</i>	323

# TABLES

2.1	Linkages between infrastructure and broader development goals	18
4.1	Workforce structure in India	65
4.2	Percentage share of agriculture and construction sectors in total value added (2011–2012 prices)	67
4.3	Average daily wages of casual worker employed across the industries in Urban India (in INR)	68
8.1	Categories of workplace accidents according to selected occupational prevalence and causes	142
8.2	Types of contract work	142
8.3	Women’s participation in the construction sector	146
8.4	Child labour: Common tasks, hazards, and injuries	148
11.1	Craft and related trades workers: building and manufacturing workers in Sweden (by sex and average age 2018)	194
12.1	Immigrants in selected construction-related occupations in the United States	210
12.2	Number of foreign construction trainees under the EPS, March 2015	211

# FIGURES

2.1	Range of competences in construction, importance of construction in job creation and parallel competences which construction relies on	23
10.1	Representation of the causal relations between the three areas ‘contact, contract, and conflict’, being prominent fields of attention, and their major importance within the business processes and the communication-structure therein, also known as the 3C-Model™	181
10.2	The NEDU-Matrix™ with conclusions and recommendations given as keywords, placed in the matrix fields	182
10.3	Impression of the One Za’abeel building and its surroundings in Dubai, United Arab Emirates	186
10.4	Schematic representation of individuals A and B standing beside each other; they might behave different or the same or could even be connected, but will still have different mindsets	186
10.5	Impression of the typical shape of the One Za’abeel building and its world-record cantilever-beam design structure in Dubai, United Arab Emirates	187
10.6	Schematic representation of individuals A and B standing beside each other but explicitly interconnected by their ‘culture’. However, this interconnection also creates a kind of distance, which symbolises the multi-faceted aspects of ‘culture’ by also distinguishing individuals, too	188
10.7	Impression of the typical facade and its reflection of sunlight of one of the towers of the One Za’abeel building in Dubai, United Arab Emirates	188
10.8	Schematic representation of an individual A or B, being individuals with their specific qualities, i.e. talents, knowledge, and skills	188

*Figures*

10.9	Model, representing individuals A and B, standing beside each other within a labour environment, being influenced by different aspects of 'culture', i.e.: Culture is 'helpful' or culture 'hurts', leading to happy or angry people	189
11.1	Female participation in the construction industry in a selection of countries	193
17.1	Local labour and businesses management framework	308

# BOXES

2.1	Profile of the construction workforce in the United States	25
3.1	Social value in Dominvs group, UK	43
8.1	Health and safety aspects during the COVID-19 pandemic	141
8.2	Unlawful work in the construction industry	142
8.3	Women in informal construction work in India	147
8.4	Precarious working conditions of children in Ulaanbaatar, Mongolia	149
8.5	The Spanish experience in reducing workplace accidents	151
8.6	Children working in brick kilns	152
11.1	Women becoming skilled trade workers, an example from India	200
11.2	Stop macho culture, a Swedish example	202
11.3	Women's awards	202

# ABBREVIATIONS

<b>AC</b>	Air Conditioning
<b>ACFTU</b>	All-China Federation of Trade Unions
<b>ADVANCE</b>	USAID Advancing Private Sector Engagement in Disaster Preparedness and Response in Indonesia (Indonesia)
<b>AGC</b>	Associated General Contractors of America (US)
<b>AI</b>	Artificial Intelligence
<b>AIRC</b>	Australian Industrial Relations Commission
<b>AMCHAM</b>	American Indonesian Chamber of Commerce (Indonesia)
<b>ARRA</b>	American Recovery and Reinvestment Act (US)
<b>BCA</b>	Building and Construction Authority (Singapore)
<b>BCAWU</b>	Building, Construction and Allied Workers Union (South Africa)
<b>BEIS</b>	Department for Business, Energy and Industrial Strategy
<b>BHA</b>	Bali Hotels Association (Indonesia)
<b>BHRRC</b>	Business and Human Rights Resource Centre
<b>BIM</b>	Building Information Modelling
<b>BtR</b>	Built to Rent
<b>BUS</b>	Build-up Skills (BUS)
<b>BWI</b>	Building and Wood Workers International
<b>CBD</b>	Central Business District
<b>CBTU</b>	Canadian Building Trades Unions
<b>CBMWU</b>	Construction and Building Materials Workers' Union (Ghana)
<b>CECE</b>	Committee for European Construction Equipment
<b>CIB</b>	International Council for Research and Innovation in Building and Construction
<b>CIB W112</b>	CIB Working Commission on Culture in Construction
<b>CIOB</b>	Chartered Institute of Building
<b>COVID-19</b>	Coronavirus Disease
<b>CITB</b>	Construction Industry Training Board (UK)
<b>CME</b>	Coordinated Market Economy

*Abbreviations*

<b>CQ</b>	Certificate of Qualification (Canada)
<b>CSIR</b>	Centre for Scientific and Industrial Research
<b>CSN</b>	Construction Skills Network (UK)
<b>DFID</b>	Department for International Development (UK)
<b>DHA</b>	Department of Human Settlements (South Africa)
<b>DLSA</b>	Division of Labor Standards Enforcement (California, US)
<b>DOL</b>	Department of Labor (US)
<b>DPW</b>	Department of Public Works
<b>DRM</b>	Disaster Risk Management
<b>DRR</b>	Disaster Risk Reduction
<b>EAP</b>	Engineers Against Poverty
<b>EC</b>	European Commission
<b>ECA</b>	Electrical Contractors Association
<b>EERI</b>	Earthquake Engineering Research Institute
<b>EFBWW</b>	European Federation of Building and Woodworkers
<b>EFQM</b>	European Foundation for Quality Management
<b>EIIP</b>	Employment Intensive Investment Programme
<b>EPA</b>	Employment Placement Agencies (EU)
<b>EPA</b>	Environment Protection Agency
<b>EPBD</b>	European Performance of Buildings Directive
<b>EPS</b>	Republic of Korea Employment Permit System
<b>ESG</b>	Environmental, Social and Governance
<b>EU</b>	European Union
<b>EWPOSS</b>	Enterprise Wage Payment Online Supervision System (China)
<b>FCL</b>	Fundación Laboral de la Construcción (Spain)
<b>FE</b>	Further Education (FE) College
<b>FES</b>	Foundation Energy Skills Programme
<b>FIC</b>	Factory Investigating Commission (New York State, US)
<b>FIEC</b>	European Construction Industry Federation
<b>GATS</b>	General Agreement on Trade in Services
<b>GCC</b>	Gulf Cooperation Council
<b>GDFCF</b>	Gross Domestic Capital Formation
<b>GDP</b>	Gross Domestic Product
<b>GIPC</b>	Ghana Investment Promotion Centre
<b>GHG</b>	Greenhouse Gas
<b>GPRO</b>	Green Professional Programme (Canada)
<b>GUD</b>	Global Urban Development
<b>GVA</b>	Gross Value Added
<b>HBE</b>	Home-based Enterprises
<b>HR</b>	Human Resource
<b>HRM</b>	Human Resource Management
<b>HSE</b>	Health and Safety Executive (UK)
<b>HUD</b>	Department of Housing and Urban Development (US)
<b>HVAC</b>	Heating, Ventilation and Air-Conditioning
<b>ICED</b>	Infrastructure and Cities for Economic Development
<b>ICT</b>	Information and Communications Technology



*Abbreviations*

<b>IFC</b>	International Finance Corporation
<b>ILGWU</b>	International Ladies' Garment Workers' Union
<b>ILO</b>	International Labour Organisation
<b>IOM</b>	International Organisation for Migration
<b>IoT</b>	Internet of Things
<b>IPA</b>	Infrastructure and Projects Authority
<b>4IR</b>	Fourth Industrial Revolution (or Industry 4.0)
<b>IT</b>	Information Technology
<b>JIB</b>	Electrical Joint Industry Board
<b>KADIN</b>	Indonesian Chamber of Commerce and Industry
<b>KCCA</b>	Kampala Capital City Authority
<b>KPI</b>	Key Performance Indicator
<b>LEC</b>	Low Energy Construction
<b>LEED</b>	Leadership in Energy and Environmental Design
<b>LID</b>	Labour Inspection Department (Qatar)
<b>LID</b>	Low-Impact Development
<b>LME</b>	Liberal Market Economies
<b>MADLSA</b>	Ministry of Administrative Development, Labour and Social Affairs (Qatar)
<b>MCEDC</b>	Montgomery County Economic Development Corporation
<b>MGNREGS</b>	Mahatma Gandhi National Rural Employment Guarantee Scheme (India)
<b>MIERA</b>	More Income and Employment in Rural Areas (Malawi)
<b>MLIT</b>	Ministry of Land, Infrastructure, Transport and Tourism (Japan)
<b>MMC</b>	Modern Methods of Construction
<b>MOHURD</b>	Ministry of Housing and Urban-Rural Development (China)
<b>MOSPI</b>	Ministry of Statistics and Programme Implementation (India)
<b>NAA</b>	National Apprenticeship Act (US)
<b>NABTU</b>	North American Building Trades Unions
<b>NEPA</b>	National Environmental Policy Act (US)
<b>NGO</b>	Non-Government Organisation
<b>NIST</b>	National Institute of Standards and Technology (US)
<b>NREGA</b>	National Rural Employment Guarantee Act 2005 (India)
<b>NZEB</b>	Nearly Zero Energy Building
<b>NCWM&amp;SISystem</b>	National Construction Workers Management and Service Information System (China)
<b>NOC</b>	No-objection Certificate
<b>NUA</b>	New Urban Agenda
<b>NWA</b>	National Water Agency (Singapore)
<b>NZIC</b>	New Zealand Infrastructure Commission
<b>ODA</b>	Official Development Assistance
<b>OECD</b>	Organisation for Economic Cooperation and Development
<b>ONS</b>	Office for National Statistics (UK)
<b>OSH</b>	Occupational Safety and Health
<b>OSHA</b>	Occupational Safety and Health Administration (US)
<b>PHP</b>	People's Housing Process (South Africa)

*Abbreviations*

<b>PLFS</b>	Periodic Labour Force Survey (India)
<b>PMAY</b>	Pradhan Mantra Awas Yojana (India)
<b>PPE</b>	Personal Protective Equipment
<b>PPP</b>	Purchasing Power Parity
<b>PWD</b>	Posting of Workers Directive (EU)
<b>QCB</b>	Qatar Central Bank
<b>REIF</b>	Real Estate Investment Fund
<b>REIT</b>	Real Estate Investment Trust
<b>RIBA</b>	Royal Institute of British Architects
<b>RICS</b>	Royal Institution of Chartered Surveyors
<b>SAFCEC</b>	South African Forum of Civil Engineering Contractors (SAFCEC)
<b>SAP</b>	Structural Adjustment Programme
<b>SBA</b>	Small Business Administration (US)
<b>SDG</b>	Sustainable Development Goal
<b>SEWA</b>	Self-Employed Women's Association
<b>SHARP</b>	Safety and Health Achievement Recognition Program (US)
<b>SIF</b>	Salary Information File (Qatar)
<b>SME</b>	Small and Medium-Sized Enterprise
<b>SOAS</b>	School of Oriental and African Studies, University of London
<b>SOE</b>	State-Owned Enterprise
<b>SFH</b>	Single-Family Housing Unit
<b>SFR</b>	Single-Family Rental
<b>STR</b>	Short-Term Rental
<b>TUWIC</b>	Tackling Undeclared Work in the Construction industry (EU project)
<b>TVET</b>	Technical Vocational Education and Training
<b>TWA</b>	Temporary Work Agencies (EU)
<b>UA Canada</b>	United Association of Journeymen and Apprentices of the Plumbing and Pipe Fitting Industry of the United States and Canada
<b>UAE</b>	United Arab Emirates
<b>UBI</b>	Universal Basic Income
<b>UN-Habitat</b>	United Nations Human Settlements Programme
<b>UNCTAD</b>	United Nations Centre for Tariffs and Trade
<b>UNDP</b>	United Nations Development Programme
<b>UNDRR</b>	United Nations Office for Disaster Risk Reduction
<b>UNEP</b>	United Nations Environment Programme
<b>UNFCCC</b>	United Nations Framework Convention on Climate Change
<b>UNICEF</b>	United Nations Children's Emergency Fund
<b>UNICRI</b>	UN Interregional Crime and Justice Research Institute
<b>UNOCHA</b>	United Nations Office for the Coordination of Humanitarian Affairs
<b>USAID</b>	United States Agency for International Development
<b>USMID</b>	Uganda Support to Municipal Infrastructure Development Programme
<b>UTIP</b>	Union Training and Innovation Program
<b>VET</b>	Vocational Education and Training
<b>VET4LEC</b>	Inclusive Vocational Education and Training for Low Energy Construction

*Abbreviations*

<b>VoC</b>	Varieties of Capitalism
<b>VPP</b>	Voluntary Protection Program (US)
<b>WHO</b>	World Health Organisation
<b>WIEGO</b>	Women in Informal Employment: Globalizing and Organizing
<b>WPS</b>	Wage Protection System (Qatar)
<b>WSIZ</b>	Wheaton Sustainable Innovation Zone
<b>WTO</b>	World Trade Organisation

# CONTRIBUTORS

**Abdul-Rashid Abdul-Aziz** is a professor at Wawasan Open University, Malaysia. He was previously with Universiti Sains Malaysia for more than 30 years. He was commissioned twice by the International Labour Organisation to research into foreign workers in the Malaysian construction industry. Apart from construction labour, his research interests include international construction and low-cost housing.

**C.O. Aigbavboa** is the Director of the Research Chair in Sustainable Construction Management and Leadership in the Built Environment at the University of Johannesburg, South Africa. He specialises in sustainable construction industry development, focusing on areas such as sustainable housing regeneration, construction management, and the application of artificial intelligence in the built environment sector. He has authored 19 research books and mentored numerous postgraduate and postdoctoral researchers. He is the chief editor of the *Journal of Construction Project Management and Innovation*, and a visiting professor at Shandong University, China.

**I.O. Akinradewo** is a PhD candidate in Construction Management at the University of Johannesburg, South Africa, where he obtained his Master's in Quantity Surveying with distinction in 2019. He is a certified blockchain architect with the Blockchain Council, US. As a testament to his research activities, he won the "Academic Rising Star" award at The BIM Africa Innovation Awards 2021.

**Poline Bala** is the Director of the Institute of Borneo Studies and Professor of Anthropology at the Faculty of Social Sciences and Humanities at Universiti Malaysia Sarawak. Her focus area of research has been quite broad. Foremost is the anthropology and history of Bornean societies. This includes population movement, and interaction and labour relations between communities at the frontiers of international boundaries. Poline has also been examining the interplay between technologies (i.e., information and communication technologies), government policies and strategies for development intervention in Malaysia.

**Juliet Banoeng-Yakubo** is a Lecturer in Business Management at De Montfort University, UK. Her PhD, undertaken at the Warwick Business School, UK, examined shared leadership in intra-organisational work teams in the global south. Her research interests include leadership, creativity, innovation and work teams. Her research has appeared in high-ranking peer-reviewed journals, including the *Leadership Quarterly*.

**Pier-Luc Bilodeau** is Professor in the Department of Industrial Relations at Université Laval (Quebec City, Canada), where he earned his PhD. His research focuses on collective bargaining and labour policy in the construction industry. He is a Construction Industry Research Team member of the *Building it Green* project for the Canadian Building Trade Unions, a co-researcher at the Interuniversity Research Centre on Globalization and Work, and a research scholar at the Institute for Construction Employment Research.

**John Calvert** was an Associate Professor at Simon Fraser University in Vancouver, Canada prior to his retirement in 2021. He was a co-director of a major Social Science and Humanities research project, “Adapting Canadian Work and Workplaces to Climate Change,” which examined the role of labour in contributing to the efforts to find solutions to the climate crisis. His current research involves promoting climate literacy in Canada’s building trades. He has a PhD from the London School of Economics in the United Kingdom.

**Youngha Cho** is Reader in the School of the Built Environment and joint lead of the Healthy Ageing and Care Research, Innovation and Knowledge Exchange Network at Oxford Brookes University, United Kingdom. Youngha is an established researcher with an international reputation in housing policy, and private and public housing market analysis. She gained her PhD from London School of Economics and Political Science, United Kingdom. She collaborates with leading academics and institutions in Hong Kong, Japan, South Korea, Singapore and the United Kingdom, and some African countries. Her research interests include integration of subjects in housing, health and social care, and development of age-friendly communities.

**Linda Clarke**, Professor in the Centre for the Study of the Production of the Built Environment (ProBE), University of Westminster, London, is an expert to the European Construction Social Dialogue Working Group, Vocational Education and Training (VET) and was awarded the European Commission 2022 VET Researcher Excellence Award. She has long experience of comparative research across Europe on VET, employment, wage relations, equality, labour, and climate change, focusing on the construction industry, including *Inclusive VET for Low Energy Construction* (2019).

**Yaw A. Debrah** was a Professor of International Human Resource Management at Swansea University, United Kingdom. He holds a PhD from Warwick University, United Kingdom. His scholarly work has appeared in leading journals. Professor Debrah has consulted or conducted training for many organisations including the Commonwealth Secretariat, ILO, Singapore Telecom, Nigerian National Petroleum Corporation, Central Bank of Nigeria and private sector firms in Africa. His publications have been used by the International Monetary Fund and the World Bank in their dealings with African governments.

## Contributors

**Evelyn Dionne** is a PhD candidate in Industrial Relations at Université Laval, Canada, interested in work and unionism, notably in the construction industry. Her research focuses on environmental labour studies as well as diversity and inclusion. She is currently completing a thesis on unions as actors in the fight against climate change.

**Florence Ellis** is a Senior Lecturer in the Department of Human Resources and Organisational Development at the KNUST School of Business, Ghana. She holds a PhD in Management Studies from Swansea University, United Kingdom. Her research interests include Organisational Studies, Organisational Behaviour, Organisational Leadership, Conflict and Conflict Management in Teams and Organisations, Diversity in Team and Organisations, and Human Resource Management. Her research has appeared in a number of internationally recognised peer-reviewed journals.

**Andrew Gilbert Were** is a Lecturer at the Department of Architecture and Physical Planning, Makerere University. He holds a PhD in Urban Planning, Design and Management. His research includes informality and the urban micro-economy, slum upgrading, urban governance and management, and resettlement planning of displaced persons. He is a member of the Uganda Inter-Agency Committee on Slum Improvement Research Project and a UN-Habitat slum upgrading expert. He is the co-author of works on a moralist theory and a theory of spontaneous location.

**Mônica A. Haddad** is a Professor of Community and Regional Planning at Iowa State University. She specializes in geographic information systems (GIS) and spatial analysis applications for planning issues. Climate justice and social justice are the driving forces of her scholarship. Her work has been published in journals such as *Applied Geography*, *Frontiers in Sustainable Cities*, *The Professional Geographer*, and *Economic Development Quarterly*. She received her PhD in regional planning from the University of Illinois at Urbana-Champaign, United States.

**Emma Harwood** is a Program Coordinator at Miyamoto International, a global multi-hazard engineering and disaster risk management firm that sustains industries and communities worldwide. As a recent graduate, Emma brings a fresh perspective to her role at Miyamoto, where she supports her team's diverse project portfolio to realize development objectives in affordable housing and climate adaptation. Emma is instrumental in expanding the global footprint of the firm's non-profit arm, Miyamoto Relief, to positively impact communities affected by disaster and climate change.

**Aziz Christian Jabaru**, MPhil, is a Research Assistant at the University of Ghana Business School, Ghana. His research interest is in Human Resource Management and organizational behaviour. He holds an MPhil Degree in Human Resource Management from the University of Ghana Business School. He has presented his work at a conference.

**Kristina Johansson** is an Assistant Professor in Human Work Science at the Department of Social Science, Technology, and Arts at Luleå University of Technology in Sweden. Her research interest concerns gender and equality at work, focusing on both service and

industry organization. Her work has appeared in journals such as *Gender, Work and Organization*, *Gender, Place & Culture*, and *Men and Masculinities*.

**Maria Johansson** is an associate senior lecturer in Human Work Sciences at the Department of Social Science, Technology, and Arts at Luleå University of Technology in Sweden. Her research interest concerns occupational health and safety as well as gender and equality in the construction industry and other male-dominated industries.

**Jane Katz** is Board Vice Chair of Global Urban Development and an advisor to the UN and other global organizations on housing, land, and urban issues. She serves on the UNDRR Stakeholder Engagement Advisory Group, and the Steering Committee for UN Habitat's World Urban Campaign, among others. She was Director of International Affairs and Programs at Habitat for Humanity for close to twenty years. Previously, Ms. Katz worked in the public and private sectors at Fannie Mae and in US government agencies. She received her Master of Arts degree in Government and Politics from the University of Maryland, and Bachelor of Arts in Foreign Affairs from the University of Cincinnati.

**Ramin Keivani** is Head of School of the Built Environment and Professor of International Land Policy and Urban Development at Oxford Brookes University. He is an urbanist with a particular research interest on low income and affordable housing policy, urban social sustainability, and impact of land and property markets on urban development and urban equity in both developed and transition economies. He has a strong track record of international comparative urban research and has published widely on various aspects of housing, land markets and urban development in different parts of the world including Brazil, China, India, countries in the Asia Pacific, Central/Eastern Europe, the Middle East and Southern Africa, and the United Kingdom.

**Jeroen Klink** (BSc and MSc in economics from Tilburg University, the Netherlands; PhD in urban planning from University of São Paulo, Brazil) has worked as a staff member in the Institute for Housing and Urban Development Studies (Erasmus University, the Netherlands) and as a secretary for regional planning in the city of Santo André (Metropolitan São Paulo). Nowadays, he is an Associate Professor at the Federal University of the ABC region (UFABC, located in São Paulo) and board member of the Urban Studies Foundation (Glasgow, UK).

**Michael Majale** is an independent consultant/researcher and holds a Bachelors Honours degree in Architecture and a Master's degree in Urban and Regional Planning from the University of Nairobi, Kenya and a PhD from Newcastle University, United Kingdom He has over 30 years of international experience in the field of housing and urban development. He has expertise in research, policy and practice related to housing and urban development, and in particular housing for the urban poor and slum upgrading.

**Andrés Mella** is a development and policy specialist with a background in Economics, Law, and Development Economics (double MSc in Economic Development and Growth from Carlos III University, Spain and Lund University, Sweden). He manages green skills and

multi-stakeholder projects for the Fundación Laboral de la Construcción and has implemented social dialogue and private-sector development programmes for ILO-HQ and GIZ Malawi. He has also published research and policy notes addressing diverse aspects of working conditions in the built environment for ILO, African Development Bank; UK Foreign, Commonwealth and Development Office; International Trades Union Confederation; Building and Wood Workers International; and European Federation of Building and Woodworkers.

**Arup Mitra** is Professor of Economics at South Asian University in India. His research interest includes development economics, issues in urban development, labour and welfare, corruption, industrial growth and productivity, and gender inequality. He was awarded the Mahalanobis Memorial Gold Medal by the Indian Econometric Society for his outstanding contribution to quantitative economics. His book, *Insights into Inclusive Growth, Employment and Wellbeing in India*, published by Springer, received the Professor S. R. Sen Best Book Award, 2019. His book, *Urban Headway and Upward Mobility in India* (2020) is published by Cambridge University Press.

**Stephen Mukiibi** is an academician and a professional architect with thirty-one years' working experience, in the academia and architectural practice. He is an Associate Professor and former Head of Department of Architecture and Physical Planning at Makerere University. He has taught both at the undergraduate and graduate levels, supervising Masters and PhD students. He has carried out extensive research in areas of housing, housing policy, slum upgrading, human settlements and urban development in the East African region.

**Barnabas Nawangwe** has been the Vice Chancellor of Makerere University, one of the oldest and premier universities in Africa, since August 2017 and he is currently serving his second term of five years. Prior to that, he was Deputy Vice Chancellor, Dean and Principal of the College of Engineering, and Head of the Department of Architecture, all at Makerere University. His research interests are in the areas of vernacular architecture, urbanism and sustainable human settlements.

**Olivia Nielsen** is a Principal at Miyamoto International where she focuses on resilient housing solutions. From post-disaster Haiti to Papua New Guinea, she has developed and worked on critical housing programs in over 45 countries. Olivia has over a decade of experience in housing finance, housing public-private partnerships, post-disaster reconstruction and green construction. Through her work, she hopes to make safe and affordable housing available to all.

**Richard B. Nyuur** is a Professor in International Business at the School of Management, University of Bradford, United Kingdom. His research interests lie at the intersection of strategy and international business in the areas of international business strategy, international human resource management, and corporate social responsibility. His works have been published in journals such as *British Journal of Management*, *International Journal of HRM*, *Journal of International Management*, *International Marketing Review*, and *Journal of Business Research*, *Journal of Small Business Management*, and *Multinational Business Review*.



## *Contributors*

**AbdulLateef Olanrewaju** is affiliated with Universiti Tunku Abdul Rahman in Malaysia. He holds a Master of Science degree in the Built Environment from the International Islamic University Malaysia and a Doctorate from Universiti Teknologi PETRONAS Malaysia. He received his quantity surveying education at Kaduna Polytechnic in Nigeria. His academic pursuits focus on lecturing and research in the fields of quantity surveying, construction health and safety management, sustainable construction, value management, building maintenance, research methodology, and construction management.

**Vivian Price**, PhD, Professor at California State University, Dominguez Hills, former union electrician, is a researcher and filmmaker for local and international projects on labour and climate justice. Recent joint publications include “Defence sector worker views on the political-economic barriers to a Just Transition” and “A Green New Deal for all: The centrality of a worker and community-led just transition in the US.” Her film, “Talking Union, Talking Climate,” centres views of oil workers in the United States, Norway and Nigeria.

**Erin Ritter** is a Program Assistant for the Conservation Law Foundation. Based in the Rhode Island office, she works in environmental justice advocacy and research. She holds a BA in Religious Studies from Grinnell College, United States.

**Melahat Sahin-Dikmen** is a lecturer at the School of Organisations, Economy and Society, University of Westminster. She is an inter-disciplinary scholar whose expertise lies in the sociology of work and employment. Her recent research is concerned with the implications of climate change for the world of work with particular reference to the built environment occupations, and representations of gender. Her recent publications include ‘Climate change, inequality and work in the construction industry’ in Healy et al (2023).

**Ângela Cristina Tepassê** is a Brazilian economist with a master’s degree in political economics from the PUC University in São Paulo, Brazil. Since 2014, she has been working as a senior analyst at the inter-syndical Department for Statistics and Socioeconomic Studies (DIEESE). She has had works published on issues related to: public policies, work, employment, and income; labor market dynamics; and the entanglements between trade, growth and development, among others. She is currently doing PhD research on real estate platforms and housing affordability in Brazilian cities at the Federal University of the ABC region.

**Wilco Tijhuis** (PhD, MSc, BSc) is a part-time Associate Professor at the University of Twente in The Netherlands. His current research is on Construction Management and Procurement, Internationalisation and Strategies, Business Development and Business Cultures in the International Construction Industry. He is also joint coordinator of the Working Commission W112 “Culture in Construction” of the international research- and industry-platform, International Council for Research and Innovation on Building and Construction (CIB). Parallel to his academic position, Wilco has management positions in international industry and is an advisor to businesses.

## *Contributors*

**Christopher Winch**, Professor of Educational Philosophy and Policy at King's College London, has written extensively on the philosophy of education and vocational education, with a particular focus on epistemological issues related to professional knowledge and judgement and learning as well as taking part in projects on comparative European vocational education and training. Books he has authored include: *Dimensions of Expertise* (2010), *Teachers' Know-how* (2017), *Educational Explanations* (2022) and *Knowledge, Skills and Competence in the European Labour Market* (2010) with Linda Clarke and others.

**Anne Wurtenberger** is an Iowa State University Community and Regional Planning Alumna. While currently working for the U.S. Army Corps of Engineers on civil works and military planning projects, she also is in the final year of her graduate program in Homeland Security and Intelligence at American Military University.

# PREFACE

We first met each other at the United Nations Headquarters in New York where we had both been invited to attend the Expert Group Meeting and Follow-Up Workshop on “Changing Consumption Patterns in Human Settlements”, organised by the then United Nations Centre for Human Settlements in New York in April 1997, but had known of each other’s work, and had been in communication with each other before then. Edmundo was working at the University of Sao Paulo in Brazil, and George was then with the National University of Singapore. A previous collaboration between us was in 2003, when George was the lead consultant on a project on green jobs in construction in Malaysia for the International Labour Office (ILO). At the time, Edmundo worked at the ILO and was the focal point for this project. In 2017, George joined the London South Bank University. In 2020, Edmundo joined the university.

The book arose out of a discussion between us in 2021. We felt that it would make sense to consider: how construction workers benefit from the work they do in putting in place the countries’ physical basis for development, and building some of the most luxurious buildings, some of which become symbols of their nations, and give the citizens pride. We also wanted to explore how workers in other sectors of the economy benefit from the items provided for them by their counterparts in the construction industry – i.e. the products of the built environment. George was in the final stages of completing a book of which he was the Editor, the *Research Companion to Construction Economics*. He had initially promised himself that that would be the last of such books he would do. To his dismay, he had allowed himself to be persuaded to do another book, *Building a Body of Knowledge for Project Management in Developing countries*. This would be another stretch. Edmundo made a convincing case about how the present book would fill a huge vacuum. George was persuaded.

We would bring together Edmundo’s background in Development Economics and the Construction Industry, his wide experience, and in particular, his knowledge and experience of labour in construction from his time as the Construction Policy Adviser at the ILO in Geneva; and George’s research and practical experience in Construction Industry Development. We had several meetings to discuss and debate the subject. We reached consensus on the possible topics such a book would cover. The book covers the three

## Preface

themes we had in mind. What we are seeking to achieve is an inter- and multi-disciplinary work which brings the three themes together.

After the proposal was approved, we set out to invite potential authors who were leading experts on the particular themes. We were gratified that most of the people we invited agreed to write chapters. We were off to a good start. However, there were gaps in the list of topics for which it took some time to find authors. In the end, there were two topics that we could not find authors for. As new authors joined the endeavour and two found it no longer possible to contribute, the process was ‘organic’, as George described it to Edmundo.

We had good support from the publishers, as we had to keep moving the deadline for submitting the agreed manuscript. The main enabler to the process of coordinating the contributions was the willingness of some of the other authors to review the draft chapters. In particular, our mutual long-time friend, Jill Wells, was most helpful. She was very thorough in her reviews. We write more about her later in this note.

The problems and challenges were what one would expect in setting out to edit a collection of chapters. For a book with specifically selected authors, who would be expected to be busy, we had to be patient, and expect delays. We had to revise the dates each time a new author or group of authors agreed to join the process.

Would we have done anything differently? We believe the path we took was the right one.

We believe that we have made a new thrust into an area of knowledge built on three interrelated themes which should be studied together in order to find ways to realise the possible synergies among them. We will monitor developments in the field by following up on citations of the chapters in the book to see how the subject develops. We will write a short synopsis for the governments, especially of the developing countries, multilateral agencies such as the ILO and the World Bank, the regional development banks, and bilateral development partners. We hope the contributors of chapters, after they have seen the whole book, will be enthused to do more on the subject. We also hope they will continue to work towards the further development of the area.

We now end this short note by expressing our thanks. We start by thanking our families for putting up with long periods when we denied them chunks of our time. We continue with Jill Wells. George first met Jill in the 1980s, when both of them had completed their doctoral studies. They both have a strong interest in the construction industries in developing countries. Edmundo has also known Jill for many decades. An important point to reveal is that Edmundo was Jill’s successor as the Construction Sector Adviser at the ILO. We are really grateful for the huge support Jill gave us in our work on this book. We thank our co-contributors. We think, together with our co-contributors, we have produced a book which will open up discussions on, and further development of, the triad of themes: *how labour and the built environment relate to development; workers of the built environment; and the impact of the built environment on labour in other sectors.*

We are also grateful to Ed Needle, Publisher, Engineering at Taylor and Francis and his colleagues including Martha Luke, for the support they have given us in our work on this book.

Finally, we thank you, our reader, for picking up this book to read. We hope you find it useful for your purposes.

Edmundo Werna and George Ofori  
London, October 2023



# Taylor & Francis

Taylor & Francis Group

<http://taylorandfrancis.com>

## **Mistreatment of migrant construction workers : Trajectory from the past to the present and into the future**

By [Abdul-Rashid Abdul-Aziz](#), [AbdulLateef Olanrewaju](#), [Poline Bala](#)

### **ABSTRACT**

Labour migration is as old as human history. Based on current and centuries old practices, labour abuse in the construction industry is perhaps as old as humankind. With demographic changes in developed nations and poverty which afflicts labour-rich countries, labour migration is expected to continue in the future. This chapter posits that mistreatment of construction migrants in the future is likely to persist. Urban growth and physical infrastructure development of many nations owe in large part to the internal as well as international movement of construction workers, between developing and developed countries which is often the subject of interest, but also between developing countries and between developed countries. Such traverses give rise to labour abuse being global in nature. So dependent are labour-abundant developing countries on remittances by their citizens abroad that during the drafting of the General Agreement of Trade in Services (GATS),<sup>1</sup> they advocated for free movement of workers to be allowed as part of its provision, but their effort failed. In their final destinations, these migrants are often treated poorly by their construction employers: exploitative wages, insecure employment and forced labour, low safety standards and poor living conditions being the common features. Structural changes in the modern-day construction industry reinforced by discriminatory legislation and judicial systems of host countries have further entrenched undesirable mistreatment of migrants. Central to this poor treatment is the perception of these workers as no more than disposable construction resources. Given these hurdles, this chapter ends by asking whether fair, safe and decent employment will ever be available worldwide for migrant construction workers. All relevant international organisations and non-government organisations (NGOs) should orchestrate their efforts for greater impact, as demonstrated by the Global Compact for Safe, Orderly and Regular Migration (usually given the short-hand title 'Global Compact') which was endorsed by the United Nations General Assembly on 19 December 2018.