



**DEVELOPMENT  
CORRIDORS  
PARTNERSHIP**

# **IMPACT ASSESSMENT FOR CORRIDORS: FROM INFRASTRUCTURE TO DEVELOPMENT CORRIDORS**

Edited by:  
Jonathan Hobbs and Diego Juffe Bignoli  
**2022**

# The Development Corridors Partnership

The Development Corridors Partnership (DCP) is a research and capacity development initiative. It is a collaboration between institutions from China, Kenya, Tanzania and the UK. The main objective is to deliver effective research and capacity-building to help improve corridor planning and management. It aims to ensure that development corridor decision-making is based on sound scientific evidence and effective use of available planning tools and procedures, to ensure that risks are

avoided and opportunities exploited. The DCP comprises partners from the University of York, the University of Cambridge, London School of Economics, Sokoine University of Agriculture, the University of Nairobi, as well as the UN Environment Programme World Conservation Monitoring Centre (UNEP-WCMC), African Conservation Centre, the World Wide Fund for Nature (WWF), the Chinese Academy of Agricultural Sciences and the Chinese Academy of International Trade and Economic Cooperation (CAITEC).

DCP Partners:



For the purposes of this publication, DCP collaboration was extended to experts representing Netherlands Commission for Environmental Assessment, the Centre for Energy, Petroleum and Mineral Law and Policy at the University of Dundee, the University of Queensland, the Columbia Centre on Sustainable Investment, the GOBI

Framework for Sustainable Infrastructure Initiative (comprising the University of Oxford, University of Central Asia and the Independent Research Institute of Mongolia), The Biodiversity Consultancy, the Wildlife Institute of India, the Endangered Wildlife Trust and Ecotecnia Ingenieros Consultores SRL.

Expert Organisations:



This publication was made possible through funding provided by:



## Disclaimer

The views expressed in this publication are solely those of the authors and do not express the views of UNEP-WCMC or the Development Corridors Partnership. Any errors are the responsibility of the authors. Copyright of the respective chapters rests with the authors and re-use or reproduction requires the authors' prior permission. This book is based on work conducted by the authors in 2021.

## Citation:

### **This publication should be cited as:**

The Development Corridors Partnership (2022). *Impact Assessment for Corridors: From Infrastructure to Development Corridors*. Hobbs, J. and Juffe-Bignoli, D. (eds.). Cambridge: The Development Corridors Partnership.

### **Example of individual chapter citation:**

Gannon, K. (2022) Achieving the Sustainable Development Goals through Integrated approaches to Development Corridor Planning. In: *The Development Corridors Partnership (2022). Impact Assessment for Corridors: From Infrastructure to Development Corridor*. Hobbs, J. and Juffe-Bignoli, D. (eds.). Cambridge: The Development Corridors Partnership.

## Acknowledgements

This report would not have been possible without the hard work and invaluable support of the UNEP-WCMC DCP team: Amayaa Wijesinghe (Assistant editor and design coordination), Neil Burgess, Tanya Payne, Camilla Blasi-Foglietti, Cecilia Antonini, Aisha Niazi (editorial support and design), and Chris Hawksworth, Julia Wentworth, and Lisen Runsten (project management).

## Image Credits

Many embedded images in this report have been sourced through Shutterstock licensing. Any differing sources are named in the image credits.

# Foreword

In the course of a long and varied working life, I have been privileged to work with, or learn from, a stimulating panoply of individuals who are committed to contributing to the economic, social, and environmental development of all aspects of the United Nations Sustainable Development Goals.

Jon Hobbs and Diego Juffe-Bignoli are, thankfully, two of these individuals. I was delighted to learn that they had come together to produce, for the Development Corridors Partnership, a rich and stimulating collection of research reports, case studies and assessments relating to the array of efforts made under the rubric of 'development corridors'. They were determined to express the conviction that decisions made, primarily by governments, regarding the planning and building of Corridors, really must be informed by an evidence-based understanding of the consequences - positive or negative - of these decisions. And they have succeeded. But Jon Hobbs will never read these words. He was hospitalized after the bulk of the work was complete, and, to the deep sadness and regret of all who knew him, he passed away at the end of September, 2021.

Jon and Diego sought out and recruited a daunting array of researchers, scholars and stakeholders to shed light on the processes currently underlying the world of development corridors today. They certainly succeeded.

The work was initiated before the onset of the COVID-19 pandemic, and as governments turn to the formidable challenge of restoring

economic vitality without further damage to the climate, it becomes even more imperative that impact assessment be understood, embraced and improved. Jon and Diego have shown us the way forward for a journey which absolutely must be embarked upon.

They would be first to recognise that the Development Corridors Partnership as a whole must be commended for showing - in many different ways and places - that, not only is the need for impact assessment clear and present, but so are the skills and commitment of researchers, scholars and stakeholders. These are to be found in an impressive coming together of universities, civil society organizations and business groups, and communities.

All are part of an outstanding initiative, funded by the UK Research and Innovation Council, and managed by the UNEP-WCMC. This initiative has been embraced by some of the best minds that have been turned to the task of ensuring that - while we attempt to bring economic and social benefits to people, in line with the United Nations Sustainable Development Goals - we do not risk significant environmental and social costs, and thus actually undermine long-term development successes.

So, I urge you to read this book, and figure out how you might improve your own contribution to the challenges ahead. Jon and Diego have set out a case. It needs to be taken up, not set aside; acted on, not just talked about. It is in your hands.

**John Harker**

Chair of the Development Corridors Partnership Independent Advisory Board,  
Nova Scotia, Canada.

Dedicated to the memory of Jon Hobbs  
who was the architect and driving force of this book

# Executive Summary

**Driven by increasing globalisation, the development aspirations of nations, and the need to access resources, an infrastructure boom is impacting many regions of our planet.** New infrastructure projects are traversing diverse landscapes over hundreds of kilometres, often crossing international borders and penetrating into remote areas previously unaffected by industrialisation and urbanisation. These large-scale projects, mostly spanning several regions in a same country, but often linear and transnational in nature, are generically called corridors. Depending on the nature and objectives, they can be transport, infrastructure, growth, resource or economic corridors.

The rapid development of corridors globally presents environmental planning professionals with numerous challenges. **The primary need is to ensure that decisions about these developments are informed by an evidence-based understanding of their consequences - both positive and negative.** This will enable infrastructure development to meet development needs without adversely impacting ecological systems or human welfare. Improving the quality of infrastructure policies, plans, programmes and projects, by ensuring they include the necessary environmental and social scrutiny, is urgently required now - and will be for the foreseeable future. This challenge is the unifying theme of this publication.

**Using insights from Africa, Asia and South America, this sourcebook compiles 24 contributed papers written in 2021, covering many facets of the**

**opportunities and challenges presented by the rapidly growing number of infrastructure and corridor developments around the world.** Prevailing planning practices are reviewed through case studies along with the efficacy of some of the available tools to conduct systematic and comprehensive impact assessments. The latter includes Strategic Environmental Impact Assessment (SEA) and Environmental Impact Assessment (EIA).

As the title suggests the underlying thesis of this publication is that, where they are justified, **there are significant benefits in ensuring that corridors that contain single purpose infrastructure developments (utility, infrastructure or transport) progress through a carefully planned sequential process of diversification and expansion to ensure the maximisation of benefits in full-blown 'development corridors'.** In this book, development corridors are therefore aspirational. They comprise areas identified as priorities for investment to catalyse economic growth and development. They should be developed with multiple stakeholders and social, economic and environmental interests and interdependencies in mind. With the integration of sustainability principles and appropriate environmental and social standards, development corridors could become true '(sustainable) development corridors'. They should be planned to maximise positive opportunities and minimise negative risks. Without this, today's short-term successes will become tomorrow's challenges and long-term human welfare and ecosystem integrity will be undermined.

# Overview of contents

This book brings together a wide range of perspectives from experts, researchers, and practitioners around the world with the purpose to foster greater collaboration and increase our global understanding of corridors and their benefits and potential negative impacts. 13 of the 24 chapters are written by independent experts and researchers from Australia, Bolivia, Brazil, China, India, Kenya, Mongolia, South Africa, Tanzania, UK, and the USA. The book also includes 11 chapters containing material gathered by the Development Corridors Partnership, a programme of work led by UN Environment Programme World Conservation Monitoring Centre (UNEP-WCMC) and funded by the UK Government via their Global Challenges Research Fund.

The collection of papers in this sourcebook is divided into five sections. First an introductory section where we introduce some key terms and definitions that underpin this work ([Chapter 1](#)). We then explore some key principles and aspirations of corridors such as delivering the Sustainable Development Goals ([Chapter 2](#)), ensuring theory and practice align ([Chapter 3](#)), ensuring financial sustainability ([Chapter 4](#)), properly assessing environmental sensitivity ([Chapter 5](#)) respecting human

rights ([Chapter 6](#)), or maximising, co-benefits ([Chapter 7](#)).

In the next three sections, we present 15 case studies from three continents: Africa, Asia, and Latin America. These case studies explore key challenges and lessons learned from specific planned, ongoing, and already implemented developments. They are presented as individual stories that readers can explore.

The final and fifth section aims to summarise lessons learned from a 4-year research and capacity building programme specifically aiming to understand the key challenges and opportunities around corridors and that has been the major driving force of this work: The Development Corridors Partnership project (DCP). DCP is a collaborative partnership across UK, Kenya, Tanzania and China, funded by the UK Research and Innovation Global Challenges Research Fund (see [Chapter 23](#)).

The book finishes with an overview of the lessons learned from the contributed papers included in this book and develops ten principles for corridor planning and delivering a meaningful and comprehensive impact assessment ([Chapter 24](#)), which we summarise here as ten key messages.

## Key messages

1

Corridors must seek to achieve positive sustainability outcomes:

The mindset underwriting environmental planning of most infrastructure developments has been to mitigate negative impacts. The planning of few existing corridors is based on their role in supporting a sustainability vision for a country or region in which they are situated. Corridor developments must therefore be based on sustainability principles and support progress towards national, regional and international sustainable development goals. A true development corridor will seek to do good, as well as to mitigate negative impacts.



2

### Integrated and inter-disciplinary approaches are needed:

Corridor developments are extensive, complex, multifaceted features traversing many landscapes. They can bring about significant transformational change to physical, economic, social, and cultural systems, and serve as interconnecting features. Yet engagement in corridor planning is often constrained by limited disciplinary and institutional involvement, with projects often superimposed upon communities. Corridor developments need diverse expertise and experience in their planning and management, including local stakeholder knowledge, avoiding disciplinary, institutional, or sectoral silos, that can result in policy conflicts, contradictions, and inconsistencies.

3

### Corridor proponents should clearly demonstrate consideration of alternatives:

Corridor options should not be limited to a preferred proposal favoured by an elite. Corridor developments must consider all feasible alternatives (including maintenance of the status quo and no corridor development) and make the risks and opportunities of each option explicit and transparent through meaningful consultation. An important requirement in all corridor planning is to justify the need for a wide choice of options and an explanation of the potential benefits it will bring and to whom, in comparison with the alternatives. Any necessary trade-offs and how any significant potential negative impacts will be effectively managed, and opportunities created must be explained.

4

### Public participation and stakeholder engagement should be at the core of corridor planning:

Corridor planning frequently fails to include meaningful participation of all stakeholders. Corridors can profoundly affect the lives and rights of indigenous peoples and local communities, potentially for generations. A common failing is that the first opportunity for local stakeholders to engage arises only after all strategic decisions have already been made and the only option remaining is for them to react negatively to a fait accompli. The meaningful engagement of all stakeholders is necessary to ensure their role is more than reactive. The way corridors are viewed by different stakeholders must be identified, understood, and addressed. Corridor developments must ensure that all interested and affected people are provided with adequate information about a proposal and have meaningful ways to engage in decision-making processes from the outset of strategic planning.

5

### Mainstreaming and tiering are fundamental for corridor success:

Corridor planning requires a tiered assessment process, ensuring that environmental and social issues are considered alongside financial and technical considerations from the start of strategic planning or programme development, right through to project specifics. Conceptual corridor planning is frequently dominated by technical and financial suitability criteria with environmental, social, cultural, and human rights sensitivity issues being considered, at best, as externalities, retrospectively, once issues and problems arise. Strategic planning is important because it is when the full range of options is still open for discussion. It also establishes the parameters that will frame and implement a corridor plan or programme. Environmental and social considerations (and the interactions between them) should be considered early in strategic decision-making alongside (and to inform) technical, financial, and economic considerations.

6

### An iterative process is needed:

Corridors exist in dynamic environments and need to be responsive to changing circumstances and priorities. Planning must adjust as circumstances and available information changes. The process should identify, map, and engage all interested and affected stakeholders from the earliest stage of corridor planning and throughout the planning and management of the corridor. New concerns and evidence will likely emerge as a corridor development progresses. Corridor planning frequently places undue emphasis on the production of a report (Environmental Impact Report) and its influence on the decision to proceed. The process may not be so linear in nature. It may involve many adjustments and decisions as new evidence emerges and predictions improve. A good-quality report and recommendations is necessary, but they are dependent upon a comprehensive process of ongoing dialogue and engagement with all stakeholders.

7

#### Corridors must ensure effective use of available tools:

Many corridor environmental impact assessments fail to meet required international standards. Corridor planning and management should make systematic and adequate use of available impact assessment procedures, methods, techniques, and tools to ensure good-quality decisions. The available procedures discussed in this publication (notably Strategic Environmental Assessment and Environmental Impact Assessment) and their associated methods, tools and techniques should be used when appropriate to help ensure that a systematic process identifies all significant potential benefits and development outcomes, and that they outweigh the costs and risks to affected people and their livelihoods and environments. The objectivity and quality of corridor decisions are dependent upon the effective use of the available tools.

8

#### Plan corridors with resilience and adaptability in mind:

Prevention will always be better than cure in addressing the negative impacts of corridors, and this should be the priority. However, some circumstances dictate an inevitability of negative impacts. Corridors, therefore, need to be designed to be made resilient to anticipated changes and adaptation measures may be necessary as 'coping' mechanisms or to offset unavoidable impacts, such as the impacts caused by climate change. The suitability of measures will require ongoing monitoring and adaptation as needs arise.

9

#### Seek impact, influence, and implementation capacity:

The decision to proceed with a corridor is ultimately the responsibility of decision makers. They are usually the representatives of all stakeholders' interests and custodians of their natural resources. Any impact assessment report must provide adequate information to ensure sufficiently good-quality decisions. If they are to be effectively implement the recommendations provided. Attempts to improve the performance of planning and associated assessment processes of corridors must tackle the ways in which outcomes are shaped by political contexts and institutional capacities. Approaches to working on assessment processes should integrate political economy analyses and institutional capacity assessment from the outset and on an ongoing basis. Resulting insights should inform the design and implementation of interventions intended to improve planning practice.

10

#### Evolve from Infrastructure to Development Corridors:

The prospects for linear infrastructure projects to evolve into comprehensive development corridors are often left to chance and spontaneity. Infrastructure projects are often developed in isolation and in an incremental way. For infrastructure projects to progress and become true development corridors, the transition must be systematically sequenced into planning from the start. Assessments must include consideration of potential induced, secondary, synergistic, transboundary, and cumulative impacts likely to result from the corridor development. The progression from infrastructure to development corridors must be based on a systematic, comprehensive, and integrated assessment of the potential positive environmental, social and economic opportunities and the rigorous avoidance or management of negative impacts.

# CONTENTS

|                      |          |
|----------------------|----------|
| <b>FOREWORD.....</b> | <b>5</b> |
|----------------------|----------|

|                               |          |
|-------------------------------|----------|
| <b>EXECUTIVE SUMMARY.....</b> | <b>7</b> |
|-------------------------------|----------|

|                           |           |
|---------------------------|-----------|
| <b>INTRODUCTION .....</b> | <b>19</b> |
|---------------------------|-----------|

## **1. Context and Definitions.....20**

|  |    |
|--|----|
| 1.1 Why this publication? .....            | 20 |
| 1.2 Drivers of infrastructure growth ..... | 21 |
| 1.3 Defining infrastructure.....           | 22 |
| 1.4 Defining corridors.....                | 23 |
| 1.5 Conclusion .....                       | 38 |
| Acknowledgements .....                     | 39 |
| References.....                            | 39 |

## **2. Achieving the Sustainable Development Goals through Integrated Approaches to Development Corridor Planning .....40**

|  |    |
|--|----|
| 2.1 Introduction .....   | 40 |
| 2.2 Domesticating the SDGs in Kenya and Tanzania .....                             | 42 |
| 2.3 Delivering the SDGs in Development Corridors .....                             | 43 |
| 2.4 Development synergies and trade-offs in development corridors .....            | 44 |
| 2.5 Delivering the SDGs through corridors: An integrated governance challenge..... | 47 |
| 2.6 A way forward through Strategic Environmental Assessment? .....                | 50 |
| Acknowledgements .....   | 51 |
| References.....  | 51 |

## **3. Tackling the EIA Impact Gap: Addressing Political Economy Realities to Bring Actual Practice Closer to Best Practice.....53**

|  |    |
|--|----|
| 3.1 Introduction .....   | 53 |
| 3.2 EIA processes - best practice versus actual practice.....                          | 54 |
| 3.3 Political realities and EIA performance.....                                       | 60 |
| 3.4 Towards more impactful EIA processes: dealing with political context head-on ..... | 64 |
| 3.5 Conclusion .....   | 68 |
| Acknowledgements.....  | 70 |
| References.....  | 70 |

|           |  |            |
|-----------|--|------------|
| <b>4.</b> | <b>The Role of Lender Safeguards in Addressing Biodiversity Risks Associated with Large-scale Infrastructure Projects.....</b>         | <b>74</b>  |
|           | 4.1 Lender safeguards for biodiversity .....   | 75         |
|           | 4.2 Challenges in applying lender safeguards.....  | 78         |
|           | 4.3 Conclusions .....  | 83         |
|           | References.....  | 83         |
| <b>5.</b> | <b>Environmental Sensitivity Mapping for Corridor Planning .....</b>   | <b>85</b>  |
|           | 5.1 Introduction .....   | 86         |
|           | 5.2 Defining and differentiating sensitivity.....  | 88         |
|           | 5.3 Moving beyond a binary vision of sensitivity.....  | 90         |
|           | 5.4 Strengthening impact assessments.....  | 91         |
|           | 5.5 Connecting impact assessments with other policies at the landscape level .....   | 92         |
|           | 5.6 Conclusion .....   | 94         |
|           | Acknowledgements.....  | 94         |
|           | References.....  | 95         |
| <b>6.</b> | <b>Putting Social Issues on the Infrastructure Agenda: Getting to a Rights-based Approach to Corridor Development.....</b>             | <b>97</b>  |
|           | 6.1 Introduction .....   | 98         |
|           | 6.2 Key challenges in putting social issues on the infrastructure corridor agenda .....  | 99         |
|           | 6.3 What is different about a corridor?.....   | 105        |
|           | 6.4 Conclusion .....   | 107        |
|           | 6.5 Recommendations .....  | 109        |
|           | Acknowledgements.....  | 110        |
|           | References.....  | 110        |
| <b>7.</b> | <b>Accounting for Sustainable Development Co-benefits: Insights from Local Experiences with Climate Resilience Interventions .....</b> | <b>113</b> |
|           | 7.1 The concept of co-benefits .....   | 115        |
|           | 7.2 Insights from climate resilience: integrating co-benefit appraisal into planning and decision-making processes .....               | 116        |
|           | 7.3 Examples of co-benefit appraisals in projects relevant for the development corridor context.....                                   | 119        |
|           | 7.4 Conclusions .....  | 124        |
|           | Acknowledgements .....   | 126        |
|           | References .....   | 127        |

## **AFRICAN CASE STUDIES ..... 129**

### **8. The Mtwara Development Corridor in Tanzania: Strategic Environmental Assessment of a Planned Corridor..... 130**

|     |   |     |
|-----|---|-----|
| 8.1 | Introduction .....  | 131 |
| 8.2 | The Mtwara development corridor in Tanzania .....   | 132 |
| 8.3 | Biodiversity and ecosystem services within the Mtwara corridor .....                                | 135 |
| 8.4 | Review of existing impact assessments .....   | 136 |
| 8.5 | National sectoral SEA for the Transport and Trade Systems Development Plan of Tanzania (2013) ..... | 137 |
| 8.6 | Regional SEA for the Mtwara and Ruvuma development plans .....                                      | 141 |
| 8.7 | Conclusions .....   | 144 |
|     | Acknowledgements .....  | 146 |
|     | References .....  | 147 |

### **9. Managing the Environmental and Social Impacts of Agricultural Transformation: Southern Agricultural Growth Corridor of Tanzania..... 153**

|     |  |     |
|-----|--|-----|
| 9.1 | Introduction .....                       | 154 |
| 9.2 | Key players and stakeholders .....       | 155 |
| 9.3 | Impact assessment in Tanzania .....      | 156 |
| 9.4 | Environmental impact assessment .....    | 157 |
| 9.5 | Strategic environmental assessment ..... | 159 |
| 9.6 | Inclusive Green Growth Tool .....        | 161 |
| 9.7 | Discussion and recommendations .....     | 162 |
|     | References .....                         | 164 |

### **10. The Importance of Building Climate Resilience into Environmental Assessment Processes: The Case for the Southern Agricultural Growth Corridor of Tanzania..... 166**

|      |   |     |
|------|---|-----|
| 10.1 | Introduction .....  | 167 |
| 10.2 | Current climate change adaptation measures in SAGCOT .....                          | 168 |
| 10.3 | Proposed methodology for a strategic climate change adaptation plan for SAGCOT..... | 169 |
| 10.4 | Conclusions .....   | 174 |
|      | Acknowledgements .....  | 175 |
|      | References .....  | 175 |

|            |  |            |
|------------|--|------------|
| <b>11.</b> | <b>Public Participation in the Environmental Impact Assessment Process for Development Corridors in Kenya.....</b>   | <b>176</b> |
| 11.1       | Introduction .....   | 177        |
| 11.2       | The SGR and LAPSSET corridors.....   | 178        |
| 11.3       | The environmental and social contexts .....  | 178        |
| 11.4       | The Environmental Impact Assessment framework.....   | 180        |
| 11.5       | The EIA process.....   | 180        |
| 11.6       | EIA and development projects.....  | 182        |
| 11.7       | The study.....   | 183        |
| 11.8       | Issues identified .....  | 184        |
| 11.9       | Comparative EIA public participation process analysis .....  | 185        |
| 11.10      | Stakeholder participation in the EIA for the corridor projects .....   | 188        |
| 11.11      | Determinants of stakeholder participation in EIA.....  | 189        |
| 11.12      | Stakeholder attitudes towards the EIA for the corridors .....  | 190        |
| 11.13      | Conclusion and recommendations .....   | 191        |
|            | Acknowledgements .....   | 193        |
|            | References .....   | 193        |
| <b>12.</b> | <b>Exploring the Potential of Scenario Planning for More Effective Environmental Assessments: Standard Gauge Railway Development Corridor, Kenya .....</b> | <b>200</b> |
| 12.1       | Introduction .....   | 201        |
| 12.2       | Brief history of a flagship infrastructure project shrouded in controversy .....   | 202        |
| 12.3       | Method.....  | 204        |
| 12.4       | Results and discussion .....   | 208        |
| 12.5       | Environmental impacts.....   | 211        |
| 12.6       | Economic impacts.....  | 214        |
| 12.7       | Social impacts.....  | 215        |
| 12.8       | Conclusions: scenarios as tool for strategy development in EIAs and SEAs.....  | 219        |
|            | References .....   | 220        |
| <b>13.</b> | <b>Community Engagement in Corridor Planning and Implementation in Kenya .....</b>   | <b>229</b> |
| 13.1       | Introduction .....   | 229        |
| 13.2       | National regulations on community engagement in Kenya .....  | 231        |
| 13.3       | Case study: LAPSSET .....  | 233        |
| 13.4       | Case study: SGR .....  | 235        |

|      |                        |     |
|------|------------------------|-----|
| 13.5 | Conclusions .....      | 237 |
|      | Acknowledgements ..... | 238 |
|      | References.....        | 239 |

**14. Guidelines on Mitigating the Negative Impacts on Biodiversity of Road, Rail and Power Corridors: South African Experiences.....240**

|      |  |     |
|------|--|-----|
| 14.1 | Infrastructure development in South Africa.....  | 241 |
| 14.2 | Legal framework for addressing the environmental and social impacts caused by development corridors..... | 242 |
| 14.3 | Implementing and enforcing the mitigation hierarchy .....  | 245 |
| 14.4 | Tools and solutions to assess and manage environmental impacts.....                                      | 246 |
| 14.5 | Conclusions .....  | 248 |
|      | Acknowledgements.....  | 249 |
|      | References.....  | 249 |

**15. Lessons Learned from the Maputo Development Corridor: An Environmental and Social Perspective .....255**

|      |   |     |
|------|---|-----|
| 15.1 | Introduction .....  | 255 |
| 15.2 | Problem statement.....  | 259 |
| 15.3 | Linkages with environmental and social environmental assessment in planning and management of corridors ..... | 260 |
| 15.4 | Conclusion .....  | 264 |
|      | Acknowledgements.....   | 265 |
|      | References.....   | 265 |

**ASIAN CASE STUDIES.....267**

**16. Environmental Safeguards for the Belt and Road Initiative: Current Status and Future Prospects.....268**

|      |  |     |
|------|--|-----|
| 16.1 | Belt and Road Initiative: scale and scope .....          | 268 |
| 16.2 | Environmental impact of infrastructure development ..... | 270 |
| 16.3 | Environmental impact of BRI .....                        | 271 |
| 16.4 | Environmental impact-related risks of BRI projects ..... | 273 |
| 16.5 | Environmental safeguards for BRI.....                    | 274 |
| 16.6 | MDB safeguards as a benchmark .....                      | 275 |
| 16.7 | Assessing BRI safeguards .....                           | 276 |
| 16.8 | The way forward.....                                     | 278 |
|      | Acknowledgements .....                                   | 282 |
|      | References.....  | 282 |

**17. Sensitive Planning and Design of Transportation Corridors: Vital Elements for Protecting India's Wildlife .....286**

17.1 Introduction ..... 286

17.2 Conservation challenges associated with transportation corridors traversing natural landscapes ..... 287

17.3 Environmental legislation for regulating transportation projects in India ..... 288

17.4 Structural mitigation measures for connecting fragmented habitats: prospects and challenges ..... 289

17.5 Structural mitigation measures applied to transportation projects in India ..... 289

17.6 Relevance of SEA in the planning of multiple linear corridors to ..... 295

17.7 Recommendations ..... 296

Acknowledgements ..... 297

References..... 298

**18. The Mekong River Corridor: A Critical Test for EIA/SEA Effectiveness .....300**

18.1 Introduction ..... 301

18.2 The Mekong river ..... 302

18.3 Development pressures ..... 303

18.4 Governance ..... 305

18.5 The Greater Mekong Sub Region (GMS) ..... 306

18.6 The Mekong River Commission (MRC)..... 306

18.7 The Lower Mekong Initiative ..... 310

18.8 The Lancang-Mekong Cooperation ..... 311

18.9 Review of hydropower developments ..... 311

18.10 Environmental planning and management..... 312

18.11 Conclusion ..... 315

18.12 Upper Mekong ..... 317

18.13 Lower Mekong ..... 320

18.14 The Mekong Delta ..... 327

Acknowledgements ..... 328

References..... 328



**19. The Belt and Road Initiative in Mongolia: Infrastructure Development and Impact Assessment .....331**

19.1 Introduction: the China-Mongolia-Russia corridor overview..... 332  
19.2 The China-Mongolia-Russia corridor ..... 334  
19.3 The Mongolian Steppe Road Programme..... 335  
19.4 Mongolia and the Belt and Road Programme ..... 336  
19.5 Impact assessment in Mongolia: the legal context..... 337  
19.6 Effectiveness of impact assessment policies and procedures ..... 341  
19.7 Impact assessment in planning and management of corridors..... 343  
19.8 Key recommendations for Central Asia ..... 343  
Acknowledgements..... 344  
References ..... 344

**LATIN AMERICAN CASE STUDIES.....347**

**20. Carajás Corridor in Brazil: Could a SEA have Reconciled Shared-use Infrastructure & Environmental Protection? .....348**

20.1 Historical background and current status of shared use of the Carajás corridor..... 349  
20.2 Long-term social and environmental implications of a pro-economic development agenda..... 351  
20.3 Could a SEA have reconciled shared-use and environmental protection in Carajás?..... 353  
20.4 Conclusions ..... 358  
Acknowledgements..... 359  
References..... 359

**21. Lessons Learned from SEAs of Road Infrastructure Developments in Bolivia: Santa Cruz-Puerto Suarez Corridor .....361**

21.1 Background and context..... 361  
21.2 Characterization of the corridor development area..... 362  
21.3 From EIA to SEA ..... 364  
21.4 The SEA process..... 365  
21.5 Results of the implementation of the SEA ..... 367  
21.6 Lessons learned..... 367  
Acknowledgements..... 368  
References..... 368

**22. Strategic Environmental Assessment for a Sustainable Mining Corridor: Addressing the Social and Environmental Risks of Tailings Dam Disasters after Mariana and Brumadinho .....369**

|      |  |     |
|------|--|-----|
| 22.1 | Introduction .....   | 370 |
| 22.2 | Background .....   | 371 |
| 22.3 | The Mariana and Brumadinho TD disasters: losses and reactions .....  | 372 |
| 22.4 | The EIA in Mariana and Brumadinho: failures in the social and environmental protection and evolving laws ..... | 376 |
| 22.5 | Approaches of the SEA for iron ore in Minas Gerais .....   | 379 |
| 22.6 | Conclusion and policy implications.....  | 381 |
|      | References.....  | 382 |

**LESSONS LEARNED ..... 385**

**23. Lessons learned from a corridor focused research and capacity-building programme .....386**

|      |                       |     |
|------|-----------------------|-----|
| 23.1 | Introduction .....    | 386 |
| 23.2 | Lessons learned.....  | 387 |
| 23.3 | Conclusion .....      | 400 |
|      | Acknowledgements..... | 401 |
|      | References.....       | 401 |

**24. Principles for development corridor planning .....402**

**Authors Profiles.....407**

# Putting Social Issues on the Infrastructure Agenda: Getting to a Rights-based Approach to Corridor Development

Margaret G. Wachenfeld

Themis Research and the Institute for Human Rights and Business, Brussels, Belgium

## ABSTRACT

Corridors are ultimately about people. People build them, use them, live alongside them and, ultimately, benefit and/or suffer from them. Recent messaging around the role of infrastructure corridors in the delivery of multiple Sustainable Development Goals (SDGs) provides a solid foundation in principle for considering and balancing all three dimensions of corridor development: economic, environmental and social. Despite the recent, welcomed emphasis on the sustainable development dimensions of infrastructure corridors, turning those messages into practice so that shared access and benefits become a reality for communities and workers along corridors will require far greater emphasis on the social dimension of corridors than has been seen to date. Social and human rights issues are still considered the next frontier in infrastructure investments. This chapter briefly addresses key challenges in putting social and human rights issues higher up the agenda in infrastructure corridors and why it is important to do so. It explores the multiple reasons why social and human rights issues are not likely to be addressed - or addressed sufficiently - without explicit requirements as part of corridor approval, implementation and monitoring processes. This chapter also addresses what is different about social impacts with a corridor, rather than a limited footprint infrastructure project, as corridors present a number of important additional challenges brought on by different corridor characteristics (i.e. their linear, dispersed, connected and complex nature). Finally, recommendations are made for improving the incorporation of, and attention to, social and human rights issues within impact assessment policies and practice for corridors.

## 6.1 Introduction

Corridors are ultimately about people. They are established with important objectives to facilitate trade and commerce, thus stimulating economic development. It is people who build them, however, and use them, live

Infrastructure corridors are considered crucial for development, putting infrastructure at “the very heart of efforts to meet the Sustainable Development Goals (SDGs)” (Economist Intelligence Limited 2019). The strong messaging around the role of infrastructure corridors in the delivery of multiple SDGs provides a solid foundation in principle for considering and balancing all three dimensions of corridor development: economic, environmental and social. Recent developments, such as the *G20 Principles for Quality Infrastructure* reinforce important messages about integrating not only environmental, but also social and human rights considerations into the full life cycle of infrastructure planning (G20 2019).

alongside them and, ultimately benefit and/or suffer from them. Goods and services move along corridors, but so do people. Yet people are often seen as bystanders in establishing and managing corridors.

The concept of development corridors, where corridors are purposefully planned to deliver shared benefits to communities all along the route – rather than these issues being treated as a mere afterthought – provides the justification and opportunity to apply these concepts to and along an entire corridor.

Despite the recent, welcomed emphasis on the sustainable development dimensions of infrastructure corridors, a recent review of research on corridors highlighted that development corridors “can have enormous social consequences, produce a range of large-scale social, political, economic and environmental trade-offs, generate very uneven impacts and exclude vulnerable populations” (Gannon K.E. et al., 2020; see [Chapter 2](#)).



Image credits: Diego Juffe Bignol

There are often long histories, entrenched political interests, and significant financial stakes underpinning large-scale infrastructure corridors that stand between ideals and reality, and that can have enormous consequences. The SDGs and the G20 Principles convey many of the right messages. Turning those principles into practice so that shared access

and benefits become a reality for communities and workers along corridors, will require far greater emphasis on the social dimension of corridors than has been seen to date (Office of the United Nations High Commissioner for Human Rights and the Heinrich Boll Foundation 2018). Social and human rights issues are rising to the top of the agenda, but are still considered the next frontier in infrastructure investments (Economist Intelligence Limited 2019).

## 6.2 Key challenges in putting social issues on the infrastructure corridor agenda

This section briefly addresses the key challenges in putting social and human rights issues higher up the agenda in infrastructure corridors. First, it situates social issues in the context of continually evolving Environmental Impact Assessment (EIA) practice. Second, it turns to identifying several reasons why social issues should be specifically addressed within the context of infrastructure projects. Third and finally, it addresses what is different about social issues in corridors, compared with other types of infrastructure projects.

### 6.2.1 Social and human rights issues within EIA history

As this publication highlights, EIAs have a long and rich history of being used (or not) in infrastructure corridors, in some cases, far more successfully than others. Captured in the Rio Declaration (United Nations Conference on Environment and Development 2006), in two international conventions (United Nations Economic Commission for Europe 1998), (United Nations Economic Commission for Latin America and the Caribbean 2018) and in the national legislation of many countries, (United Nations Environmental Programme 2018), EIAs have become an accepted part of the project-planning landscape, even if implementation faces the

many challenges highlighted in this publication (see Chapters 3, 11, 13 and 18). EIAs provide an important process standard, with a systematic procedural requirement to consider and address potential impacts and to involve, as a core part of the process, those potentially affected. The diversity of impacts that a project – or in this case a corridor – may have should in turn dictate the necessary disciplinary diversity needed to address those impacts appropriately within the EIA process. That diversity should mean, not only that the full range of issues are specifically and separately addressed but, importantly, the interplay among the impacts are specifically considered and addressed. That maturity of addressing and appropriately synthesizing the management of integrated impacts remains a work in progress.

Effective EIAs should always include a social dimension, even without the addition of the ‘S’ in the abbreviation. However, as social issues were often relegated to a secondary consideration, unsurprisingly, social impact assessments (SIAs) developed alongside EIAs in the 1970s and were done as part of EIAs, “usually badly” (Vanclay *et al.* 2015). For SIAs, there has not been the same clearly defined moment for social issues such as the Rio Declaration, which marked the coming of age of environmental rights and EIAs. The social bucket has often been seen as a disparate

collection of issues. Instead, they are about the issues that affect or concern people and affect their lives, directly or indirectly. The environmental and social safeguard policies (safeguards) of development finance institutions (DFIs) that projects must address to secure financing from institutions such as the World Bank, the International Finance Corporation (IFC) and the African Development Bank, include several specific social safeguard policies that address common social challenges in larger footprint projects in developing countries. They have played a role in shaping practice on addressing social issues covered in environmental and social impact assessments. Alongside the growing suite of DFI social safeguards, SIA practices matured, defining principles, developing approaches and advancing practices in the way social issues are assessed and managed throughout the project cycle (Vanclay 2003).

Human rights impact assessments (HRIA) are a newer variant of impact assessments, building on the impact assessment approach, but more explicitly grounded in the international human rights normative framework (Gotzmann 2019). Whereas SIAs are sometimes viewed, unfairly,<sup>1</sup> as addressing an amorphous set of issues, human rights standards add to impact assessment practice a comparable international treaty architecture, similar to the multilateral environmental agreements architecture that underpins EIAs. Human rights standards define the framework for the impact assessment and provide guidance on both the substance and process to address a project's negative impacts on people. The international human rights framework also reinforces that the issues to be addressed in a HRIA are underpinned by legal obligations on States to respect, protect and fulfil human rights, and clear expectations set by the United Nations Guiding Principles on Business and Human Rights (UNGPs) on private sector actors (Ruggie 2011). The UNGPs are a normative framework that clarifies that the standard of responsibility for business regarding human rights is to respect human rights, whether domestic law sufficiently protects those rights or not. They elaborate on the steps that companies must take to know

and show that they do so, including by carrying out human rights due diligence to identify, prevent, mitigate and account for how they address adverse human rights impacts (Office of the United Nations High Commissioner for Human Rights 2014). HRIAs are one tool for businesses to do so, and they are being increasingly used as a stand-alone assessment (NomoGaia 2018) or integrated (Danish Institute for Human Rights and International Petroleum Industry Environmental Conservation Association 2016) with other types of impact assessments. Each option has its drawbacks and benefits. HRIAs can have more normative, legal and reputational bite than an SIA might be perceived to have, in part because they address issues and impacts from the perspective of people's rights, and the accountability of both states and businesses to respect those rights, rather than treating these impacts and the people affected as issues to be assessed and treated like any other issue.

Both SIAs and HRIAs seek to cover and bring into the regulatory and project planning process issues that can be fundamental to people's lives. That is, where they live or can no longer live, whether their livelihoods will be eliminated entirely or so negatively impacted that they can no longer feed their families, whether the social capital that knits communities together will be disrupted and devalued, whether cultural sites of worship and celebration at the core of cultural traditions will be bulldozed, whether communities and their representatives can, when necessary, peacefully protest the construction of the corridor without fearing for their lives. SIA and HRIA processes seek to identify, assess and develop prevention and mitigation measures that can be used to address these impacts throughout the project cycle and give them greater visibility and a place in decision-making that does not always exist in typical EIA practice. They put the participation of those potentially affected at the centre of the process in identifying, assessing and developing responsive preventive and mitigation measures, rather than treating consultation simply as a process step that must be taken to complete regulatory approval (see [Chapter 13](#)).

## 6.2.2 The importance of explicit recognition of social and human rights issues in corridor projects

Without explicit recognition that social and human rights issues must be addressed as a condition of corridor approval, implementation and monitoring, they are not likely to be addressed – or addressed sufficiently – for reasons briefly explored below.

Firstly, the social bucket, particularly when explicitly overlain with the human rights framework, is often profoundly integrated with politics at many different levels (these are touched on in selected chapters in the volume [3, 13]). Corridors are complex projects to manage from a policy, legal and administrative point of view. But even before addressing the institutional capacity to manage such complex projects (Organisation for Economic Co-operation and Development and

International Monetary Fund 2019), a government's approach to governance and rule of law plays a defining role in whether a corridor will become a development corridor (see [Chapter 1](#)). A development corridor requires a complex balancing of different rights and interests that elevates consideration of social and environmental impacts to the same level as consideration of economic benefits. The tone from the top – that is, government attitudes and the signals governments send about the role that different stakeholders play or do not play in authoritarian and repressive regimes – in deciding government policy and projects matters in such large-scale projects. Good governance – issues such as whether communities and individuals even have rights under a constitution or subsidiary legal framework that should in theory be taken into account in corridor planning, whether communities and journalists can voice opinions without fear of retribution, whether a country's judicial system is well established and disposed to hear disputes about land acquisition and resolve them in a fair and equitable manner, and whether corruption is endemic – are all indicative of the attention that may be given to the social dimensions of corridor planning.

Whether a government has the institutional capacity to manage projects as complex as corridors is another layer of overall analysis that requires heightened attention ([Chapter 20](#)) and, at times, a needed dose of realism (World Bank 2014). The countries most in need of such corridors are often those that are least able to manage the complexity. Who benefits and who does not from large-scale projects should be a matter of rights of many different kinds, including human rights, but the process is often far more complex, depending who exercises power and how they exercise it. As the Organisation for Economic Co-operation and Development (OECD) has noted, the nature of public investment in infrastructure makes it particularly prone to corruption (Organisation for Economic Co-operation and Development 2016).

Secondly, the political economy of decision-making around large-scale projects, even in higher-functioning states, plays a key role in decision-making, as highlighted in [Chapter 3](#). Local communities that are potentially affected are not the power brokers. Without explicit attention, these are the easiest groups to ignore in complex projects. They have neither political relevance nor the kind of political power that is needed to sway vested interests. It is often the poorest, most deprived, vulnerable and socially excluded communities that experience the greatest environmental inequalities, with infrastructure planned for their lands rather than more affluent or politically well-connected areas (see [Chapters 11](#) and [13](#)). SIA and HRIA seek to foreground the impacts on and rights and interests of the most vulnerable and marginalized in corridor decision-making, building as they do on principles of inclusivity (Aizawa 2020). The power of the human rights narrative is in giving their interests equal weight in decision-making, and in prevention and mitigation plans. A human rights approach insists that, where marginalized groups may experience impacts disproportionality, additional, specialized preventive and mitigation measures are necessary to redress the impacts. The increasing role of DFIs, the private sector and investors concerned about environmental, social, governance (ESG) impacts in

infrastructure corridors provides, at least in theory, new leverage for strengthening this critical dimension of the impact assessment process, even where governments are willing to ignore or even seek to repress any kind of active inclusion of those affected.

Thirdly, as a regulatory matter, although in most countries across the world EIAs are required by law as part of a project approval process, regulatory requirements for conducting SIA remain limited (Vanclay 2014). In some cases, social dimensions are specifically included within the scope of EIA laws, but even where they are, they may be given only secondary attention, as a subset of environmental issues.

Fourthly, there are many issues around the interplay between local communities and corridors, but there is one in particular that is at the core of a web of related impacts that can have significant implications for people's lives and, therefore, deserves attention through dedicated SIA and HRIA processes: land. Many countries around the world still have incomplete or dysfunctional legal frameworks governing land tenure, which include unresolved objectives about whether land is to be governed as a commercial asset to be harnessed for economic development, or as a basis for livelihood activities and social identity for the, often majority, rural populations (African Development Bank 2020). Land tenure is deeply political, reflecting cultural values and the collective sense of justice about distribution in a country. As a result, it is a profoundly challenging area of reform. In the many countries where governments retain the constitutional right to land ownership, those on the land potentially hold some form of tenure rights that may range from formal legal title to customary tenure rights holders, to those who hold the land through short or long-term occupation (Committee on World Food Security 2012). In many developing countries, particularly in rural areas, communities themselves recognize and manage tenure through customary land tenure practices, which the government may or may not recognize (Land Portal 2021). When

the time comes for the government to exercise the typical governmental function of eminent domain to secure land for corridors, some governments find it convenient that their patchy land regulatory framework does not recognize customary or other forms of tenure. Those living on the land – sometimes for generations – under these rules may not be recognized as land owners, and therefore not entitled to compensation or to a voice in consultation processes to establish the corridor (Land Portal and International Institute for Environment and Development 2020). Referring to those on the land as “illegal squatters”, even though there may have been no possible legal avenue under national law to pursue claims to legalize their title, becomes a convenient excuse for eviction without due process or compensation, as required under human rights law (United Nations 2007a).

Corridors often involve resettling communities along the route – potentially many different communities. Resettlement can trigger profound social transformation that is often a source of constant conflict, anxieties, concerns and human rights violations. In addition, too few governments have laws governing resettlement to define the rights of those physically and economically displaced by public sector projects, the process for actually establishing new resettlement sites, the objectives of replacing livelihood activities (Kamakia, Guoqing and Zaman 2017), for appropriately assessing fair compensation (Tagliarino 2017) or generally to manage the complex process of resettlement. Countries that do have such laws in place lack the more detailed procedures and capacity to capture the full range of assets, including the natural assets communities rely on, which need to be covered as part resettlement arrangements (see [Chapter 18](#)). Further, countries typically do not have plans or principles, much less laws, to manage what is often predictable in-migration, as people move to the area of potential land acquisition and construction around corridors, seeking new livelihood opportunities but overstressing local capacity to provide services (International Finance Corporation 2009).



Around the world, in many countries with indigenous peoples, there is a patchwork of recognition of their rights to their land, territory and resources as set out in the United Nations Declaration on the Rights of Indigenous Peoples (UNDRIP) (UN Permanent Forum on Indigenous Issues 2021). While there are encouraging signs that indigenous land and resource rights are becoming more secure in some places through both legislation and litigation, there are many countries where these rights remain weak. UNDRIP provides that indigenous people have the right to determine their own economic, social and cultural development and to manage, for their own benefit, their own natural resources. The duties to consult with indigenous peoples and to obtain their free, prior and informed consent (FPIC) are crucial elements of the right to self-determination. FPIC is more than consultation and states are obliged to have consent as the objective of consultation before undertaking projects that affect indigenous peoples' rights to land, territory and resources, and to explicitly obtain the consent of indigenous peoples in cases of relocation from their lands or territories (Office of the United Nations High Commissioner for Human Rights 2013). Normative instruments, such as the Voluntary Guidelines on the Responsible Governance of Tenure and the UNGPs, reinforce the expectation that private sector actors respect those indigenous peoples' rights as well during project planning and implementation, whether or not they are protected under national law (United Nations 2018). Corridors that plan to go near or even through indigenous peoples' lands, or that may impact the natural resources they rely on, require long-term planning and engagement with indigenous peoples, to secure their consent and any conditions attached. Otherwise, re-routing or modification must be planned for where and when necessary.

All of this makes for potent, and in many cases, justified complaints and conflicts around infrastructure projects as people's assets are expropriated without any, limited or very delayed compensation (see [Chapter 13](#)). Where livelihoods are tied to the land or place, project-induced displacement can have even

more severe impoverishment impacts, imposing long-term, potentially intergenerational trauma, especially where vulnerable groups are displaced. These land issues are interlinked with a number of human rights, including in particular the right to housing and the right to an adequate standard of living, but also to the enjoyment of many rights that are bound up with everyday community life - that is, the rights to health, education, and cultural life (Equator Principles 2020). The expediency of pushing through expropriation of land for corridors according to national laws that provide weak or absent protection for these rights can be alluring to governments seeking investors for large-scale infrastructure corridor projects. However, this creates new sets of impacts that are contrary to the objectives of the SDGs that are so often the purported reason for developing the corridor in the first place (Office of the United Nations High Commissioner for Human Rights and the Heinrich Boll Foundation 2018).

An SIA/HRIA process cannot address underlying land reforms - that is a typically a multi-decade process. What they can do is to ensure that these complex issues of the social and human rights impacts of land acquisition are identified, evaluated and addressed through appropriate assessment and management processes, such as a separate and dedicated resettlement assessments and action plans where necessary (European Bank for Reconstruction and Development 2017). SIA/HRIA can overlay the land acquisition and resettlement process with international standards to highlight relevant gaps in national law (Vanclay and van der Ploeg 2017). Where DFIs are involved, the application of DFI safeguards on involuntary land acquisition and resettlement is mandatory, although even the application of DFI safeguards is not a guarantee of outcomes that protect the rights of local communities and, importantly, better living standards after resettlement (Picciotto 2013; Cotula 2019).

Fifthly, meaningful stakeholder consultation has become an accepted, integral part of impact assessment theory, if not practice, that plays a crucial role in providing space and

a process for the voices and views of those potentially affected (International Institute for Sustainable Development 2018). The divergence between good practice and actual practice have been highlighted in Chapters 3 and 13. These processes can also undermine, rather than elevate, attention to social and human rights impacts if care is not taken. There are several points of concern, which are addressed below.

Consultation should not be treated as a substitute for specific attention to social issues through a dedicated SIA/HRIA process. Just because there is a consultation process, it does not mean that there is no need for dedicated SIA/HRIA, nor does it mean there are no specific social issues to address if stakeholders do not raise them as part of a consultation process. There may be a whole host of reasons why people do not raise issues in consultations, nor are all social issues suitable to be addressed solely through consultations. Consultation with people is a core value of SIA and HRIA, but consultation is not the sole measure of the methodology; both SIA and HRIA are a whole branch of impact assessment that is based on a range of methodologies and approaches to assess and manage social and human rights issues.

The consultation process can take on an exclusionary function when treated as a technocratic step; if it is not in the consultation record, it is not taken into account. Even if it is in the consultation record, consultation responses can end up in annexes that by their placement signal the lack of importance attached to the views conveyed. Because the consultation process can be very determinative of whose interests get considered and whose do not, how the process is run becomes very important, as does who is consulted and how their concerns are recorded (Bradlow and Chapman 2011). Even in processes with detailed consultation requirements, as in corridors funded with DFI funding, where safeguards on consultation are applied, stakeholder engagement is consistently one of the issues that is most often raised in complaints about DFI-funded projects (Daniel *et al.* 2016).

There is a risk that all stakeholders are thrown into the same grouping, creating a muddle – and at times a purposeful muddle – lumping together everyone and anyone with any kind of interest in a corridor and treating them all equally. Yet not all stakeholders are equal (Hobbs 2020). Those who are potentially negatively impacted by the corridor, whose rights (to housing, an adequate standard of living, water etc.) are differently situated to those who may have broader interests in corridors. These are rightsholders rather than just stakeholders and, as such, they should be treated differently in the consultation process and, importantly, in the prevention, mitigation and remediation steps set out in the action plan to avoid violations of their rights. Where they are not counted as landowners through a formal expropriation process, they will typically not have access to legal avenues to make claims, or if they do, this may be a fraught, lengthy process. A human rights framing provides a basis for the potentially affected rightsholders to argue for recognition of security of tenure and other human rights at a minimum (Vanclay and van der Ploeg 2017).

The stakeholder consultation process can become disempowering if treated as the only legitimate interface for stakeholders to raise concerns about a project, to the exclusion of all other avenues. Addressing concerns outside of that narrow window of a consultation meeting can be considered a challenge to development itself. In an era when civil space is closing, and those who object to projects are branded enemies of development and criminalized, harassed or even killed, this is a serious concern (Antoine 2018; Hossain *et al.* 2018). In authoritarian regimes, stakeholder consultation can be manipulated to undermine, rather than exercise rights, by treating the impact assessment process as a checkbox, rather than an informative exercise.

## 6.3 What is different about a corridor?

It is important to consider what is different about social issues when it is a corridor being considered, rather than a limited footprint infrastructure project. Given how many corridors there are in existence and planned under the heading of delivering on the SDG (Economist Intelligence Limited 2019), there is less literature than might be expected on the environmental impacts of corridors (Gannon *et al.* 2020), but even less so on the social dimensions. In addition, the assessment of some major corridors that have been linked to anchor projects, often resource extraction projects, with a few notable exceptions, tend to be lost in the assessment of the overall anchor project, thus limiting further the available evidence. Nonetheless, a few issues stand out.

The first is the large scale/small voice problem. Corridor projects, by their nature require long-term planning that is typically complex, high-level and political. Trying to influence the early upfront decisions about corridors in favour of approaches that balance out impacts on communities requires a level of expertise and organization that is typically well beyond the knowledge and capacity of any local, rural civil society organizations. Being able to raise issues of the potential social impact of a large-scale corridor requires a level of scenario analysis that draws on experiences from other corridors – something local communities will not have access to. Even for organizations concerned with and able to address the environmental and social impacts of corridors at the policy and programme level, finding an entry point into the discussions, coupled with the political economy considerations in large-scale, multi-billion dollar corridors, highlights the challenges. The limited number of civil society organizations that are able to raise social and human rights concerns are very small voices in very large-scale projects.

The second issue relates to the linear nature of a corridor, as a corridor affects a wide range of communities on either side of the corridor. The dispersion of these groups is likely to mean they lack any perceived sense

of cohesion. From the point of view of politicians and regulators who are interested in pushing through corridor decisions as quickly as possible, the dispersed nature of stakeholders along long corridors may be seen as an advantage. They may have little chance of co-organization or of seeing sufficient similarities that give such disparate groups sufficient cause to overcome the significant organizational challenges of bringing together groups along the corridor. They thus represent a more limited impediment than may be possible around one static, localized infrastructure project where community cohesion is strong, grounded in shared roots and interests. The divide and rule approach to consultations may be even more easily manipulated in corridor impact assessments, as may be the tactic of bringing in outsiders to speak for local communities, who in fact have no legitimacy in representing local concerns. Methodologies to engage these communities and better connect their shared impacts and interests need to be better adapted to corridor realities.

The third issue relates to the connected nature of the infrastructure. Corridors are purposefully designed to bring new goods and people to areas where they were not connected before. Those connections are seen and designed to contribute to national development, but those same connections can also have profoundly deleterious consequences for those populations and places that do not exist for other localized projects. The most obvious examples involve the devastating impacts of transport infrastructure projects in opening access to pristine areas that are also home to indigenous peoples – and in some cases, formerly uncontacted indigenous peoples (Ferrante, Gomes and Fearnside 2020). Corridors that open up areas for development bring a whole range of induced impacts – from loss of land and loss of access to resources, to negative impacts on health through disease transmission, to undermining cultural unity – that are often irreversible and irremediable, and that cannot, in applying a mitigation hierarchy, be either offset or

compensated. And yet, lessons learned from previous projects, some with disastrous consequences, are consistently repeated (International Finance Corporation and Fundação Getulio Vargas 2018).

A fourth issue that deserves further consideration is related to the large-scale nature of corridors. This means that they traverse large areas of a country, or several countries. Given the number of countries classified as fragile and affected by conflict (World Bank 2020; Organisation for Economic Co-operation and Development 2020), some part of a corridor may traverse areas that are affected by conflict, or at least by heightened tension. This impacts on project planning, but it can also have profound social and human rights and political consequences. There is often a two-way dynamic, with conflicts affecting corridor development and corridor development affecting conflicts, with the contextual risks materializing in unexpected ways. Corridors can open access to areas in conflict, they can facilitate the movement of government security forces, as well as insurgent forces along routes opened, they can be accompanied by heightened security forces to protect corridors, which in turn exacerbates existing tensions, to name just a few of the interacting dynamics. In other words, there may be a range of conflict dynamics that a corridor may exacerbate, or potentially mitigate. HRIAs and SIAs should draw out these links, especially when corridors are planned for conflict-affected and fragile areas (Orsini and Roper 2018). Conflict assessments are yet another area that require specific expertise and methodologies and they could be integrated into corridor impact assessments (Geneva Centre for the Democratic Control of Armed Forces and the International Committee of the Red Cross 2015).

Finally, the most significant issue relates to dispersal that is also an inherent characteristic of corridors: the dispersal of accountability. This is a significant issue, given the large number of actors that are typically involved in corridor projects. In some cases, there is a corridor authority or there may be a centralized ministry that has thematic authority but

no authority over local planning. Where the corridor involves public-private partnerships (PPPs) through a PPP structure, there may be a complex layering of responsibilities with separate enforcement authorities supervising the private sector operators. Given the size and scale of corridors, there may be multiple financial institutions involved, both public and private. Financiers add another layer of possible accountability avenues and complexity to the structure of corridor transactions. The regulatory framework and number of actors are likely to be far more complex than for localized infrastructure projects. If the corridor crosses borders, that adds a whole new dimension to the complexity, much less if the corridor crosses several borders. With so many actors, the risk is that everyone and no one is accountable for environmental and social impacts. Unless the corridor has a centralized authority that manages the project, including taking responsibility for addressing grievances and non-compliance, it may be impossible for communities to untangle the identity of the project proponent or funder that is responsible for harms.

Access to justice, including remedy, is one of the three Principle 10 environmental rights set out in the Rio Declaration (United Nations Conference on Environment and Development 2006) and subsequent regional treaties and legislation. The UNGPs (highlighted above) also reinforce a focus on accountability and remedy where there have been violations of human rights. One of the three pillars of the UNGP framework is devoted to ensuring that victims of human rights abuses have access to remedy, starting with operational-level grievance mechanisms. The DFI safeguards have long since required that projects they fund set up operational-level grievance mechanisms at the level of the project. DFIs also typically have their own grievance mechanisms, independent accountability mechanism (IAMs), which address complaints about DFI-funded projects. Infrastructure projects are one of the sectors with the most complaints to IAMs, which could be indicative of the level of concerns in other corridor projects (Daniel *et al.* 2016).

While, in theory, those harmed as part of corridor development or implementation have access to national courts or other non-judicial mechanisms in a country, that may indeed be only a very theoretical prospect, and something that an HRIA can flesh out as part of the assessment. Establishing a grievance mechanism that covers the whole corridor may provide a far more immediately accessible avenue, and if structured well, can create important lessons for the whole corridor. This

would likely require new approaches to project structuring to ensure that there is one centralized and accessible grievance mechanism, with financial resources to address adverse impacts covering the entire project and the entire life cycle of the corridor project (World Bank 2016). Given the increasing rhetoric around connecting corridors to the delivery of the SDGs, it is important that SDG 16 becomes an integral part of the SDG-corridor development framework.

## 6.4 Conclusion

---

This chapter has focused on why it is important to provide a far stronger place for social and human rights considerations within impact assessment practice for corridors – starting with integration into the strategic level and Strategic Environmental Assessments (SEAs). Whether an integrated or a stand-alone process is preferable is a matter of both professional debate and, to a certain extent, the specific circumstances. There are drivers that should further elevate the social issues in corridor planning and projects. The key issue will be to test how these drivers push real change in the politics and practice on the ground, so that the impact assessment process becomes a more meaningful approach to, not only highlighting and foregrounding social and human rights risks and impacts, but also contributing to the ongoing management of these issues throughout the whole project development cycle, from strategic conception to post-closure (Vanclay *et al.* 2015).

Given the size and scale of corridor infrastructure projects, there is likely to be a mix of financial institutions involved, and one or more are likely to be a DFI. As noted above, DFIs have had environmental and social safeguard policies in place to guide consideration and management of environmental and social impacts as a condition of financing for decades (see Chapters 4 and 5). These safeguards are periodically updated. There is variation among DFI safeguards, but at least some DFIs are increasingly strengthening the social dimension, including by incorporating human rights into

their safeguard policies and strengthening the breadth and depth of human rights issues covered. These safeguards are applied by a range of other financial institutions through voluntary adoption, such as the Equator Banks, by OECD Export Credit Agencies, by financial institutions financed by DFIs, via syndication agreements around particular transactions, and more informally as other financial institutions use them as a model for their own policies, thus spreading the practice and influence of the safeguards to a far wider set of financial institutions that may be involved in corridor financing. There are gaps in safeguard frameworks, particularly with respect to human rights, so involvement of DFIs do not represent a panacea for impact assessments across corridors (Office of the United Nations High Commissioner for Human Rights 2019). Private sector ‘equator’ banks updated their Equator Principles in 2020 to include a specific focus on human rights, in part because they were under pressure to provide a greater profile to the issue than in the IFC Performance Standards (on which the Equator Principles are based) did (Equator Principles 2020). The numerous complaints about DFI-funded corridor projects attest to the challenges of addressing social impacts, even in projects with experienced financial and development oversight from DFIs.

The counterfactual raises the spectre of the management of complex social challenges in projects where there are no mature multilateral DFIs involved. A lack of experience

may prevail among project proponents in international operations, where social issues are considered a matter purely for national governments (who may be uninterested or worse repressive), or where funders policies are antithetical to the human rights values that underpin SIA/HRIAs (Myers *et al.* 2019). There is a far wider range of financial institutions increasingly looking to infrastructure investments. These include pension funds and institutional investors looking for long-term investments, matched to their pension time horizons. In addition, regional and national financial institutions are also being drawn into financing corridors and they may have far less expertise and experience, and in some cases expectations, that environmental and social issues are an integral part of project requirements. Though environmental, social, governance (ESG) or 'impact' investing signals a sea-change, there is a long way to go in developing and applying the standards that would turn ESG into the consistent requirements that would prompt project sponsors to address the kinds of challenges highlighted in this publication. In particular, most investors currently consider ESG issues only when they may have a material impact on their own financial returns, and not what impacts their investments may have on people and the environment. However, that is slowly changing, and could become another important driver as investors and banks demand further accountability from infrastructure operators about the management of environmental and social issues.

The G20's recent Principles on Quality Infrastructure reinforce important messages about integrating, not only environmental, but also social and human rights considerations into the full life cycle of infrastructure planning, as noted above (G20 2019), and provide important signals from governments. However, while these principles, like the push on connecting the SDG and infrastructure agenda, and the focus on ESG, all push in the right direction, raising the profile of addressing environmental and social issues as an integral part of corridor planning and implementation, the challenge remains in translating high-level commitments into binding requirements that

are applied to projects. Strong leadership and clear guidance are needed to value the issues drawn out through SIA/HRIAs, even in the face of the many challenging circumstances that face corridor projects, from stiff national political resistance to providing space and voice to the population, to changing the hardwiring of corridor project financing and legal documentation (financial conditions, legal agreements etc.) (Brauch 2017), to managing the complexity of making full use of the suite of impact assessment tools that can help inform better corridor planning and implementation.

A sobering recent study highlights the challenges of addressing these issues, even where the costs of ignoring social impacts is translated into hard, cold financial losses, repeatedly. An Inter-American Development Bank (Inter American Development Bank) study in 2017 looked at 200 infrastructure projects across six sectors in the IDB portfolio, where there was some level of social conflict about the project. The study found that "firms that fail to consider conflicts proactively or choose to remain unresponsive to conflicts when they arise usually face substantial consequences and are more likely to see their projects cancelled or abandoned. In most cases, risk and conflict management systems are ignored while community engagement is regarded as a secondary requirement which needs to be fulfilled in order to comply with regulations. Their crucial function for preventing conflicts is often not seen" (Watkins *et al.* 2017).

## 6.5 Recommendations

---

Firstly, the basic point is that there should be a consistent requirement for specific attention to social and human rights issues in corridor impact assessments. Corridors can have significant impacts on a substantial number of communities and people along their route, profoundly affecting their lives, potentially for generations. These impacts extend far beyond other localized infrastructure investments, justifying equally significant attention to these issues.

Secondly, given the potential for profound social disruptions, attention to social impacts should be routinely incorporated into SEAs for corridor projects; that is, strategic environmental and social assessments (SESA). Better yet, developing or maturing an approach to strategic social impact assessments (SSAs) that give equal focus to social dimensions at the level of programme planning could be considered.

Thirdly, the impacts of corridors on people are mostly covered by international human rights frameworks, adding a weight and urgency to giving priority to these issues. This is an obligation for governments, but also an expectation for the private sector actors involved in corridor projects, such as financial institutions, project operators and contractors. The increasing focus on the role of the private sector – in impacting human rights, in land grabbing, on indigenous peoples' rights and during resettlement – will lead to closer scrutiny of these issues and the private sector actors involved in corridor projects in the years to come. Structured HRIA processes can help corridor proponents better plan for, prevent and mitigate the many negative impacts that corridor projects can have on human rights, while also taking the opportunity of the detailed assessments to augment the positive impacts, thus contributing to the SDGs.

Fourthly, a remedy for negative impacts is a core tenant of human rights as well as of environmental rights under Principle 10 of the Rio Declaration. It is also part of the typical

mitigation hierarchy that has gone largely unnoticed (but see efforts to address social impacts in the context of biodiversity offsets in Griffiths et al. 2019 and Jones et al. 2019). Many mitigation hierarchies include compensation or offsetting where impacts cannot be prevented or mitigated. Offsetting is not appropriate when harms to people are concerned, as distinct from many environmental issues. While compensation can be appropriate for some social impacts, in some circumstances, it is not the only, or the most appropriate remediation step. The impact assessment community needs to revise its thinking about mitigation hierarchies for social and human rights impacts (and potentially also for a range of environmental impacts that cannot be addressed through compensation or offsetting). With projects as extensive and long-lasting as corridors, starting the process from an appropriate approach to mitigation hierarchies that reflect accountability for remedy would signal a significant shift in conceptualization and practice.



*Image credits: Diego Juffe Bignoli*

## Acknowledgements

The author gratefully acknowledges the ideas and editorial input from Jon Hobbs.

## References

---

- African Development Bank (2020). Rethinking land reform in Africa: new ideas, opportunities and challenges. Adibjan: African Natural Resources Centre.
- Aizawa, M. (2020). Inclusiveness in Sustainable Infrastructure and the Nexus with the Environment. Washington D.C.: The Observatory for Sustainable Infrastructure.
- Antoine, B. (2018). Squeezing civic space: restrictions on civil society organizations and the linkages with human rights. *The International Journal of Human Rights* 22(8), 966-988.
- Bradlow, D. and Chapman, S. (2011). Public Participation And The Private Sector: The Role Of Multilateral Development Banks In The Evolution Of International Legal Standards. *Erasmus Law Review* 4(2), 91-125.
- Brauch, M.D. (2017). Contracts for Sustainable Infrastructure: Ensuring the economic, social and environmental cobenefits of infrastructure investment projects. International Institute for Sustainable Development.
- Committee on World Food Security (2012). Voluntary Guidelines on the Responsible Governance of Tenure of Land, Fisheries and Forests in the Context of National Food Security. Rome: Food and Agricultural Organization of the United Nations.
- Cotula L. (2019). Land rights and investments: why the IFC Performance Standards are not enough: A comparison with the Voluntary Guidelines on the Responsible Governance of Tenure. IIED, London.
- Daniel C. et al. (2016). Glass Half Full? The State of Accountability in Development Finance. Amsterdam: SOMO.
- Danish Institute for Human Rights and International Petroleum Industry Environmental Conservation Association (2016). Guide for integrating human rights in environmental, social and health impact assessment. London: International Petroleum Industry Environmental Conservation Association.
- European Bank for Reconstruction and Development (2017). Resettlement Guidance and Good Practice. London: Eu-



ropean Bank for Reconstruction and Development.

Economist Intelligence Limited (2019). The Critical Role of Infrastructure for the Sustainable Development Goals. The Economist. [https://content.unops.org/publications/The-critical-role-of-infrastructure-for-the-SDGs\\_EN.pdf?mtime=20190314130614&focal=none](https://content.unops.org/publications/The-critical-role-of-infrastructure-for-the-SDGs_EN.pdf?mtime=20190314130614&focal=none). Accessed 21 July 2021.

Equator Principles (2020). Guidance Note on the Implementation of Human Rights Assessments Under The Equator Principles. London: Equator Principles Association.

Ferrante, L., Gomes, M. and Fearnside, P.M. (2020). Amazonian indigenous peoples are threatened by Brazil's Highway BR-319. Land Use Policy 94, art. 104598.

G20 (2019). G20 Principles for Quality Infrastructure Investment. [https://www.mof.go.jp/english/policy/international\\_policy/convention/g20/annex6\\_1.pdf](https://www.mof.go.jp/english/policy/international_policy/convention/g20/annex6_1.pdf). Accessed 21 July 2021.

Gannon, K. E., Pettinotti, L., Conway, D., Surminski, S., Ndilhana E. and Nyumba, T. (2020). Imaginaries of development corridors: Delivering the Sustainable Development Goals through development corridors in East Africa. Leeds: Grantham Research Institute on Climate Change and the Environment.

Geneva Centre for the Democratic Control of Armed Forces and the International Committee of the Red Cross (2015). Addressing Security and Human Rights Challenges In Complex Environments: Toolkit. 3rd ed. Geneva: Geneva Centre for the Democratic Control of Armed Forces and the International Committee of the Red Cross.

Gotzmann N. (2019). Handbook on Human Rights Impact Assessment. Cheltenham: Edward Elgar.

Griffiths, V. F., Bull, J. W., Baker, J., and Milner-Gulland, E. J. (2019). No net loss for people and biodiversity. Conserv. Biol. 33, 76-87. doi: 10.1111/cobi.13184

Hobbs, J. (2020). Is Responsible Mining Sufficient. Dundee: Extractives Hub & University of Dundee Centre for Energy, Petroleum and Mineral Law and Policy. Dundee

Hossain, N., Khurana, N., Mohmand, S., Nazneen, S., Oosterom, M., Roberts T. et al. (2018). What Does Closing Civic Space Mean for Development? A Literature Review and Proposed Conceptual Framework. Brighton: Institute of Development Studies.

International Finance Corporation and Fundação Getulio Vargas (2018). Large-scale Projects in the Amazon - Lessons Learned and Guidelines. Sao Paulo: International Finance Corporation.

International Finance Corporation (2009). Projects and People: A Handbook for Addressing Project-Induced In-Migration. Washington D.C.: International Finance Corporation Publishing.

International Institute for Sustainable Development (2018). UNEP Reviews Global Status of Environmental Assessments. <https://sdg.iisd.org/news/unep-reviews-global-status-of-environmental-assessments/>. Accessed 9 April 2021.

Jones, J. P. G., Bull, J. W., Roe, D., Baker, J., Griffiths, V. F., Starkey, M., et al. (2019). Net gain: seeking better outcomes for local people when mitigating biodiversity loss from development. One Earth 1, 195-201. doi: 10.1016/j.oneear.2019.09.007

Kamakia, A., Guoqing, S., Zaman, M. (2017). Does Kenya's Development-Induced Displacement, and Resettlement Policy Match International Standards? A Gap Analysis and Recommendations. Journal of Sustainable Development 10(5), 2017.

Land Portal and International Institute for Environment and Development (2020). Responsible Land-Based Investment Navigator. <https://landinvestments.org/>. Accessed 9 April 2021.

Land Portal (2021). Land Mark Matrix Indicators of the Legal Security of Indigenous and Community Lands. <https://landportal.org/book/dataset/lmm-lsic>. Accessed 9 April 2021.

Myers, M., Gallagher, K.P., Ray, R., Garzón, P., Grimm, D., Reid, J. et al. (2019). China and the Amazon: Toward a Framework for Maximizing Benefits and Mitigating Risks of Infrastructure Development. Washington D.C.: Gordon and Betty Moore Foundation.

NomoGaia (2018). Human Rights Impact Assessment Resources. <http://nomogaia.org/human-rights-impact-assessment-hria/>. Accessed 9 April 2021.

Organisation for Economic Co-operation and Development and International Monetary Fund (2019). Reference Note on Environmental and Social Considerations in Quality Infrastructure. Paris: Secretary-General of the Organisation for Economic Co-operation and Development.

Organisation for Economic Co-operation and Development (2016). Integrity Framework for Public Infrastructure. Paris: Organisation for Economic Co-operation and Development.

Organisation for Economic Co-operation and Development (2020). States of Fragility 2020. Paris: Organisation for Economic Co-operation and Development Publishing.

Office of the United Nations High Commissioner for Human Rights and the Heinrich Boll Foundation (2018). *The Other Infrastructure Gap: Sustainability. Human Rights and Environmental Perspectives*. Geneva: Office of the United Nations High Commissioner for Human Rights and the Heinrich Boll Foundation.

Office of the United Nations High Commissioner for Human Rights (2013). *The United Nations Declaration on the Rights of Indigenous Peoples: A Manual for National Human Rights Institutions*. Geneva: United Nations.

Office of the United Nations High Commissioner for Human Rights (2014). *Frequently Asked Questions About the Guiding Principles on Business and Human Rights*. Geneva: United Nations.

Office of the United Nations High Commissioner for Human Rights (2019). *Benchmarking Study of Development Finance Institutions' Safeguards and Due Diligence Frameworks against the UN Guiding Principles on Business and Human Rights*. Geneva: Office of the United Nations High Commissioner for Human Rights.

Orsini, Y. and Roper, C. (2018). *Human rights due diligence in conflict-affected settings: Guidance for extractives*. Geneva: International Alert.

Picciotto, R. (2013). *Involuntary Resettlement in Infrastructure Projects: A Development Perspective*. Cambridge, MA: Lincoln Institute.

Ruggie, J.G. (2011). *Report of the Special Representative of the Secretary-General on the issue of human rights and transnational corporations and other business enterprises*,

Ruggie, J.G. *Guiding principles on business and human rights: Implementing the United Nations 'protect, respect, remedy' framework*. Geneva: United Nations High Commissioner for Human Rights. (2011)

Tagliarino, N.K. (2017). *The Status of National Legal Frameworks for Valuing Compensation for Expropriated Land: An Analysis of Whether National Laws in 50 Countries/Regions across Asia, Africa, and Latin America Comply with International Standards on Compensation Valuation*. *Land* 6(2), 37.

United Nations Environmental Programme (2018). *Assessing Environmental Impacts – A Global Review of Legislation*. Nairobi: UN Environment.

United Nations (2007a). *Basic principles and guidelines on development-based evictions and displacement (A/HRC/4/18, Annex I)*. New York: United Nations.

United Nations (2007b). *UN Declaration on the Rights of Indigenous Peoples*. New York: United Nations.

United Nations (2018). *Free, prior and informed consent: a human rights-based approach, A/HRC/39/62*. New York: United Nations.

United Nations Conference on Environment and Development (2006). *Rio Declaration on Environment and Development*. Rio de Janeiro: United Nations.

United Nations Economic Commission for Europe (1998). *Convention on Access to Information, Public Participation in Decision-making and Access to Justice in Environmental Matters*. Aarhus: United Nations Economic Commission for Europe.

United Nations Economic Commission for Latin America and the Caribbean, (2018). *Regional Agreement on Access to Information, Public Participation and Justice in Environmental Matters in Latin America and the Caribbean*. Escazú: United Nations Economic Commission for Latin America and the Caribbean.

United Nations Permanent Forum on Indigenous Issues (2021). *State of the World's Indigenous Peoples Volume V, Rights to Lands, Territories and Resources*. New York: United Nations Permanent Forum on Indigenous Issue.

Vanclay, F. and van der Ploeg, L. (2017). *A human rights based approach to project induced displacement and resettlement, Impact Assessment and Project Appraisal*. Fargo, ND: International Association for Impact Assessment.

Vanclay, F., Esteves, A.M., Aucamp, I., Franks, D.M. (2015). *Social Impact Assessment: Guidance for assessing and managing the social impacts of projects*. Fargo, ND: International Association for Impact Assessment.

Vanclay, F. (2003). *International Principles for Social Impact Assessment*. Surrey: International Association for Impact Assessment.

Vanclay, F. (2014). *Developments in social impact assessment*. Cheltenham: Edward Elgar.

Watkins, G.G., Mueller, S.-U., Meller, H., Ramirez, M.C., Serebrisky, T., Georgoulas, A. (2017). *Lessons Learned from Four Decades of Infrastructure Project Related Conflicts in Latin America and the Caribbean*. Washington D.C.: Inter American Development Bank.

World Bank (2014). *World Bank Group Support to Public-Private Partnerships*. Washington: The World Bank.

World Bank (2016). *Uganda Transport Sector Development Project – Additional Financing: Lessons Learned and Agenda for Action*. Washington, D.C: World Bank Group.

World Bank (2020). *Classification of Fragile and Conflict-Affected Situations*. <https://www.worldbank.org/en/topic/fragilityconflictviolence/brief/harmonized-list-of-fragile-situations>.