

The human rights impacts of climate change mitigation and adaptation measures

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German Institute
for Human Rights

Human Rights in Practice

The Human Rights Impacts of Climate Change Mitigation and Adaptation Measures



The Institute

The **German Institute for Human Rights** is the independent National Human Rights Institution of Germany (§ 1 GIHR law). It is accredited according to the Paris Principles of the United Nations (A-status). The Institute's activities include the provision of advice on policy issues, human rights education, information and documentation, applied research on human rights issues and cooperation with international organisations. It is supported by the German Bundestag. The Institute is mandated to monitor the implementation of the UN Convention on the Rights of Persons with Disabilities and the UN Convention on the Rights of the Child and established Monitoring Bodies for these purposes.

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Human Rights in Practice

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Preface

The quality of state action will be crucial to how we deal with the impacts of climate change. As the February 2022 report of the IPCC makes painfully clear, this applies both to measures that help to mitigate climate change and to measures designed to help us adapt to the effects of climate change. Yet numerous studies show that such measures have had negative impacts on rights-holders worldwide. This handbook shows such examples: How, where and why climate mitigation and adaptation have had negative human rights impacts. Building on the examples drawn from a wide variety of sources, it elicits the factors responsible for, or contributing to, these negative human rights impacts and recommends alternatives – which have no negative impacts on human rights but still have positive mitigation or adaptation effects.

Violations of human rights in the context of climate change policies occur if measures for mitigation or adaptation implemented by states are not adequate, not proportionate or if less invasive measures could have been used to reach the same climate-related goal; abuses of human rights occur if third parties, like companies, cause or contribute to such human rights violations.

The case studies in this handbook show that most human rights are at risk from climate

adaptation and mitigation measures and policies. In most contexts, groups already disadvantaged or marginalised are especially vulnerable to have their human rights further infringed or even violated. Indigenous peoples in the Global South are a good case in point, and so are women, often in the context of rights to land as well as participation. In both the Global North and the Global South, persons or groups living in poverty are more vulnerable to climate adaptation and mitigation measures as they do not have the means to adapt to dramatic socio-economic changes and are less likely to be consulted and included in decision-making.

The handbook also looks at factors that favour the negative human rights impacts described in the case studies and how policy makers and those who design measures of climate mitigation and adaptation could avoid those impacts. The handbook is thus useful to National Human Rights Institutions or civil society organisations working on climate change related policies, advising governments and companies on how to adopt a human rights-based approach to climate change related policies.

Michael Windfuhr

Deputy Director

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Abbreviations

CDM	Clean Development Mechanism	ITUC	International Trade Union Confederation
CERD	Committee on the Elimination of Racial Discrimination	PES	payment for environmental services
FCPF	Forest Carbon Partnership Facility	REDD	Reducing Emissions from Deforestation and Forest Degradation
FCP	Forest Conservation Program	SLCP	Sloping Land Conversion Programme
FPIC	free, prior and informed consent	UNDP	United Nations Development Programme
GCF	Green Climate Fund	UNDRIP	Declaration on the Rights of Indigenous Peoples
GEF	Global Environment Facility	UNEP	United Nations Environment Programme
GHG	greenhouse gas	UNFCCC	United Nations Framework Convention on Climate Change
IRM	Independent Redress Mechanism	UNGP	United Nations Guiding Principles on business and human rights
ILO	International Labor Organization		
IPCC	International Panel on Climate Change		

Executive Summary

This handbook examines the human rights impacts of climate mitigation and adaptation measures. While the negative impacts of climate change on human rights have been explored elsewhere, less work has been done to identify the human rights impacts of measures taken in response to climate change, whether in the form of climate change adaptation or mitigation measures or policies. This study therefore aims to identify these human rights impacts in the context of specific sectors. To do so, it draws on a number of case studies from different geographical areas across the Global South and Global North. Our primary focus is to show human rights impacts of adaptation and mitigation measures and to identify factors that influence or determine these human rights impacts.

Section 2 introduces the identified case studies by sector. In the subsections we look at decarbonisation and the goal of a just transition away from fossil fuels (section 2.1), renewable energy projects, including wind and solar projects, hydroelectric projects, and mining activities associated with renewable energy (section 2.2). The section continues with case studies relating to bio-fuels and land use, the transport sector, housing and construction as they relate to sea-level rise. Finally, section 2.7 examines the question of participation in climate-related decision-making which has relevance for all sectors.

The examples identified in the study demonstrate that most, if not all, human rights are at risk from climate adaptation and mitigation measures and policies. Groups that are already disadvantaged or marginalised are especially vulnerable. Indigenous peoples are particularly at risk and have had their rights infringed and often violated in many instances, usually in the Global South. Women are also at risk of negative human rights impacts, often in the context of rights to land as well as participation. In both the Global North and the

Global South, those living in poverty are more vulnerable to climate adaptation and mitigation measures as they do not have the means to adapt to dramatic socio-economic changes and are less likely to be consulted and included in decision-making.

Violations of human rights in the context of climate change policies occur if measures for mitigation or adaptation are not adequate, not proportionate or if less invasive measures could have been used to reach the same climate-related goals. This includes where governments, for example, authorise and carry out evictions on indigenous land; where deforestation could have been mitigated by less harmful means; or where governments implement programmes aimed at decarbonisation which discriminate directly or indirectly against certain population groups and negatively impact their economic and social rights. Human rights abuses carried out by third parties, such as private companies, occur if they carry out harmful activities, for example on indigenous land, without comprehensive human rights safeguards, or if market-based carbon offsetting mechanisms contribute to forced evictions committed by governments. Last but not least, funding bodies – be they multilateral like the World Bank or regional banks – are at fault where they have no mechanisms for accountability and do not require projects to meet human rights standards.

Section 3 of the handbook analyses the case studies set out in section 2 with the aim of identifying the factors that influence human rights impacts. In section 3.1 underlying systemic factors are discussed. The factors identified from the case studies include: (a) lack of clear safeguards; (b) an absence of grievance mechanisms; (c) poor security of tenure; (d) lack of recognition of indigenous rights; (e) bad governance; (f) poor consultation and participation processes; (g) pre-existing vulnerabilities of

certain groups; (h) failure to assess impacts on marginalised or disadvantaged groups; (i) failure to assess unintended environmental impacts; and (j) lack of policy coherence.

Section 3.2 examines the mechanisms used in the examples to either avoid or mitigate potential human rights impacts from climate adaptation and mitigation measures. These mechanisms include: (a) human rights impact assessments prior to potentially harmful measures or activities; (b) monitoring and reporting requirements during the implementation; (c) respect for indigenous rights, including free, prior and informed consent, particularly from the national governments; (d) respect for land rights; (e) adequate consultation and participation in decision-making; (f) the use of phased approaches to mitigate impacts; (g) pre-existing schemes and programmes for social protection; (h) targeted schemes to ease the impacts of decarbonisation; (i) programmes to address job losses and unemployment; and (j) consistency and coherence in climate-related policies.

Finally, section 3.3 identifies the mechanisms used by complainants (and others) to seek redress and relief after human rights violations related to harmful climate mitigation or adaptation measures. The mechanisms or avenues used within the study examples include: (a) public pressure and protest, often targeted at funding bodies; (b) formal grievance mechanisms at the level of the funding body or the project itself; (c) informal appeals to funding bodies; (d) national courts (both domestic and foreign); (e) regional human rights bodies; and (f) UN human rights mechanisms. The examples suggest that seeking redress directly from funders of projects that are harmful to human rights may, in some instances, be more effective than pursuing relief from human rights bodies and national courts. After a brief conclusion in section 4, the handbook provides in section 5 a closer look at the mechanisms developed in the UNFCCC and their shortcomings.

1 Introduction

Climate change poses a severe and existential threat to all human rights. Measures to mitigate the extent of the human rights impacts of climate change are therefore vital. In addition, where the effects of climate change cannot be avoided or sufficiently mitigated, adaptation is essential. Without adequate climate mitigation and adaptation measures human rights cannot (continue to) be fully realised.

Climate mitigation and adaptation strategies have been implemented in various forms, and with increasing prevalence, since the UN Framework Convention on Climate Change (UNFCCC) entered into force in 1994. The measures put in place under these strategies have been accompanied, in many instances, by human rights violations and abuses.

Climate action that mitigates climate change at a global level and benefits the vast majority has the potential to cause severe harm to certain groups, often local communities directly impacted by the activities. Climate mitigation and adaptation for the greater good is not a justification for these negative impacts on human rights since these impacts can be prevented. It is therefore essential to understand the human rights impacts from adaptation and mitigation measures in order to determine how they can be avoided or, if it is impossible to avoid them, how they can be addressed.

Safeguarding human rights in climate action ensures that adaptation and mitigation measures can be pursued for the benefit of all who are threatened by the climate crisis.

The discussion of human rights impacts in this handbook refers to cases from different geographical areas across the Global South and Global North. These are arranged according to the sectors within which the measures or activities occur. Section 2 of the study explores these case

studies and their related human rights impacts. While the focus is on negative human rights impacts flowing from climate action, section 2 also includes instances where potential impacts could occur or were avoided.

Following the identification and discussion of the examples, the secondary focus of the study is the analysis of these case studies in order to identify factors that influence or determine the incidence of human rights impacts. This includes examining the examples from section 2 in order to identify underlying systemic factors; mechanisms to avoid or mitigate human rights impacts; and mechanisms for affected individuals and groups to address human rights impacts and seek redress.

This handbook will not assess whether measures to mitigate climate change or negative human rights impacts were ultimately successful or whether the measures taken were overall adequate or proportionate. This research primarily relies on reports, articles and other publications from various publicly available sources. A comprehensive assessment of the efficacy of policies and measures discussed in this handbook would require a very different research design and in-depth knowledge of country contexts. For example, where it is noted that particular measures have reduced or mitigated the harmful impact on human rights, this should not be understood as confirmation that all human rights were adequately protected in that instance.

The sources used in this study were obtained through various searches, including searching the Stellenbosch University library database for sources with the following search terms: human rights and climate change; climate change law; climate justice; human rights and climate mitigation; human rights and adaptation; just transition; just transition and human rights; REDD and human rights; clean development mechanism and human rights; adaptation and

human rights; maladaptation and human rights; maladaptation and climate change. Additional studies and sources were found by using these search terms in online search engines, primarily Google and Duck Duck Go. Relevant cases were sought by reviewing the cases in the Climate Change Litigation Database of the Sabin Center for Climate Change Law. The websites of the following organisations were systematically searched for pertinent information and documentation: the OHCHR; the UNFCCC

Secretariat; the UN Environment Programme; the World Health Organisation; the International Labour Organization; the Green Climate Fund; the Adaptation Fund; the Global Environment Facility; the Centre for International Environmental Law; Amnesty International; the Business and Human Rights Resources Centre; the Global Initiative on Economic, Social and Cultural Rights; the Stockholm Resilience Centre; the Global Centre on Adaptation; and the Mary Robinson Foundation.

2 Potential and actual human rights impacts in different sectors

Many climate mitigation and adaptation activities take place in partnership with, or with oversight from, various mechanisms established or supported by the UNFCCC. The extent to which these mechanisms incorporate and protect human rights therefore affects the degree to which human rights are threatened by individual mitigation and adaptation projects. Human rights are not explicitly included in the UNFCCC, but in 2010 the Conference of the Parties affirmed that “Parties should, in all climate-related actions, fully respect human rights”.¹ Practical implementation and operationalisation of this declaration has unfortunately been inadequate in many cases.² In particular, the Clean Development Mechanism and the initiative for Reducing Emissions from Deforestation and Forest Degradation (REDD) have received widespread criticism for their failure to protect human rights of affected communities, particularly indigenous peoples in developing countries.³ The Global Environment Facility, the Adaptation Fund and the Green Climate Fund contain more comprehensive safeguards, although threats to human rights are still present (see section 5 for a thorough overview of these mechanisms).

This demonstrates that any mechanisms or programmes established to implement climate adaptation or mitigation have to contain practical measures for the protection of both substantive and procedural rights.

This section introduces cases of human rights impacts linked to climate mitigation and adaptation in different sectors. Although the emphasis is on identifiable negative human

rights impacts, in some instances these impacts did not occur – either because they were adequately prevented, or because in the particular circumstances the impact did not meet the threshold of a human rights abuse or violation. These case studies have still been included as they serve to illustrate how potential human rights impacts have been avoided. The following sections 2.2 to 2.7 explore some of the different sectors where climate mitigation and adaptation take place. Finally, section 2.8 examines the question of participation in climate-related decision-making which has relevance for all the abovementioned sectors.

2.1 Decarbonisation and just transition

Mitigating the wide-ranging and severe human rights impacts from climate change requires a transition away from fossil fuels. This process of decarbonisation will itself have various impacts on human rights and, in order to avoid or mitigate these impacts, a “just transition” from a carbon-dependent world is required. Decarbonisation is critical for the mitigation of climate change, but it comes with inevitable social and economic disruption that must be managed in order to avoid violating the human rights of the most vulnerable and marginalised. This section considers the human rights impacts of decarbonisation and a just transition in the context of fuel pricing and subsidies; unemployment, access to jobs and social protection; and other socio-economic impacts resulting from decarbonisation.

¹ UNFCCC (2010), para 8; CIEL / CARE International (2015), p. 6.

² CIEL / CARE International (2015), p. 6.

³ Amnesty International (2021), pp. 44, 51.

2.1.1 Fuel: prices and subsidies

Fossil fuel subsidies have extensive negative human rights impacts, particularly in relation to their contribution to climate change. These subsidies also use government resources that could be directed elsewhere. For example, in 2015 the Asian Development Bank determined that in some Asian countries government expenditure on subsidies for fossil fuels exceeded expenditure on education or health.⁴

However, access to fuel and energy is essential for, among other things, heating homes, cooking, transport, providing healthcare services and livelihoods. The price of fossil fuels and the extent to which they are subsidised therefore have important implications for the realisation of

human rights. Policies and measures related to carbon pricing, carbon taxes and the removal of fossil fuel subsidies must therefore consider the distributional consequences for those who may not be able to afford the energy and fuel on which their survival depends.⁵

According to the International Institute for Sustainable Development about a third of all countries have reformed at least part of their fossil fuel subsidies between 2015 and 2018 indicating that it is possible to design and implement appropriate reform policies that meet the needs of the population without resulting in protests and instability. Redirecting resources into social protection systems were found key to the success of reforms.⁶

Case Study 1: Ecuador, removal of fossil fuel subsidies

The rapid removal of fuel subsidies in Ecuador in 2019 resulted in a dramatic increase in fuel prices and widespread protests led by transport workers, indigenous peoples as well as student and labour unions.⁷ Without prior consultation with those affected, the fossil fuel subsidy reform was too drastic and rapid to allow vulnerable individuals and groups to adapt and did not address the needs of the poor.⁸ After 11 days of violent protests, the government was forced to backtrack and reverse the policy.⁹

Case Study 2: Egypt, removal of fossil fuel subsidies

The reform of fossil fuel subsidies in Egypt was implemented gradually, along with the introduction of necessary social protection mechanisms. Prior to 2012 the Egyptian government was spending roughly 20% of its budget on fossil fuel subsidies.¹⁰ Forced to phase out these subsidies, the government began the process of slowly increasing the price of gasoline in 2012, and followed this with an increase of electricity prices in 2013. In 2014 the government further increased fuel prices while allocating 53% of its savings to health, education and social protection. In 2016 the government again raised fuel prices while simultaneously increasing subsidies for food.¹¹ The social protection programmes introduced included two cash transfer programmes that sought to offset the impact of these increases on vulnerable groups. One was targeted at poor families with children of school-going age (the takaful programme), and a much smaller one was targeted at the elderly, disabled

4 Amnesty International (2021), p. 66.

5 UN, General Assembly (2020), para 13-19; Amnesty International (2021), pp. 66-67, 93 & 125; UNEP (2015), pp. 9-10.

6 International Institute for Sustainable Development (2019); Amnesty International (2021), pp. 66-67; See also International Trade Union Confederation (undated), p. 4.

7 International Institute for Sustainable Development (2019); Monahan (2019).

8 Monahan (2019).

9 Ibid; International Institute for Sustainable Development (2019).

10 Makdissi (2018); International Labour Organization (2018), p. 110.

11 Makdissi (2018); International Trade Union Confederation (undated), p. 5.

and orphans (the karama programme).¹² The ILO estimates that these programmes reached roughly 6 million Egyptians,¹³ while other sources estimate 2.5 million households, constituting a third of households beyond the national poverty line.¹⁴ The government also increased subsidies on infant formulas and paediatric medicines, and introduced free school meals and gas connections in poor areas; there are no data on the effects of these interventions.

While these measures do not erase the detrimental impact of fuel increases for poor households, and the overhaul of the social protection system did not adequately fulfil human

rights,¹⁵ they demonstrate how attempts were made to avoid or mitigate certain impacts through targeted social protection programmes.

Case Study 3: UK, Fuel poverty and household energy prices

In the United Kingdom, 10% of households live in fuel poverty.¹⁶ These households have above-average fuel costs combined with low income, putting them below the poverty line.¹⁷ In 2013 the UK government introduced the Energy Company Obligation scheme, aiming to help combat fuel poverty through subsidising home insulation for low-income households, thereby allowing them to save energy and reduce related costs.¹⁸ The scheme would therefore contribute to climate mitigation while providing assistance to households facing fuel poverty. Although the scheme has been successful in meeting targets related to carbon and cost savings,¹⁹ this has not been the case for tackling fuel poverty. The Committee for Fuel Poverty (CFP), an independent advisory body, notes in a 2020 report that those worst affected by fuel poverty were not appropriately prioritised in the scheme.²⁰ The CFP states that in 2016 roughly 10% of the scheme measures were taken in fuel poor homes, while in 2017 and 2018 this number increased to roughly 28%.²¹ In subsequent years the scheme's focus on fuel poor homes remained under 30%.²² The budget for the scheme was also cut in 2017. It has therefore been suggested that the scheme was a failure and that it also stalled progress in delivering home insulation targets that would be compatible with the UK's net zero target.²³

12 International Labour Organization (2018), p. 110; Makdissi (2018).

13 International Labour Organization (2018), p. 110. See for an evaluation: IFPRI (2018).

14 Vidican Auktor / Loewe (2021), p. 20.

15 International Labour Organization (2018), p. 104; Vidican Auktor / Loewe (2021), p. 20.

16 Committee on Fuel Poverty (2020), p. 6. On fuel poverty, see: UN, General Assembly (2020), para 35; Levy / Patz (2015), p. 317.

17 Committee on Fuel Poverty (2020), p. 6.

18 International Trade Union Confederation (undated), p. 5.

19 Adcock / Hinson (2020), p. 4.

20 Committee on Fuel Poverty (2020), pp. 41-42.

21 Ibid, p. 42.

22 Ibid. It must be noted that a 2018 government press release states that 70% of beneficiaries of the ECO energy efficiency scheme are from low-income families. This discrepancy may be due to the distinction between "low income families" and the CFP's concern with "fuel poor homes". See UK Government (2018).

23 Hannon / Clarke (2021), pp.141-144.

2.1.2 Unemployment and a just transition

Unemployment schemes and social protection

Decarbonisation and a just transition from fossil fuels will necessarily involve the closure or dramatic decline of a number of industries. One of the greatest impacts of decarbonisation is on the employment and livelihoods of those working in sectors related to fossil fuels. Aside from the fossil fuel industry itself, this includes aviation, car manufacturing and industrial agriculture.²⁴ Although transfer, reemployment and relocation of workers is desirable, this is not always possible, and socio-economic impacts on workers, families and communities are often unavoidable. In order to safeguard human rights, governments need to make provision for the continued fulfilment of the right to an adequate standard of living and the right to social security.²⁵ Unemployment protection schemes are one way to ensure that. In Poland, for example, the closure of certain coal mines in order to mitigate GHG emissions was done in conjunction with financial support from the European Commission of 1.9 billion euros. A large portion of the funds was allocated to workers who become jobless as a result of the closures.²⁶ In Romania, the closure of two coal mining units was approved along with financial support of 54 million euros, the bulk of which is earmarked for “compensation salaries for the laid-

off personnel and programmes to retrain former employees to work in alternative professions and other social security benefits for these workers”.²⁷ Elsewhere, planned closures have been delayed or put on hold due to the absence of appropriate measures to provide social security and decent alternative work for affected employees.²⁸

The ILO has also pointed out that in some cases, permanent migration may be the only solution for those unable to find work.²⁹ In these cases, the ILO argues that vulnerable households’ adaptive capacity can be increased through cash transfers that reduce the costs of migration and provide some insurance, thereby facilitating mobility. In addition to cash transfers, ensuring that social protection is portable between employers and states would strengthen the ability of workers to adapt and migrate where necessary.³⁰

Where provision is not made for adequate social security and unemployment protection, the human rights of workers in the abovementioned industries will be threatened by the transition to a low-carbon or zero-carbon economy. Where unemployment and social protection schemes do exist, they will rarely cover all affected individuals, and those who are likely to be excluded or disqualified (and are often already marginalised) need to receive special attention.³¹

Case Study 4: China, Social protection and unemployment schemes to support logging ban

China introduced a logging ban in 1998 which sought to address unsustainable logging and protect forests along the Yangtze and Yellow River basins that act as carbon sinks.³² The ban also had the purpose of preventing soil erosion and flooding that were threatening local communities.³³ Although

²⁴ Amnesty International (2021), p. 43.

²⁵ International Labour Organization (2018), p. 104.

²⁶ Reuters (18.11.2016).

²⁷ European Commission (2016). See also International Labour Organization (2018), p. 107.

²⁸ International Labour Organization (2018), p. 107.

²⁹ Ibid, p. 109.

³⁰ Ibid, p. 109.

³¹ Ibid, p. 107. As the ILO report notes, this could include “workers who are underemployed and/or engaged in non-standard forms of employment, indigenous and tribal peoples, ageing populations and smallholder farmers, all of whom consequently have to rely on informal community or family support systems”.

³² International Labour Organization / Agence Française de Développement (2016), p. 2. Similar logging bans were imposed in Thailand and the Philippines: see Lewis (2017), p. 41.

³³ International Labour Organization / Agence Française de Développement (2016), p. 2.

not directly related to fossil fuels, this example does concern the closure of a large sector and is analogous to issues surrounding decarbonisation and a just transition. China's logging ban affected nearly 1 million state forest workers.³⁴ In addition to the state workers directly affected, 120 million local people were impacted as they were unable to continue small-scale agriculture and other activities in the forests that were now protected.³⁵ The government did introduce a range of measures to mitigate the negative effects of the ban.³⁶ These measures included conservation incentives, job placement services, retirement schemes, unemployment benefits, rice subsidies, and cash transfers.³⁷ The Forest Conservation Program (FCP) that led to the logging ban involved subsidies to state forestry activities in order to compensate for the losses resulting from the ban. Local governments were also given funds to provide assistance to workers that were laid off as a result of the FCP.³⁸ The government also introduced a programme to promote employment and job creation. It included subsidies to social insurance contributions, new recruitment offices to assist in finding local jobs (or non-local jobs for those willing to migrate), support for new businesses, as well as incentives for businesses to hire workers and for workers to receive re-employment training. Newly created jobs were also available in Forest Protection Units for workers from logging and related activities.³⁹ Workers from state-owned enterprises had access to a pension scheme, and options were also available for early retirement or a severance disbursement. Four years after the logging ban was introduced, roughly two thirds of affected workers had been placed in jobs (in the forest sector and elsewhere) or had retired.⁴⁰ Those who remained unemployed had access to some unemployment benefits through the welfare system, and the FCP provided some funding for local governments to provide these benefits.⁴¹

The abovementioned interventions primarily benefitted those workers who had been employed by state-owned enterprises and did not account for the local residents who had relied on small-scale agriculture and other income-earning activities on the newly protected land.⁴² The government provided some support for local people through the Sloping Land Conversion Programme (SLCP) which provided a rice subsidy from 1999 to 2002. This was a voluntary programme, although many households were left with little alternative. The programme provided participants with between 1.5 to 2.25 metric tons of rice per year for each hectare of cropland that was repurposed for reforestation.⁴³ Due to the size of the rice subsidy, a result of a supply surplus at the time, even rice-growing households stood to gain more revenue from the SLCP than their farming activities. The compensation lasted between two to eight years depending on the type of regeneration activity undertaken on the land.⁴⁴

The final government interventions were cash transfers introduced in 2002. On condition of performing conservation activities, participants could access cash subsidies for living standards, education, medical care and the purchase of seeds and supplies.⁴⁵ The rice subsidy was later also replaced with a cash transfer. Between 1999 and 2008 roughly 124 million people (or 32 million households) took part in reforestation and conservation activities under the SLCP.⁴⁶

34 International Labour Organization (2018), p. 110.

35 International Labour Organization / Agence Française de Développement (2016), p. 3.

36 International Labour Organization (2018), pp. 107 & 110.

37 International Labour Organization / Agence Française de Développement (2016), pp. 2-6.

38 Ibid, p. 3.

39 Ibid, pp. 3-4.

40 Ibid, p. 4.

41 Ibid.

42 Ibid.

43 Ibid, pp. 4-5.

44 Ibid, p. 5.

45 Ibid.

46 Ibid.

These government programmes facilitated significant reforestation and provided for the protection of many workers. It has been noted, however, that the large share of workers under the state-owned enterprises simplified this process such that the measures used in this case may not be available in other contexts.⁴⁷ Pre-existing government social protection mechanisms also contributed to easing the transition of these workers and communities who previously relied on logging and related activities for their livelihoods.⁴⁸

Supporting green jobs

Governments can mitigate the social and economic impacts of decarbonisation and related job losses by supporting skills training and job creation related to more sustainable and “green” jobs. Such programmes can target certain sectors or certain vulnerable groups.⁴⁹ The ITUC notes that a just transition can be supported by programmes that provide payment for environmental services (PES).⁵⁰ These PES programmes have environmental objectives and provide possible access to revenue for low-income households.

Case Study 5: Brazil, Bolsa Verde

The Bolsa Verde programme in Brazil provides families in extreme poverty with cash payments for activities related to vegetation maintenance and conservation of natural resources.⁵¹ This programme is offered alongside the conditional cash transfer programme called Bolsa Familia, which forms part of the country’s social protection system and seeks to combat extreme poverty.⁵² Participants in the Bolsa Familia programme must fulfil responsibilities related to health care monitoring as well as immunization and school attendance for children.⁵³ Participants in the Bolsa Familia programme are prioritised for enrolment in the PES Bolsa Verde scheme.⁵⁴

In the Philippines, the government introduced the Green Jobs Act targeted at creating and sustaining green jobs. The Act requires the development of training regulations and a qualifications framework for green jobs. It also provides for curriculum development, skills training and fiscal incentives

for training. Under the Act, the Green Technology Centre provides training in various areas including photovoltaic systems, hydroponics, vertical gardening, landscaping, inverter technology and servicing of electric three-wheeled vehicles (called e-trikes).⁵⁵

Case Study 6: South Africa, Creating green jobs for women

A just transition does not simply ensure secure jobs for those (largely men) who are or were previously employed in fossil fuel-related jobs, but job creation in the renewable energy sector sensitive to gender justice and the need to create decent jobs for women.⁵⁶ In South Africa, a

47 Ibid.

48 Ibid, p. 6.

49 International Labour Organization (2018), pp. 143-146.

50 International Trade Union Confederation (undated), pp. 4-5. For other examples of Pro-poor PES programmes in the Global South, see Schwarzer / Van Panhuys / Diekmann, (2016).

51 Schwarzer / Van Panhuys / Diekmann (2016), p. 15.

52 Ibid, p.9.

53 Ibid, p. 10.

54 Ibid, p. 16.

55 International Labour Organization (2018), p. 132.

56 Global Initiative for Economic, Social and Cultural Rights (2020), p. 7.

community initiative is employing women as renewable energy and energy efficiency advisors.⁵⁷ A non-governmental organisation, Gender CC⁵⁸ started the Gender into Urban Climate Change Initiative in 2016. The organisation collaborates closely with local leaders and other community organisations in order to understand the needs of the communities and how their projects can be of use. The communities they serve are primarily from informal settlements and peri-urban areas characterised by high unemployment, lack of access to electricity, and dependence on illegal electricity connections as well as low quality sources of energy including firewood, paraffin, gas and candles.⁵⁹ In 2018 Gender CC began the Renewable Energy and Energy Efficiency for Development Initiative (REEED). The initiative involves training women to be REEED advisors. These women run their own independent businesses that sell sustainable products for renewable energy and energy efficiency, including smokeless woodburning stoves, solar chargers, cookers, and lighting solutions.⁶⁰ The organisation creates energy efficiency hubs where these women can sell the products and also receive training on business skills and green technology.⁶¹ This project provides much-needed employment and income to these women, and they in turn spread awareness and knowledge about renewable energy and energy efficiency while distributing products that contribute to a greener energy.⁶² The distribution of cheaper and cleaner alternatives also shields poor households from increases in electricity that they cannot afford. These benefits are not only important for providing alternatives to expensive coal-powered electricity, but they are also critical in providing safer alternatives to illegal electrical connections and other energy sources that cause indoor pollution and fire hazards.⁶³ The education and participation of the community also has potential to contribute to greater support for renewable energy and related climate mitigation and adaptation policies.

Trade unions and a just transition for workers

Trade unions have a particular role to play in ensuring a just transition for workers in the fossil fuel and related industries. In many instances unions have been instrumental in ensuring

adequate unemployment protection, alternative jobs, and skills training through consultation, negotiation and collective bargaining with employers and governments.

Case Study 7: Australia, How trade unions protect labour rights in transition

In Australia, for example, the closure of the Hazelwood power station was announced in 2016 with only five months' notice.⁶⁴ An agreement to assist workers was negotiated between the State of Victoria, trade unions and the company, Engie. 15.3 million USD was allocated to help retrenched workers transfer to other power companies, while early retirement packages were designed to help create vacancies for the displaced workers. Any participating employers received a contribution from the worker transfer scheme.⁶⁵ In Argentina, the construction workers' union promotes the training of workers for jobs in the renewables sector.⁶⁶ This includes providing skills training for biogas production installation, solar water heaters, and wind and solar power. As the government

57 Ibid, pp. 8-10.

58 See GenderCC SA (undated). The organisation is part of Gender CC International.

59 Global Initiative for Economic, Social and Cultural Rights (2020), pp. 8-9.

60 Ibid, p. 9.

61 Ibid, pp. 9-10.

62 Ibid, p. 10.

63 Ibid.

64 International Trade Union Confederation (2017), p. 15.

65 Ibid.

66 Ibid, p. 13.

increases renewable energy capacity, the support (and demand) for these skills increases. The union also opened a dedicated training and research centre on renewable energies.⁶⁷ The Siemens Gamesa Renewable Energy Group (SGRE) is a multinational corporation that has attempted to include dialogue with workers and local representatives in its approach to decarbonisation.⁶⁸ In 2015 SGRE, along with Spanish Unions as well as the IndustriALL Global Union signed a global framework agreement on social responsibility in the renewable energy industry, focusing on the protection of labour rights.⁶⁹

While the role of trade unions is vital in ensuring the rights of the workers they represent, states must also take measures to safeguard the labour rights of those who fall outside of the unionised industries but whose livelihoods are still affected by decarbonisation. It has been reported, for example, that while there are policies in Canada to compensate and retrain workers from the fossil fuel industries, these policies do not cover other workers in oil and gas towns

who face unemployment. Many such workers are from service sectors in these towns, and the majority are women.⁷⁰ In order to ensure that their livelihoods and labour rights are also protected, state policies must not be limited to the boundaries of fossil fuel industries, but must take into account the consequences for the surrounding communities and their families, particularly marginalised or disadvantaged groups.⁷¹

Case Study 8: Denmark, A just transition from coal to wind

In the 1970s Denmark began transitioning away from coal-fired power to wind energy.⁷² By 2015 the country's globally competitive wind industry employed more than 30 000 people, and 42% of Denmark's electricity was produced by wind power.

The Just Transition Centre attributes the success of the transition to social dialogue and support from unions as well as pension funds.⁷³ In Denmark, more than two thirds of workers are union members, and employee representatives make up a significant portion of large companies' boards. The Just Transition Centre notes that unions have a significant impact on the formation of "public opinion, policy, and social consensus" and that they are "powerful business and political actors".⁷⁴ Given that the Danish unions are in favour of renewable energy and climate policy, they recognise the potential for job creation in these areas.⁷⁵

In addition to this union support, the pensions fund system has been an important source of funding for renewable energy.⁷⁶ For these funds, an investment in wind energy is an investment in strong domestic companies within a sector that has demonstrated its success. The alignment of these funds with Denmark's policies is an important contributing factor to the success of the transition along with the public and private support generated by the pro-wind and pro-climate unions.⁷⁷

67 Ibid. For more on skills training for green jobs, see International Labour Organization (2018), pp. 129-151.

68 Trade Union Development Cooperation Network (2019), p. 37.

69 Ibid.

70 Global Initiative for Economic, Social and Cultural Rights (2020), p. 7. The GI-ESCR explains that "[i]n just transitions discussions, the fact that the extractive sector is dominated by male workers often leads to the needs of female workers being overlooked."

71 See the example of Unión Hidalgo at section 2.8 below. In that case French electrical company EDF consulted with selected people in committees that were not representative of the community.

72 Just Transition Centre (2017), p. 11. See also International Trade Union Confederation (2017), p. 11.

73 Just Transition Centre (2017), p. 12.

74 Ibid.

75 Ibid.

76 Ibid.

77 Ibid.

Case Study 9: UK, Closure of Cottam coal power plant in Nottingham

The Cottam coal power plant in the UK was part of the French Company, EDF Energy.⁷⁸ The plant was originally scheduled to close in 2025, but in February 2019 it was decided to close the plant six months later, a brief time for operations to shut down and placing up to 300 jobs at risk.⁷⁹ Reasons for the earlier closure included the drive towards decarbonisation as well as difficult market conditions.⁸⁰ The company sought to redeploy workers within the “EDF family” as much as possible.⁸¹ However, as noted by a representative of the Prospect Union, workers can only be moved to other coal-fired power stations where those are available and not also being decommissioned.⁸² The union therefore advocated for the training of workers so they can be transferred to other areas of the energy sector, allowing some workers to build on their existing skills and move to similar roles in renewable or nuclear energy.⁸³

Some have criticised policies in the United Kingdom for shortcomings in policy design, including “the failure to consider longer term questions about which energy source(s) will replace coal, and what jobs will replace those that rely on the coal industry”.⁸⁴ Others have noted that clear and consistent policymaking around decarbonisation could contribute to a well-managed and just transition, whereas the UK’s inconsistent policies and legal uncertainty

contribute to hardship for workers and communities reliant on the coal industry.⁸⁵ Be that as it may, the involvement and support of unions was critical in ensuring that workers were protected in the face of this unexpected closure. Where necessary decarbonisation is likely to accelerate in the face of increased pressure, unions have an important role to play in protecting workers and their livelihoods.⁸⁶

Case Study 10: Italy, Energy transition at Italian multinational, Enel

In 2016 the Italian-based multinational Enel⁸⁷ included decarbonisation of the energy mix as a focus for its 2016–2020 Sustainability Plan as well as one of its ESG (environmental, social and governance) pillars.⁸⁸ The company set a goal of becoming carbon-neutral by 2050,⁸⁹ and the plan for decarbonisation included the development of renewable energy capacity; the reduction of thermal capacity; targeted CO2 emission reduction; and environmental retrofitting of certain plants.⁹⁰ The company’s Future-e project focuses on the closure and redevelopment of Enel sites or assets “that have reached the end of their useful life”.⁹¹ The aim is to create a circular project where

78 For more on the EDF group’s engagement with unions on the transition from fossil fuels, see Trade Union Development Cooperation Network (2019), pp. 36–37.

79 BBC (07.02.2019). Other reports refer to 158 jobs at risk, so it is unclear which is more accurate. See, for example, Current News (07.02.2019); The Independent (07.02.2019).

80 Current News (07.02.2019).

81 Unite the Union (2017).

82 Unionlearn (2020).

83 Ibid.

84 Burke (2019).

85 Current News (07.02.2019).

86 Trade Union Development Cooperation Network (2019), pp. 36–37.

87 For an overview of the history of the company as a public and then private entity, see Rugiero (2019), pp. 118–119.

88 Enel (2016).

89 Ibid, p. 37.

90 Ibid, p. 61.

91 Rugiero (2019), p. 127. See also Enel (undated).

existing assets are re-used for projects developed through a project competition and extensive engagement with local stakeholders.⁹² The project includes the closure of 23 thermoelectric plants, of which at least nine have begun conversion into a range of facilities including tourism or hospitality, biotechnology centres, recreation centres as well as two centres for internal Enel logistics.⁹³ With regard to the position of workers from these plants, Enel has a history of industrial relations that are characterised by high levels of unionisation and positive dialogue in the form of bargaining, information-sharing and consultation.⁹⁴ In planning the closure of 23 of its plants in Italy, Enel consulted with Italian trade unions to draw up an agreement on a just transition in the decarbonisation process.⁹⁵ This includes provisions related to processes for relocation, early retirement options, the promotion of mobility, and training to ensure skills for workers that secure their employability.⁹⁶

Naturally, the process is not without its critics. Some have argued that the closure scenario is not as well defined as Enel claims, and that the closure should take place more slowly to ensure limited negative impacts.⁹⁷ Where sites have not been shut down, but capacity is reduced, unions have been critical of increased health and safety risks and work overload as well as outsourcing of activities.⁹⁸ The trade unions' proposals in this regard include an increase in a phased approach to closure or adaptation of plants, new investments in some plants, and insourcing certain activities.⁹⁹ In addition, while Enel has made efforts to guarantee reassignment of workers, for many this inevitably involves displacement to other locations.¹⁰⁰

Rugiero suggests that decarbonisation and a just transition must include integration between company and public policies, effective coordination and planning, and strengthening social dialogue.¹⁰¹ Social dialogue can, as Rugiero

concludes, "play a crucial role in ensuring that the emerging energy alternatives are inscribed in profound social change capable of combining employment development, reducing climate-altering emissions, combating poverty and protecting workers and the territories to which they belong (...)." ¹⁰²

2.1.3 Additional socio-economic impacts from decarbonisation

Decarbonisation affects not only jobs within the fossil fuel industry, but also investments linked to fossil fuels and related industries. A diminishing sector means impacts on pensions that depend on the sector, decreased public budgets in certain areas due to lower industry revenue, as well as decreased income for coal-dependent communities.¹⁰³ These impacts on economic activity in certain communities requires targeted investments and support for these communities beyond the workers directly affected.

92 Rugiero (2019), p. 127.

93 Ibid, p. 128.

94 Ibid, p. 121.

95 Trade Union Development Cooperation Network (2019), p. 35.

96 Ibid; International Trade Union Confederation (undated), p. 5.

97 Trade Union Development Cooperation Network (2019), p. 35.

98 Rugiero (2019), p. 129

99 Ibid.

100 Trade Union Development Cooperation Network (2019), p. 35.

101 Rugiero (2019), pp. 131-132.

102 Ibid, p. 132.

103 International Trade Union Confederation (2017), p. 14.

Case Study 11: US, Coal miners' pension funds

In the Appalachian region in the US, for example, some communities were unable to access government support for their transition from coal. An initiative by the Rockefeller Family Fund and the Appalachia Funders Network supported local communities in designing and submitting alternative economic projects for funding. The initiative aided a just transition by funding new projects in tourism, renewables and other social enterprises.¹⁰⁴ In addition to their impact on employment and livelihoods, the closure of coal mines has a potentially significant impact on those who have invested in the industry. In the United States, a number of multi-employer pension plans, including the US miners' pension fund, are considerably affected by sector closures.¹⁰⁵ These pension funds would previously have been considered low-risk due to their large investment pools and reliance on multiple companies.¹⁰⁶ However, the pension plans rely on employer contributions, and these contributions are reduced with coal mine closures.¹⁰⁷ Pension funds already took a hit with the 2008-2009 recession in the US, so further losses have severe consequences for miners and their families who are dependent on these pensions.¹⁰⁸ Following a number of protests and campaigns,¹⁰⁹ in 2019 the United States introduced a bill to protect miners' pensions.¹¹⁰

There is some controversy surrounding this support for private pensions from one industry while the plight of other declining pension funds is overlooked.¹¹¹ What is clear is that decarbonisation has a significant impact on pensions that affect workers from the industry. Bankrupt companies may not be able to meet their obligations,¹¹² and states may have to intervene to ensure that the right to social security is upheld.

2.2 Renewable energy

Renewable energy projects play a significant role in climate mitigation and adaptation. Combatting climate change is, to a large degree, dependent on their success. However, these projects often require large areas of land and do not always take human rights of those living on the land into

account. Groups that are already marginalised and disadvantaged are most at risk of being overlooked or having such projects imposed on them without regard for the impacts. For example, women are less likely to be given opportunities to participate in decision-making and are regularly excluded from compensation schemes, often on the basis of their lack of land ownership and tenure, further exacerbating their dispossession.¹¹³

The impacts of renewable energy projects differ according to the nature of the activities in question. This section therefore considers examples from the following categories separately: wind and solar energy projects; mega-dams and hydroelectric projects; and mining activities related to the minerals required for renewables.

104 Ibid.

105 Ibid, p. 12; International Trade Union Confederation (undated), p. 4.

106 European Trade Union Confederation (2018), p. 39; Newsmax (02.07.2014).

107 International Trade Union Confederation (2017), p. 12.

108 Newsmax (02.07.2014).

109 Jamieson (2019).

110 Rainey (2019).

111 Ibid.

112 Gill (2020).

113 Global Initiative for Economic, Social and Cultural Rights (2020), p. 12.

2.2.1 Wind and solar projects

Case Study 12: Kenya, The failed Kinangop Wind Park

In Kenya the drive for renewable energy has resulted in investments in areas that are often inhabited by indigenous peoples.¹¹⁴ Land conflicts between local communities and investors, exacerbated by poor regulation and lack of consultation, have resulted in failed renewable energy projects.¹¹⁵ One such example is the Kinangop Wind Park. The 60.8 MW project was first proposed in 2012 and was registered under the Clean Development Mechanism.¹¹⁶ Disputes and protests ensued within the local community over the compensation offered to land owners, fears of forced displacement and relocation, and the extremely close proximity of turbines to local homes (as close as 20 metres in some cases).¹¹⁷ Confrontations with the police resulted in one fatality.¹¹⁸ Ultimately, civil unrest and resultant financial costs and delays forced the cancellation of the project.¹¹⁹

What is noteworthy about this case is that many objections to the project may have been resolved with appropriate consultation and engagement with the community, including respect for the right to FPIC. There was a lack of clarity around compensation for land owners and rumours of possible forced displacement. Some objections also related to fears of radiation from wind turbines and consequent health and

environmental problems. Experts affirm that the fear of radiation is unfounded where wind turbines are concerned.¹²⁰ It is clear that the project's prospects of success would have greatly increased had the developers understood that the solution is "embracing community engagement and integrating free, prior and informed consent into all projects".¹²¹

Case Study 13: UK, Opposition to wind energy projects

Renewable energy projects in the UK often face objections from the public based on claims of negative impacts on landscape, heritage and neighbouring properties.¹²² Given the importance of mitigating climate change through increased reliance on renewable energy, in many cases these alleged impacts are outweighed by the benefits of the renewable energy project.¹²³ However, in some instances the negative impact on heritage and cultural resources is considered greater than the potential benefit. This was the case in *City of Bradford Metropolitan Council v Gillson and Sons*, heard before the Planning Inspectorate in 1995.¹²⁴ The proposed erection of three wind turbines was refused based on the impact on the character and appearance of the Brow Moors, a particular landscape that is closely associated with the literary work of the Brontës, and therefore an important

¹¹⁴ Kavilu (2021).

¹¹⁵ Ibid; Equitable Origin (2016).

¹¹⁶ Clean Development Mechanism (2021).

¹¹⁷ McGovern (2016); Equitable Origin (2016); Business and Human Rights Resource Centre (undated-a); Capital Business (06.07.2018).

¹¹⁸ CIEL (2021), p. 8.

¹¹⁹ McGovern (2016); Business and Human Rights Resource Centre (undated-a).

¹²⁰ Waruru (2015).

¹²¹ Equitable Origin (2016).

¹²² See, for example, Planning Inspectorate (1995a), [1995] 10 P.A.D. 243; Planning Inspectorate (2000), [2000] 15 P.A.D. 833; High Court of Justice, England and Wales (2013), [2013] EWHC 2162; High Court of Justice, England and Wales (2015a), [2015] EWHC 3; Outer House Court of Session, Scotland (2017), [2017] CSOH 113.

¹²³ See, for example, High Court of Justice, England and Wales (2015a), [2015] EWHC 3; High Court of Justice, England and Wales (2013), [2013] EWHC 2162; Outer House Court of Session, Scotland (2017), [2017] CSOH 113.

¹²⁴ Planning Inspectorate (1995b), [1995] 10 P.A.D. 255.

source of tourism for the local area.¹²⁵ In a 2015 case concerning the heritage impact of a wind turbine generator, the Planning Court held that the negative impact on views from Carnaby Temple outweighed the benefits of the proposed project.¹²⁶

While the abovementioned cases do not deal with human rights directly, they are illustrative of the possibility for such renewable energy projects to have a detrimental impact on important cultural features and tangible cultural heritage, affecting the enjoyment of cultural rights. However, such impacts would only meet the threshold of human rights violations or abuses in the most extreme cases where particularly significant cultural heritage would be severely affected by such a renewable energy project. In light of the potential effect on human rights, detrimental impacts on cultural heritage should be avoided wherever viable alternatives exist.

2.2.2 Mega-dams and hydroelectric projects

The construction of large dams for hydropower has been associated with severe human rights violations and abuses, particularly in Latin America. These projects often result in the forced displacement of local communities, usually indigenous peoples, as well as harm to ecosystems and rivers on which these communities depend to for food, health and livelihoods.¹²⁷ In addition to this, communities are denied their procedural rights, for example to participation. In particular, indigenous peoples' right to FPIC is regularly violated. The renewable energy companies responsible for these projects rarely have sufficient due diligence procedures in place, and the ensuing human rights abuses are well-documented.¹²⁸

Case Study 14: Laos, The Nam Theun Dam

The Nam Theun dam in Laos is a hydropower project that was funded by numerous entities, including the World Bank and the Asian Development Bank.¹²⁹ The project required the resettlement of 6.300 individuals from local communities.¹³⁰ While the social and environmental effects of this project have been heavily criticised,¹³¹ its gender-mainstreaming approach is still noteworthy.¹³² Gender specialists, led by the Laos Women's Union, were hired to support the power company and work with local government to ensure the effective participation of women throughout the project, particularly in relation to the implementation of a Social Development Plan and Resettlement Action Plan.¹³³ The identification of project impacts included gender-disaggregated data.¹³⁴ Importantly, the land

¹²⁵ Ibid, para 37-38.

¹²⁶ High Court of Justice, England and Wales (2015b), [2015] EWHC 292.

¹²⁷ UNEP (2015), p. 8; Eisen / Eschke (2020), p. 16.

¹²⁸ See, for example: Amnesty International (2021), p. 68; Business and Human Rights Resource Centre (2020); Business and Human Rights Resource Centre (2019). For documentation on cases in Panama, see: Amnesty International (2021), p. 62; CIEL (2021), p. 8; Carbon Market Watch (2016); Chatziantoniou / Alford-Jones (2016); for documentation on cases in Honduras: Amnesty International (2021), p. 68; Bank Track (2018); for Colombia: Eisen / Eschke (2020), p. 34; for Chile: Ibid, p. 16; CIEL (2019), p. 3; CIEL (2021), p. 9.

¹²⁹ World Bank (2019).

¹³⁰ Inter-American Development Bank (2014), p. 11.

¹³¹ Rogers (2018); Both ENDS (02.04.2015).

¹³² See US Agency for International Development (2018), p. 9.

¹³³ Inter-American Development Bank (2014), p. 11; World Bank (2013), p. 10.

¹³⁴ World Bank (2013), p. 10.

titles and compensation for resettlement were issued jointly to husbands and wives. The available evidence suggests that the measures taken to include women were a success.¹³⁵

This example affirms the importance of gender-mainstreaming to protect the rights of women who are impacted by the activities of renewable energy projects. It also demonstrates the value added by the involvement of civil society organisations who are able to advocate for those impacted by the project.

2.2.3 Mining for minerals related to renewable energy technology

Renewable energy technology is dependent on the extraction of minerals, including cobalt (see section 2.5), copper, lithium, manganese, nickel and zinc, most of which are mined in the Global South.¹³⁶ While these minerals are vital for a successful transition to renewable energy sources, the associated mining activities pose significant risks to individuals and communities.¹³⁷ The demand for these minerals is expected to increase with the global transition to renewable energy, therefore increasing the scope for related human rights abuses. The Business and Human Rights Resource Centre has developed a “Transition Minerals Tracker” to track and monitor the human rights policies and practices of companies that are involved in extracting minerals required for renewable energy technology.¹³⁸

The Business and Human Rights Resource Centre has also done research on the human rights impacts and risks in the mineral supply chains associated with solar panels,¹³⁹ wind turbines,¹⁴⁰ and electric vehicles.¹⁴¹ Between 2010 and 2020

the Transition Minerals Tracker identified 276 allegations of human rights violations and abuses related to the mineral supply chain, despite many of the companies having human rights policies.¹⁴² The nature of these allegations indicates that the key areas of negative human rights impacts are related to:

- attacks on human rights defenders;
- lack of consent from indigenous communities;
- excessive use or pollution of vital water sources;
- corruption and mismanagement of funds by extractive companies and governments; and occupational health and safety of mine workers.¹⁴³

There are numerous human rights risks associated with the minerals required for renewable energy technology and they extend throughout the value chain. For example, the mining required for lithium-ion batteries may take place largely outside of China, but China dominates the supply chain.¹⁴⁴ Polysilicon, necessary for solar panels, is almost exclusively sourced from China; the production process fraught with forced labor and very high CO2 emissions,¹⁴⁵ leading to an US import ban and similar discussions in Europe. It is therefore crucial that state and non-state actors at every level of the value and supply chain take the necessary steps to respect and protect human rights.

¹³⁵ Ibid, p. 9.

¹³⁶ Business and Human Rights Resource Centre (2021), p. 1.

¹³⁷ See Amnesty International (2021), pp. 69 & 84.

¹³⁸ Business and Human Rights Resource Centre (2021), p. 1.

¹³⁹ Business and Human Rights Resource Centre (undated-b).

¹⁴⁰ Business and Human Rights Resource Centre (undated-c).

¹⁴¹ Business and Human Rights Resource Centre (undated-d).

¹⁴² Business and Human Rights Resource Centre (2021), p. 1.

¹⁴³ Business and Human Rights Resource Centre (2021), p. 3.

¹⁴⁴ More than 60% of global lithium refining, over 70% of cobalt refining and nearly 80% of anode production according to Garrett Hering (25.10.2021): US lithium-ion battery imports spike amid scramble to address ethical risks. S&P Global. <https://www.spglobal.com/marketintelligence/en/news-insights/latest-news-headlines/us-lithium-ion-battery-imports-spike-amid-scramble-to-address-ethical-risks-66838633> (accessed 28.02.2022).

¹⁴⁵ See Murphy / Elimä (2021).

2.3 Bio-fuels

Biofuels have been promoted as renewable alternatives to fossil fuel in the efforts to mitigate climate change. However, the promotion of biofuels has led to a number of severe human rights impacts across the globe.

The use of agricultural land for crop-based biofuel production decreases available land for food production and can therefore increase food prices and reduce access to food.¹⁴⁶ The promotion of biofuel production has therefore been linked to global food price shocks which disproportionately affect the poor.¹⁴⁷ The example of EU and US biofuel policies and their consequences are discussed below.

In addition to the broad impacts on the right to food, the extent of land use required for biofuel production also leads to widespread land-grabbing and related human rights impacts on local communities, often rural and indigenous peoples.¹⁴⁸ The threats to the land, livelihoods, food security and lives of these peoples have been well documented.¹⁴⁹

In South Korea, the classification of biomass generation as renewable was criticised in the Korean Biomass Plaintiffs case, filed in 2020, where the plaintiffs pointed to the forest devastation, CO2 emissions, and air pollution resulting from biomass generation.¹⁵⁰ It was argued that biomass subsidies therefore infringe on constitutional environmental rights, while also diverting potential subsidies away from other renewable resources that are carbon-neutral.¹⁵¹

Case Study 15: EU and US, Biofuel policies and the right to food

In 2007 the EU and US adopted policies in support of biofuel production.¹⁵² In 2008 a global food price increase led to a food crisis that had a disproportionate impact on access to food for the poor, and increased the number of people in the world experiencing hunger.¹⁵³ This food crisis has been attributed to a number of factors, but many agree that the promotion of biofuels was a significant contributor.¹⁵⁴ A report from the International Bar Association explains: “Increased reliance on agrofuels displaces land that is otherwise used for crop production, reducing supply and driving up prices. This in turn results in price volatility on international food commodity markets, a main cause of reduced food accessibility for vulnerable populations.”¹⁵⁵

It has been estimated that in 2008 an additional 100 million people were pushed into poverty, while about 30 million more people were driven to hunger.¹⁵⁶ And while global prices may have peaked and fallen again after the 2007-2008 crisis, a report from ActionAid demonstrates that in southern Africa and east Africa, domestic price increases lingered far longer.¹⁵⁷ This means disproportionate human rights impacts on already vulnerable populations in countries with low income.

In May 2008 the UN Committee on Economic, Social and Cultural Rights responded with a statement

146 Levy / Patz (2015), p. 317; Amnesty International (2021), p. 80.

147 Levy / Patz (2015), p. 317; Amnesty International (2021), p. 80; Mary Robinson Foundation (2015a), p. 5; International Bar Association (2014), p. 94; UNEP (2015), pp. 8-9. For a recent example of problematic biofuel policies, see Oxfam Belgium (2021).

148 Amnesty International (2021), p. 80; Lewis (2017), p. 44; Human Rights Watch (2019); Amnesty International (2018); EarthRights International (2017).

149 Amnesty International (2021), p. 80.

150 Climate Case Chart (undated-a).

151 Ibid.

152 For a comprehensive discussion of EU biofuels policies and their human rights impacts, see ActionAid (2012).

153 International Bar Association (2014), p. 183; Mary Robinson Foundation (2015a), p. 5; Mary Robinson Foundation (2015b), pp. 24-25.

154 International Bar Association (2014), p. 183; Mary Robinson Foundation (2015b), pp. 24-25; ActionAid (2010), pp. 12-13.

155 International Bar Association (2014), p. 183.

156 ActionAid (2010), pp. 12-13.

157 Ibid, p. 16.

on the world food crisis urging states, among other things, to limit the rise in food prices by “encouraging production of local staple food products for local consumption instead of diverting prime arable land suitable for food crops for the production of agrofuels, as well as the use of food crops for the production of fuel”.¹⁵⁸ The food crisis, the role of biofuel policies and related production have also been addressed by the Special Rapporteur on the right to food,¹⁵⁹ and the Special Rapporteur on the right to a healthy environment.¹⁶⁰

Case Study 16: Guatemala, Sugarcane production for bioethanol in the Polochic Valley

The demand for sugarcane production in Guatemala increased with the demand for sugar-based biofuel. A significant portion of EU biofuels have been provided by Guatemala over the years.¹⁶¹ Large investment projects have sought to increase the country’s capacity to produce and export ethanol in light of increased demand.¹⁶²

Indigenous peoples in the Polochic Valley were already struggling for the recognition of rights to their land when a large refinery took over most of the land in the valley for sugarcane production between 2003 and 2008.¹⁶³ While indigenous communities had previously been allowed to remain on the land and continue farming to provide for their families, by 2008 most of the legal land titles had been transferred to the refinery, which promised jobs and good wages for those in the Polochic Valley.¹⁶⁴ However, the company declared bankruptcy in 2009; it laid off many workers and their plantations were almost auctioned off in 2010.

Between 2009-2011, 14 communities claimed the land they considered theirs. In March 2011, despite ongoing settlement negotiations, the company (Chabil Utzaj, owned by a relative of the then president) obtained eviction orders for the communities living in the Polochic Valley. Government forces, private security, and refinery personnel were involved in the violent eviction of 11 of these communities, demolishing homes and crops to prevent their return. The three communities that were not evicted were shielded by rising rivers that prevented access as well as jurisdictional problems with the eviction order.¹⁶⁵ During the evictions there were fatalities and arrests, access to food and livelihoods for these communities was decimated, and there has been little access to justice for any of the human rights harms suffered.¹⁶⁶

Following the Polochic Valley evictions, the Guatemala Human Rights Commission, along with a coalition of Guatemalan and international organisations, petitioned the Inter-American Commission on Human Rights to grant precautionary measures to protect the indigenous communities from further irreparable harm.¹⁶⁷ The precautionary measures were granted in June 2011, but the government did not act to assist the affected communities. Attacks on the lives and homes of the communities continued until late October 2011.¹⁶⁸

The Guatemalan government delivered the first food aid only in December 2011. Promises to provide land to the displaced families were largely not met, and the conditions on the new land were very poor. By 2015 more than 600 families were still awaiting relocation.¹⁶⁹

¹⁵⁸ UN, Committee on Economic, Social and Cultural Rights (2008).

¹⁵⁹ UN, General Assembly (2015), para 89(g).

¹⁶⁰ UN, General Assembly (2019), para 80(f).

¹⁶¹ See Cutz et al (2020), p. 8.

¹⁶² ActionAid (2013), pp. 4-5.

¹⁶³ Ibid, p. 5.

¹⁶⁴ Ibid, pp. 6-7.

¹⁶⁵ Ibid, p. 7.

¹⁶⁶ Ibid, p. 8.

¹⁶⁷ Guatemala Human Rights Commission (undated).

¹⁶⁸ Ibid.

¹⁶⁹ Ibid.

2.4 Land use: Agriculture, forests and conservation

Many climate change mitigation and adaptation activities are concerned with land and how it is used. These measures may require land use changes or the preservation of existing land use.¹⁷⁰ The renewable energy projects discussed above, particularly the production of biofuels, often require changes to large portions of land.¹⁷¹

The land-use changes with perhaps the most significant implications for climate change are agriculture and the use of forests. It has been estimated that emissions from agriculture, forestry and other land use amount to 23% of total greenhouse gas emissions.¹⁷²

Forests are critical for carbon sequestration and therefore for climate mitigation. Deforestation exacerbates and accelerates climate change. Forest conservation as well as reforestation or afforestation are therefore popular climate adaptation strategies.¹⁷³ Other natural landscapes are also important carbon sinks that might be conserved in the interests of climate mitigation.

With regard to agriculture, adaptation to changes in the climate may result in the promotion of new (more sustainable) agricultural practices or crop varieties that could interfere with local farming practices and threaten those who rely on small-scale or subsistence farming. As shown above, the production of biofuels also threatens agriculture as it is land-intensive and may inhibit the use of agricultural land for food.¹⁷⁴

Changes in land use create risks for individuals and communities who rely on the land in question. Local communities, often indigenous peoples, may depend on the land for housing, food, water and

livelihoods. Displacement or dispossession can violate these rights.¹⁷⁵

A major challenge in this context is a lack of legal security of tenure, which is wide-spread in many countries of the Global South.¹⁷⁶ This is a particularly common problem for indigenous communities whose rights are often not recognised or protected in domestic legislation.

It is therefore important that mitigation and adaptation activities consider the rights of those who use the land identified for proposed development or land-use changes. Local and indigenous communities must be consulted and their rights to the land must be respected and promoted, even where domestic legal protection is inadequate.¹⁷⁷ The following section considers examples of human rights impacts related to mitigation and adaptation activities associated with forests and their conservation, as well as agriculture.

2.4.1 Forests and conservation

Forests are of critical importance to climate change mitigation. As forests act as carbon sinks, the preservation of existing forests (or establishment of new ones) is an important tool for reducing carbon in the atmosphere. Deforestation is therefore a severe threat, and reforestation policies and projects such as those under REDD+ have an important role to play.¹⁷⁸ However, many forests across the world are also inhabited by indigenous people and their homes, livelihoods and cultures have often been destroyed by activities related to reforestation or conservation.¹⁷⁹ It is therefore critical that any reforestation or afforestation measures take particular care to respect and protect the human rights of indigenous peoples.

170 Lewis (2017), p. 43.

171 See, for example, Levy / Patz (2015), p. 317.

172 Amnesty International (2021), p. 70.

173 See Cavanagh / Benjaminsen (2014) for an early example in Uganda.

174 Lewis (2017), p. 44.

175 Ibid, p. 43.

176 Amnesty International (2021), pp. 75-77. See documentation of land use rights at <http://www.landmarkmap.org/>

177 See Committee on Food Security / FAO (2012), pp. 11-17.

178 REDD+ is discussed in more detail at section 5.1.2 below.

179 Lewis (2017), p. 42; International Bar Association (2014), p. 49; UNEP (2015), p. 9; Cavanagh / Benjaminsen (2014).

International human rights law requires the active participation and consultation of indigenous peoples for development and activities on their land and territories.¹⁸⁰ Their free, prior and informed consent should be sought before such activities are approved or implemented.¹⁸¹ Violations of this right are, however, all too common. In many cases, indigenous peoples lack the security of tenure or land rights to resist illegal land seizure and related evictions and displacement.¹⁸² Some conservation measures aiming to reduce or prevent deforestation take a protectionist or fortress approach to conservation which prohibits all human activity within forests, resulting in severe impacts on indigenous peoples' rights.¹⁸³

In **Kenya**, for example, the Sengwer people have faced forced evictions and displacement as a result of inappropriate attempts at forest conservation.¹⁸⁴ This is despite the evidence that indigenous peoples have a more successful track record of caring for biodiversity and protecting forests than government conservation projects do.¹⁸⁵

Carbon trading schemes have, in some instances, created perverse incentives and opportunities for “carbon piracy” and the abuse of indigenous peoples and their rights.¹⁸⁶

The **Australian entrepreneur** David Nilsson is known as the “carbon cowboy” for falsely promising excessive profits to indigenous peoples, and then entering into agreements that provide

no legal protection for them. Inequitable contracts like these offer favourable terms for the investor and contain hidden clauses that hand over ownership of the forests with no rights to access or use forest resources.¹⁸⁷ Lack of domestic protection for indigenous rights significantly increases the vulnerability of indigenous peoples to such abuses.¹⁸⁸

Reforestation must also take into account the current uses of the land in question. In some instances, reforestation projects can impede access to food where the land is relied on for small-scale or subsistence farming.¹⁸⁹ This is particularly important where arable land is scarce to begin with and is becoming more scarce as a result of climate change.¹⁹⁰ It has also been observed that large monoculture plantations are undesirable climate solutions due to their reduced effectiveness as carbon sinks (when compared to natural reforestation), as well as their increased environmental impacts that have consequences for food and water.¹⁹¹ Indeed, some have criticised the REDD programme for its classification of monoculture plantations as “forests”, as it allows for large plantations of commercial (and alien) species that are detrimental to the local ecosystem.¹⁹²

In **Brazil** a plantation of Australian eucalyptus trees was approved to earn carbon credits despite resultant degradation of the environment and reduced resilience against climate change.¹⁹³

180 For a positive example from Ecuador of indigenous peoples' participation, see Mary Robinson Foundation (2015a), pp. 15-16.

181 UN, General Assembly (2007).

182 Lewis (2017), pp. 45-46; Amnesty International (2021), pp. 72 & 76.

183 Amnesty International (2021), p. 76; UN, OHCHR (2021), pp. 6-10.

184 Amnesty International (2021), p. 72; Eisen / Eschke (2020), pp. 16 & 34.

185 Amnesty International (2021), p. 76; CIEL (2021), p. 11 & fn 80; Mary Robinson Foundation (2015a), pp. 15-16. See also Dawson et al (2021), p. 26.

186 Horner (2015), pp. 102-105.

187 Ibid, p. 105; Friends of the Amazon (undated).

188 Horner (2015), p. 105.

189 Amnesty International (2021), pp. 82-83.

190 International Bar Association (2014), p. 94.

191 Amnesty International (2021), pp. 82-83.

192 Horner (2015), pp. 98-101. The damage of these plantations is caused by, among other things, increased requirements for heavy machinery, increased use of fertilisers and pesticides, increased reliance on genetically modified organisms and subsequent impacts on soil and water resources and the local ecosystem as a whole.

193 Ibid, pp. 99-100.

Case Study 17: Kenya, Centre for Minority Rights Development (Kenya) and Minority Rights Group International on behalf of Endorois Welfare Council v Kenya¹⁹⁴

This case before the African Commission on Human and Peoples' Rights (the African Commission) was decided in 2010 and concerned the development of a game reserve by the Kenyan government on land belonging to the Endorois indigenous community.¹⁹⁵ Although not directly related to climate change, the case illustrates the potentially harmful impacts of ill-conceived conservation efforts that fail to respect the rights and territories of indigenous peoples. The Endorois people were evicted from their ancestral land in 1978 when the reserve was established. After challenging the eviction, the authorities promised compensation in the form of fertile land, employment in the reserve, and 25% of tourist revenue. When the compensation was not forthcoming, the Endorois community approached the domestic courts where they were not successful in obtaining any relief. They turned to the African Commission claiming violations of their rights, including their rights to property, religion and culture, natural resources, and development. In the complaint, the community sought restitution of the land as well as compensation for the losses suffered.¹⁹⁶ The African Commission held that the Kenyan government had violated all of these rights,¹⁹⁷ affirming that any objectives of the game reserve related to conservation and economic development would not be impeded by allowing the Endorois to lawfully exercise their rights to their land, natural resources, and cultural practices.¹⁹⁸ The African Commission's recommendations included recognition of the Endorois' rights to the land, ensuring access to the land, provision of adequate compensation for the loss suffered, payment of royalties as well as access to employment with respect to the economic activities within the reserve, and dialogue and reporting with respect to the recommendations made.¹⁹⁹

Years after the success of this case, the Endorois community have become more involved in activities related to the reserve which is managed by the county government and the Kenya Wildlife Service.²⁰⁰ They have been involved in developing a community protocol with reference to relevant national and international laws as well as various benefit-sharing models.²⁰¹ Stemming from a participatory process, the community protocol will set out the process of consent and benefit sharing where the resources belonging to the Endorois community are concerned, as well as any associated traditional knowledge.²⁰²

Although the circumstances of this case do not relate directly to climate action, the example of the Endorois judgment is instructive for similar climate-related cases where conservation projects with climate mitigation or adaptation objectives pose a threat to the rights of local or indigenous communities.²⁰³ The case of the Endorois community demonstrates that indigenous peoples' rights must be central to any proposed activities on their land.

The example also indicates that it is possible to pursue conservation projects in conjunction with the protection of indigenous peoples' rights, as long as indigenous peoples are fairly compensated

194 African Commission on Human and Peoples' Rights (2010).

195 Claridge (2011), p. 2.

196 African Commission on Human and Peoples' Rights (2010), para 22.

197 Claridge (2011), p. 5.

198 African Commission on Human and Peoples' Rights (2010), para 173.

199 Ibid, recommendations (a)-(g).

200 Birgen / Cocchiaro / Siakilo (2018), p. 60.

201 Ibid, p. 59.

202 Ibid, pp. 59-60.

203 See Amnesty International (2021), p. 76; Lewis (2017), p. 45-46.

and are consulted and involved in relevant decision-making. Indeed, many have affirmed that conservation projects implemented and

managed by indigenous peoples, or in cooperation with indigenous peoples, tend to have greater success.²⁰⁴

Case Study 18: Peru, REDD and indigenous peoples' rights

Peru has roughly 69 million acres of forest, more than a third of which is home to indigenous peoples,²⁰⁵ but largely without legal protection.²⁰⁶ Seeking to take advantage of potential REDD+ funding, the Peruvian government was a strong advocate for the programme.²⁰⁷ While the dual challenge of poor legal recognition and REDD+ incentives already places indigenous peoples in a vulnerable position, the Peruvian government has exacerbated the situation through policies and practices that promote industrial resource extraction over community-based forest management.²⁰⁸ Apart from disparaging remarks on the indigenous communities by the president,²⁰⁹ there was a distinct lack of appropriate consultation with indigenous peoples in Peru and, where consultation took place, it was rarely conducted prior to the approval or commencement of the activities in question.²¹⁰ Following extensive protest and campaigning, the Peruvian government recognised the right of free, prior and informed consent in its national laws in 2011.²¹¹ Lack of clear safeguards within the REDD+ process, however, still left indigenous peoples in a vulnerable position. Indigenous communities in Peru remained critical of REDD+ and the prioritisation of the “carbon counting” for the benefit of foreign states with high emissions over the prioritisation of rights issues and indigenous forest management.²¹²

2.4.2 Agriculture

Agriculture is intertwined with human rights as well as climate change. Sustainable agriculture is essential for providing access to food, particularly in areas where climate change is causing droughts, flooding and other unpredictable weather patterns. However, agricultural practices are also significant contributors to climate change.

The IPCC has estimated that roughly 21–37% of total greenhouse gas emissions can be attributed to the food system as a whole, with 9–14% attributable to crop and livestock activities.²¹³ Measures to mitigate these emissions and adapt to the impacts of climate change will need to uphold all human rights, including the rights to food and water, while paying particular attention to the livelihoods of agricultural workers.

204 Dawson et al (2021); Amnesty International (2021), pp. 76 & 82-83; Mary Robinson Foundation (2015a), pp. 15-16; UN, OHCHR (2021), p. 11ff.

205 Horner (2015), p. 103.

206 Ibid.

207 Espinoza Llanos / Feather (2012), p. 8.

208 Espinoza Llanos / Feather (2012), p. 15; Horner (2015), p. 104. In addition, the success of REDD activities has been undermined by the government's failure to prevent illegal logging, see CIEL (2014).

209 Espinoza Llanos / Feather (2012), p. 15.

210 Raftopoulos / Short (2019), pp. 95-96; Espinoza Llanos / Feather (2012), pp. 51-52.

211 For the history of the legal reform related to land and resources of indigenous peoples, see Espinoza Llanos / Feather (2012), pp. 16-17. See also Horner (2015), p. 104.

212 Espinoza Llanos / Feather (2012), pp. 48-49.

213 See Mbow et al (2019), p. 439.

Case Study 19: Costa Rica, Livestock programme to reduce GHGs

Costa Rica has roughly 45 000 livestock farms, and GHGs associated with livestock production form 30% of the country's GHG emissions.²¹⁴ The first phase of the NAMA (Nationally Appropriate Mitigation Actions) livestock project (from 2013 to 2021) involves 10% of these farms, while the latter phase will scale up to incorporate 80% of the farms by 2028.²¹⁵ The project allows farmers to mitigate GHG emissions through "i) improved fertilisation planning; ii) rotational grazing and live fences; iii) improvement of pastures; and iv) silvo-pastoral systems".²¹⁶ While the project is estimated to have a significant impact in terms of GHG reduction,²¹⁷ its aim is also to contribute to the government's anti-poverty strategies. Intended benefits from the project include: efficient farming operations which mean savings for the farmer; higher and more stable yields leading to more predictable income; increased production to secure the right to food for the population; greater resilience to climate impacts such as drought; and reduced pollution of water sources, contributing to the health of rural communities.²¹⁸ The continued success of these livestock farms will also ensure that employment continues to be available for the 14% of the workforce employed there.²¹⁹

The case study shows that through working with farmers and empowering them to adapt to climate change and contribute to climate mitigation, measures to promote effective climate action may support and enhance human rights for the individual farmers as well as for the

greater population. We should note here that the descriptions and data available reflect the objectives and potential of this particular livestock programme, but no evidence was found to indicate whether or not the programme has achieved these results.

Case Study 20: Germany, Neuzelle Agricultural Cooperative v Head of Administrative Services of Oder-Spree rural district authority [2013] EU ECJ C-545/11

A German agricultural cooperative, Neuzelle, challenged amendments to a support scheme for farmers designed to provide income support and ensure a fair standard of living before the European Court of Justice.²²⁰ The amendments involved the progressive reduction of these support payments over a number of years.²²¹ The savings from these reductions would be used to finance challenges faced by farmers related to climate change, the growing importance of bio-energy, effective protection of biodiversity, and improved water management. The cooperative argued that the reduction in direct payments was unlawful on the basis of (1) a legitimate expectation that had been created, and (2) discrimination against cooperatives who received a greater percentage of reduction in payment as opposed to smaller farms and farmers.²²²

The court held that there was no legitimate expectation that could be relied on, as it was clear that the support scheme could be modified and adapted.²²³ The court also held that it was fair to require

214 Mary Robinson Foundation (2015a), p. 7.

215 Ibid, p. 8. For a more detailed description of the project see UNFCCC (2014).

216 Mary Robinson Foundation (2015a), p. 8.

217 Ibid. It is estimated that reductions and carbon capture or storage from the project will result in a saving of 12.9 million tonnes of CO₂ equivalent.

218 Ibid.

219 Ibid, p. 7.

220 European Court of Justice (2013), para 14-16, EU ECJ C-545/11. See also Climate case chart (undated-b).

221 European Court of Justice (2013), para 8.

222 Ibid, para 19.

223 Ibid, para 39.

farmers with a larger area of agricultural land to contribute a greater percentage in reductions to support rural development.²²⁴ The court affirmed that there was no discrimination, and that all groups of farmers such as Neuzelle were deemed to be a single farmer for the purposes of the scheme.²²⁵

In this case the need for climate adaptation and mitigation measures was linked to the reduction in income support provided to farmers in the region. The case was not framed in human rights terms, but it is not difficult to imagine that a more drastic measure of this kind could have a detrimental effect on the right to an adequate standard of living of vulnerable farmers and their families. Where a negative impact on the right to food might occur, states are obliged to avoid retrogression in the level of enjoyment of the right in accordance with article 2(1) of the International Covenant on Economic, Social and Cultural Rights. This means that the necessary climate action should be funded while continuing to provide a vital safety net for farmers affected or any other measures needed to prevent regressive impacts.

2.5 Transport

Fossil fuels are a central feature of transportation systems worldwide. Climate mitigation and adaptation measures are necessary in the transport sector (which causes about 20% of global GHG emissions)²²⁶, but these measures also have the potential to infringe on human rights or have discriminatory effects.

When it comes to air travel, a number of countries and institutions have restricted or banned short haul flights, affecting all travellers. Taxes on aviation, levied in many countries to make air travel more expensive and thus less attractive, have the potential of differential impact on people. Amnesty International for example has argued for progressive taxation, a ban of private jets and

business class seats, and for investing in low-carbon transport infrastructure accessible to all.

Many countries have a large equality gap in transport: Transport-related air and noise pollution affects communities on low incomes more, lower income groups cannot afford the journeys they need to make for work or education or need to spend a disproportionate amount of time to make them, prices for public transport may rise faster as the costs for cars, car-dominated city planning makes lives dangerous for pedestrians or bicyclists.²²⁷ This is why ex ante environmental and human rights impact assessments should make sure that transport infrastructure meets the needs of different communities,²²⁸ particularly disadvantaged communities.

Transforming transportation for a low-carbon future also involves promoting other forms of transport such as cycling. However, projects related to the creation of more cycling-friendly infrastructure and “bikeable neighbourhoods” are also not equitably distributed.²²⁹ For example, in the United States, wealthy neighbourhoods, with higher tax income, are more likely to have greater investment in safe infrastructure and therefore a high proportion of cyclists.

Low-carbon transport also requires investment in renewable alternatives such as electric vehicles. However, this requires the use of batteries that to date rely on minerals obtained through mining activities, mostly in the Global South, that are associated with extensive environmental damage and human rights violations and abuses.²³⁰

224 Ibid, para 44-45.

225 Ibid, para 50.

226 <https://ourworldindata.org/co2-emissions-from-transport> (accessed 03.02.2022).

227 See for the UK: Gates et al (2019); for Germany: Frey et al (2020).

228 Amnesty International (2021), p. 86.

229 Levy / Patz (2015), p. 317.

230 See 2.3.3 above. See also Amnesty International (2021), pp. 69 & 84; González / De Haan (2020); Business and Human Rights Resource Centre (2018).

Case Study 21: Democratic Republic of Congo, Mining for cobalt

Cobalt is used in lithium-ion batteries which are currently the most common form of electric vehicle (EV) batteries.²³¹ The Business and Human Rights Resource Centre notes that in 2017 global demand for cobalt was anticipated to grow by between 585 and 1000 percent by 2050. More than 60% of cobalt production worldwide comes from the Democratic Republic of Congo (DRC) where the mineral is extracted through commercial operations as well as artisanal mining.²³² Between 2007 and 2019 the Business and Human Rights Resource Centre recorded 31 allegations of human rights violations and abuses related to cobalt mining in the DRC.²³³ The nature of the violations and abuses include “environmental pollution, corruption, dangerous working conditions and displacement of local communities with insufficient consultation and compensation”.²³⁴ For example, Glencore, a prominent large-scale commercial mining operation, has been the subject of allegations of bribery, corruption, and abuse of power in the DRC.²³⁵ Such corruption robs ordinary citizens of the benefits of the exploitation of their country’s natural wealth and resources, affecting the financial and other resources available for the realisation of human rights. Another significant area of concern relates to reports of the use of child labour for cobalt mining, particularly within small-scale and artisanal mining operations.²³⁶ A 2019 report from the OECD affirms that child labour has been observed in mining operations in the DRC and that there are “significant weaknesses in existing due diligence practices regarding child labour”.²³⁷ The Center for Effective Global Action reports that 11% of children in these mining communities work outside the household, with 23% of those working in the mining sector.²³⁸ These children tend to have less education for their age and are less likely to be enrolled in school.²³⁹ Given that the need for additional household income for poor families is a driver of child labour, interventions that affect artisanal mining income may increase child labour as income is sought elsewhere.²⁴⁰ Any interventions should be carefully assessed for human rights risks prior to implementation in order to avoid any unintended negative impacts on these vulnerable communities.²⁴¹

Climate change mitigation and adaptation measures in the area of transport will require significant changes to public transport systems and the use of private vehicles. This affects many aspects of peoples’ lives, including affordable access to healthcare services, education, and employment. Measures and policies related to

changes in the transport system must include public participation and take the needs of the population into account. Any technology required, such as batteries for electric vehicles, must be sourced and produced with full respect for human rights throughout the supply chain.

231 Business and Human Rights Resource Centre (undated-d).

232 Business and Human Rights Resource Centre (undated-d).

233 Ibid.

234 Ibid.

235 Wild / Silver / Clowes (2018); Global Witness (2014); RAID (2018).

236 OECD (2019), p. 6.

237 Ibid.

238 Faber / Krause / Sánchez de la Sierra (2017), p. 7.

239 Ibid, p. 8.

240 Ibid, p. 9.

241 Ibid. For examples of potential initiatives, see Mancini et al (2021).

2.6 Housing, construction and sea-level rise

2.6.1 Forced displacement, relocation policies and managed retreats

Climate change adaptation may require relocation and lead to the displacement of communities where land becomes uninhabitable due to natural disasters or sea level rise. Where policies of forced relocation or managed retreats are implemented, they need to be done with respect for human rights, particularly the right to adequate housing.²⁴² Civil society groups have documented that climate change and disaster risk reduction were used as “excuses for demolitions and evictions of informal settlements to make way for modernization and development projects, without adequate resettlement programs for displaced persons”.²⁴³

In the **Philippines**, for example, one relocation initiative aimed to rehabilitate certain urban waterways in Metro Manila that contributed to flooding and risks related to storm surges. The government offered residents either very expensive in-city relocation sites or sites far from the urban centre (where most residents worked in the informal sector). As a result, few households chose to participate in this relocation programme, and the programme was ultimately suspended, leaving the flood risks and unsafe housing unresolved.²⁴⁴ Evictions have also occurred, with the government asserting that these are in the interests of the welfare and safety of the urban poor.²⁴⁵

In the context of strategies for climate change adaptation in the Maldives, the Special Rapporteur on the right to adequate housing has noted the risks associated with forced displacement.²⁴⁶ Forcing communities to relocate in order to adapt to climate change can result in harm to human

rights if it is not managed carefully with adequate consideration for these rights.

2.6.2 Sea-level rise and coastal protection mechanisms

As sea-level rise poses an increasing threat on housing and infrastructure on coastlines across the world, various adaptive interventions are implemented to address this challenge. Any coastal protection mechanisms will have implications for the surrounding environment, properties, and infrastructure. Where these measures might have a detrimental effect on human rights, they must be avoided and the impacts must be mitigated.

Levy and Patz note, for example, that appropriate adaptation technologies will depend on the context and the risks faced. While large sea walls are used to stabilise shorelines in many cases, they argue that this could threaten the livelihoods of fishers, particularly in areas where small-scale fishing provides income for large portions of the population.²⁴⁷

In **Vietnam**, for example, mangrove plantations are a preferred means of storm surge protection. This ecological approach is a far cheaper intervention than the sophisticated technology used by the Netherlands. In addition, the mangroves “preserve wetlands and marine food chains that support local fisheries”.²⁴⁸

As sea levels continue to rise and flooding increases in many areas of the world, coastal protection and measures to reduce flood risks are inevitable. It is important for states to carefully consider the range of possible responses and interventions, and to select the alternatives that offer the most protection for the full range of human rights.

242 Lewis (2017), p. 41. On the inclusion of human rights in relocation policies in Samoa, see Eisen / Eschke (2020), p. 39.

243 Global Initiative for Economic, Social and Cultural Rights / MISEREOR (2020), p. 7.

244 Ibid, pp. 16-17 & 19.

245 Ibid, p. 19.

246 Rajamani / Darrow / McInerney-Lankford (2011), p. 18. See also UN, Human Rights Council (2009), para 7; UN, Human Rights Council (2010), para 19.

247 Levy / Patz (2015), p. 318.

248 Ibid.

Case Study 22: Australia, Coastal protection: Ralph Lauren 57 v Byron Shire Council²⁴⁹

In New South Wales, authorities have not had a consistent approach to coastal protection. The Byron Shire Council attempted a managed retreat as a result of risks to coastal properties, but later withdrew it.²⁵⁰ In the 1960s and 1970s the Council had established hard shoreline armouring which had the effect of exacerbating soil erosion elsewhere on the coastline – placing private properties at greater risk. The Council later drafted planning policies that prevented residents of these properties from installing their own protections to mitigate the impact of coastal erosion on their properties, although these were withdrawn before they came into effect.²⁵¹ As a result of increasing coastal erosion, in 2010 a group of property owners took legal action against the Council, asking the court to hold the Council liable for the costs of erecting shoreline protection measures as well as for the loss of property value.²⁵² The plaintiff residents argued that the Council had been negligent in erecting hard shoreline armouring that worsened erosion on adjacent properties or that the Council's armouring constituted a public nuisance.²⁵³ The position of the residents was also impaired by the Council's inconsistent policy approach to coastal protection as it issued and then withdrew planning documents and continued to maintain that its preferred policy is one of a managed retreat.²⁵⁴

The case was not ultimately resolved in court as the parties agreed to a settlement. The terms of the settlement prevented the Council from removing coastal protection measures installed by the plaintiff residents, unless the residents agreed to such removal. The settlement also provided that the residents should apply to the Council for permission to erect any additional shoreline armouring within one year of the settlement, and effect such armouring within a year of approval. Following that, no changes to the shoreline or coastal protection measures may be repaired or added for a period of 20 years. Any subsequent proposals are also not guaranteed approval.²⁵⁵

This case illustrates that the environment is dynamic and interrelated. Changes made in one location in order to avoid or mitigate certain impacts may have unintended negative effects elsewhere.²⁵⁶ Here the Council's attempt to secure a portion of the shoreline with hard armouring failed to consider the knock-on effect on the

rest of the shoreline, and how the changes to wave action and soil movement would compound coastal erosion for surrounding areas, including the plaintiffs' properties. Although Ralph Lauren 57 v Byron Shire Council did not have serious human rights implications, the case illustrates the dangers of undertaking adaptation activities without fully investigating and appreciating the short-term and long-term effects on surrounding communities and their rights.

2.6.3 Other housing-related impacts

Climate change has important consequences for housing and development planning. Mitigating and adapting to climate change may mean stricter regulation for certain activities, and more freedoms for others. In the context of development planning, for example, more concessions may need to be made for building plans that integrate sustainable materials and renewable energy, while environmentally harmful approaches may be more restricted.

249 New South Wales Supreme Court (2016): [2016] NSWSC 169; Climate Case Chart (undated-c). For another case dealing with a similar set of facts, see Climate Case Chart (undated-d).

250 UNEP (2017), p. 23.

251 Ibid. The contents of the draft coastal zone management plan were discussed and challenged in New South Wales Supreme Court (2016).

252 Climate Case Chart (undated-c); UNEP (2017), pp. 35-36.

253 UNEP (2017), pp. 35-36.

254 Climate Case Chart (undated-c).

255 Ibid; UNEP (2017), p. 35.

256 UNEP (2015), p. 10.

In the case of *R v Medway Council* in the UK, a proposed development plan was challenged on the basis that the development would block the sun from a neighbouring property and limit the neighbour's ability to generate electricity from their solar panels.²⁵⁷ Although the case does not concern human rights, it is illustrative of the types of concerns that must be taken into consideration.

Land use and development planning also requires adequate consideration of climate change and appropriate adaptation. Cases from the United States²⁵⁸ and Australia²⁵⁹ illustrate that development permits and plans will be rejected if they fail to take into account the increased need for stormwater capacity for future flooding or sea level rise. Although developers have sought to argue that these decisions unfairly limit their development rights, such decisions will be necessary in order to protect property and life from the risks associated with climate change and natural disasters.²⁶⁰ Once again, these are not decisions that have any direct negative impact on human rights, but they underscore the adaptation measures required and how they affect different stakeholders.

It is also important to note that some building and housing adaptations can exacerbate the impacts of climate change for others. For example, it is now recognised that the copious use of air-conditioning in urban centres can worsen heat exposure for the urban poor. Waste heat from air-conditioning can warm outdoor air considerably, exacerbating health risks related to heat waves for those unable to afford air-conditioning (or homes).²⁶¹

2.7 Participation in climate-related decision-making

In addition to the impacts on human rights identified in the sections above, there are procedural rights in relation to the design and implementation of climate policies and related decision-making.

Many negative human rights impacts can be avoided if appropriate and comprehensive access to information, participation and consultation takes place prior to these adaptation and mitigation activities. For a variety of reasons, groups most affected by climate change are most affected by the human rights impacts of adaptation and mitigation and it is precisely the most affected vulnerable groups who are regularly overlooked in climate action.²⁶² Including inputs of affected marginalised, vulnerable and disadvantaged groups in decision-making on climate adaptation and mitigation makes use of their knowledge and expertise and realizes their procedural rights.²⁶³

While a number of states have promoted public participation and access to information in the context of climate change-related decision-making, states are not always proactive about soliciting input from those affected, particularly more marginalised groups.²⁶⁴ In addition to women,²⁶⁵ special attention should be given to the inclusion and participation of indigenous peoples,²⁶⁶ those with disabilities,²⁶⁷ as well as migrants and refugees.²⁶⁸ Any climate action taken must not have a disproportionate negative effect on women nor on any of these groups, and gaining their input is critical to identifying such potential impacts.²⁶⁹ The following case study looks in particular at land rights of women and how they were included, or rather excluded, from the consultation process.

257 High Court of Justice, England and Wales (2019): [2019] EWHC 1738 (Admin).

258 Virginia Circuit Court (2018): No. CL18002289-00 (Va. Cir. Ct. May 24, 2018).

259 New South Wales Land and Environment Court (2017): [2017] NSWLEC 1042.

260 UNEP (2020), p. 25.

261 Levy / Patz (2015), p. 318.

262 Ibid, p. 50.

263 Amnesty International (2021), pp. 47, 50, 91, 103; Eisen / Eschke (2020), p. 19.

264 UNEP (2015), pp. 34-35.

265 Amnesty International (2021), p. 91; Mary Robinson Foundation (2015a), p. 6.

266 Amnesty International (2021), p. 51.

267 Amnesty International (2021), p. 52.

268 Ibid, p. 55.

269 Lewis (2017), pp. 46-47.

Case Study 23: Mexico, Unión Hidalgo: Community participation and the role of women

Unión Hidalgo is a small, energy-poor Mexican community in Oaxaca state. In 2015, a subsidiary of the energy company *Électricité de France* (EDF) began negotiations for land rights with some representatives of the community with the aim of consolidating already existing wind parks into one large wind farm.²⁷⁰ The resultant contracts were in conflict with Mexican legislation that recognises that the relevant lands of the Unión Hidalgo community are communally owned, and they therefore contributed to social conflicts.²⁷¹ The government approved all necessary licences by 2017. The Zapoteca indigenous people only received information of the development plan after the approvals in 2017.²⁷² After a lot of back and forth, also involving Mexican courts, a consultation process was started but plagued with bribery, lack of access to (culturally adequate) information, lack of freedom to express views as well as attacks, intimidation and harassment of human rights defenders.²⁷³

Only 50 of about 400 participants in the consultation process were women, and most of these were direct family of male landowners and did not meaningfully engage or participate in the process.²⁷⁴ The participation of women was neither encouraged nor was there any effort to arrange appropriate times or locations suitable for women.²⁷⁵ Female participants who opposed the project were met with particular hostility; they alleged that authorities and representatives of the company failed to make sufficient effort to protect them from hostile speech and dangerous behaviour.²⁷⁶ Women rights defenders were “stigmatized, harassed, and subjected to violent attacks”.²⁷⁷

270 UN, Special Rapporteurs on extreme poverty and human rights, the right to development, the situation of human rights defenders, and the rights of indigenous peoples (2021), pp. 6-10 for an overview of human rights impacts from wind power projects in the region. See also Global Initiative for Economic, Social and Cultural Rights (2020), pp. 14-17. In 2018, representatives from the community turned to the French National Contact Point to file a complaint but withdrew it after 18 months, arguing that the mediation procedure initiated was fruitless, see: <https://www.oecdwatch.org/complaint/union-hidalgo-vs-edf-group/> (accessed 06.02.2022). On the court case in France, see <https://www.ecchr.eu/en/case/wind-park-in-mexico-french-firm-disregards-indigenous-rights/> (accessed 06.02.2022).

271 UN, Special Rapporteurs (2021), pp. 2-3 & 9.

272 UN, Special Rapporteurs (2021), p. 3.

273 Global Initiative for Economic, Social and Cultural Rights (2020), pp. 16-17; UN, Special Rapporteurs (2021), pp. 4-5. Elsewhere the number of participating women is reported at 5% out of 500 participants. See UN, Special Rapporteurs (2021), p. 8.

274 Global Initiative for Economic, Social and Cultural Rights (2020), p. 16.

275 Global Initiative for Economic, Social and Cultural Rights (2020), p. 16.

276 UN, Special Rapporteurs (2021), p. 7.

277 Global Initiative for Economic, Social and Cultural Rights (2020), p. 17.

3 Factors that influence human rights impacts

This section discusses the factors that influence the protection of human rights in climate adaptation and mitigation. This discussion is based on the examples set out above. Firstly, the presence of underlying systemic factors will be examined. Thereafter, any potential mechanisms to avoid negative human rights impacts, as presented in the above examples, will be discussed. Finally, mechanisms to address impacts and redress are explored, along with a consideration of their effectiveness. This is by no means a comprehensive list, but it provides an overview of some of the factors that can influence the protection of human rights, or lack thereof, in the context of climate action.

3.1 Underlying systemic factors

There are various systemic factors that influence the likelihood of human rights violations by governments or abuses by private entities. Adequate protection and realization of human rights requires proactive measures taken by governments to fulfil their human rights obligations, particularly where minorities or marginalised groups are concerned.

Where a country has a poor record of protecting human rights, this would increase the likelihood of harm to human rights in the context of climate action, including harm related to the rights of affected population groups to participate in climate policies or to find redress for any harm. Conversely, a high level of human rights protection would increase the likelihood of more participatory climate policies and more accountability of state or corporate action but is not a guarantee that human rights are not violated or abused by climate mitigation or adaptation measures.

The identified systemic factors are set out below:

(a) **Lack of clear and explicit safeguards**

Human rights violations and abuses are more likely to occur where appropriate safeguards and policies to protect human rights are not in place. In particular, these safeguards need to be clear and explicit where human rights are concerned. For example, in the case of REDD+ activities, the Cancún agreements have been criticised for framing human rights related safeguards in vague and general terms (see section 5.2). The lack of clear and explicit provisions protecting human rights meant that, as shown in **Case Study 24**, indigenous people remained vulnerable to abuses even after gaining formal recognition of their rights under national law.

(b) **Absence of redress and grievance mechanisms**

The absence of accessible mechanisms to have grievances heard is a factor that exacerbates human rights violations and abuses. An absence of mechanisms for redress and hearing complaints also perpetuates human rights violations and abuses as it means there is no accountability for failures to respect, protect and fulfil human rights. In the example of the Sasan project in India (see **Case Study 24**), the investigation into Ex-Im Bank found that there was no mechanism to address and resolve complaints from those negatively affected by projects funded by the bank. In addition to this, the Clean Development Mechanism also failed to provide a forum for those affected to air their grievances (see section 5.1).

(c) Inadequate security of tenure

As noted above, the importance of land use for numerous climate mitigation and adaptation activities means that land rights, including access, security of tenure, and ownership, are critical for the protection of human rights. Housing, food, water, and activities important for livelihoods are often tied to land. Those without security of tenure or domestic legal recognition of their land rights are therefore at greater risk. Women are less likely to have formal ownership or titles to land, leading to their exclusion from consultation, participation, and compensation related to activities on the land, despite bearing the brunt of dispossession. This is evident in the example of Unión Hidalgo in Mexico (see **Case Study 23**).

(d) Lack of domestic recognition and protection of indigenous peoples' rights

Lack of domestic recognition for land rights is a particular concern where indigenous peoples are concerned. Indigenous land rights, in addition to other rights such as FPIC, are often infringed by activities related to climate action. The extent to which these violations and abuses are allowed to occur seems to be linked to the extent to which governments provide legal and other support for the recognition and protection of indigenous peoples. In the example of REDD activities in Indonesia, it is clear that the government has constantly resisted pressure to amend its legislation to include adequate recognition of indigenous rights (see **Case Study 25**). In the case of the Endorois in Kenya, the government was complicit in the violation of indigenous rights, and only relented years later after pressure from the African Commission (see **Case Study 17**). In the Polochic Valley in Guatemala, the introduction of corporate interests in bio-fuels exacerbated existing struggles for indigenous peoples' recognition of their rights to the land, leading to escalated conflicts and further rights violations and abuses (see **Case Study 16**). In the case of Unión Hidalgo in Mexico, the presence of legislation recognising indigenous land rights was not sufficient to prevent human rights abuses, and the government still cooperated with the company to facilitate and sanction harm to indigenous peoples and their land (see **Case Study 23**).

(e) Bad governance

Government corruption, bribery, and collusion with offending entities, in short: bad governance, is another significant factor. Abuse of human rights is rife where governments either turn a blind eye to the harmful impacts a company's activities, or where governments sanction the activities of such companies through unethical agreements and violent enforcement. In Peru, for example, the government fuels activities that are harmful to indigenous peoples by promoting industrial resource extraction and REDD activities without appropriate safeguards (see **Case Study 18**). In Guatemala, the government failed to act on the recommendations of the Inter-American Commission on Human Rights to protect the indigenous peoples of the Polochic Valley (see **Case Study 16**). And in the Democratic Republic of the Congo the government is responsible for corruption and collusion with mining companies, despite their well-documented human rights abuses (see **Case Study 21**).

(f) Inadequate participation and consultation processes

Another important factor influencing the nature and extent of human rights impacts is the degree and quality of participation and consultation with affected communities. Most instances of human rights abuses and violations in the case studies presented here, if not all, are characterised by a failure to adequately consult with all those affected by the proposed activities before their approval and commencement. This is the case for indigenous peoples affected by government supported REDD activities in Peru who have historically been excluded from participation in decisions affecting their lands (see **Case Study 18**). Poor participation and consultation also creates preventable tension and exacerbates existing conflicts as is evident from the example of the Kinangop project in Kenya. In that case the lack of adequate consultation and information about the wind energy project allowed the spread of misinformation regarding the health impacts of wind turbines, creating further unrest and division (see **Case Study 17**). Finally, attempts at consultation are inadequate where they fail

to take measures to solicit inputs from those who are marginalised and fail to account for extenuating circumstances. This can be seen in the example of Unión Hidalgo, where the government did not provide any allowances following a devastating earthquake, and where women were discouraged from participating due to a lack of protection from harassment and intimidation (see **Case Study 23**).

(g) **Pre-existing vulnerabilities of marginalised and disadvantaged groups**

The extent of human rights impacts from activities related to climate mitigation and adaptation is often determined by the extent to which the marginalized members of society are protected from harm. Those who are already excluded are much more likely to be overlooked and/or negatively impacted by climate action. This is true for indigenous peoples and women, but also those living in poverty, children, minorities, and various other categories. In relation to a just transition from fossil fuels, for example, many schemes to address the socio-economic impacts are focused almost exclusively on the workers in the industries in question. This excludes those who live and work in towns that are built around coal mines, such as the many businesses and service industry workers that support coal or other fossil fuel communities (see sections 2.1.2 and 2.1.3). In China, the measures taken to mitigate the impacts of the logging ban, although relatively comprehensive, were still criticised for providing inadequate protection to the marginalised, including those who were not state workers and could not qualify for assistance (see **Case Study 4**).

Where indigenous people are concerned, a pre-existing lack of legal recognition makes them more vulnerable to human rights abuses from multi-national corporations. This vulnerability also exposes them to harm from inequitable contracts and carbon piracy perpetrated by unscrupulous individuals and companies (see section 2.4).

(h) **Failure to consider or assess impacts**

Human rights abuses can also occur as a result of a failure to adequately assess the full extent

of the impacts of a proposed policy or activity. Appropriate impact assessment requires a consideration of the impacts on marginalised and disadvantaged groups, including the specific contextual factors that expose these groups to risk, how sensitive they are to the identified risks, and their adaptive capacity. An example of this is the impact of a sudden and poorly-planned fuel subsidy removal on the livelihoods of the poor in Ecuador (see **Case Study 1**). In the US, measures had to be taken to address the overlooked impact of decarbonisation on the pensions of coal miners and other workers (see **Case Study 11**). In Metro Manila, a relocation initiative failed to consider the impact on the poor people who would be relocated outside urban areas where there is no access to work (see section 2.7). When designing biofuel policies, the EU and US failed to adequately consider or assess the impact of these policies on agriculture, global food prices, and food security, particularly for developing countries and the poor (see **Case Study 15**).

(i) **Failure to consider or assess unintended impacts on the environment**

In some instances, unintended environmental consequences could lead to human rights impacts. The nature of environmental impacts requires caution when interfering with environmental processes and ecosystems. For example, the introduction of hard shoreline protections in Byron Shire, Australia led to changes in wave action and coastal erosion, impacting neighbouring homes (see **Case Study 22**). In Brazil, the inappropriate introduction of monoculture plantations with alien species affected local ecosystems could pose a threat to those who depend on the forests for access to food and water (see **Case Study 5**).

(j) **Lack of policy coherence**

Finally, human rights impacts can also be precipitated by an inconsistency in policy approaches to climate mitigation and adaptation. The lack of policy coherence can exacerbate conflicts and negative impacts. In the UK, for example, a lack of consistent policy on decarbonisation and related legal uncertainty exacerbates the hardships faced

by coal workers and their communities (see **Case Study 9**). Also in the UK, there were discrepancies between the stated objectives of a scheme to address fuel poverty and the evidence that households in fuel poverty did not receive assistance (see section 2.2.1). In this case inconsistencies between policy objectives and implementation contributed to the harm suffered. In Australia, the absence of clarity regarding relocation policies and coastal protection strategies added to the impacts of coastal erosion in Byron Shire (see **Case Study 22**).

3.2 How to avoid negative impacts

There are a number of mechanisms that seem to increase the protection of human rights and contribute to the avoidance or mitigation of negative impacts associated with climate action. Many of these involve addressing the systemic factors noted in section 3.1 above.

(a) Human rights impact assessments

Comprehensive human rights impact assessments conducted prior to approval and commencement of activities or policies for climate change mitigation or adaptation can make a significant contribution to the avoidance and mitigation of negative impacts. Such assessments should pay particular attention to the disadvantaged or marginalised, and should consider impacts on the full range of human rights. For example, human rights impact assessments are explicitly required for projects funded under the Green Climate Fund and the Adaptation Fund (see section 2.1.3). This ensures that, at the very least, some of the potential harm to human rights can be identified and avoided before a project is approved. Such impact assessments can help shape the design and implementation of projects, such as the case of Nam Theun Dam in Laos where gender specialists assisted in identifying impacts, and then shaped the way impacts on women were avoided and mitigated (see **Case Study 14**).

(b) Monitoring and reporting on activities

In addition to impact assessments before commencement, potential impacts during the life-cycle of a project or policy need to be monitored and ongoing accountability should be ensured. Both the Adaptation Fund and the Green Climate Fund require ongoing monitoring and reporting on measures taken to minimise or avoid risks flowing from the project in question (see section 5.3). This should be done for all climate mitigation or adaptation measures as they often span many years and, as circumstances change, new risks and potential impacts may arise.

(c) Explicit recognition of indigenous peoples' rights, including FPIC

Given the numerous examples of harm to indigenous peoples resulting from climate action, it is evident that clear recognition of indigenous rights is critical to avoiding human rights impacts. Governments and funding bodies alike could avoid these impacts by following the example of the Green Climate Fund by requiring free, prior and informed consent for all activities on indigenous territories (see section 5.3). The position of indigenous peoples would be further strengthened by ensuring that domestic legislation and policy recognises and respects indigenous land rights.

(d) Respect for land rights and the inclusion of women

In addition to recognising indigenous territories, governments can mitigate the impact of climate action by ensuring security of tenure and legal recognition of rights of use, access and ownership of land. This is particularly important for women who are often excluded from ownership and therefore excluded from decision-making and benefits related to the land. Projects can also provide additional security and protection for women in these instances, such as was done in Laos with the Nam Theun Dam project. In that instance, women were included by allowing for dual-title properties in resettlement programs and providing compensation for both men and women (see **Case Study 14**).

(e) Consultation and participation

Comprehensive engagement with affected individuals, groups and communities is critical in order to avoid harm to human rights. Not only does such consultation and participation aid in the identification of potential impacts on those affected that may not be self-evident, the consultation and participation is a human right in and of itself. The example of Nam Theun Dam in Laos shows that making use of civil society groups such as gender specialists can ensure a more accessible and participatory process (see **Case Study 14**). Similarly, impacts on the labour rights of workers at risk from decarbonisation have been minimised or avoided in many instances as a result of trade unions. The examples above demonstrate that the unions can be an important tool in engaging with companies and governments on behalf of workers to ensure that their rights are protected. The just transition from coal to wind energy in Denmark has been attributed at least in part to the significant role played by unions in facilitating social dialogue (see **Case Study 8**). In the case of Enel, bargaining, information-sharing and consultation helped to ease the transition for many workers. Of course, unions are only an asset to such dialogue if their practices meet human rights standards for participation and consultation (see section 2.1.2).

The success of climate mitigation and adaptation measures can be vastly improved if local communities are actively engaged and participate in the design and implementation of such measures. For example, it has been established that indigenous owned and managed forests outperform privately managed forests with respect to biodiversity outcomes and carbon capture (see sections 2.7 and 2.4.1).

(f) Phased approaches to policies that will have negative impacts

With regard to government policies that affect an entire population, a phased approach to certain climate mitigation and adaptation measures may aid in avoiding or minimising detrimental human rights impacts. For example, where fuel subsidies need to be removed in order to reduce reliance on fossil fuels, governments can consider a gradual

phased approach such as was implemented in Egypt (see **Case Study 2**). In Costa Rica, the introduction of more sustainable farming practices was similarly phased with support initially targeting small-scale farmers (see **Case Study 19**).

Failures to ensure phased approaches to company-level decarbonisation policies have been criticised (see 2.1.2), and in some instances closures have been delayed where human rights impacts could not be mitigated or avoided (see 2.1.2). Appropriately phased approaches can ensure that necessary action is taken while allowing populations, particularly the most vulnerable, to adjust and adapt to socio-economic changes such that their human rights are not infringed in the process.

(g) Pre-existing government programmes for social protection

Human rights can be further protected from the negative impacts of climate adaptation and mitigation efforts where governments have pre-existing programmes and schemes for social protection in place. This contributes to the resilience of individuals and communities, shielding them to some degree from the socio-economic impact of these measures. For example, in the case of China, impacts from the introduction of a logging ban were mitigated in part by existing social protection for those affected (see **Case Study 4**). This existing social protection could then be supplemented and expanded where additional support was required. In Brazil, the Bolsa Verde programme was supported and reinforced by the pre-existing Bolsa Familia programme which served many of the same households and thereby increased protection for the most vulnerable (see **Case Study 5**).

(h) Targeted schemes to ease negative impacts

Along with pre-existing social protection, many climate adaptation and mitigation measures necessitate targeted protection for those who will be most affected. By providing direct support to those bearing the brunt of the negative impacts, the human rights of these individuals and communities can be safeguarded.

For example, part of Egypt's approach to removing fuel subsidies, along with increased food subsidies, was targeted social assistance for poor families with young children as well as for the elderly, disabled and orphans (see **Case Study 2**). China introduced similar targeted programmes and food subsidies to ease the impact of its logging ban on vulnerable households that were affected (see **Case Study 4**). In addition to the social protection in these examples, negative impacts can also be eased by targeted investment in certain areas. For example, in the Appalachian region in the US, private investments eased the negative impacts felt by communities bearing the brunt of decarbonisation efforts (see **Case Study 11**). In Costa Rica, targeted government investment in farmers as part of its NAMA livestock programme both eased the transition to sustainable practices and contributed to decarbonisation (see **Case Study 19**).

(i) **Schemes to address job losses related to decarbonisation**

Phasing out fossil fuels potentially has a significant detrimental impact on workers within the industry. These impacts can be avoided and mitigated through programmes to provide for affected workers, as well as other proactive job creation and training initiatives. Governments and/or companies, can ease the impacts on workers facing unemployment through a variety of means.

In the case of China, the government provided job placement services, retirement schemes, unemployment benefits for state forest workers who were affected (see **Case Study 4**). At company level, Enel entered into an agreement with trade unions on a just transition in the decarbonisation process, including processes for relocation, early retirement options, the promotion of mobility and training to ensure skills for workers that secure their employability (see 2.1.2). Cooperation between unions, companies and governments can aid in ensuring that the labour rights and other human rights of workers are protected. In the example of Hazelwood, Australia, such cooperation assisted in easing the impact on workers through an agreement that

provided for worker transfers, early retirement packages and employers' contributions for participation in the scheme (see 2.1.2). This level of cooperation for the protection of labour rights is also evident in the global framework agreement entered into between Siemens Gamesa Renewable Energy Group and various unions (see 2.1.2).

Retraining workers is particularly important given that entire industries are dying and many cannot use their current skills any longer. In Argentina, this is promoted by the construction workers' union which facilitates training for jobs in the renewables sector, and also opened a training and research centre on renewable energies (see 2.1.2). When the Cottam plant in the UK closed, many workers could not be transferred, so the union advocated for training workers for other areas of the energy sector, allowing some to build on existing skills and move to similar roles in renewable or nuclear energy (see **Case Study 9**).

Proactive creation of more sustainable and "green" jobs can also ensure that there are sufficient employment opportunities. In South Africa, a community-based initiative equips women entrepreneurs to provide renewable energy alternatives to their communities (see **Case Study 6**). The Bolsa Verde programme in Brazil provides payment for environmental services, thereby providing income for households in need, while contributing to environment protection (see **Case Study 5**). In the Philippines, the introduction of the Green Jobs Act provides for the development of training regulations and a qualifications framework for green jobs, as well as curriculum development, skills training and fiscal incentives for training (see 2.1.2).

(j) **Policy coherence**

Finally, the negative impact of climate mitigation and adaptation measures can be eased where there is consistency and coherence in government policies. The benefits of such policy alignment are evident in the example of Denmark's transition to wind energy. In that case there was a large degree of harmony between the objectives and policies

of various sectors as well as public support. The alignment of public opinion, government policy, private industry and union positions provided for a smoother transition with minimal harm (see **Case Study 8**). A just transition will require such integration between company and public policies, effective coordination and planning, and strengthening social dialogue.²⁷⁸

3.3 Mechanisms to address impacts and seek redress

The examples discussed in this handbook demonstrate a number of different possibilities for victims of human rights abuses who want to obtain relief and redress. These are utilised with varying degrees of success. For some, the effectiveness of the mechanism will depend on the circumstances and the particular context. What does seem clear is that in most cases, those affected by significant human rights harm may need to pursue many (if not all) of these avenues simultaneously. In **Case Study 23**, the community turned to the Mexican court, the French National Contact Point and, finally, to a French court, for violation of the French due diligence law. This illustrates the importance of UNGP compliant complaints mechanisms at a project and funding level, as well as on an international level, particularly for minorities and indigenous peoples who may receive very little protection or support from their governments.

(a) Protests and public pressure

In many instances, the communities affected by climate adaptation and mitigation measures are small rural communities, often comprised of indigenous peoples. For this reason, they may not be in a position to resist oppressive or harmful government policies. However, where decisions affect a broader, more visible or influential portion of the population, they may be able to rally support, or organize widespread protest and civil disobedience. This was the case in Ecuador, where the removal of fuel subsidies caused civil unrest which ultimately led to the revocation of the policy

(see **Case Study 1**). The example of the Sasan project in India, it was pressure from the public – both in India and in the US – that led to the investigation of the US Bank that funded the project (see **Case Study 24**).

(b) Formal grievance mechanisms

Formal grievance mechanisms have not always been available for climate mitigation and adaptation projects but many international funds now include processes for hearing complaints related to individual projects as well as broader policies. This is the case for the Global Environment Facility, the Adaptation Fund and the Green Climate Fund (on all three, see section 5.3). The most comprehensive of these mechanisms is the Independent Redress Mechanism of the Green Climate Fund which includes direct access for individual complaints as well as follow-up procedures. Such mechanisms ensure that even where states and corporations do not provide opportunities for complaints to be heard at a national level or a project level, those affected have other possible channels through which to be heard.

(c) Informal appeals to funding bodies

Where formal grievance mechanisms do not exist, it is possible for complaints and allegations of human rights violations and abuses to reach funding bodies. These bodies could be more inclined to respond than some offending corporations or governments. In the case of the Sasan project in India, there were no available complaints mechanisms under the Clean Development Mechanism. However, protests and news of human rights abuses associated with the project resulted in an investigation conducted by the Office of the Inspector General for the funding bank – the US Ex-Im Bank in this instance (see **Case Study 24**). As many human rights abuses result from a profit-driven system, the threat of project-funding being reduced or revoked may be more effective than other avenues.

²⁷⁸ See Rugiero (2019), pp. 131-132.

(d) National (domestic and foreign) courts

One common avenue for relief for victims of human rights violations and abuses is to approach the domestic courts. Where complainants seek to approach regional human rights bodies for relief, this is often a prerequisite. However, as with many human rights cases, a favourable judgment does not always translate into government compliance with the relevant order. This was the case in Indonesia where the Constitutional Court decided a case brought by the National Indigenous Peoples Organization, affirming that national legislation on forestry was unconstitutional as it failed to recognise indigenous peoples' customary rights to their forests. Despite this judgment, the government was unwilling to give effect to the order, leading to criticism and concern from the UN Committee on the Elimination of Racial Discrimination as well as the UN Committee on Economic, Social and Cultural Rights (see **Case Study 25**).

Those seeking redress for human rights harms can also approach foreign national courts for relief in certain circumstances. This has been done in relation to human rights abuses in Unión Hidalgo where representatives for the community have approached French courts alleging that the company failed in its due diligence obligations under French law. The outcome of the case remains to be seen, but this is a possible mechanism for redress where local governments are unable or unwilling to assist those affected (see **Case Study 23**).

(e) Regional human rights bodies

Another possible mechanism for redress is that of regional human rights bodies. In the example of Polochic Valley in Guatemala, the national human rights commission joined a coalition of local and international organisations to petition the Inter-American Commission on Human Rights to grant precautionary measures to protect the indigenous communities of the valley. Although the precautionary measures were granted, the government did very little to meet its obligations (see **Case Study 16**). This illustrates the value of National Human Rights

Institutions and organisations in drawing attention to human rights violations and abuses. However, the case resulted in limited benefits for communities affected. Even with a successful judgment, the government was reluctant to fulfil its human rights obligations.

In the case of the Endorois, the African Commission on Human and Peoples' Rights similarly gave a favourable judgment for the indigenous community. In this case the process from initiating the legal challenge to obtaining the judgment took many years. However, the position of the Endorois after the judgment did improve, as evidenced by more equitable benefit-sharing, increased involvement in conservation activities, and respect for indigenous peoples' consent (see **Case Study 12**).

Regional human rights bodies are a potential source of relief for those who have been harmed by climate mitigation and adaptation activities. However, the process can be very slow, it requires the support of other organisations, and it holds no guarantees for government compliance, even where a favourable judgment is obtained. At the very least, it does allow for complainants to be heard and ensures that human rights abuses are acknowledged. Whether this leads to practical remedies or compensation for affected individuals and communities will depend on the circumstances.

(f) UN human rights mechanisms

UN human rights mechanisms provide another avenue for potential redress. In the example of REDD activities in Indonesia, the UN Committee on the Elimination of Racial Discrimination recognised the human rights violations that had been alleged, and consistently provided clear recommendations to the State. However, given the span of its continued interventions (from 2007 to 2021) it is apparent that the Indonesian government has done little to meet these recommendations, with the exception some inadequate legislative amendments (see **Case Study 25**).

In the case of Unión Hidalgo in Mexico, four human rights Special Rapporteurs wrote a joint letter to the company, asking for further information about the alleged human rights abuses. It is possible that such an intervention at company level may be more effective than focusing on government action and policies. However, as this letter was sent during 2021, the value of this approach and the response from EDF Group remains to be seen (see **Case Study 23**).

4 Conclusion

Mitigating and adapting to the worst effects of climate change is essential for the continued realisation of all human rights. However, as this handbook demonstrates, climate mitigation and adaptation measures have a wide range of potentially harmful consequences. They often depend on large tracts of land and activities that can be disruptive and destructive to local environments. Climate-related policy measures affect large groups of people and, without careful consideration of the impacts, particularly for marginalised and disadvantaged groups, these measures can exacerbate harm to the rights of the most vulnerable.

The examples in this handbook comprise a small selection of the various cases across the world of human rights impacts flowing from climate mitigation and adaptation activities. As pressure to address climate change increases in the coming years, the urgency of the climate crisis must not be viewed as a justification for unnecessary and disproportionate measures harming human rights.

Preventing unnecessary harm to human rights resulting from climate action requires a clear recognition and respect for human rights from governments, funding bodies, and developers or companies implementing the relevant activities. In particular, the rights of indigenous peoples must be recognised and protected, as well as the

rights of women. Proposed activities and policies should be preceded by adequate and inclusive consultation with affected groups as well as comprehensive environmental and human rights impact assessments. Projects should be subject to ongoing monitoring and reporting, and should include complaints mechanisms consistent with human rights. Where detrimental impacts are likely to occur, phased approaches should be considered in order to mitigate impacts. Existing government programmes for social protection should be utilised to extend protection for those affected and, where necessary, additional targeted schemes for those most vulnerable should be introduced to address other socio-economic impacts, including unemployment.

While there has been progress in recognising human rights in climate mitigation and adaptation measures, there is still a long way to go. The more governments around the world understand the urgency of climate-related action, the higher the risk is of human rights infringements or violations, cloaked as “necessities” but not adequately assessed.

Human rights must be more explicitly integrated within climate-related measures and must be appropriately prioritised so that the necessary climate action does not violate human rights of those most vulnerable.

5 A closer look: UNFCCC mechanisms and related financial mechanisms

5.1 Clean Development Mechanism

The Clean Development Mechanism (CDM) was established under the Kyoto Protocol and focuses on rewarding projects in developing countries that reduce greenhouse gas emissions.²⁷⁹ Theoretically, the CDM provides a means for climate change mitigation that also provides direct benefits for developing countries. By allowing entities to earn carbon credits, or carbon emission reductions, the CDM incentivised projects in developing countries without providing adequate human rights safeguards for those who would be directly affected by these projects.²⁸⁰ CDM projects associated with human rights violations and abuses have been widely reported.²⁸¹ They include the Barro Blanco hydroelectric dam in Panama;²⁸² the Aguan Biogas project in Honduras;²⁸³ the Kinangop wind power project in Kenya;²⁸⁴ and the Alto Maipo hydroelectric project in Chile.²⁸⁵

Although the CDM includes rules and procedures related to stakeholder consultation, these are very general and do not require consent (or free, prior and informed consent where indigenous peoples are concerned), and they do not include requirements related to the protection of human rights.²⁸⁶ There are also no requirements related to benefits for local communities and there are no provisions made for monitoring progress or addressing grievances after a project has been approved.²⁸⁷ Although some attempts have been made to address the inadequate stakeholder consultation, these have been insufficient to protect human rights.²⁸⁸ It remains to be seen whether human rights will be adequately protected under the CDM's successor under article 6.4 of the Paris Agreement, the Sustainable Development Mechanism.²⁸⁹

Case Study 24: India, Sasan Ultra Mega Power Project

The Sasan project is a coal-fired power project related to the use of technology intended to reduce greenhouse gas (GHG) emissions. It was registered under the Clean Development Mechanism in 2010.²⁹⁰ In addition to reducing GHG emissions, the project promised economic empowerment and

²⁷⁹ Horner (2015), pp. 85-86; International Bar Association (2014), p. 49.

²⁸⁰ Horner (2015), pp. 88-90.

²⁸¹ Amnesty International (2021), p. 62.

²⁸² CIEL (2021), p. 8; Mary Robinson Foundation (2015a), p. 4; CIEL (2016); Carbon Market Watch (2016)

²⁸³ Horner (2015), pp. 91-93; International Bar Association (2014), p. 49; Carbon Market Watch (2011).

²⁸⁴ CIEL (2021), p. 8. This project is discussed in more detail at 2.3.1.

²⁸⁵ *Ibid*, p. 9; Eisen / Eschke (2020), p. 16; CIEL (2019), p. 3.

²⁸⁶ UNEP (2015): p. 36.

²⁸⁷ *Ibid*; International Bar Association (2014), p. 49.

²⁸⁸ UNEP (2015), p. 36.

²⁸⁹ Amnesty International (2021), p. 61. On possible approaches to human rights in the SDM, see: Villavicencio Calzadilla (2018); Webb / Wentz (2018); Carbon Market Watch (2017).

²⁹⁰ Bank Track (2016).

improvements in health care.²⁹¹ However, the project resulted in a number of serious human rights violations and abuses. There was little to no public consultation, and no free, prior and informed consent (FPIC) from the local indigenous community. Houses and community property were bulldozed and personal belongings demolished, resulting in forced displacement of the community.²⁹² Protestors were met with violence and arrests. Local individuals and communities were removed from the forest and agricultural land on which they depended for food.²⁹³ In addition to this, the plant itself is reported to have caused numerous deaths and injuries to workers,²⁹⁴ while pollution from the plant has severe negative impacts on the food, water and health of surrounding communities.²⁹⁵ The project's funder, Ex-Im Bank in the United States, received pressure from the public to investigate the project. It responded by commissioning the Office of the Inspector General for the Ex-Im Bank to investigate the project, and a report on the investigation was released in 2015.²⁹⁶ The report confirmed that there was insufficient monitoring and reporting in relation to environmental and social performance, as well as inadequate notification of health and safety incidents at the plant.²⁹⁷ The report also found that Ex-Im Bank did not have a mechanism to address and resolve complaints from those who are negatively affected by projects funded by the bank, including the victims of reported harm to human rights.²⁹⁸ The project's registration under the CDM delivered no protection for the human rights of local communities, and did not provide any monitoring, reporting or grievance mechanisms.

5.2 Reducing emissions from deforestation and forest degradation (REDD+)

In the 2005 UNFCCC negotiations, the initiative of Reducing Emissions from Deforestation and Forest Degradation in developing countries (REDD) was introduced. It was later expanded to include the conservation and sustainable management of forests as well as the enhancement of forest carbon stock in developing countries (referred to as REDD+).²⁹⁹ As forests serve as vital carbon sinks, the initiative aims to contribute to climate mitigation by protecting and conserving forests, through encouraging incentives for REDD activities. However, since its inception, there

were numerous reports of negative human rights impacts associated with REDD projects.³⁰⁰ The initiative's potential to deliver significant gains for climate change, biodiversity, and sustainable development is thus marred by its negative impacts on human rights.³⁰¹ REDD+ has likewise been criticised as its main proponents are high-polluting entities who favour offset trading over efforts to reduce emissions at source. This offsetting is often done at the expense of developing countries and the local and indigenous communities whose land is used for such projects.³⁰² REDD+ also created opportunities for land grabbing and corruption that caused harm to local and indigenous communities.³⁰³ There is also concern that benefits gained by developing

291 Carbon Market Watch (2014).

292 Ibid; Carbon Market Watch (2013), p. 2.

293 Carbon Market Watch (2014).

294 Carbon Market Watch (2013), p. 2.

295 Ibid; Carbon Market Watch (2014).

296 See Patel (2016). See also Office of the Inspector General Export-Import Bank of the United States (2015).

297 Ibid., p. 34, finding 3A.

298 Ibid, pp. 40-44.

299 Savaresi (2012), p. 102; Horner (2015), p. 94.

300 For a survey of allegations of human rights violations related to REDD, see Sarmiento-Barletti / Larson (2017).

301 See Savaresi (2012), p. 103.

302 Horner (2015), pp. 95-96; Amnesty International (2021), p. 85.

303 Lewis (2017), p. 46; UNEP (2015), p. 9; Amnesty International (2021), p. 62; Horner (2015), p. 96.

states for participation in REDD+ activities are not equitably distributed and may not reach those who ultimately pay the price for these activities.³⁰⁴ Indigenous communities, many of whom reside in or depend on forests, are most vulnerable to human rights harm resulting from these climate mitigation activities. With reference to REDD+, the Special Rapporteur on the rights of indigenous peoples has noted that “the active participation of indigenous peoples in these processes is essential to their sustainable success”.³⁰⁵

The 2010 Cancún Agreements provided additional guidelines for the implementation of REDD, including the requirement that projects respect “the knowledge and rights of indigenous peoples and members of local communities” and that the participation of these stakeholders is included.³⁰⁶ They also require participating developing countries to address considerations related to land tenure, forest governance, and gender equality.³⁰⁷ Another positive provision requires developing countries to report on REDD safeguards and how they are being implemented through the UNFCCC National Communications.³⁰⁸ However, the safeguards introduced by the Cancún Agreements have been criticised for not having enough specificity to adequately protect human rights.³⁰⁹

Following the Cancún Agreements, the UN-REDD Programme, which provides support for REDD+ activities, introduced additional criteria and guidelines in order to operationalise these safeguards.³¹⁰ These include the adoption of Social and Environmental Principles and Criteria, FPIC Guidelines, and a grievance mechanism

for affected communities.³¹¹ Participation in the UN-REDD Programme is voluntary and it has no formal links to the UNFCCC. As Savaresi notes the safeguards and policies of the UN-REDD are often inconsistent with the safeguards imposed by the World Bank’s Forest Carbon Partnership Facility (FCPF),³¹² creating non-binding, parallel regimes and separate standards for different projects.³¹³

In 2013 the Warsaw Framework for REDD+ was introduced and, while the UNFCCC falls short of legally requiring states to adopt safeguards for REDD+ activities, the framework does require states to maintain Safeguard Information Systems that report on these safeguards. Maintenance of these Safeguard Information Systems is also a prerequisite for receiving payments for REDD+.³¹⁴ Since 2019, the Lima REDD+ Information Hub has been in operation, publishing public information related to REDD+ activities, including summaries from participating states on implementation of safeguards.³¹⁵ While these developments are important contributions to protecting human rights in REDD+ activities, they do not impose human rights obligations and, without more defined obligations, it is unlikely that local and indigenous communities will be adequately protected from human rights violations and abuses related to REDD+ activities.

Tension between forest conservation (or exploitation) and indigenous rights occurs in many regions. Forest degradation is a threat to both the climate as well as indigenous peoples, but efforts to protect forests can likewise undermine indigenous peoples’ rights. The extent to which indigenous peoples’ rights are safeguarded largely

304 UNEP (2015), p. 9.

305 UN, General Assembly (2016), para 67. See also UNEP (2015), p. 9.

306 Savaresi (2012), p. 109; UNEP (2015), pp. 36-37; Lewis (2017), p. 46.

307 Savaresi (2012), p. 109.

308 Savaresi (2012), p. 109.

309 Ibid; Horner (2015), p. 107.

310 Ibid, pp. 110-111. The UN-REDD Programme is a collaboration between the Food and Agriculture Organization of the United Nations (FAO), the United Nations Development Programme (UNDP) and the United Nations Environment Programme (UNEP). Although it is a response to UNFCCC decisions regarding REDD+ activities, it is not related to the UNFCCC.

311 Ibid.

312 See UNEP (2015), pp. 36-37.

313 Savaresi (2012), pp. 111-112; UNEP (2015), pp. 36-37.

314 Sarmiento-Barletti / Larson (2017), p. 5.

315 See UNFCCC (undated).

depends on the government, as the example from Indonesia shows. In Indonesia, indigenous peoples have faced many obstacles exercising their rights, particularly in relation to forest territories.³¹⁶ The country has ten percent of the world's forest resources and these resources support the livelihoods of roughly 30 million indigenous people. However, 143 million hectares of these

forest resources are classified as state property, while another 58 million hectares are held by private entities, often commercial plantations.³¹⁷ As noted by the Special Rapporteur on indigenous peoples' rights, this situation has led to the illegal expropriation of indigenous territories without consent, and the infringement of indigenous peoples' rights.³¹⁸

Case Study 25: Indonesia: What the UN Committee on the Elimination of Racial Discrimination said on REDD activities

The absence of domestic protection for indigenous rights in Indonesia was raised by the UN Committee on the Elimination of Discrimination (CERD).³¹⁹ In its 2007 Concluding Observations, the Committee expressed concern regarding plans for large-scale oil palm plantations. The Committee urged the State party to review its laws and ensure that they “respect the rights of indigenous peoples to possess, develop, control and use their communal lands”.³²⁰ Following the establishment of the REDD programme in 2008, the Indonesian government published a regulation on “the implementation of demonstration activities on reduction of emission from deforestation and degradation”.³²¹ The CERD responded in early 2009 noting that “oil palm plantations continue to be developed on indigenous peoples' lands” and that there has been no attempt to comply with the Committee's earlier recommendations.³²² The letter also states that the 2008 law on REDD fails to recognise indigenous peoples' rights to their territories. A few months later, the Indonesian government published a new regulation on implementation procedures for the REDD programme.³²³ Over the following years, more correspondence between the CERD committee and the Indonesian government ensued on how the government intended to protect indigenous rights.³²⁴ In 2013 the Indonesian Constitutional Court ruled that the 1999 Forestry Act was unconstitutional as it designated customary forests as state property,³²⁵ thereby recognising indigenous peoples' customary rights to their forests.³²⁶ The government was not quick to implement the court's decision,³²⁷ duly noted by the UN Committee on Economic, Social and Cultural Rights in its Concluding Observations 2014³²⁸ and by the CERD in a 2015 letter.³²⁹ It appears that in 2016 the Land Agency made some progress with recognising the rights of indigenous peoples through the creation of a category for the recognition of collective rights.³³⁰ However, law reform has been inadequate: As recently as April 2021, the CERD reiterated its Concluding Observations from 2007 and asserting that “the domestic law of Indonesia does not contain appropriate protections

316 UN, Human Rights Council (2007), para 27-28.

317 Ibid, para 28.

318 Ibid, para 27-28 & 37.

319 See Savaresi (2012), p. 107-108.

320 UN, Committee on the Elimination of Racial Discrimination (2007), para 17.

321 Republic of Indonesia (2008).

322 UN, Committee on the Elimination of Racial Discrimination (2009a). All the Committee's letters are available at <https://www.ohchr.org/EN/HRBodies/CERD/Pages/EarlyWarningProcedure.aspx> (accessed 16.11.2021).

323 Republic of Indonesia (2009).

324 UN, Committee on the Elimination of Racial Discrimination (2009b); UN, Committee on the Elimination of Racial Discrimination (2011).

325 Constitutional Court of the Republic of Indonesia (2013): Case No.35/PUU-X/20. See Kahurani / Sirait (undated).

326 Norwegian Agency for Development Cooperation (2016).

327 Norwegian Agency for Development Cooperation (2016).

328 UN, Committee on Economic, Social and Cultural Rights (2014), para 38.

329 UN, Committee on the Elimination of Racial Discrimination (2015).

330 Fay / So Denduangrudee, Ho-Ming (2018), p. 17.

to guarantee the respect for the principle of self-identification in the determination of these communities as indigenous peoples".³³¹ The case illustrates how the implementation of REDD incentivizes and worsens an already poor human rights record vis-a-vis vulnerable sections of the population.³³²

5.3 Other climate finance mechanisms

Global Environment Facility

The Global Environment Facility (GEF) is a financial mechanism launched in 1994 that supports the implementation of a number of international environmental conventions including the UNFCCC as well as conventions related to biodiversity, chemicals, and desertification.³³³ The GEF also manages the Special Climate Change Fund (SCCF) and the Least Developed Country Fund (LDCF).³³⁴ As an independent financial entity, the GEF funds projects in partnership with various stakeholders and its implementing agencies which were initially the UNDP, UNEP and the World Bank, but have since expanded.³³⁵

Only in 2011 the GEF Council introduced policies on environmental and social safeguards as well as on gender mainstreaming³³⁶ which are binding for the GEF's implementing agencies.³³⁷ The Policy on Environmental and Social Safeguards includes requirements for

- screening for impacts,
- the protection of cultural resources;
- avoiding and minimising involuntary resettlement; and protecting the rights of indigenous peoples. This protection of

indigenous peoples includes the requirement of free, prior and informed consent (FPIC);³³⁸

- the establishment of independent and transparent systems for accountability and enforcement that effectively address potential violations and abuses, and are accessible to those affected by individual projects. The mechanisms need to be capable of receiving and responding to complaints from affected individuals and communities. For those grievances that cannot be resolved at the level of the implementing agency, the GEF established a Conflict Resolution Commissioner.³³⁹

While the GEF safeguards could be improved by more comprehensive provision for the exercise of procedural rights, including public participation and consultation for non-indigenous local communities,³⁴⁰ they are important in contributing to the protection of human rights from negative impacts of GEF-funded projects.

Adaptation Fund

The Adaptation Fund was established in 2001 under the Kyoto Protocol to the UNFCCC with the objective of financing adaptation activities in developing countries. The fund is managed and supervised by the Adaptation Fund Board.³⁴¹ In 2013 the Board approved the Fund's

331 UN, Committee on the Elimination of Racial Discrimination (2021), p. 2.

332 See Savaresi (2012), p. 108.

333 See Global Environment Facility (undated-a); Global Environment Facility (2001).

334 UNEP (2015), p. 39; Johl / Lador (2012), p. 7.

335 Global Environment Facility (undated-b).

336 GEF Council (2011); UNEP (2015), p. 39.

337 Johl / Lador (2012), p. 8.

338 UNEP (2015), p. 39.

339 Johl / Lador (2012), p. 8.

340 Ibid.; Johl / Lador (2012), p. 9.

341 See Adaptation Fund (2017).

Environmental and Social Policy.³⁴² The policy applies to projects funded by the Adaptation Fund and incorporates certain human rights safeguards including the adoption of measures to avoid or minimise social and environmental risks as well as requirement of monitoring and reporting on such measures until the end of the project.³⁴³

Principles that must guide the impact assessment process include the respect and promotion of human rights, adherence to labour standards set by the International Labor Organization (ILO), and compliance with obligations towards indigenous peoples as set out in the Declaration on the Rights of Indigenous Peoples (UNDRIP).³⁴⁴ The Adaptation Fund requires projects to avoid and minimise “the need for voluntary resettlement” and dictates the requirements for limited resettlement and compensation. Projects must also ensure fair and equitable access to benefits and must not impede access to economic, social and cultural rights. Specific requirements are also included to ensure respect for the rights of marginalised and vulnerable groups as well as women. The policy requires that those implementing funded projects provide an accessible, transparent, fair and effective mechanism for “receiving and addressing complaints about environmental or social harms”. In addition to the project-level complaints mechanism, the policy also provides for the submission of complaints to the Board secretariat.³⁴⁵

These are relatively comprehensive safeguards for the protection of human rights in the context of projects funded by the Adaptation Fund and could serve to guide other project-specific climate action.

Green Climate Fund

The Green Climate Fund (GCF) is the operating entity of the financial mechanism of the UNFCCC and the Paris Agreement and was established in 2010.³⁴⁶ In 2014 the Board of the GCF adopted an initial framework for the Fund’s accreditation process, including environmental and social safeguards for projects funded by the GCF.³⁴⁷ The standards include:

- avoidance of displacement and forced eviction,
- the improvement or restoration of livelihoods and standards of living,
- and the free, prior and informed consent of indigenous peoples.
- an independent redress mechanism (IRM) to hear complaints related to specific GCF-funded projects or to broader policies and procedures related to the GCF.³⁴⁸

The GCF then developed an environmental and social management system and an accompanying draft environmental and social policy which was adopted by the Board in 2018.³⁴⁹ The updated environmental and social policy is quite thorough in its inclusion of human rights. The guiding principles of the policy

- include the integration of environmental and social sustainability,
- equality and non-discrimination,
- stakeholder engagement and disclosure of relevant information,
- a gender-sensitive approach,
- labour and working conditions as guided by the standards of the ILO,
- respect for indigenous peoples’ rights including specific reference to the UNDRIP and FPIC.³⁵⁰

³⁴² UNEP (2015), p. 38. The policy (as later revised in 2016) is available at https://www.adaptation-fund.org/wp-content/uploads/2013/11/Amended-March-2016_-OPG-ANNEX-3-Environmental-social-policy-March-2016.pdf (accessed 16.11.2021).

³⁴³ Carbon Market Watch (2015), pp. 11-12.

³⁴⁴ UNEP (2015), pp. 38-39.

³⁴⁵ Ibid.

³⁴⁶ Green Climate Fund (2021), p. i.

³⁴⁷ Green Climate Fund (2014). See also UNEP (2015), pp. 37-38.

³⁴⁸ UNEP (2015), pp. 37-38.

³⁴⁹ Green Climate Fund (2018); Green Climate Fund (2017). See also Green Climate Fund (2021), p. 216.

³⁵⁰ The policy notes that the GCF will be responsible for confirming that consultation occurred and that consent of indigenous peoples is obtained wherever necessary. See Green Climate Fund (2018), para 12(b).

The policy includes management of environmental and social risks throughout the lifecycle of GCF-funded projects as well as requirements for risk management and assessments, due diligence, monitoring and reporting. The policy also sets out grievance redress mechanisms, including the independent redress mechanism.³⁵¹

In addition to this, the guiding principles specifically refer to human rights, stating that: “[a]ll activities supported by GCF will be designed and implemented in a manner that will promote, protect and fulfil universal respect for, and observance of, human rights for all recognized by the United Nations. GCF will require the application of robust environmental and social due diligence so that the supported activities do not cause, promote, contribute to, perpetuate, or exacerbate adverse human rights impacts”.³⁵²

The IRM has relatively comprehensive procedures in place for dealing with complaints. By 2021, there have been eight complaints recorded.³⁵³ One example from 2020 involves a complaint made by an individual regarding the Saïss Water Conservation Project in Morocco.³⁵⁴

Issues were raised regarding consultation, access to information as well as access to water. With support of the IRM, the parties underwent what is termed “problem solving”. As a result of this process, several agreements were reached and the complainant, satisfied with the results, terminated the complaint. Another example involves a “self-initiated investigation” by the IRM into a project in Peru.³⁵⁵ This is a process followed where the IRM receives information to indicate that a project has or may negatively affect a community or person. This investigation or preliminary inquiry involved a conservation project affecting indigenous peoples and began in 2019. The action taken by the IRM included issuing official guidance on FPIC and on risk categorisation for projects concerning indigenous peoples, and a legal opinion regarding the collective land rights of the indigenous peoples involved in the project. The final task of the IRM is to ensure compliant consent documentation in accordance with its guidance on FPIC.

The 2018 environmental and social policy of the GCF contains clear references to human rights and addresses concerns related to both substantive and procedural rights. It provides mechanisms for accountability and complaints as well as ongoing monitoring and reporting. This policy is a vast improvement on the approaches under the CDM and REDD.

351 Green Climate Fund (2018).

352 *Ibid.*, para 8(q).

353 See Independent Redress Mechanism (undated).

354 Independent Redress Mechanism (2020).

355 Independent Redress Mechanism (2019).

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