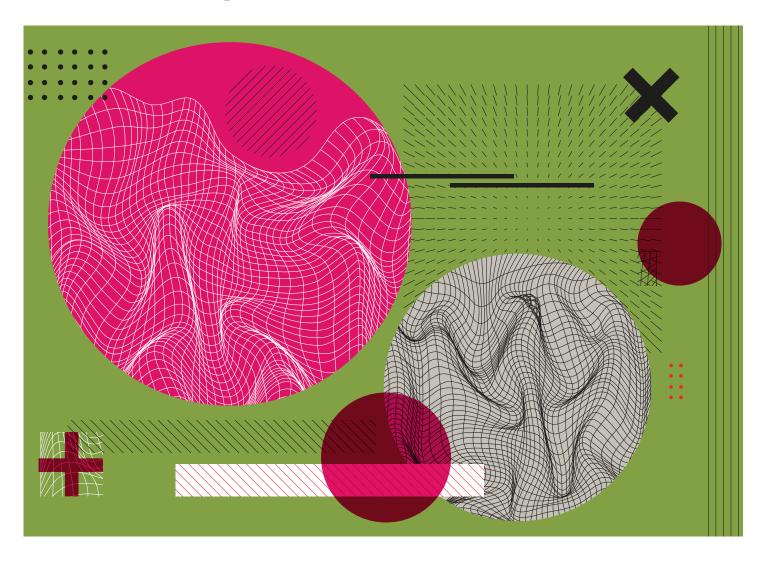


REDUCING INEQUALITIES IN DEVELOPMENT POLICY AND PRACTICE

Climate Change and Just Transition





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List of A	cronyms	
BMZ	German Federal Ministry for Economic Cooperation and Developm	ent
CA	Conservation agriculture	
CO ₂	Carbon dioxide	
COP	Conference of the Parties	
ETS	Emissions trading system	
GHG	Greenhouse gases	
ILO	International Labour Organization	
IPCC	Intergovernmental Panel on Climate Change	
JTRC	Just Transition Research Collaborative	
LDCs	Least developed countries	
LIC	Low-income country	
LMICs	Low- and middle-income countries	
MSME	Micro, Small and Medium-sized Enterprises	
NDC	Nationally determined contribution	
NGO	Non-governmental organization	
SEWA	Self-Employed Women's Association	
SSE	Social and Solidarity Economy	

1. Introduction¹

Climate change, environmental destruction and biodiversity loss have significant impacts on livelihoods, health and productivity. The world is heading for a 3°C global rise in temperature this century due to the concentration of greenhouse gases (GHG) in the atmosphere (UNEP 2023). This rise will cause an increase in extreme weather events such as heatwaves, heavy rain, drought and associated wildfires, and coastal flooding, as well as exceedingly high temperatures (IPCC 2022:18). The IPCC estimates that approximately 3.3 to 3.6 billion people live in "contexts that are highly vulnerable to climate change" (IPCC 2022:12).

Climate change magnifies existing inequalities, both within and between countries. Within countries, populations at greater risk of adverse effects include "disadvantaged and vulnerable populations, some indigenous peoples, and local communities dependent on agricultural or coastal livelihoods," whereas regions at higher risk include "Arctic ecosystems, dryland regions, small island developing states, and Least Developed Countries" (IPCC 2018:9). Economic inequalities between the world's richest and poorest nations have reportedly widened by 25 percent due to global warming (BMZ 2023, based on Diffenbaugh and Burke 2019). As major carbon emitters, industrialized countries are the primary drivers of climate change, but lower-income countries (LICs) bear the brunt of its impacts (Acevedo et al. 2017). Oxfam found that in 2019, the richest 1 percent of the global population contributed 16 percent of carbon emissions, the same contribution as that of the poorest 66 percent, and that by 2030, the emissions of this 1 percent will be over 22 times the amounts allowable to restrict global warming below 1.5 °C (Oxfam 2023:x), the internationally-agreed threshold beyond which climate change will have potentially irreversible effects.

Climate change mitigation and adaptation offer the possibility to reduce inequalities when policy foregrounds the needs and perspectives of low-income and vulnerable groups and places. However, efforts to date have fallen short. At the international level, transfers of finance and technology from countries in the global North to countries in the global South² are insufficient to promote decarbonization and protection against climate risks. The commitment to deliver USD 100 billion per year in climate finance by 2020, first agreed at Conference of the Parties (COP) 15 in 2009 (UNFCC n.d.), was reached for the first time in 2022 but it has been criticized for being insufficiently ambitious (Alayza et al. 2024), and much of climate finance goes into mitigation rather than adaptation. This pattern persists despite the fact that adaptation is a priority concern of many low- and middle-income countries (LMICs), especially those that contribute very little to global

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² Global South countries comprise low- and middle-income countries.

emissions.³ As a result, LMICs encounter challenges in meeting their obligations under the Paris Agreement, and in undertaking the necessary investments to adapt to negative climate impacts.

In order to address the interlinked and rising challenges of climate change and inequalities, it is necessary to scale up international climate finance and investments in green technologies and skills development, and to design national strategies that combine sustainable development and social protection. The concept of just transition, "the idea that justice and equity must form an integral part of the transition towards a low-carbon world" (ITRC 2018:4), is increasingly invoked to express this objective. Launched by trade unions in the 1970s, the just transition agenda aspires to a fair and inclusive transition from fossil fuel-dependent economies to sustainable, low-carbon development models. UNRISD and others have argued that the concept has the potential to act as a platform for catalytic change toward more ecologically and economically equitable societies (ILO 2015; JTRC 2018; UNRISD 2022).

1.1 The three dimensions of sustainable development and their interlinkages

Achieving sustainable development and reducing inequalities requires not only economic approaches but social and ecological ones as well. These policy guidance notes on reducing inequality explore programmatic areas related to three key dimensions of sustainable development—inclusive and sustainable economic development, climate change policies and just transition, and social protection—and their role in reducing inequality.4 While these guidance notes explore these three dimensions individually, there are many interlinkages between them. An overarching approach to inequality reduction is important in addition to dimension-specific guidelines.

Some guidelines are specific to climate change and just transition, while others apply to policies across sectors. Those that apply across sectors can be divided into general principles, political economy considerations, and policy framing.

General principles:

 Ensure policies clearly recognize and seek to address prevailing inequalities in income and other relevant dimensions (social, ecological, political).

Identify the needs of the most disadvantaged in policy formulation and how their circumstances can be improved in both relative and absolute terms.

Highlight any possibilities to reduce the absolute gaps between better- and worse-off groups.

UNCTAD 2023a. Only 45 percent of climate funds received by least-developed countries (LDCs) targeted climate adaptation, which is a key priority for LDCs, and a third of the finance was in loans rather than grants, which increases the risk of debt traps.

BMZ (2023:9) highlights these three dimensions as critical to inequality reduction: "Effective measures to counter inequality must align with the three dimensions of sustainable development, the 2030 Agenda and the Paris Agreement. Accordingly, our approach is divided into economic, social and ecological measures."

Political economy considerations:

- Analyse the power dynamics that perpetuate the status quo, including those relating to gender, and how strategies can engage with these dynamics to promote change.
- Consider reform timing: progressive reforms tend to be most sustainable when introduced either during the height of economic prosperity or following crisis.
- Develop specific strategies to counter vested interests opposed to reform. Possible actions
 include strengthening civil society organizations and avenues for legal empowerment,
 enhancing transparency and accountability, promoting inclusive policy-making processes,
 leveraging international assistance and supporting public education campaigns.

Policy framing:

- Position the principles of inclusive and sustainable economic development, climate justice, and social protection within a rights-based framework to empower citizens, enhance trust and promote policy longevity.
- Ensure that policies include meaningful opportunities for disadvantaged groups to co-create policy, participate in decision making and hold governments to account.
- Design policies that take into account intersectionality—that is, how the interaction of various social identities, such as gender, class, race, ethnicity or sexuality, shape outcomes and opportunities. Such policies should be integrated into an inclusive system to avoid perpetuating policy silos and neglecting interconnected challenges.

The ensuing guidelines draw attention to how projects and policies in each of these three policy areas are likely to impact the others and what needs to be done to effectively mainstream inequality reduction across sectors and projects. Climate change, for instance, unduly affects vulnerable populations, exacerbating existing social disparities (World Bank 2023a). Its ripple effects, such as extreme weather events, natural disasters and resource scarcity, often hit marginalized communities the hardest (UNDRR 2021). By embedding climate change considerations into social protection, governments and development agencies can bolster the ability of affected communities to address climate-related challenges and insist on government accountability. The concept of just transition, which lies at the heart of equitable climate change policy, acknowledges the potential adverse socioeconomic impacts the move away from fossil fuels can have if not well managed. When done well, just transition can accelerate much needed decarbonization while tackling root causes of injustice and challenging systems of exclusion and discrimination (JTRC 2018; Morena et al. 2020). Moreover, while climate change threatens economic development and can amplify inequality if overlooked, it also heralds opportunities for inclusive and sustainable economic development—for example, via investments in renewable energy, energy efficiency, public transport and sustainable agriculture, as well as the jobs they create (Bhattacharya et al. 2021, Jobs and Development Partnerships 2024). It is estimated that the transition to cleaner energy sources could generate up to 100 million jobs worldwide by 2050 (Ferroukhi et al. 2020). By pivoting toward green sectors, countries can transition toward sustainable economies that benefit a wider populace, particularly underserved communities.

Inclusive economic development strategies that prioritize access to these emerging sectors, alongside the "greening" of traditional sectors, can bridge socio-economic divisions, thereby reducing inequality. By tackling concentrations of power and wealth, they not only have the potential to diminish the influence of entrenched interests that benefit from the status quo but also to amplify the voices and interests of the marginalized communities who are most affected by climate change.

Social protection policies, in turn, further inclusive economic development by various means. They can lead to positive impacts on economic stability (automatic stabilizers) and productivity (human capital), better distributional outcomes, and positive impacts at the household level, for example by lifting credit constraints affecting low-income households, protecting against adverse shocks, and influencing the allocation of resources and time in households, all of which have implications for income growth (OECD 2019). More broadly, by ensuring that everyone, including low-income and vulnerable populations, has access to basic social services, such as healthcare and education, as well as social assistance, social protection measures create a foundation for inclusive development and just transition (Krause et al. 2022).

This guidance note on climate change and just transition focuses on adaptation and mitigation policies that have the potential to reduce inequality. It is complementary to the guidance note on inclusive and sustainable economic development (UNRISD 2024a) and the guidance note on social protection (UNRISD 2024b). Findings and recommendations from all three guidance notes are brought together in a checklist for project planning and implementation (UNRISD 2024c).

2. Links Between Climate Change and Inequality

Climate change can undermine fundamental human rights, including the rights to life, food, water and health (IPCC 2018). Climate hazards increase the risk of deaths, non-communicable diseases, the emergence and spread of infectious disease, and health emergencies (WHO 2023). The impact falls disproportionately on the poorest populations in poor countries who typically lack access to the insurance mechanisms or basic health services that might protect them against shocks (Guivarch et al. 2021). The World Health Organization (WHO 2023) predicts that between 2030 and 2050, climate change may cause an additional 250,000 deaths yearly from undernutrition, malaria, diarrhea and heat stress, with low-income countries and small island developing states (SIDS) enduring the harshest impacts.

Climate change also risks increasing poverty, both because its impacts fall more heavily on the poor and because the costs of mitigating climate change could slow economic development in poorer countries (Taconet et al. 2020). In the poorest countries, a large share of the population (including those with the lowest incomes) relies on activities such as agriculture, forestry and fishing, which are most likely to be affected by climate change (Guivarch et al. 2021). Rising temperatures worsen

existing inequalities in access to clean water and affordable food (Guivarch et al. 2021). World Bank (2020) estimates suggest that climate change could plunge an additional 135 million people into extreme poverty by 2030. The risks are higher still for specific populations who are disproportionately affected by climate change in different ways, among them women (box 1), Indigenous populations, racial and ethnic minorities, migrants, the urban poor and informal workers.

Box 1. How climate change disproportionately impacts women

Women are often disproportionately affected by climate change. In labour markets, this is partly because women workers typically occupy more precarious positions than men (Rogan 2018) and because many highly feminized sectors are particularly vulnerable to climate change. For example, subsistence farmers grapple with challenges like a loss of habitats, soil erosion and desertification, all of which threaten food security (ITUC et al. 2022). Women, who are responsible for more than half of all small-scale food production, a have "limited entitlements, assets, and access to resources required for adaptation and resilience" compared with their male counterparts (ILO 2023:27). Health and social care workers, 70 percent of whom are women (ITUC et al. 2022), must contend with the increased prevalence of natural disasters, heat stress and a higher disease burden. Similarly, providers of water and other utilities face direct effects from heat, such as issues with waste collection and disruptions to supply chains. In addition, climate change affects nutrition, health, sanitation and utilities (such as water, electricity and fuelwood) in ways that can increase unpaid care workloads (van Niekerk n.d.). According to WECAN (2023:7), "fossil fuel derived air, water, and soil pollution impact women's fertility, mental health, and daily work and responsibilities." Indeed, around 2.3 billion people relied on harmful and polluting fuels for cooking in 2022 (IEA 2023). Extreme weather and climate events, one result of a reliance on fossil fuels, are linked to increased levels of gender-based violence (van Daalen et al. 2022, Zavala et al. 2024). This results from heightened socioeconomic stability and mental stress, as well as a deterioration in law enforcement and social services (Jiménez Thomas 2023:3). Taking into account these deleterious effects on women workers, Coles et al. (2021) argue that, "The shift to green jobs offers an unprecedented opportunity to create a new paradigm for gender equality and women's economic empowerment as we shift away from fossil fuels and build resilience to climate impacts and toward an economy that is fairer and more inclusive." Understanding how climate change affects women, both at home and in paid work, calls for a gendered response that recognizes and addresses its multiple impacts on income generation, health and other aspects of wellbeing.

^a Per FAO (2024): "women produce between 60 and 80 percent of the food in most developing countries"; ^b The impact on health and other public sector workers is described in van Niekerk (n.d.). Source: Samman 2024

Poverty and inequalities, in turn, can further propel climate change. For example, LICs limited ability to invest in climate adaptation measures renders them more exposed to the adverse effects of

climate change such as extreme weather events and sea-level rise, resulting in the destruction of livelihoods and infrastructure. More broadly, it is argued that socioeconomic inequalities foster carbon-intensive patterns of consumption and production, enable wealthy elites to obstruct climate policies, weaken public support for climate policy and undermine collective climate action (Green and Healy 2022). Such arguments speak to the importance of prioritizing the needs of the most disadvantaged individuals and groups when formulating climate change policy and ensuring that global North countries are held to account for their heavy contributions to climate change. These countries should, in turn, bear the bulk of the costs of transition, in line with the principles of equity and common but differentiated responsibilities between North and South (UNRISD 2022: Chapter 5).

Policies tackling climate change can reduce inequality in many ways:

- Environmental incomes: Many people in rural areas, particularly those with ready access to forest resources, obtain sizeable shares of their incomes from wood fuels, wild foods and products harvested from natural areas beyond forests. Climate policies can protect these areas while safeguarding local communities' access to the resources they depend on for their livelihoods (Smith-Hall et al. 2022).
- Livelihood diversification: According to the International Labour Organization (ILO), 1.2 billion jobs, or 40 percent of the global labour force, depend directly on ecosystem services (ILO 2018:7). Climate policies can provide new employment opportunities, such as in renewable energy, and support decent work in low-carbon sectors, such as the care sector, which contribute to societal resilience (Coles et al. 2021; ILO 2023).
- Health protection: Climate change affects health not only directly, but also through its impacts on the health workforce and infrastructure, reducing progress toward universal health coverage (WHO 2023). Climate policies can indirectly prevent health crises, such as those caused by extreme heat or vector-borne diseases, while reducing disparities in access to health and other social determinants of physical and mental health that climate change accentuates (WHO 2023).
- Community empowerment and human rights: Community-led adaptation can empower local communities to express and advocate for policies and investments that reflect their priorities, including rights to land and natural resources (see Coger et al. 2022).
- Financial stability: Climate finance mechanisms can help stabilize economies by promoting diversification and reducing their reliance on industries that may not be sustainable in the long term, such as fossil fuels. Social protection, and in some cases insurance mechanisms such as wealth index insurance (see box 4 below), can protect vulnerable populations from climate-induced income fluctuations.
- Asset protection: Low-income households rely disproportionately on land and natural resources. Protecting such assets from climate-induced disasters, for example via appropriate risk transfer mechanisms such as social protection or public insurance, can therefore bolster resilience.

Climate change requires systematic and interconnected policy responses from international to local levels. Limiting warming to 1.5 °C (based on 2019 emissions levels) requires that global carbon dioxide (CO₂) emissions are reduced by 48 percent by 2030 and reach net zero in the early 2050s, followed by net negative CO₂ emissions (Center for Sustainable Systems 2023:1). Energy use contributes over 73 percent of greenhouse gas emissions, and agriculture an additional 18 percent, making these sectors critical to policy responses.⁵ A holistic response will require transformative shifts in infrastructure, lifestyle and behavior that include "switching cars for public and active transport modes, designing low-carbon livable cities, adopting plant-based and healthier diets, improving material use and recycling, implementing circular economy principles, and preparing current and future workers for the green economy" (World Bank 2023b:1). To achieve its potential, policy needs to carefully consider the impacts of different trajectories for meeting these goals, highlighting the need to strengthen the resilience of the most vulnerable populations and of entire societies.⁶

Progressive climate policies not only combat global warming but also play a crucial role in reducing inequality by ensuring a more equitable distribution of resources and opportunities. Indeed, it is argued that the reduction of inequality is a fundamental cornerstone of such policy: "decarbonization without structural change risks ignoring or, worse, exacerbating social inequalities and injustices related to energy and climate vulnerabilities at the local or global scales" (Abram et al. 2022: 2). Just transition strategies offer a framework for progressive action that envisions a fair and inclusive shift from fossil fuel-dependent economies to sustainable, low-carbon development models.

Just transition strategies often include a focus on the creation of quality jobs, including for workers in the informal economy, the provision of education and training for workers to enter new industries, and the strengthening of social protection systems (see ILO 2015). They might encompass investments in low-emission and job-intensive sectors, such as the care sector, and the diversification of local economies to prevent negative economic impacts from the transition. The Just Transition Research Collaborative (JTRC 2018) argues that approaches to just transition fall along a continuum, ranging from those rooted in the "status quo" to those involving managerial or structural reforms, to transformative responses that challenge the current political economy and aim for development alternatives rooted in solidarity and more egalitarian power structures. Often transformative approaches appeal to broader notions of justice, invoking just transition as a vehicle "to elevate societal justice as the core to achieving a sustainable energy transition" (Abram et al. 2022:4). This research distinguishes several forms of justice that could be addressed. According to Abram et al. (2022:4), these include:

- Procedural justice: ensuring meaningful and continual consultation of affected parties;
- Distributive justice: ensuring costs and benefits of the transition shared equitably;

⁵ Data are from Ritchie (2020).

⁶ See scenarios in IPCC (2022).

⁷ ILO (2022a) finds that appropriate investments in the care sector could create up to 299 million new jobs by 2035.

- Recognitional justice: recognizing the unequal value current socio-cultural, economic and political arrangements place on members of society, and the risk that climate change and transitional policies could worsen inequalities relating to gender, class, and race or ethnicity;
- Restorative justice: redressing past harm through compensating affected groups or reducing the likelihood of future harm.

Through robust measures anchored in a just transition framework, climate policy can contribute to poverty reduction and sustainable development, ensuring that the benefits of a greener economy are widely shared. Abram et al. (2020:1) link just transition strategies to the international obligations of signatories to the Paris Agreement in recommending that that governments "incorporate just transition provisions into their Nationally Determined Contributions, to provide opportunities for review and promote peer-to-peer learning."

Along similar lines, some advocates have proposed that climate justice involves envisioning "fundamentally different futures rooted in solidarity economy thinking which tackle different dimensions of existing injustices and inequalities intersectionally" (UNRISD 2022:279). Social and Solidarity Economies (SSEs) emphasize principles such as mutual aid, voluntary cooperation and democratic decision making (ILO 2022b), in contrast to the individualism underlying market economies. These principles find expression in new economic models that are based on "the primacy of people and social purpose" in the distribution and use of profits (ILO 2022b:2). The main organizational form SSE units take are cooperatives, which can involve consumers, producers or workers (Filippi et al. 2023:6). For example, the Self-Employed Women's Association (SEWA) in India has established over 153 "collective social enterprises" or cooperatives involving 480,000 informal workers, of which some 80 percent have achieved economic viability (Filippi et al. 2023:9). According to Filippi et al. (2023:9), the association incubates emerging collective social enterprises in the local handicraft, dairy, agriculture, domestic work, construction and recycling sectors and connects them with other collective enterprises providing health, childcare, insurance and financial services. The potential of SSE entities to engage in the creation of a green economy links SSE directly to the concept of a just transition (OECD 2023). According to ILO (2023:36) SSE models also "can contribute to reducing inequalities and advancing social inclusion as SSE entities are often established by, and for, members of categories that are discriminated against, such as indigenous and tribal peoples, ethnic minorities, and migrants." Numerous successful SSE entities can be found, yet they are often standalone projects, presenting policy makers with the challenge of expanding and scaling up such initiatives to fully realize their potential (Utting 2018). To harness the potential of SSE to contribute to more equitable and sustainable economies, public policies play a key role (UNRISD 2022): Recognizing new forms of SSE organizations, developing strategies that support SSE as a sector, institutionalizing SSE in public policies, co-constructing SSE policies, and developing an eco-systemic approach to support SSE are promising innovations that have rendered positive results. To overcome existing challenges, "Locking in ... support legally and fiscally and building strong intermediary organizations and networks that can advocate for SSE at different levels of governance are key" (UNRISD 2022:287).

3. Key Types of Climate Policy

Climate change policies are typically categorized into two pillars: mitigation and adaptation policies.

3.1 Mitigation

Mitigation—or efforts to reduce greenhouse gas emissions—involves either reducing the sources of these gases (for example, the burning of fossil fuels for electricity, heat or transport) or enhancing the sinks that accumulate and store these gases (such as the oceans, forests and soil) (NASA 2023). The aim of mitigation policy, in turn, is to allow stabilization of GHG levels "in a timeframe sufficient to allow ecosystems to adapt naturally to climate change, ensure that food production is not threatened, and enable economic development to proceed in a sustainable manner" (IPCC 2014: 4). An equity lens would ensure that such measures do not impose costs on consumers who are vulnerable to energy or food price rises, particularly for the poorest, who spend a higher share of their incomes on essential goods (Guivarch et al. 2021). In a similar vein, international mitigation initiatives should not allow countries in the North to externalize social and ecological costs to countries in the global South (Hickel and Slamersak 2022).

3.1.1 Reducing greenhouse gases

The major **GHG reduction policy approaches** fall into three main categories: carbon pricing, technology subsidies and performance standards:⁸

- Carbon pricing policies aim to price carbon emissions in a way that accounts for its external costs on societies. Direct carbon pricing instruments include emissions trading systems (ETS)—also known as a cap-and-trade system, which establishes a maximum allowable level of emissions and allows industries to "sell" their surplus allowances—carbon taxes and carbon credits (World Bank 2023c:11). However, emissions trading has been considerably criticized for a lack of governance, transparency and accountability, with some deals between companies in the global North and governments in global South countries being criticized as effective "land grabs" (Bryan 2023). Indirect policies such as the removal of fossil fuel subsidies have a similar intention of more accurately pricing carbon, thereby aiming to prompt a shift to cleaner alternatives (Newell 2021; World Bank 2023c). However, the need to avoid adverse impacts on poorer consumers again requires attention to how the revenues generated by carbon pricing policies can be redistributed to offset or reverse the negative impacts (Guivarch et al. 2021).
- Technology and innovation subsidies involve tax credits or direct public funding directed
 to developing and deploying low-emission technology, for example, subsidies on wind, solar
 or hydroelectric power to promote renewable energy (Newell 2021). Again, explicit efforts
 are needed to ensure equitable access to the new employment opportunities that such
 investments might create.

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⁸ This typology is from Newell (2021).

• Performance standards "require specific products or processes to meet certain minimum or average levels of technical performance ... and can range from being flexible, broad, and market-based, to being prescriptive and site-specific," for example energy efficient standards for buildings or transport (Newell 2021). An equitable focus would centre the needs of economically vulnerable populations who might be adversely affected by this retrofitting or new production to ensure that they are able to benefit from the new infrastructure and that they do not lose out from being unable to comply with new requirements.

3.1.2 Sequestering GHGs

Policies aimed at sequestering GHGs often prioritize actions such as reforestation, carbon capture in agricultural practices, and marine conservation efforts like mangrove reforestation and "blue carbon" initiatives. These latter initiatives are dedicated to preserving and rejuvenating marine ecosystems that serve as carbon sinks. The potential impacts of these policies are significant. For instance, halting the degradation of forest ecosystems and championing their restoration could contribute to more than one-third of the total climate change mitigation needed by 2030 to achieve the Paris Agreement's objectives (IUCN 2021). Reforestation and afforestation initiatives are also likely to have equality-enhancing effects on economically vulnerable populations given that some 1.6 billion people rely on forests for their livelihoods (IUCN 2021).

3.2 Adaptation

Adaptation policy involves adjusting to actual or expected future climate change impacts. The goal is two-fold: 1) to reduce risks arising from the harmful effects of climate change, for example sea-level rise, more intense extreme weather events or food insecurity; and 2) to exploit potential beneficial opportunities associated with climate change (for example, longer growing seasons or increased yields in some regions) (NASA 2023). From an equity perspective, policy makers will need to decrease the exposure of the most vulnerable populations to the impacts of climate change—for example through policies such as flood zoning, land entitlement and building standards—and bolster the access of the poorest populations to social services, social protection and insurance mechanisms (Guivarch et al. 2021).

Box 2. Transformative approaches to climate change adaptation in coastal cities

Jakarta and Ho Chi Minh City are prominent examples of coastal cities grappling with challenges posed by climate change, including sea-level rise, subsidence and increased flooding events. Adaptation measures often focus on infrastructure-heavy protective interventions, such as dikes, sea walls and building retrofitting. UNRISD has argued that such technical solutions have little effect in reducing people's susceptibility to harm or increasing their coping and adaptive capacities to natural hazards; instead, it is necessary to address more complex socio-political barriers to transformative change and climate justice. In particular, it has urged policy makers to imagine how cities may address root causes of

vulnerability to flood risks experienced by slum dwellers and urban poor people. It proposes a rights-based approach to adaptation that links climate change with people's immediate needs such as health care, water and sanitation, urban mobility and housing. The approach seeks to ensure citizens have a meaningful voice in decision making and the co-creation of solutions to ensure durable and socially just pathways to climate change adaptation.

Source: Tran and Krause 2019, UNRISD 2019.

Types of adaptation policy, depending on the context, might include:

- Water Resource Management: Ensuring sustainable and equitable water distribution, especially in areas prone to drought or flooding. Community-managed water and sanitation systems are increasingly popular, with considerable research devoted to identifying determinants of their success (Machado et al. 2022).
- Infrastructure development: For example, building or modifying infrastructure to cope with the effects of climate change, such as sea walls or coastal embankments, though it is vital these are not imposed as technical solutions and instead fully respond to the needs and preferences of affected communities (box 2).
- Agricultural Practices: Encouraging practices resilient to changing weather patterns and temperatures, especially among smallholder farmers. Given that agriculture and smallholder farmers are particularly vulnerable to the detrimental consequences of climate change, a propoor policy focus on agriculture has the potential to respond to climate change while reducing inequality. Climate Smart Agriculture, for example, offers new technologies and practices designed to boost production, while adapting to and mitigating the impacts of climate change (Zougmoré et al. 2021). The supportive technologies and systems can be designed for and targeted toward smallholder farmers and marginalized communities (box 3). Weather Index Insurance can be a critical component in policy strategies to facilitate adaptation to climate change, particularly for agricultural sectors, by allowing the transfer of climate-related risks from individuals, farmers or businesses to insurance companies or risk-pooling entities (box 4; see also Collier et al. 2009).

Box 3. Conservation agriculture and its impact in Zambia

Conservation Agriculture (CA)—no-till methods that minimize soil disturbance, maintaining soil cover and crop diversification—is an adaptation and mitigation strategy that has been gaining traction world-wide. These methods are designed to enhance soil carbon sequestration, lower carbon emissions, improve water efficiency, reduce input costs and boost biodiversity. To address variable rainfall and declining soil fertility, the government of Zambia has promoted the adoption of CA, which has resulted in improved yields, even under erratic rainfall; reduced labour owing to fewer tillage operations; and enhanced resilience against drought and other extreme weather events. Analysis of the 2015 Rural Incomes and

Livelihoods Survey suggested that 9 percent of smallholder rural households practiced CA. Komarek et al. (2019) highlight a 33 percent increase in average maize yields across Zambia, comparing the CA-based system with the control system.

Source: Komarek et al. 2019

Box 4. Transferring risk through the "InsuResilience Global Partnership"

The "InsuResilience Global Partnership" was launched at the 2017 UN Climate Change Conference (COP23) by the German Federal Ministry for Economic Cooperation and Development (BMZ) in collaboration with other partners. It aims to enhance the resilience of LMICs and protect the lives and livelihoods of poor and vulnerable people against the impacts of disasters and climate change. Its objectives include providing climate and disaster risk finance and insurance solutions for 500 million poor and vulnerable people annually, and ensuring that 80 of the most vulnerable countries have comprehensive disaster risk finance strategies in place by 2025.

The Partnership prioritizes the needs of disadvantaged or marginalized groups in several ways. First, it focuses on creating affordable insurance products. Second, it advocates for a comprehensive approach to risk management that combines risk transfer with risk reduction and risk retention, emphasizing the importance of disaster risk reduction as a component of sustainable development. Third, it creates insurance products tailored to the specific needs of the poor and vulnerable populations, taking on board their risk profiles and the challenges they face, such as limited financial literacy and lack of collateral. Fourth, the Partnership aims to enhance local capacities to develop and implement risk finance and insurance solutions, including educating communities about the benefits of insurance and how to access and use it effectively. Fifth, it promotes collaboration between governments, civil society, the private sector and international organizations to pool resources, share knowledge and align efforts to provide effective protection against climate risks. Finally, the initiative encourages innovation to improve the efficiency, reach and impact of insurance solutions and emphasizes the importance of measuring impact, particularly in terms of how effectively poor and vulnerable communities are being protected against climate risk. This partnership serves as a model for the integration of climate resilience with poverty reduction objectives.

Sources: InsuResilience Global Partnership n.d., Sett et al. 2021.

Complementary policies to ensure that adaptation (and mitigation) policies are inequality reducing link with inclusive and sustainable economic development and social protection. Policies focused on strengthening green industries such as renewable energy, sustainable agriculture and transport will need to ensure jobs and relevant skills development programmes are made available to workers

affected by structural change, including women and other disadvantaged groups. Relatedly, policies focused on "green financing" such as low interest loans or grants for green projects could prioritize marginalized communities and Micro, Small and Medium-Sized Enterprises (MSMEs), or areas with high poverty rates. Social protection policies should be strengthened to ensure coverage of the groups facing adverse consequences linked to climate change as well as those making a transition to low-carbon jobs. The concept of Adaptive Social Protection, for example, "builds resilience by helping poor and vulnerable households prepare for, cope with, and adapt to covariate shocks," thereby ensuring they do not fall into poverty or become trapped in poverty as a result (World Bank 2023d:2). Adaptive Social Protection needs to be part of a comprehensive social protection system that provides income security across the life course in case of social contingencies and supplements these with systemic contingencies such as natural disasters. Social protection policies might also consider linking cash transfers to environmental stewardship, for example, initiatives such as afforestation or sustainable farming, an eco-social policy approach that is increasingly promoted to spur a just transition to low-carbon and sustainable economies (UNRISD 2016).

4. Political Economy Considerations

The political economy of climate change is deeply interwoven with global power dynamics, whereby historical emissions by industrialized nations have precipitated a crisis with disproportionate impacts on LMICs, and on marginalized communities within LMICs. To tackle this fundamental injustice, the use of rights-based discourses is critical in empowering citizens to demand accountability on climate commitments. In the international arena, such demands might emphasize the obligations that a historical responsibility for climate change confers on countries in the global North to support LMIC adaptation to climate change through concessional financing, technology transfer and other forms of assistance. The concept of "loss and damage" has emerged as a critical aspect of international climate negotiations, encapsulating the need for reparative measures for harms that go beyond what can be managed by adaptation (Bhandari et al. 2024). Indeed, some advances have been achieved in response to demands by LMIC countries for a loss and damage fund and the scaling up of affordable climate finance (UNCTAD 2023a).

Domestic power dynamics often reflect entrenched interests that may obstruct transformative change necessary for a global just transition, for example those of political or economic elites who may have a vested interest in maintaining the status quo (Green and Healy 2022). Any policy directed at climate change will create "winners," including new economic stakeholders with interests aligned with climate resilience, and "losers," those who are likely to suffer economic losses as a result of transition (Carley and Konisky 2021). Policy makers face the challenge of balancing these trade-offs in a manner that maintains a focus on the overall goal of responding effectively to climate change and distributing costs and benefits fairly, and the opportunity of using climate change to pave the way for broader forms of just transition.

Countering adverse power dynamics is likely to require a multifaceted approach that might involve:

- Strengthening civil society: A robust civil society can pressure governments to enact and enforce policies that combat climate change and promote social justice (Akinsemolu 2023). Non-governmental organizations (NGOs), trade union bodies, community groups and activists play a critical role in raising awareness, mobilizing public demand for change and holding those in power accountable.
- Promoting transparency and accountability: Implementing policies that increase the
 transparency of government and corporations can ensure systematic and reliable reporting of
 progress on climate targets and reveal how elite interests shape policy outcomes (E3G
 Research Team 2010). Support for accountability frameworks and the open publication of
 environmental data can invite public scrutiny and empower watchdogs and activists.
- Inclusive policy-making processes: To the extent possible, policy-making processes should amplify the voices of those most affected by climate change, such as Indigenous populations, small-scale farmers and the urban poor. Democratic engagement platforms such as citizen assemblies offer one possible modality (Abram et al. 2020:1). Strategies aimed at decarbonization can promote social backlash if not perceived to be just; policy makers are advised to encourage debate around the political and ethical choices involved, facilitating societal buy-in (Abram et al. 2020).
- Leveraging international support: International agreements and oversight can provide
 both pressure and support for LMICs to counter domestic vested interests, for example
 through financial incentives, technology transfer and other actions that empower domestic
 actors pushing for change (UNCTAD 2023b).
- **Legal empowerment:** Reforms to legal frameworks that enable climate change litigation, protect environmental defenders, and enforce environmental laws should be supported (Setzer and Benjamin 2020).
- Educational campaigns: Education campaigns can raise public awareness of the inequalities associated with climate change, the long-term costs of climate inaction and the benefits of a just transition. Analysis of messaging used to communicate the effects of climate change suggests that a focus on its environmental, economic and moral dimensions had a "small to medium"-sized impact on public support while the impact of messaging linked to specific geographic implications or public health consequences was negligible (Li et al. 2018).

5. Key Recommendations for Influencing Climate Policy and Just Transition

The final section of this note seeks to distill key guidelines for development partners that emerge from this discussion. The overall remit is to promote the development and implementation of just transition strategies that ensure that climate change policy is as fair and inclusive as possible, and

make broader linkages to social justice. The guidelines fall into four clusters: identifying specific opportunities to strengthen the inequality-reducing impact of climate change policies; empowering stakeholders, beneficiaries and other vulnerable groups; bolstering public awareness and engagement; and linking policies across sectors to include economic, social and ecological considerations. Together, these elements offer the potential for a holistic approach that maximizes the inequality-reducing impact of responses to climate change. The approach also ensures that such programmes are integrated into a broader set of policies addressing the economic, social and ecological dimensions of sustainable development, thereby enhancing societal equity.

Identify opportunities to strengthen the inequality-reducing impact of climate change policy

- Insist on the historical responsibility climate change confers on countries in the global North, including supporting LMICs in adapting to climate change through concessional and grant-based financing, technology transfer and other forms of assistance, as well as addressing loss and damage resulting from climate impacts.
- Regularly review Nationally Determined Contributions (NDCs) so that they increasingly capture commitments to secure a just transition and the connection between climate action and inequality reduction.
- Support just transition policies that pay special attention to informal workers, migrants and other populations put in situations of vulnerability when facing shifts as a consequence of climate policies (women, Indigenous peoples, ethnic minorities).
- Invest in policies and programmes that bolster the abilities of disadvantaged groups to adapt to changing weather patterns and temperatures.
- Ensure that different risks faced by low-income households are covered by public insurance or social protection schemes.
- Invest in access to health services to respond to climate-related health problems.
- Promote Social and Solidarity Economies as a powerful model for advancing both economic and ecological transformation.

Empower stakeholders, beneficiaries and other vulnerable groups

- Highlight the importance of community-led adaptation initiatives that are relevant, sustainable and aligned with each community's unique needs.
- Support platforms such as citizen assemblies that promote democratic engagement.
- Ensure the highest possible involvement of concerned stakeholders in just transition
 processes, including workers and trade union bodies, social organizations and community
 activists, among others.
- Encourage legal reforms that facilitate climate change litigation and the implementation of environmental laws.

Bolster public awareness and engagement

- Advocate for approaches to adaptation and mitigation that address inequalities among people, across generations and between countries, and frame trade-offs accordingly.
- Develop comprehensive education programmes to raise public awareness about the unequal burden of climate change impacts in which those who have contributed least to the problem are most affected.
- Ensure open communication and dialogue about the policy choices underpinning government plans, beneficiaries and contributors.
- Highlight economic, environmental and moral arguments for addressing climate policy and just transition.

Link policies across sectors to include social, economic and ecological considerations

- Proactively support the transition toward more sustainable economies by promoting ecofriendly infrastructural developments and industries that prioritize sustainable and equitable development outcomes.
- Ensure that social protection strategies take into account and protect groups facing the adverse consequences of climate change.

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