GCF Social protection and climate change: A strategic review of the evidence

Literature review

This report was commissioned by the Green Climate Fund (GCF) and prepared by Oxford Policy Management (OPM)**.**

The contents of this report are the responsibility of the authors and do not necessarily reflect the views or policies of GCF, its Board, or its Secretariat.

Acknowledgements

GCF gratefully acknowledges the contributions of the OPM team for their analytical work, research, and technical expertise in the development of this publication. The project manager is Nancy Okodoi. The remaining team members are Ana Solorzano, Clinton David, Jesse McCornell, Katherine Cooke, Lucy Scott, Meghan Taylor, Paola Davila, and Sanya Prakash. GCF also extends its appreciation to Oscar A. Garcia. Stephanie Speck and Kevin Watkins for their valuable review and feedback on this report, and to Christina Humtsoe for the invaluable project management skills. For further information contact Nancy Okodoi (Nancy.Okodoi@opml.co.uk).

About Oxford Policy Management

Oxford Policy Management's vision is for fair public policy that benefits both people and the planet. Their purpose is to improve lives through sustainable policy change in low- and middle-income countries.

Through OPM's global network of offices, they work in partnership with national stakeholders and decision makers to research, design, implement and evaluate impactful public policy. They work in all areas of economic and social policy and governance, including health, finance, education, climate change and public sector management. OPM have cross-cutting expertise in our dedicated teams of monitoring and evaluation, political economy analysis, statistics, and research methods specialists. They draw on our local and international sector experts to provide the very best evidence-based support.

Contents

List of acronyms

ARC	African Risk Capacity
CIF	Climate Investment Funds
E-CCT	Environmentally Conditioned Cash Transfers
FCAS	Fragile and Conflict-Affected Situations
GCF	Green Climate Fund
GEF	Global Environment Facility
GGA	Global Goal on Adaptation
HSNP	Hunger Safety Net Programme (Kenya)
ILO	International Labour Organization
LDCF	Least Developed Countries Fund
LMICs	Low- and Middle-Income Countries
MCFs	Multilateral Climate Funds
MGNREGS	Mahatma Gandhi National Rural Employment Guarantee Scheme (India)
NDAs	Nationally Designated Authorities
OECD DAC	Organization for Economic Co-operation and Development Assistance Committee
PPCR	Pilot Program for Climate Resilience
PSNP	Productive Safety Net Programme (Ethiopia)
SASPP	Sahel Adaptive Social Protection Programme
SCCF	Special Climate Change Fund
SPIAC-B	Social Protection Inter-Agency Cooperation Board
SRSP	Shock-Responsive Social Protection
UNFCCC	United Nations Framework Convention on Climate Change
WFP	World Food Programme

1 Introduction

This literature review examines the evolving relationship between social protection and climate action, with a particular focus on low- and middle-income countries. It seeks to synthesise existing evidence on how social protection systems can contribute to climate adaptation, mitigation and just transitions, while also analysing how climate change is reshaping the objectives, design and financing of social protection itself. It also explores the implications for policy coherence, financing and institutional coordination, particularly in relation to climate finance mechanisms.

The first section reviews the literature on social protection as an instrument of climate action. It:

- Examines evidence on shock-responsive and anticipatory systems, public works and natural resource management, cash-plus and productive inclusion approaches, and the role of social protection in supporting gender equity, human capital development and livelihood diversification.
- Considers how social protection can contribute to mitigation and just transition agendas, including through income support during labour market restructuring, incentives for sustainable resource management and the protection of vulnerable groups from the distributional impacts of climate policies.
- Analyses climate change as a policy and systems challenge for social protection.

The second section examines the interface between social protection and climate finance. It:

- Reviews how multilateral climate funds and related financing instruments are engaging with social protection, either explicitly or indirectly.
- Assesses the opportunities and constraints associated with using nationally anchored social protection systems as delivery platforms for climate-related interventions.
- Discusses issues of institutional alignment, additionality, system strengthening and harmonisation across development, humanitarian and climate agendas.

The review concludes by identifying key gaps in the literature, particularly regarding transformative pathways, long-term structural adaptation and the integration of climate science into social protection planning.

2 Social protection and climate action

Climate change is driving a rapid rise in the frequency, intensity, and overlap of hazards, creating increasingly complex and cascading risks that undermine development gains across low- and middle-income countries. Extreme weather events are now measurably amplified by anthropogenic warming, while longitudinal studies demonstrate how climate shocks trigger irreversible asset losses and long-term declines in household wellbeing. These dynamics interact with conflict, fragility, and food system disruptions, contributing to acute food insecurity affecting hundreds of millions of people. Climate impacts also intersect with structural social inequalities, disproportionately affecting vulnerable groups like women and girls due to structural constraints and heightened exposure to environmental risks, thereby increasing the likelihood of persistent poverty and long-term vulnerability.

Climate science now demonstrates that a business-as-usual trajectory is inadequate, as current adaptation and mitigation efforts are outpaced by the accelerating scale and complexity of climate impacts. The IPCC's Sixth Assessment Report finds that risks are becoming increasingly non-linear, compounding, and cascading, with multiple hazards interacting across sectors and regions in ways that amplify systemic disruption. It warns that sector-specific interventions cannot keep pace with the speed at which climate risks are intensifying. In this light, climate action requires coordinated and integrated, human-centred approaches that combine mitigation, adaptation, equity, and resilience-building, grounded in local knowledge, systems thinking, and anticipatory risk management (IPCC, 2022). This conclusion is corroborated by recent global assessments highlighting that fragmented or reactive approaches are insufficient to address the structural drivers of vulnerability or prevent climate impacts from escalating into systemic crises (UNEP, 2025; WMO, 2026).

COP30 strengthened global focus on these interlinked challenges, recognising social protection as a "foundation of resilience" and an essential instrument of climate adaptation (Belem Declaration on Hunger, Poverty, and Human-Centred Climate Action, 2025). Moving forward, it is paramount that social protection systems are capable to enable households and communities to anticipate, withstand and recover from climate impacts. This will require a decisive shift in policy and financing priorities to embed adaptive and inclusive social protection at the centre of climate action (USP 2030; 2024).

2.1 What is social protection

Social protection is as a fundamental human right, driver of human development, and critical instrument for building resilience (ILO, 2012; OECD DAC, 2014; USP 2030, 2024). It is a set of policies and programmes aimed at preventing and protecting all people against poverty, vulnerability, and social exclusion throughout their life cycle, with particular emphasis on vulnerable groups (SPIAC-B, 2019). Social protection programmes are implemented or mandated by governments with the goal to help recipients maintain income in times of adversity or to raise their living standards (Midgley, 2022; Costella et al., 2023).

More than half of the world's population (52.4%) is covered by at least one social protection benefit (ILO 2024). Programmes usually include:

- Social assistance: Support to households and individuals to maintain a minimum level of income and consumption. For example, cash or in-kind transfers and labour-intensive public works programmes.
- Social insurance: Contributory programmes that provide a buffer against different contingencies across the life cycle. For example, health insurance and pensions.
- Labour market programmes: Targeted at working age populations to improve the employability and earning capacity of individuals by building skills and training workers. For example, vocational training.

Growing recognition exists of social protection's key role in inclusive climate action (Bhalla et al., 2024; FAO and Red Cross Red Crescent, 2019; Pereznieto et al, 2025). Social protection can perform a range of different functions in relation to climate change, including helping people to respond to climate change-induced social, economic and political challenges, contribute to adaptation and resilience efforts, and help societies transition to net zero (McCord and Costella, 2023). Moreover, programmatic investments are already taking place:

- Costella et al (2024) found a total of 98 social protection programmes with climate outcomes in low- and middle-income countries (LMICS) that reach large populations and involve substantial financial investments globally. These programmes include objectives around shock response, climate adaptation, mitigation and just transitions.
- Forthcoming research in FCAS finds 22 social protection and climate projects and programmes across 14 fragile and conflict-affected situations (FCAS), including in contexts affected by violent conflict and in countries with low levels of system maturity (Solórzano, et al. forthcoming). The majority of programmes include objectives to enable adaptation to climate change and respond to climate-related shocks.

Social protection frameworks have been developed that encompass systematic measures to reduce vulnerability and build resilience in the face of covariate shocks (Devereux and Solorzano, 2025). These frameworks include "adaptive social protection" (Davies et al., 2009; Bowen, et al. 2020), "climate-responsive social protection" (Kuriakose, et al., 2013), "shock-responsive social protection" (O'Brien et al., 2018), and "anticipatory social protection" (Bharadwaj, Mitchell and Karthikeyan, 2023). Often, they are interpreted and implemented in ways that reflect the institutional mandates and priorities of the agencies and organizations that support them (Devereux and Solorzano, 2025). These frameworks have also led to a common misunderstanding that any investments to support people in the face of compounding shocks, fall under the exclusive realm of "adaptive" or "shock-responsive" systems. Hence, they are perceived as separate or disjointed from regular social protection systems, which is perceived as focusing mainly on life-cycle and idiosyncratic shocks (ibid.). To avoid this theorical misinterpretation, in this project, we refer to social protection systems and their potential to support climate action.

2.2 Social protection's role on climate action

Social protection intrinsically builds resilience of the most vulnerable people. By directly reducing income poverty; contributing to human development and productive outcomes, such as education, health and productive livelihoods; and supporting increased equity, inclusion, and social justice, social protection can address some of the causes of social vulnerability (McCord and Costella, 2023). It targets poorer, vulnerable, and at-risk populations which often overlaps with those disproportionately affected by climate change, including rural groups whose livelihoods are often under particular threat.

More generally, **social protection can stimulate economic growth through multiplier effects**, especially when targeted at lower-income groups. For instance, a study by Development Pathways shows how an investment of 1 per cent of GDP in social protection policies has a multiplier effect on GDP of between 0.7 and 1.9, with a higher effect in countries with a lower GDP per capita (Development Pathways, 2017).

Social protection also helps reduce the need for humanitarian assistance through averting negative coping strategies and so protecting poor households from falling deeper into poverty traps when exposed to recurrent shocks and stressors. By stabilising livelihoods and providing predictable support, social protection systems can prevent crises from escalating into humanitarian emergencies (O'Brien et al. 2018). These systems are therefore critical to bridging humanitarian and development responses.

Social protection can help households cope with, and recover from, climate-related and other shocks. By averting negative coping strategies, effective social protection mechanisms can safeguard human development outcomes across education, nutrition, health and livelihoods which are now increasingly threatened by climate impacts (Bangalore et al., 2016; Carter et al., 2007; Dercon, 2004). In Zambia, the social cash transfer programme increased monthly food expenditures per capita by 29 to 34 percent and reduced the probability of severe food insecurity by 22 to 23 percent during times of crisis, specifically agricultural production and price shocks as a result of climate-induced erratic rainfall (Lawlor et al., 2017).

Social protection can deliver time-bound support to shield households from climate shock effects. This is often based on scaling up and/ or adapting regular social protection provision in response to crises, mostly taking the form of cash transfer or insurance payouts (O'Brien et al. 2018; Beazley et al. 2021). For instance, horizontal

expansion has occurred in Mauritania to support additional households during the lean season, increasing assistance from 13% of people in need in 2012 to 45% in 2022 (World Bank, 2025). There is increasing evidence on the impacts of social protection in different contexts of climate shock response:

- In 2023, a short-term, nutrition-sensitive cash transfer initiative in Sri Lanka increased the consumption of nutritious foods by children and caregivers. The transfers contributed to improving food consumption and dietary diversity despite the concurrent food price inflation and in the context of climatic shocks affecting household food security (Headey et al., 2024).
- **Kenya's Hunger Safety Net Programme (HSNP) blends regular and emergency payments via early-warning triggers for droughts.** HSNP provides regular payment to 133,000 households in arid counties, adding up to 100,000 more households with one-off emergency payments during times of drought (Hakeem, 2024). An evaluation of HNSP found that regular payments increased food consumption, livestock ownerships and household creditworthiness which effectively mitigated the effects of drought. Moreover, economy modelling found that for every KES 1 transferred, local income rose by KES 0.38 to 0.93, demonstrating significant spillover effects in the local economy (Merttens et al, 2017).
- **Ethiopia's Productive Safety Net Programme (PSNP) demonstrates scalable protection during droughts.** The PSNP implements predictable public works and temporary scale-ups for vulnerable rural households in drought-prone areas to support the protection of household assets and food security during crises. Evaluations show reduced household food insecurity, fewer distress sale of assets and an increased uptake of agricultural inputs (Hoddinott et al., 2012; Berhane et al., 2014; Berhane et al., 2016). It is worth noting that significant boosts in resilience are associated with higher transfer values and continuous participation in the programme (Abay et al., 2022). 79% of recipient households were less likely to experience food insecurity due to droughts compared to households not participating in the programme (FAO, 2022).

Anticipatory transfers can also safeguard food consumption, curb distress asset sales, and ease post-shock poverty (Bastagli et al, 2016). In Haiti, for instance, an anticipatory action plan was activated in 2023 upon forecasts of heavy rainfall; this enabled the delivery of early warning messages and anticipatory cash transfers to 18,700 vulnerable people through the existing social protection programme, helping families prepare before the shock hit (Secades and Shafee, 2024). Evidence from Bangladesh further illustrates the potential gains of anticipatory transfers. A large-scale evaluation of a one-off humanitarian cash transfer delivered seven days ahead of the 2020 monsoon floods found that early assistance improved food consumption for adults and children, reduced negative coping (including costly borrowing), and enabled households to take protective actions such as evacuating people and livestock before floodwaters peaked. The effects of the transfer were still present three months later (Pople et al., 2021). Such anticipatory systems not only protect consumption levels but also livelihood in the contexts of weather-related shocks. This may reduce impacts and lower the cost of the response, offering a relevant approach for some loss and damage contingencies (Cabot Venton, 2020).

However, there are important differences between project-based anticipatory approaches and efforts to embed anticipatory action in national social protection systems. Project-based anticipatory action, typically led by humanitarian actors, often 'piggybacks' on elements of social protection systems (such as beneficiary data or payment mechanisms) to channel one-off anticipatory transfers or top-ups to at risk households, as seen in recent activations in Somalia and Haiti (Secades and Shafee, 2024; WFP, 2022). By contrast, some countries are moving towards social protection system based anticipatory action, where core anticipatory action components such as forecast triggers, preagreed action plans and prearranged financing are integrated within government-led social protection systems and programmes. This enables routine safety nets to scale up horizontally and vertically ahead of forecast climate shocks, as in emerging initiatives in Mozambique and the Dominican Republic (WFP, 2022).

Evidence from shock-responsive social protection research stresses that ex ante preparedness improves timeliness and effectiveness, including pre-positioning relevant data, monitoring early warnings with agreed trigger points, and creating prior agreements so finance can flow rapidly during crises to enable vertical and horizontal scale-up (O'Brien et al., 2018). Furthermore, advances in geospatial targeting and early-warning triggers can help target climate vulnerable people for scale-up rules, so that households at risk receive cash in advance of forecasted weather-related shocks (World Bank, 2025). Evidence from the Sahel shows that targeting systems effectively

reached “climate-affected populations” by combining poverty criteria with local hazard indicators (Roest et al 2025). One longitudinal study from Southern Africa illustrates both the potential and the limits of existing evidence. Over a 30-year period, Masunungure and Shackleton (2018) find that social assistance interventions reduced household vulnerability to declining average rainfall and other environmental stressors, demonstrating that transfers can buffer long-term climatic pressures. However, often these initiatives emphasise support in the aftermath of climate-related shocks, with less attention paid to longer-term adaptation or addressing underlying conditions which may make people vulnerable (Lind et al., 2023).

Social protection can help secure incomes when livelihoods and labour markets are disrupted due to climate shocks, either by directly providing cash or by facilitating access to wage income through active labour market programmes such as public works or skills development training (McCord & Ridout, 2025).

Social protection can provide some initial capital to fund relocation and/or facilitate livelihood changes due to climate related displacement. Climate-induced human mobility is a particular area where social protection, such as employment in public works schemes, skills development, and provision of social housing, could facilitate voluntary migration, manage distress migration, and support trapped populations (Schwan & Yu, 2018; Silchenko & Murray, 2023). For example, in Fiji, Climate Resettlement Grants proactively support communities affected by both slow- (e.g., sea level rise) or rapid- (e.g., cyclones) onset climate change (Government of Fiji, 2023). However, there are few comprehensive frameworks on climate resettlement which account for complementary social protection provisions (Holmes, 2024). There is uncertainty on optimal modalities, targeting and design to support positive migration outcomes (including for “immobile” populations) and to avoid maladaptive distress migration across heterogeneous contexts (Silchenko and Murray, 2023; IPCC, 2022).

By stabilising income, social protection can make households more creditworthy and attractive to lenders. Access to financial services through social protection has been shown to notably increase women’s financial empowerment, control over resources and decision-making power. For example, in Niger, evidence suggests that mobile money transfers positively impacted intrahousehold decision making and women’s bargaining power within the household (Aker et al., 2016). These effects, however, are contingent on programme design features which consider contextual gender norms, intra-household dynamics and women's specific barriers to financial access (Duvendack and Mader, 2019; J-PAL, 2021).

Social protection can help build more resilient and adaptive households and livelihoods. It can assist households, particularly small-scale producers, to raise productivity sustainably, boost efficiency, and take up more resilient livelihood practices. It can also aid natural resource and physical environment management through financial incentives and public works programmes (Costella et al, 2021). Social protection benefits can also help strengthen adaptive capacities through positive impacts on fundamental human development outcomes (Godfrey Wood, 2011; Tenzing, 2019; Costella et al, 2023). For example, well-designed child benefits combined with complementary social services and/or cash plus initiatives can support better outcomes for children’s education, health and nutrition, thereby reducing multi-dimensional poverty and increasing the adaptive capacity (Aleksandrova, 2019).

Public works programmes can target climate-related disaster risk reduction by restoring or adapting key infrastructure and natural resource management while offering social protection as short-term employment or guarantees (USP 2030, 2025). They can also support the creation of new infrastructure and alternative livelihood opportunities (McCord & Ridout, 2025).

Preliminary findings from a review of over 40 research papers by FAO on the role of public works programmes in environmental and climate action highlight their potential as strategic tools for tackling both socio-economic and environmental challenges, by strengthening income security while strengthening natural resource management and ecosystems restoration, enhancing community and household resilience and adaptive capacity, and delivering climate mitigation outcomes (FAO, forthcoming).

Some of the largest public employment programmes globally including those in Ethiopia, India, Rwanda or South Africa, incorporate various activities to manage natural resources in a sustainable manner (ILO, UNEP and IUCN,

2022). Ethiopia's PSNP is estimated to create 40,000 community-level assets each year which contribute to land restoration, improved water management and expanded irrigation (Norton et al., 2020). India's Mahatma Gandhi National Rural Employment Guarantee Scheme (MGNREGS) offers temporary wage employment to roughly 100 million rural workers yearly. About 65% of the work focuses on natural resource management, including water management and land development structures (ILO, UNEP and IUCN, 2022). In 2018, approximately 1.3 million public and private infrastructure works were completed under MGNREGS that focused on natural capital improvements for water and soil conservation, groundwater recharge, drainage improvement and tree-plantations (Norton et al., 2020). The programme also includes persons with disabilities as part of its priority target group (Baig et al. 2025). Tied to MGNREGS, the ERADA programme connects rural households to diversified, climate-resilient livelihood options while also ensuring women and vulnerable communities hold key roles in leadership, decision-making, and livelihood diversification, yielding significant community impact (Pereznieto et al., 2025).

In this light, inclusive social protection can support socially vulnerable groups like women, children, the elderly and persons with disabilities in the context of climate change (Baig et al. 2025; Pereznieto et al., 2025). For example, ERADA in India used gender transformative tools to mobilise over 25,000 women from marginalised communities, strengthen their decision-making power and support a shift into more climate resilient livelihoods. This contributed to shifts in household and community power relations and increased support from men for women's active engagement in community decision-making (Pereznieto et al., 2025).

However, public works programmes can also fail to deliver their promised resilience gains. Evidence from Ethiopia and Kenya found that assets built through public works programmes were often poorly sited, designer or maintained resulting in little to no measurable livelihood benefits (Levine et al., 2024). Instead, programme design and implementation generally prioritised labour absorption and wage payments over quality asset creation. FAO (forthcoming) highlights three key vectors for successful outcomes, relating to wages and income security, skills development and the creation of infrastructure or assets, with evidence strongest for wage-related outcomes, more limited for asset-related environmental outcomes, and thin for skill-based impacts. PSNP findings also show that while social assistance plays a protective function supporting absorptive capacities, it cannot generate adaptive capacities in contexts affected by conflict and climatic shocks without more extensive packages of support (Lind et al., 2025). This underscores the importance of strengthened policy and institutional coordination, the incorporation of risk-informed planning and triggers, prioritising asset quality, monitoring and maintenance, and strengthening skills development pathways, especially for youth (FAO, forthcoming).

It is also worth noting that in many low-income settings, **small and infrequent transfers mean that the impact of social protection on poverty is often limited and rarely closes deep income and consumption gaps**. Existing reviews highlight that while transfers often improve food security and other short-term outcomes, their effects on poverty reduction and asset accumulation are frequently modest, especially where benefit levels are small and coverage is partial, as most often seen in low-income and FCAS settings (Okamura et al., 2025; Bastagli et al., 2016). As such, there have been increasing debates over the mode and size of transfers. Some of the most substantial impacts reported in the cash transfer literature derive from large, oneoff lumpsum payments, as outlined in GiveDirectly's randomised control trial in Kenya. Findings show relaxed liquidity constraints, higher investment and better food security; however, this mode of transfer is difficult to replicate at scale in government financed national systems (Haushofer and Shapiro, 2016). Recent analyses of transfer size and coverage underscore that, in many contexts, current benefit levels fall short of what would be required to close poverty gaps, posing important design and financing challenges for social protection as a vehicle for transformative poverty reduction and climate resilient livelihoods (Bastagli et al., 2016; Okamura et al., 2025).

Empirical evidence on the effectiveness of social protection transfers in addressing the impacts of slow-onset environmental change associated to climate change remains extremely limited (Costella et al. 2023). In particular, there is little research examining how such transfers mediate the complex trade-offs between short-term livelihood support and longer-term environmental unsustainability, increasing the risk of maladaptation (Solórzano and Cardenes, 2019). Maladaptation results from failing to consider the full range of potential impacts and unintended consequences of an action. Maladaptation can also result negative impacts on different scales, sectors and contexts. Social protection programmes that are designed as isolated interventions, rather than as part of a

systemic approach that considers vulnerability contexts at different scales, can lead to maladaptive outcomes, further exacerbating risks. For instance, a conditional cash transfer or public works programme targeting households in areas facing protracted climatic shocks—such as recurrent droughts, may strengthen absorptive capacity by providing post-shock income support. However, such programmes can inadvertently create incentives for households to remain in locations with poor long-term environmental prospects, even when temporary migration or permanent relocation would offer a more viable adaptive strategy. In this sense, the intervention may enhance shock responsiveness but do little to support longer-term adaptation if longer term climate information is not factored in (Solórzano and Cardenes, 2019).

Social protection programmes do not incorporate long-term climate risk considerations in their design and theories of change (Costella et al. 2023; Solórzano and Cárdenes, 2019). Findings from MGNREGA in India show that the programme does not adequately support mobility as a coping strategy because it limits benefits to people who remain in their village and does not support migrants at destination sites (Bharadwaj et al.

2021). Other forms of conditionalities can also indivertibly incentivise this maladaptive behaviour or erode autonomous adaptation strategies when climate change considerations are absent from social protection design (Solórzano and Cárdenes, 2019).

Tailoring interventions to context will help address some maladaptation risks, so that strengthening the assets and resilience of one group does not happen at the expense of another (Devereux and Solórzano, 2025; Desai et al. 2023). For example, a development project in Botswana aimed to provide drought-resistant crops and groundwater irrigation to smallholder farmers. In practice, only the wealthier commercial farmers were able to access the support, exacerbating existing inequalities. Additionally, class differences inhibited the traditional reciprocity practices that typically benefit poorer farmers, especially women, during times of crisis (Pereznieto and Holmes, 2023).

In this light, from design to implementation social protection programmes should integrate social inclusion considerations, in particular why some individuals are more at risk and assessing who benefits and who pays the costs of the interventions and their unintended effects. For instance, GCF SAP042 in Mozambique integrates gender equality, disability, and social inclusion across the social protection programme policy cycle, from assessments to locally grounded planning and implementation, including persons with disabilities (see this project's Case Studies report). Climate analysis and projections can be used not to predict exact outcomes, but to explore a range of plausible futures. This allows policymakers to stress-test social protection options against different scenarios and assess whether programmes remain effective under changing conditions. Such analysis helps identify potential maladaptation risks and ensures that interventions remain viable over time (Solorzano and Cardenes 2019).

Social protection schemes are often most effective in contributing to adaptation when they are linked with complimentary services (Costella et al. 2023; Aleksandrova 2019; FAO & Red Cross Red Crescent Climate Centre, 2019; Solórzano & Cárdenes, 2019; Ulrichs et al., 2019). "Plus" instruments such as cash plus or public works plus, that combine social assistance with complementary measures such as skills training, social behavioural change and communication for adaptation, financial services and productive assets, can address underlying vulnerability and have the potential to promote adaptation and economic inclusion. This is possible through the adoption of climate adaptive agricultural practices and technologies, diversification of incomes sources and livelihoods, and improved natural resource management and ecosystem restoration – as seen from evidence spanning Nicaragua, India, and Ethiopia (Bhalla et al., 2024).

In Nicaragua, households in drought-prone areas receiving a conditional cash transfer combined with complementary interventions (vocational training and a productive investment grant for non-agricultural self-employment activity) had on average 8% high consumption and 4% higher income than control group households that were just receiving the conditional cash transfer. They were also 13 percentage points more likely to engage in non-agricultural self-employment activities (Macours et al., 2012). These programmes can also be designed to be inclusive: the Disability-Inclusive Ultra-Poor Graduation (DIUPG) programme in Bangladesh worked with 2,700 people, including 450 persons with disabilities, to provide disability-inclusive livelihood trainings, as well as

financial services for the new entrepreneurs. In addition, DIUPG tackled broader societal barriers to disability inclusion through a partnership with the National Union of Women with Disabilities Uganda. The organisation provided life skills coaching to DIUPG participants, and sensitised village leaders on disability inclusion (Baig et al. 2025).

In FCAS, integrated support is critical because extremely poor households that face recurrent and protracted shocks are often unable to boost their adaptive capacities without first stabilising their livelihoods, through receiving predictable transfers that support their absorptive capacities (Naess, et al. 2022; Lind et al. 2025). However, cash plus programming remains quite short-sighted and usually following programme "adaptations" or "tweaks" from programming in stable contexts. Lind et al (2023) cash plus programmes review in protracted crises find little evidence that these programmes are adapted to address situations of forced displacement or other conflict-related processes that generate and/or worsen vulnerability. "The emphasis is on tweaking delivery processes to work in protracted crises, but not necessarily on a design to work on protracted crisis." (ibid.: 36). Moreover, transfer levels on their own are typically too small to enable meaningful adaptation investments (Holland-Szyp, et al. 2025; Ulrichs et al., 2019). This challenge is particularly acute in protracted crisis countries, where acute climate risks compound high poverty and low adaptation preparedness and is often paired with critically low social protection coverage (Swithern et al., 2025).

Around half (46 percent) of social protection financing in these contexts is channelled through overseas development finance (ODF) grants, compared to 16 percent for other countries. The amount being directed to protracted crises countries has more than quadrupled from 2018 – 2023 (Swithern et al., 2025). However, social protection remains a small portion of ODF, at just 2.7 percent in 2023. The interface between humanitarian and development finance is particularly complex in protracted crisis settings: financing for humanitarian cash and voucher assistance (CVA) far exceeds that for social protection, accounting for 24 percent of ODF in FCAS. Much of this humanitarian aid is implemented by third-party actors, outside of governments, highlighting persistent humanitarian-social protection divides (Swithern et al., 2025; Watkins et al., 2025). While humanitarian finance has a crucial role to play in crisis contexts, these countries also need flexible approaches that also support national systems.

The twin-track approach implemented by UNICEF and WFP in the Sahel illustrates how social protection systems can work synergistically with the humanitarian sector to build resilience and maintain continuity in contexts of political disruption. This is a flexible approach that channels support either through government social protection systems (Track 1) or directly through humanitarian agencies when national systems are disrupted (Track 2). Both tracks are designed to align with national priorities and ultimately reinforce, rather than replace, national government capacity. In Niger, the 2023 coup led to the suspension of the Wadata Talaka safety net programme (Track 1). This led to a pivot to Track 2, enabling UN actors to deliver cash in the absence of the national programme to reach vulnerable populations (WFP and UNICEF, n.d.). In fragile settings, the twin track approach can play an important role in expanding the reach of social protection and bridging the gap between the humanitarian and social protection response to enable continuity (Swithern et al., 2025; Watkins et al., 2025).

Given that MCF resources in FCAS are already channelled through non-governmental actors via Accredited Entities, there is a strong rationale for MCFs to explore these flexible delivery arrangements with national systems. Third-party actors are also central to implementing social protection with climate objectives in some FCAS such as Niger, Somalia, Ukraine and Haiti (Solórzano et al., forthcoming). Climate projects also fund Accredited Entities' own safety nets, including cash transfers, which closely resemble nationally led safety nets (e.g. GCF project FP279 in South Sudan funds WFP's resilience programme and cash transfers) (see this project Portfolio Review). From a climate finance perspective, this creates an opportunity to invest in cohesive approaches, that reduce fragmentation and avoiding parallel systems (ibid.)

Social protection can also serve as a gateway to financial services and productive investments. Programmes like cash transfers, public works and social insurance support risk-taking and investment, particularly when payments are digitised or linked to financial accounts, which can be leveraged for credit or savings products. Evidence shows that predictable income support enables households to shift from subsistence to more productive livelihoods. For

example, Handa et al.'s (2018) analysis of two unconditional cash transfer programmes in Zambia found an increase in non-farm activities and profitability, while Daidone et al. (2019) finds evidence from a seven-country review that social assistance supports a move to productive livelihoods and reduction in casual labour and greater asset investments.

Regional programmes like the Sahel Adaptive Social Protection Programme (SASPP) demonstrate productive inclusion impacts. SASPP supports six countries – Burkina Faso, Chad, Mali, Mauritania, Niger and Senegal – in building adaptive social protection systems to support vulnerable households adapt to the impacts of climate changes and other shocks (Fuselli et al, 2025). In addition to helping countries build flexible and responsive systems that can scale-up in case of a covariate shock, SASPP also supports the expansion of productive inclusion programmes. In Niger, productive inclusion led to an increase of 60 to 100 percent in per capita consumption, even 18 months after the programme ended (Roest et al., 2025). In Mali, programme beneficiaries were 57 percent more likely to increase their savings and 46 percent more likely to invest in productive assets, significantly strengthening their resilience to climate change and enhancing their ability to confront future shocks (Roest et al., 2025). The Social Safety Net Project in Burkina Faso aims to boost resilience by merging regular and shock-responsive cash transfers, helping poor households mitigate climate-related income losses and adopt sustainable, climate-resilient livelihood strategies (World Bank, 2015).

Home-grown school feeding programmes can support climate adaptation by linking farmers to resilient practices. Procuring food from local smallholder farmers can provide stable market access and income to encourage agroforestry and agroecological farming (FAO, 2018). A study in Busia County, Kenya, found that the home-grown school feeding programme enabled participants to learn new farming techniques and nearly half of the participants involved the in study indicated that their income had increased as a result (Borish et al., 2017). In Brazil, the national school feeding programme reserved 30 percent of procurement for smallholder farmers to support rural poverty reduction efforts (Watkins et al., 2024; Mason et al, 2024). A little over a decade after the programme began, around 30 million people escaped poverty, reported food insecurity halved and the number of people living with malnutrition reduced dramatically from 19 million to 3 million demonstrating how structured demand can create meaningful markets for small-scale producers and strengthen climate resilient livelihoods (World Bank, 2016; FAO et al., 2014).

Beyond these direct poverty and livelihood gains, there is growing recognition that school feeding can catalyse wider shifts in food systems by using public procurement to incentivise sustainable, climate smart practices, including the adoption of drought resistant crops and other resilient production methods (Mason et al, 2024). Recent analysis also shows that, although school meals are still only sparsely reflected in NDCs and NAPs, they are beginning to feature in a small but growing number of country climate strategies and climate finance funded projects, indicating an emerging policy space to more fully integrate school feeding into climate adaptation agendas (Mason et al, 2024).

Social protection can be intentionally designed to contribute to reduced greenhouse gas emissions and carbon sequestration by providing incentives to promote sustainable natural resource management. This can be achieved through cash incentives to promote conservation activities and sustainable resource management, environmentally conditioned cash transfers (E-CCT) and carbon sequestration through public works programmes. Promising data exists on social transfers aiding natural-resource management and ecosystem restoration, especially via public employment and environmental cash transfer programmes (USP 2030, 2025). Social protection can directly support mitigation efforts through provision of income to incentivise the conservation and restoration of crucial carbon sinks including forests, mangroves or soils (ILO, 2024).

Brazil's Bolsa Verde demonstrates how conditional incentives can reduce deforestation. This was achieved by leveraging existing conditional cash transfer (CCT) programmes and providing incentives for forest conservation, reforestation, and afforestation (USP 2030, 2025; Pereznieto et al., 2025). Deforestation in Bolsa Verde areas was 44% to 53% lower than the counterfactual, yielding carbon reduction benefits three times the programme cost (Oxfam, 2020). The programme was reinstated in 2023 with a renewed focus on combining poverty reduction and

sustainable resource use (ILO, 2024). Ethiopia's PSNP also supports natural resource management goals through public works by building assets that improve watershed management, contributing an average carbon capture of 5.7 tonnes of CO2 per hectare per year at project sites (USP 2030, 2025).

Social protection can protect workers and vulnerable groups as economies shift towards low carbon and circular models. In 2019, ILO estimated that a sustainable energy transition and development of the circular economy could eliminate 78 million jobs while simultaneously creating 103 million jobs, globally (ILO 2019). While findings suggest an overall net positive employment effect, the disruption to the labour market is significant.

Mismatches between labour demand and supply is likely to result in an increase in unemployment, and asset and livelihood loss which would exacerbate poverty and inequality (ILO, 2024). Social protection, as part of an integrated policy response, is able to better protect people's jobs and enterprises from the adverse effects of climate change. Moreover, social protection encourages productive risk-taking, enables job restructuring, protects living standards and reduces vulnerability, ensuring no one is left behind in the shift to low-carbon economies (ibid.).

Social protection can be designed to cushion households from adverse effects of climate mitigation policies like carbon taxes and fossil fuel subsidy removals by offering financial assistance, unemployment support, and retraining. It can directly support environmental sustainability by encouraging emission-reducing activities and ecosystem restoration. It can also help households manage price rises in essentials like food, water, energy, and transport, most effectively with broad, inclusive coverage (USP 2030, 2025).

Indonesia's 2014 fossil fuel subsidy reform exemplifies how social protection can cushion price shocks during transitions. The government removed gasoline subsidies, previously used to ease poverty, and sharply increased social spending in 2015. Building on a 2005 unconditional cash transfer programme that covered nearly a quarter of the population with unconditional transfers, educational assistance and healthcare, an a more targeted conditional transfer was introduced in addition to a national health insurance scheme for the (near) poor (ILO, 2024). This protected vulnerable households from price shocks while creating fiscal space for broader coverage.

2.3 Why climate change is a policy problem for social protection

As social protection contributes to climate action, so climate change, in turn, affects the routine delivery of social protection itself. As climate risks intensify, social protection systems, particularly in LMICs, face growing operational and financial pressures that require targeted investments to maintain and strengthen support for the most vulnerable. Climate change disrupts these systems through both increased demand for assistance and the transformation of underlying risk profiles, challenging their ability to function reliably and equitably.

Climate-related shocks such as droughts, erratic rainfall, and heatwaves are intensifying, deepening poverty traps and inequality in low- and middle-income countries, with the potential of reversing years of sustainable development gains (Corral Rodas, Fajardo Gonzalez and Nguyen, 2025; IDMC, 2025; OPHI & UNDP, 2025). The World Bank estimates that without 'ambitious efforts' to mitigate climate change, the number of people in extreme monetary poverty could double by 2050 (World Bank, 2025). For Africa in particular, projections suggest a mean long-term GDP decline of 7.12 percent, with the most affected regions seeing a GDP loss of up to 26.6 percent. Crop production is also projected to decline significantly across Africa with agricultural revenue losses expected to rise to approximately 30 percent, pushing poverty levels to between 20 and 30 percent, compared to a no climate change scenario (Adom, 2024).

Recent climate attribution studies find robust evidence linking extreme weather events to distinctive climate change effects. For example, in 2025, World Weather Attribution find that in Pakistan climate change has increased the rainfall intensity by around 15 percent, while in South Sudan, extreme heat over a seven-day period would have been approximately 4C cooler had the climate not warmed by 1.3C (World Weather Attribution, 2025a; World Weather Attribution, 2025b). Moreover, longitudinal studies in rural Ethiopia and Honduras highlight how climate shocks trigger irreversible asset losses, trapping poorer households on low-productivity paths with limited recovery

capacity (Carter et al., 2007; Dercon, 2004). In the absence of robust social protection, families rely on asset-degrading coping strategies that erode long-term resilience and development.

The IPCC finds that climate impacts and risks are becoming increasingly complex, with multiple hazards occurring simultaneously and interacting with non-climatic drivers, producing compounded and cascading risks across sectors and regions (IPCC, 2022). This complexity expands social protection caseloads beyond chronic poverty to include episodically vulnerable households and people affected by systemic disruptions in food systems, health risks and labour markets (Costella et al., 2023). In 2024, over 294 million people in 53 countries experienced high levels of acute food insecurity (GRFC, 2025). Many of these countries are also FCAS, where climate change interacts with the compounding effects of conflict and fragility that disrupt livelihoods and food systems, pushing growing numbers of people into acute hunger and food insecurity (FAO, UNICEF and WFP, 2024). These shocks deepen poverty, food insecurity and increase exposure to future shocks and can intensify humanitarian needs when shocks occur.

Life-cycle and climate risks are also becoming increasingly intertwined. For instance, women and girls are disproportionately affected by climate risks due to their dependence on livelihoods based on natural resources and agriculture, the existing burden of unpaid care work, lower incomes and limited assets, and a higher likelihood of being adversely affected by environmental disasters and shocks (Nesbitt-Ahmed 2023; Pereznieto et al., 2025; ILO, 2024). This increases the probability of long-term chronic poverty (IPCC, 2022) and thereby placing persistent burdens on safety nets and on their graduation approaches (Tenzing, 2020).

As the frequency, magnitude and interdependence of crises increase, it becomes clear that no individual, household or community is ever 100 per cent resilient, due to idiosyncratic and covariate shocks that cannot be predicted or fully prevented or insured against (Devereux and Solórzano, 2025). Changes in the climate system are highly likely to increase the need for social protection both to address transitory needs at a covariate level, as well as to address chronic, long-term needs for individuals, households, and societies (Costella et al. 2023).

Climate change also create new vulnerable groups and new risks pushing the boundaries of social protection systems. This include climate-displaced people, itinerant labourers, unauthorised migrants and the urban poor in informal settlements, who frequently live without core social safety nets and may therefore be excluded from conventional registries and entitlements (Dodman et al., 2023; ILO, 2024)

Climate change can also weaken the institutional and fiscal capacity needed for social protection scale-up: the IPCC notes that adaptation programming may draw resources away from social welfare and safety nets, even though maintaining safety nets can enhance resilience precisely because they address non-climatic stressors that interact with climate hazards (IPCC, 2022). Financing gaps and constrained fiscal space are already binding: the ILO estimates that a basic social protection floor in LMICs requires an additional US$1.4 trillion annually (3.3% of aggregate GDP), including US$552.3 billion for key cash benefits, and notes extremely high relative financing needs for low-income countries that imply reliance on international support (ILO, 2024).

At the same time, climate change is reshaping expectations of what social protection must do to protect vulnerable people beyond routine life-cycle risks. Climate change poses profound long-term challenges characterised by structural transformation, deep uncertainty and non-linear risks (IPCC, 2022). Gradual processes such as desertification, sea-level rise and shifting agro-ecological zones will alter labour markets, migration patterns and livelihood systems, requiring social protection to move beyond temporary relief toward sustained and longer-term resilience-building and support transformation when adaptation limits have been reached (McCord & Ridout, 2025; Costella, et al. 2023; Aleksandrova, et al. 2021).

Yet, there is comparatively little evidence on social protection's role in enabling forward-looking strategies and transformational change, as opposed to the more substantive evidence on how social protection protects consumption and assets in the face of climate-related shocks than on whether social protection reliably enables forward-looking strategies and transformational change (Costella et al., 2023; Desai et al., 2023; Aleksandrova and Costella, 2021; Tenzing, 2020; Ulrich et al. 2019). This is because social protection systems in LMICs have not been designed to address the extent of these new recurrent risks and challenges. A broader and nuanced understanding

of the ways in which climate change not only increases but also changes the nature of risks social protection typically deals with, and importantly, how social protection responds to them, can improve policymaking in this space (Costella et al. 2023).

As climate risks become more systemic and uncertain, social protection systems must therefore strengthen their capacities to support climate resilience, enhance their institutional flexibility and financing frameworks to manage both recurrent shocks and long-term structural change (IPCC, 2022; ILO, 2024). Climate actors have a critical role to play in order to strengthen the contribution of social protection to climate resilience. These includes the development of tools and expertise for effectively combining long-term climate risk assessments with analysis of a changing environmental and social footprint (Desai et al. 2025). It also entails closer alignment with climate science to inform programme's theories of change, design and implementation, as well as enhancing national capacities.

3 Climate finance and social protection

3.1 How MCFs are supporting social protection for climate action

Recent international frameworks, from the Global Goal on Adaptation to the Just Transition Work Programme, urge integrating social protection into climate strategies (UNFCCC, 2023; USP2030, 2024). Multilateral climate funds (MCFs) are also increasingly recognising social protection as a relevant and effective instrument for delivering climate action, particularly in relation to adaptation, loss and damage, and just transitions. Yet, the literature emphasises how integration remains fragmented and uneven (Aleksandrova et al., 2024; FAO and GCF, 2025; Hopper et al. 2024; Sengupta and Sivanu, 2023). The GCF is the only MCF that has systematically analysed their social protection investments (see FAO and GCF, 2025; and this study Portfolio Review).

Analysis currently developed by this research shows 41 GCF projects that include social protection, mainly to support adaptation, spanning from projects that seek better harmonisation and coordination with social protection (15) and piggybacking on the social protection instruments and systems (13) to system strengthening (8) and innovation (5) (see Portfolio Review deliverable).

The Adaptation Fund framework offer support for social protection programming by requiring projects to demonstrate tangible economic and social benefits for vulnerable groups. It has reported 19 projects that focus on livelihood protection and diversification, cash-based support, public works, and skills or enterprise development to help vulnerable households adapt to climate impacts (Task Force, 2025). They typically integrate these instruments into broader community-level adaptation efforts, such as climate-resilient agriculture, ecosystem restoration, and local infrastructure, prioritising the poorest and most climate-exposed groups receive direct, tangible benefits that strengthen resilience and reduce vulnerability (ibid.).

The AF's project 'Economic, Social and Solidarity Insertion for Resilience in the Governorate of Kairouan (IESS Adapt)' combines natural-resource management with livelihood support, and ensured that climate interventions used existing social protection delivery systems, aligned the project payments with the national safety net, and avoided duplication (Task Force, 2025).

The GEF explicitly recognises adaptive social protection as a key approach in its draft GEF-G strategy for the Least Developed Countries Fund (LDCF) and Special Climate Change Fund (SCCF), highlighting it as one of the key approaches in delivering support (Task Force, 2025). The GEF reported 44 projects with social protection and focus on climate-resilient livelihoods, cash or in-kind support, public works, skills and enterprise development, food security, community-based adaptation, and support to vulnerable groups, all embedded within broader adaptation efforts such as ecosystem restoration, climate-smart agriculture, and local resilience planning (ibid.). For example, in Cambodia the GEF is funding an initiative designed to strengthen the climate-resilience of rice-farming communities through an eco-system-based and market-driven approach. This project supports mechanisms that extend social protection to small-scale producers and public works programmes, with the aim of strengthening overall resilience (GEF, 2021). However, as explained, no systematic review has been conducted to understand how the fund is including social protection.

The CIF has built on lessons from the PPCR to recognise social protection as an essential system for climate-resilient development. Newer initiatives such as ARISE promote the use of social protection systems for vulnerability assessments, safeguards and targeted investments, while just transition and decarbonisation programmes increasingly incorporate income support and labour market measures (Task Force, 2025). ARISE encourages a systems-based approach, with proposals encouraged to identify an 'anchor system', such as social protection, which the investment will build-on in order to be able to build the resilience of vulnerable people over the longer term and at scale.

The Fund for Responding to Loss and Damage (FRLD) places affected populations at its core and is expected to rely heavily on national social protection systems to deliver rapid, transparent and scalable support for climate-related shocks and slow-onset impacts.

Moreover, various disaster risk financing (DRF) tools support and have leveraged social protection systems as money-out mechanisms in LMICs to deliver more inclusive, effective and people-centred climate finance in contexts of weather-related shocks. Digital payment systems, early warning-linked triggers and scalable beneficiary registries allow for rapid expansion of support in response to climate shocks, while maintaining consistent operational standards:

- In the Caribbean, Saint Lucia and Dominica has adopted a sovereign parametric insurance "top-up" model (facilitated by WFP and the Caribbean Catastrophe Risk Insurance Facility) which pre-arranges that a portion of any payout is dedicated to funding emergency cash transfers via national social protection programmes (WFP, 2025).
- Senegal has channelled payouts from the African Risk Capacity (ARC) drought insurance pool into its social assistance programmes, demonstrating the viability of insurance-funded shock responses (UNDP, 2025).

The Global Shield Financing Facility (GSFF) also demonstrates practical integration of social protection into climate risk finance, while contributing to strengthening national systems. The GSFF established an Adaptive Social Protection Programmatic Window in collaboration with the WB and WFP to support social protection systems as vehicles of disaster and climate resilience, including in FCAS. In Somalia, a US$12 million GSFF grant was approved to design triggers for emergency cash transfers, enabling the country to scale up its social safety net programme in response to climate shocks while expanding pastoralists' access to insurance and credit (ibid). In Malawi, GSFF support ensured women benefited from adaptive social protection through alignment with its Gender Strategy. The cash transfer programme enabled drought-triggered payouts to around 330,000 people, prioritising women-headed households, and reducing disbursement time from six months to one month (Global Shield Financing Facility Annual Report, 2025). Currently, 26 percent of GSFF's portfolio represents social protection investment, showcasing the value placed on social protection as a means to meet those most vulnerable, even in FCAS.

3.2 How social protection supports MCFs objectives

Social protection directly advances MCFs core objectives in several ways:

- **Improving adaptation effectiveness** by reducing socio-economic vulnerability and enabling households to absorb and recover from climate shocks through cash transfers, public works and livelihood support (Sengupta and Sivanu, 2023).
- **Supporting equity and inclusion**, a stated priority across MCFs, by targeting populations most exposed to climate risks yet least able to cope, particularly rural and low-income groups (FAO and GCF, 2025).
- **Enabling scalable and nationally owned delivery of MCF projects** - through building on existing national systems that can be rapidly expanded in response to climate-related shocks, aligning with MCF commitments to country ownership and sustainability (USP2030, 2024).
- **Enhancing returns on investment over time** - a country with a shock-ready social protection system can utilise climate funds more rapidly and effectively when disaster strikes, increasing the impact of every dollar (McCord and Ridout, 2025). Stronger social registries, payment systems, and delivery infrastructure enable quicker and larger-scale responses to weather-related shocks. In terms of delivery, social protection infrastructure provides a ready-made architecture through which multiple climate funds can channel resources efficiently and transparently.

As climate finance continues to expand, fragmentation in delivery mechanisms, vulnerability assessments, monitoring frameworks and impact reporting has emerged as a persistent challenge, limiting transparency, comparability and overall effectiveness. Social protection systems, by contrast, are nationally anchored platforms designed for systematic targeting, large-scale delivery and accountability, making them uniquely suited to serve as common infrastructure for climate finance interventions.

The inclusion of social protection within the Global Goal on Adaptation (GGA), notably through Target F9 on coverage and effectiveness of social protection systems, provides a formal policy basis for positioning these systems as core adaptation instruments rather than peripheral social measures. This reframing enables climate funds to converge around shared outcomes related to resilience, vulnerability reduction and shock responsiveness, thereby creating a coherent set of adaptation indicators applicable across portfolios.

By grounding climate investments in nationally governed, auditable and increasingly digitised social protection systems, funds can reduce risks of double counting, inconsistent methodologies and opaque impact claims. This enhances confidence in reported outcomes and supports the credibility of climate finance as a driver of tangible adaptation progress.

Social protection can provide a pro-poor and people-centred approach to climate finance (Task Force, 2025). Analysis show that there is no correlation between the amount of money received for climate change adaptation by people living in extreme poverty and climate-vulnerability of a given country (Alcayna, 2020). In 2023, out of 132 countries, approximately two thirds of the top 25% of countries (20) most vulnerable to climate change are FCAS, and eight out of the top ten most climate vulnerable countries in the world (from OECD country list of climate adaptation recipients) are FCAS receiving 5.9% of total climate adaptation finance in 2023 alone (Solórzano et al forthcoming). Moreover, the United Nations Environment Programme Adaptation Gap Report (UNEP, 2023) found that in 2017, only 17% of adaptation funding was aimed at building local resilience. In this light, there are various challenges in ensuring that climate finance is fully people-centred and inclusive, reaching those most in need. However, all of these countries have some form of social protection and programmatic investments on climate-sensitive social protection are already taking place (Solórzano et al forthcoming).

As explained above, **social protection is also affected by the impacts of climate change,** threatening its capacities to deliver support to the poorest and most vulnerable members of society. Climate finance can offer an important opportunity to resource foundational capacities so that social protection systems can more effectively support adaptation and resilience objectives (McCord & Ridout, 2025). Entry points for MCF to support social protection systems include climate-informed planning through the provision of climate services and establishing linkages with early warning systems; an improved institutional, policy and regulatory environment through the integration of climate risk considerations in sectors relevant to social protection; promotion of institutional coordination; and enhanced knowledge and finance (Aleksandrova, et al. 2024).

Sectors become priorities for climate finance and MCFs through a combination of scientific risk evidence (notably from the IPCC), political agreement under the United Nations Framework Convention on Climate Change (UNFCCC), governing board decisions of MCFs, and the ability to demonstrate measurable mitigation or adaptation outcomes within fund results frameworks. The process involves climate vulnerability prioritisation or strategic sectoral prioritisation within the climate finance architecture. Sectors such as **energy systems, agriculture and food security, water resources, coastal zones, infrastructure and cities, and ecosystems/land use** have been elevated across funds because they are consistently identified as highly climate-vulnerable and economically significant in IPCC assessments[1], while also offering scalable and investment-ready opportunities consistent with the mandates of the GCF, GEF and other MCFs. In practice, priority status reflects both climate risk exposure and strategic alignment with global climate and development agendas, including UNFCCC outcomes on adaptation, mitigation, and just transition.

By contrast, social protection has rarely been designated as a standalone priority sector within climate finance frameworks, despite its growing recognition as a critical enabler of people-centred adaptation, resilience-building, and just transition policies. This reflects not a lack of relevance, but rather the fact that social protection cuts

[1] Energy, agriculture, water, and infrastructure are consistently prioritised across all funds. Ecosystems and land use are central for GEF and GCF mitigation/adaptation portfolios. Livelihoods and social resilience are increasingly recognised, particularly by the GCF, Adaptation Fund, and MDBs. Health and social protection are rarely standalone sectors but are increasingly embedded within adaptation and resilience programming. Just transition is gaining prominence, especially in MDB and CIF frameworks.

across multiple sectors and has historically been financed through domestic public budgets rather than climate-specific funding channels.

As such, social protection-related MCF investments are more likely to occur where ministries responsible for social protection, agriculture and climate change collaborate during project design and implementation (Sengupta and Sivanu, 2023). Since NDAs and national focal points, usually located in environment or finance ministries, lead engagement with climate funds, social protection stakeholders must work closely with them to ensure their proposals are considered. This alignment also reduces the risk of duplication, supporting project efficiency.

Where social protection objectives are explicitly incorporated into Nationally Determined Contributions, National Adaptation Plans or climate fund country programmes, MCFs are better able to justify financing social protection as a climate-relevant intervention (FAO and GCF, 2025). For instance, social protection is increasingly reflected in national climate strategies and investment frameworks, which supports the demand for climate finance for social protection and strengthens the climate rationale of proposed interventions. A recent ILO review shows a sharp rise in the share of NDCs that include social protection, increasing from 15% in the second-generation NDCs to 65% in the third generation (ILO, 2025). In terms of National Adaptation Plans a review of 129 NAPs from developing countries found only 10% refer to social protection (ILO, 2022 in Task Force, 2025).

A key example is Cambodia's 3.0 NDC, where social protection was featured as a stand-alone adaptation sector. By institutionalising 'social protection, social services, and child protection' within the climate framework, Cambodia assigns it nearly US$ 899 million for 2026–2035, ensuring concrete programmes with measurable outcomes. Key measures include expanding the coverage of the national poverty identification system, strengthening school feeding programmes, and introducing shock-responsiveness to address climate shocks and economic transitions (Baig et al. 2025).

Sufficient funding and flexibility must be in place so that climate finance can support not just isolated project-based interventions but also longer-term system strengthening. This could be done through readiness grants and dedicated funding windows that accommodate social protection type interventions (Aleksandrova et al. 2021). For instance, the FRLD's planners consider funding foundational systems as a strategic use of limited funds to enable efficient future payouts (McCord and Ridout, 2025).

Social protection systems also require continuous financing beyond individual project cycles, and alignment with broader development finance can support systemic resilience while reducing fragmentation (Task Force, 2025; Roest et al., 2025). Complementarity with development banks, humanitarian actors and national financing systems is essential for long-term sustainability. This creates opportunities for coordinated financing, whereby different funds support complementary elements of the same system, which can be especially relevant in FCAS (Solórzano, et al. forthcoming; Aleksandrova et al. 2024). It can translate high-level harmonisation principles into practical operational alignment across targeting, delivery and measurement. Such an approach directly advances harmonisation objectives by replacing parallel project structures with shared delivery mechanisms, which is especially critical in FCAS contexts (Solórzano et al. forthcoming).

3.3 Challenges for MCFs to support social protection

Operational barriers identified across climate finance institutions further constrain the scaling of social protection. These include inconsistent interpretation of social protection within climate finance, weak integration between national climate and social protection strategies, and limited technical capacity to articulate climate rationales for social investments (Hopper et al., 2024).

Another challenge is ensuring climate finance principles (such as additionality and climate rationale) are upheld, funds must be satisfied that they are not simply filling regular social spending, but addressing climate-induced needs. Clear indicators and evidence (e.g. showing how a cash transfer enables adaptation to climate risk) are needed to justify these investments (FAO and GCF, 2025). MCF prioritise on-the-ground results, so funding is less suited to financing nationwide system-building (e.g. establishing social protection registries), focusing instead on project-based interventions.

Moreover, **limited consensus on what transformative investments entails** show a tendency to favour proposals centred on economic efficiency, infrastructure development, technological solutions and private sector engagement, which align closely with liberal market-oriented logics (Kuhl et al., 2024). This dynamic has important implications for social protection investments. **Given that social protection primarily delivers public goods through state-led systems rather than revenue-generating or market-based mechanisms, it can be perceived as less aligned with dominant conceptions of efficiency and catalytic finance.** As a result, proposals that focus on strengthening social systems, addressing poverty traps or redistributing climate risk may struggle to demonstrate 'transformational impact' in ways that resonate with prevailing governance incentives (Aleksandrova et al., 2024; Kuhl et al., 2023. This contributes to the current pattern of fragmented inclusion, where social protection appears as a supporting component rather than a core climate resilience strategy.

A tension also exists because some MCFs (like the AF) have mandates for projects with immediate benefits, making pure system-strengthening proposals harder to finance (Adaptation Fund, 2023). To overcome this, experts recommend blending different funding sources or using special readiness windows to support system development (McCord and Ridout, 2025; Aleksandrova et al. 2024).

References

Abdul Latif Jameel Poverty Action Lab (J-PAL). (2021) 'Designing financial services and social protection programs to enhance women's economic empowerment', J-PAL Policy Insights. Last modified Feburary 2021. https://doi.org/10.31485/pi.3090.2021.

Adom, P. K. (2024) 'The Socioeconomic Impact of Climate Change in Developing Countries in the Next Decades: A Review', CGD Working Paper 681. Washington, D.C.: Center for Global Development. https://www.cgdev.org/publication/socioeconomic-impact-climate-change-developing-countries-next-decades-review

Aker, J., Boumnijel, R., McClelland, A. and Tierney, N. (2016) 'Payment mechanisms and antipoverty programs: Evidence from a mobile money cash transfer experiment in Niger', *Economic Development and Cultural Change* 65(1), pp. 1–24. DOI: 10.1086/687578.

Alcayna (2020), *At What Cost? How chronic gaps in adaptation finance expose the world's poorest people to climate chaos*. Zurich Flood Resilience Alliance.

Aleksandrova, M., and Costella, C. (2021) 'Reaching the poorest and most vulnerable: Addressing loss and damage through social protection', *Current Opinion in Environmental Sustainability* 50, 121–128, https://doi.org/10.1016/j.cosust.2021.03.010.

Aleksandrova, M., Kuhl, L. and Malerba, D. (2024) 'Unlocking climate finance for social protection: an analysis of the Green Climate Fund', *Climate Policy* 24(7), pp. 878–893.

Baig, Z., Chandaria, S., Munyandamutsa, J., Solórzano, A., Strohm, R. (2025) 'Scoping Review on Disability-Inclusive Social Protection for Climate Action in Rural Areas', Social Protection Technical Assistance Advice and Resources (STAAR) Facility, DAI Global UK Ltd, United Kingdom. Scoping review on disability-inclusive social protection for climate action in rural areas

Bangalore, M. et al. (2016) *Shock Waves: Managing the Impacts of Climate Change on Poverty*. World Bank.

Bastagli, F., Hagen-Zanker, J., Harman, L., Barca, V., Sturge, G., Schmidt, T., with Pellerano, L. (2016) *Cash transfers: what does the evidence say? A rigorous review of programme impact and of the role of design and implementation features*. Overseas Development Institute (ODI).

Beazley, R., Bischler, J., and Doyle, A. (2021) *Towards shock-responsive social protection: Lessons from the COVID-19 response in six countries. Synthesis report*. Oxford Policy Management (Maintains Programme). June 2021.

Beazley, R., A. Solórzano, and V. Barca (2019), *Study on Shock Responsive Social Protection in Latin America and the Caribbean: Summary of key findings and policy recommendations*. OPM and WFP.

Belém Declaration on Hunger, Poverty, and People-Centred Climate Action (2025) Belém Climate Summit, 7 November.

Béné, C., Cannon, T., Davies, M., Newsham, A., and Tanner, T. (2014) 'Social Protection and Climate Change', *OECD Development Co-operation Working Papers* No. 16. OECD Publishing.

Berhane, G., Gilligan, D.O., Hoddinott, J., Kumar, N., Taffesse, A.S. (2014) 'Can Social Protection Work in Africa? The Impact of Ethiopia's Productive Safety Net Programme', *Economic Development and Cultural Change* 63(1), 1–26.

Berhane, G., Hirvonen, K., Hoddinott, J., Kumar, N., Taffesse, A.S. Yohannes, Y., Tefera, M., Nishan, B., Lind, J., Sabates-Wheeler, R., and Strickland, A. (2016) *The Implementation of the Productive Safety Nets Programme and the Household Asset Building Programme in the Ethiopian Highlands, 2014. Program Performance Report 2015*. Addis Ababa: Ethiopia Strategy Support Program, International Food Policy Research Institute.

Bhalla, G., Knowles, M., Dahlet, G. and Poudel, M. (2024) *Scoping review on the role of social protection in facilitating climate change adaptation and mitigation for economic inclusion among rural populations*. Rome, FAO. https://doi.org/10.4060/cd0287en

Bharadwaj, R.; Mitchell, T.; Karthikeyan, N. 2023. *Anticipatory Social Protection Index for Resilience – ASPIRE*. London, International Institute for Environment and Development.Borish, D., King, N. and Dewey, C. (2017) 'Enhanced community capital from primary school feeding and agroforestry program in Kenya', *International Journal of Educational Development* 52, 10–18.

Bowen, T. et al. 2020. *Adaptive social protection: Building resilience to shocks* (International Development in Focus). Washington, DC, World Bank.Cabot, V. (2020) *Economics of early response and resilience to COVID-19: Ethiopia*. Social Protection Approaches to COVID-19: Expert Advice (SPACE), DAI Global UK Ltd.

Carter, M.R. et al. (2007) 'Poverty Traps and Natural Disasters in Ethiopia and Honduras', *World Development* 35(5), pp. 835–856. https://doi.org/10.1016/j.worlddev.2006.09.010.

Costella, C., Banthiya, A., Reilly, R., Sivanu, S., Slater, R., Georgiadou, Y., and van Aalst, M. (2024) 'Mapping the integration of climate considerations in social protection in LMICs: An assessment of ninety-eight climate-relevant social protection programs', *Climate Risk Management* 46, 100660. https://doi.org/10.1016/j.crm.2024.100660

Costella, C., van Aalst, M., Georgiadou, Y., Slater, R., Reilly, R., McCord, A., Holmes, R., Ammoun, J., and Barca, V. (2023) 'Can social protection tackle emerging risks from climate change, and how? A framework and a critical review', *Climate Risk Management* 40, 100501. https://doi.org/10.1016/j.crm.2023.100501

Daidone, S., Davis, B., Handa, S. and Winters, P. (2019) 'The household and individuallevel productive impacts of cash transfer programs in subSaharan Africa', *American Journal of Agricultural Economics* 101(5), pp. 1407–1426. DOI: 10.1093/ajae/aay113.

Davies, M. et al. (2009). *Climate change adaptation, disaster risk reduction and social protection: Complementary roles in agriculture and rural growth?* (IDS Working Paper, No. 320). Brighton, Institute of Development Studies.

Dercon, S. (2004) 'Growth and shocks: evidence from rural Ethiopia', *Journal of Development Economics* 74(2), pp. 309–329. https://doi.org/10.1016/j.jdeveco.2004.01.001.

Desai B, Läderach P, Roy S, Meddings G, Costella C, Bidault N, Solórzano A and Campbell R (2025) 'Integrating science for simultaneously addressing loss and damage from climate change and strengthening social protection', *Front. Clim.* 7:1497560. doi: 10.3389/fclim.2025.1497560

Desai, B. et al. (2023) *Adaptive social protection: A persistent illusion or the way forward for climate adaptation and social inclusion? (Policy Brief).* Montpellier, Consultative Group on International Agricultural Research.

Development Pathways (2017). *Investments in Social Protection and Their Impacts on Economic Growth: Tax Financing Options*. Orpington: Development Pathways.

Devereux, S., and Solórzano, A. (2025) 'Resilient People, Resilient Systems: The essential role of social protection in a polycrisis world', *International Social Security Review. Social Security: Enabling and Promoting Resilience Special Issue.* doi.org/10.1111/issr.70001

Devereux, S., Solórzano, A., and Wright, C. (2024) *Maximizing impact: the intersection of social protection and resilience*, World Food Programme, Rome.

Dodman, D., Sverdlik, A., Agarwal, S., Kadungure, A., Kothiwal, K., Machemedze, R. and Verma, S. (2023) 'Climate change and informal workers: Towards an agenda for research and practice', *Urban Climate* 48, 101401. URL: https://doi.org/10.1016/j.uclim.2022.101401

Duvendack, M. and Mader, P. (2019) 'Impact of financial inclusion in low- and middle-income countries: A systematic review of reviews', *Campbell Systematic Reviews* 15(1–2), e1012. DOI: 10.4073/csr.2019.2.

FAO (2018) *Strengthening sector policies for better food security and nutrition results: Public food procurement. Policy Guidance Note 11*. Rome. https://www.Fao.org/3/CA2281EN/ca2281en.pdf

FAO (2022) 'Reducing vulnerability to weather shocks through social protection: Evidence from the implementation of Productive Safety Net Programme (PSNP) in Ethiopia', FAO Agricultural Development Economics Working Paper 22–02, Rome

FAO (forthcoming), 'Social protection for inclusive climate and environmental action: evidence and lessons on the design and implementation of environmentally-conditioned cash transfers and green public works'. Rome.

FAO and GCF (2025) *Social protection and inclusive climate action: A review of social protection for rural populations within Green Climate Fund projects*. Rome: Food and Agriculture Organization of the United Nations and Green Climate Fund.

FAO and Red Cross Red Crescent Climate Centre. 2019. *Managing climate risks through social protection – Reducing rural poverty and building resilient agricultural livelihoods*. Rome.

FAO, WFP, and IFAD (2014) The State of Food Insecurity in the World. Report. Rome: Food and Agriculture Organization, World Food Programme, and International Fund for Agricultural Development.

Fajardo Gonzalez, J., Nguyen, M.C. and Corral Rodas, P.A. (2025) 'The Future of Poverty: Projecting the Impact of Climate Change on Global Poverty through 2050', *Policy Research Working Paper 11173*, World Bank, Washington, DC.

FSIN and Global Network Against Food Crises. (2025) *GRFC 2025*. Rome.

Fuselli, S., Niebuhr, M., Saidi, M. and Agostini, S. (2025) 'Adaptive Strategies and Approaches to World Bank Safety Net Delivery Amid Challenges: A guide to implementing social safety nets in fragile, conflict, and violent contexts', World Bank, Washington, DC.

Global Environment Facility (GEF). (2021) 'Promoting climate-resilient livelihoods in rice-based communities in the Tonle Sap region', Project Identification Form (PIF), Cambodia.

Global Shield Financing Facility (2025) *Annual Report 2025*. Washington, DC: World Bank.

Government of Fiji. (2023) *An introduction to the Climate Relocation of Communities Trust Fund (CROC) for communities and the public*.

Hakeem, B. (2024) *HSNP Operational Monitoring Synthesis Report: Evaluation of the Hunger Safety Net Programme (HSNP) Phase 3*. Oxford Policy Management (OPM).

Handa, S., Natali, L., Seidenfeld, D., Tembo, G. and Davis, B. (2018) 'Can unconditional cash transfers raise long-term living standards? Evidence from Zambia', *Journal of Development Economics* 133, pp. 42–65.

Haushofer, J. and Shapiro, J. (2016) 'The short-term impact of unconditional cash transfers to the poor: Experimental evidence from Kenya', Quarterly Journal of Economics 131(4), pp. 1973–2042.

Headey, D., Hemachandra, D. and Ranucci, I. (2024) *An empirical investigation of UNICEF's nutrition-sensitive short-term cash transfer programme in Sri Lanka. UNICEF Sri Lanka Working Paper, August, 2024*. Colombo, UNICEF. https://www.unicef.org/srilanka/media/4691/file/An%20
empirical%20investigation%20of%20UNICEF%E2%80 %99s%20nutrition-sensitive%20short-term%20cash%20
transfer%20programme%20in%20Sri%20Lanka.pdf

Hoddinott, J., Berhane, G., Gilligan, D.O., Kumar, N., Taffesse, A.S. (2012) 'The Impact of Ethiopia's Productive Safety Net Programme and Related Transfers on Agricultural Productivity', *J. Afr. Econ.* 21(5), 761–786.

Holland-Szyp, C.; Lind, J. (2025) 'Social protection and resilience in protracted crises', *International Social Security Review* 78(2–3).

Hopper, R., Hurworth, M., and Lowndes-Bull, Z. (2024) 'The Realities of Climate Finance for Social Protection'. London: STAAR Facility, DAI Global UK.

IDMC (2025) *Global Report on Internal Displacement 2025*. Internal Displacement Monitoring Centre.

Ignaciuk, A., Scognamillo, A. and Sitko, N. (2021) *Leveraging social protection to advance climate-smart agriculture: evidence from Malawi. FAO Agricultural Development Economics Working Paper 21-04*. Rome, FAO. https://doi.org/10.4060/cb3649en

International Labour Office (2019) *Skills for a greener future: A global view based on 32 country studies*. International Labour Office.

International Labour Office, *World Social Protection Report 2024-2026: Universal Social Protection for Climate Action and a Just Transition*, Geneva: International Labour Office, 2024.

International Labour Organization (ILO), *R202 - Social Protection Floors Recommendation, 2012, No. 202*, 14 June 2012.

ILO, UNEP and IUCN. (2022) *Decent Work in Nature-based Solutions 2022*. Geneva.

ILO (2025) *Mapping just transition in NDCs 3.0 - global trends: Insights from 123 countries*, Geneva: International Labour Office, 2025.

Intergovernmental Panel on Climate Change (IPCC) (2022) *AR6 Working Group II, Chapter 8: Poverty, Livelihoods and Sustainable Development*. In: *Climate Change 2022: Impacts, Adaptation and Vulnerability*. Geneva: IPCC. URL: https://www.ipcc.ch/report/ar6/wg2/downloads/report/IPCC_AR6_WGII_Chapter08.pdf

Intergovernmental Panel on Climate Change (IPCC), (2023) 'Summary for policymakers', in H. Lee and J. Romero (eds), *Climate Change 2023: Synthesis Report. Contribution of Working Groups I, II and III to the Sixth Assessment Report of the Intergovernmental Panel on Climate Change*, Intergovernmental Panel on Climate Change IPCC, 2023a, pp. 1–34, https://doi.org/10.59327/IPCC/AR6-9789291691647.001

Kuhl, L., Shinn, J., ArangoQuiroga, J., Ahmed, I., and Rahman, M. F. (2023) 'The liberal limits to transformation in the Green Climate Fund', *Climate and Development*, 1–12. https://doi.org/10.1080/17565529.2023.2235318

Kuriakose, A. T. et al. 2013. "Climate-responsive social protection", in *Development Policy Review*, Vol. 31, Suppl. 2.

Lawlor, K., Handa, S., Seidenfeld, D. and The Zambia Cash Transfer Evaluation Team (2019) 'Cash Transfers Enable Households to Cope with Agricultural Production and Price Shocks: Evidence from Zambia', *The Journal of Development Studies* 55(2): 209–226. https://doi.org/10.1 080/00220388.2017.1393519

Levine, S., Ludi, E. and McCord, A. with Agol, D., Amsalu, A., Duvendack, M., Njigua, J. and Tefera, M. (2024) *Do public works programmes create valuable assets for livelihoods and resilience? A retrospective study of the impacts of assets for natural resource management in Ethiopia and Kenya. Technical report.* London: Supporting Pastoralism and Agriculture in Recurrent and Protracted Crises (SPARC). (https://www.sparc-knowledge.org/publicationsresources/do-public-works-programmes-create-valuable-assets

Lind, J., Holland-Szyp, C., Sabates-Wheeler, R., Teshome, Y. and Otto Naess, L. (2025), *Policy Briefing: Social Protection, Livelihoods and Climate Resilience in Conflict-Affected Settings*. November 2025. Better Assistance in Crisis (BASIC) Research.

Lind, J., Sabates-Wheeler, R. and Szyp, C. (2023) *Cash-Plus Programming in Protracted Crises: A Review of Programmes in Contexts of Overlapping Conflict, Forced Displacement and Climate-Related Shocks*, BASIC Research Working Paper 19, Institute of Development Studies, Brighton.

Macours, K., Premand, P. and Vakis, R. (2012) *Transfers, diversification and household risk strategies: Experimental evidence with lessons for climate change adaptation*. World Bank Policy Research Paper 6053. Washington, DC, World Bank.

Mason, N., Kamninga, T., and Rezaei, M., (2024) Climate finance for sustainable school feeding: exploring the options. Technical Note 2, developed for the Sustainable Finance Initiative of School Meals Coalition. ODI Advisory Report. London: ODI.

Masunungure, C. and Shackleton, S.E. (2018) 'Exploring Long-Term Livelihood and Landscape Change in Two Semi-Arid Sites in Southern Africa: Drivers and Consequences for Social–Ecological Vulnerability', *Land* 7, 50. https://doi.org/10.3390/land7020050

McCord, A. and Ridout, M. (2025) *How social protection can help the Fund for Responding to Loss and Damage to achieve its goals: A primer*. London: Social Protection Technical Assistance, Advice and Resources (STAAR).

McCord, A., Costella, C. (2023) 'Integrating climate change into social protection programmes and policy', Social Protection Technical Assistance, Advice and Resources (STAAR), DAI Global UK Ltd, United Kingdom

Merttens, F., Binci, M., Haynes, A., Laufer, H., and Scott, M. (2017) *Evaluation of the Kenya Hunger Safety Net Programme Phase 2: Quantitative Household Impact Evaluation - Technical Report*. Oxford Policy Management. 20 July 2017.

Midgley, J. (2022) *Advanced introduction to social protection*. Edward Elgar Publishing.

Næss, L.O., Selby, D. and Daoust, G. (2022) *Climate Resilience and Social Assistance in Fragile and Conflict-Affected Settings*. Brighton: Institute of Development Studies

Norton, A., Seddon, N., Agrawal, A., Shakya, C., Kaur, N., and Porras, I. (2020) 'Harnessing employment-based social assistance programmes to scale up nature-based climate action', *Philosophical Transactions of the Royal Society B: Biological Sciences* 375(1794), 20190127

O'Brien, C., Scott, Z., Smith, G., Barca, V., Kardan, A., Holmes, R., Watson, C. and Congrave, J. (2018) *Shock-Responsive Social Protection Systems Research: Synthesis report*. Oxford: Oxford Policy Management. URL: https://www.opml.co.uk/files/Publications/a0408-shock-responsive-social-protection-systems/srsp-synthesis-report.pdf

Okamura, Y., Iyengar, H.T.M.M. and Andrews, C. (2025) Wake-up call for social assistance? An unfinished mission to reach the poor and beyond: State of Social Protection Report 2025 Background Paper #3. Washington, DC, World Bank. Discussion Paper No. 2510, March.

Oxford Poverty and Human Development Initiative (OPHI) and United Nations Development Programme (UNDP) (2025) *Global Multidimensional Poverty Index (MPI) 2025: Overlapping Hardships – Poverty and Climate Hazards*.

Pereznieto, P., Kolbe, D., Taylor, M., and Walsham, M. (2025) 'Strengthening Social Protection Programming for Inclusive Climate Action in Rural Settings', Social Protection Technical Assistance Advice and Resources (STAAR) Facility, DAI Global UK Ltd, United Kingdom.

Pereznieto, P.; Holmes, R. 2023. Gender-transformative social protection in crisis contexts: Guidance note (Social Protection Technical Assistance, Advice and Resource Facility). Hemel Hempstead, DAI Global UK.

Pople, A., Hill, R. V., Dercon, S., and Brunckhorst, B. (2021) 'Anticipatory Cash Transfers in Climate Disaster Response', Working paper 6, Centre for Disaster Protection, London.

Roest, J., Aline Coudouel, and Liza Gordin. (2025) 'Building Climate Resilience at Scale in the Sahel: Where Climate Funds and Social Protection Make Common Cause.' Working Paper. Washington, D.C.: CGAP. https://www.cgap.org/research/building-climate-resilience-scale-in-sahel.

Schwan, S., and Yu, X. (2018) 'Social protection as a strategy to address climate-induced migration', *International Journal of Climate Change Strategies and Management* 10(1), 43–64.

Scott, Z. (2023) *Linking disaster risk financing with social protection: An overview of concepts and considerations*. World Food Programme/GIZ, October 2023.

Secades, U. and Shafee, M. (2024) *Linking Anticipatory Action and Social Protection in Fragile and Conflict-Affected Settings: The Case of Haiti*. World Food Programme, October 2024.

Sengupta, S. and Sivanu, S. (2023) *Climate funds and social protection: What is the progress to date?* Geneva: Red Cross Red Crescent Climate Centre.

Silchenko, D., and Murray, U. (2022) 'Migration and climate change – The role of social protection', *Climate Risk Management* 39, 100472. URL: https://doi.org/10.1016/j.crm.2022.100472

Solórzano, A. and Cárdenes, I. (2019) 'Social protection and climate change: WFP Regional Bureau for Latin America and the Caribbean's vision to advance climate change adaptation through social protection'. World Food Programme in collaboration with Oxford Policy Management.

Solórzano, A., Quevedo, A., Knowles, M., Addison, S. and Francesca Sabia (forthcoming), *Integrating Climate Finance and Social Protection for Inclusive Climate Action in Fragile and Conflict-Affected Situations: A Scoping Review*. Rome: FAO.

Swithern, S., Lazer, K., Rieger, N. and Carter, B. (2025) *Financing Social Protection in Protracted Crises*, BASIC Research Working Paper 41, Brighton: Institute of Development Studies, DOI: 10.19088/BASIC.2025.010.

Task Force on Linking Adaptive Social Protection and Climate Financing (2025) *Scaling social protection for climate action: Insights from MCF*. AF, CIF, GCF and GEF with BMZ.

Tenzing, J. D. (2019) 'Integrating social protection and climate change adaptation: A review', *Wiley Interdisciplinary Reviews: Climate Change* 11(2).

Ulrichs, M., Slater, R. and Costella, C. (2019) 'Building resilience to climate risks through social protection: From individualised models to systemic transformation', *Disasters* 43(S3), pp. S368–S387, 10.1111/disa.12339

United Nations Development Programme (2025) *Social Protection, Risk Finance and Insurance – Policy Note*. New York: UNDP Insurance and Risk Finance Facility.

United Nations Environment Programme (UNEP), (2023) *Adaptation gap report 2023: Underfinanced,.underprepared. Inadequate investment and planning on climate adaptation leaves world exposed*, United Nations Environment Programme, 2023, https://doi.org/10.59117/20.500.11822/43796

United Nations Environment Programme (2024) *Adaptation Gap Report 2024: Come hell and high water*. Nairobi: UNEP. https://www.unep.org/resources/adaptation-gap-report-2024

USP2030 (2024) *Social protection and climate finance: How social protection can support climate action and climate justice by leveraging climate finance*. Geneva: Universal Social Protection 2030.

Watkins, K., Fiala, O., Haag, P. and Zubai, A. (2024) *School feeding and the Sustainable Development Goals: An agenda to combat child hunger, boost education, transform food systems and strengthen equity.* Report. London: ODI.

Watkins, K., Nwajiaku-Dahou, K., Long, C., Manuel, M., Sissa, A. Stronge, C. & Knox, D. (2025) 'Building equitable global social protection systems for a Sustainable Development Goal recovery – the case for a 'virtual financing' mechanism', Social Protection Technical Assistance, Advice and Resources (STAAR) Facility, DAI Global UK Ltd, United Kingdom.

World Bank (2016) *Safeguarding Against a Reversal in Social Gains During the Economic Crisis in Brazil. Repor*t. Washington DC: World Bank

World Bank (2020) *Disaster Risk Finance for Adaptive Social Protection: Guidance Note*. Washington, DC: World Bank Group.

World Bank (2020) Bowen, T., Del Ninno, C., Andrews, C., Coll Black, S., Johnson, K., Kawasoe, Y., Lahiri, A., Park, A. and Wise, P. *Adaptive Social Protection: Building Resilience to Shocks*.

Washington, DC: World Bank.
https://documents1.worldbank.org/curated/en/579641590038388922/pdf/Adaptive-Social-Protection-Building-Resilience-to-Shocks.pdf

World Bank (2025) *The State of Social Protection 2025: The 2-Billion-Person Challenge*. Washington, DC: World Bank.

World Food Programme (2022) *Anticipatory action and social protection: Guidance note.* Rome, World Food Programme. docs.wfp.org/api/documents/WFP-0000154582/download/

World Food Programme and United Nations Children's Fund (n.d.) *Delivering shock-responsive social protection in the Sahel: Activating the twin-track approach in the face of political disruption.* docs.wfp.org/api/documents/WFP-0000162604/download/.

World Meteorological Organization (2026) *State of the Global Climate 2025*. Geneva: WMO.
https://library.wmo.int/viewer/69807/download?file=WMO-1391-2025_en.pdf&type=pdf&navigator=1World Weather Attribution (2025a) 'Climate change intensified heavy monsoon rain in Pakistan, exacerbating urban floods that impacted highly exposed communities'. https://www.worldweatherattribution.org/climate-change-likely-intensified-heavy-monsoon-rain-in-pakistan-exacerbating-urban-floods-that-impacted-highly-exposed-communities/

World Weather Attribution (2025b) 'Women and girls continue to bear disproportionate impacts of heatwaves in South Sudan that have become a constant threat'. https://www.worldweatherattribution.org/women-and-girls-continue-to-bear-disproportionate-impacts-of-heatwaves-in-south-sudan-that-have-become-a-constant-threat/