

CLIMATE RESILIENCE THROUGH SOCIAL PROTECTION

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Executive Summary

Growing climate crises pose civilization-scale threats. Climate risks are already putting livelihoods, people, and ecosystems at risk. They threaten to reverse the gains of development achieved over the last few decades. According to recent estimates, climate change may thrust more than 720 million people back into poverty by 2050. It may also force 140 million people to become climate refugees. Escalating climate crises demand a concerted global response towards a transition that supports the vulnerable and strengthens their capabilities.

Better alignment and integration of social protection with climate adaptation is critically important for addressing

climate change risks. The importance of social protection for climate adaptation stems from its scope and scale, its substantial institutional infrastructure with the capacity to reach hundreds of millions of vulnerable households, its overlap in objectives with climate adaptation goals, and its positive outcomes for wellbeing and vulnerability reduction.

Countries in the global South invest more than US\$500 billion annually in social protection; globally, such investments exceed US\$2 trillion. Nearly one-third of the population in low and middle-income countries benefits from some form of social protection. These benefits

About this paper

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flow in greater proportion towards the poor and the vulnerable, making social protection vitally important for climate justice goals, too. Indeed, both social protection and climate adaptation instruments seek to support the wellbeing of the vulnerable and the poor.

Several of the types of social assistance program we examine — including conditional and unconditional cash transfers, public works programs, and school feeding programs — involve outlays of US\$50–100 billion each. Others, which we do not examine in detail — social pensions, in-kind transfers and fee waivers — are similar in scale. The potential for social protection instruments to support climate adaptation is quite substantial. Few other social or climate policy instruments have the reach, diversity, resources, or policy objective overlap that social protection and climate adaptation do. Market instruments to address the climate adaptation needs of the truly poor and vulnerable will not emerge without substantial government co-ownership of the risks and costs inherent in managing climate adaptation for those whose limited incomes and resources prevent effective exercise of market demand.

Social protection systems — especially in the form of social assistance programs such as cash transfers, public works and employment guarantee programs — are growing and serving more people in low and middle-income countries. A large body of evaluative work documents and establishes the positive contributions of such social assistance programs, including positive outcomes associated with key indicators of both wellbeing and social resilience, such as:

- Nutrition
- Calorie intake and consumption
- Productive and non-productive assets
- Health and sanitation
- Literacy and education
- Migration and crime (in some cases)

Studies have also shown that public works and employment programs increase wage rates, support infrastructure development and the recuperation of natural capital, and improve the resilience of local economies.

But to effectively integrate social protection with climate adaptation, there are several challenges to address. Programs for assisting the poor and the vulnerable

remain weak and fragile in many countries in the global South, both because of institutional gaps and the need for additional finance. In the rich world, political movements periodically challenge social protection programs, seeing in them the roots of long-term dependence at individual level and fiscal crises at national level. And there is only limited evidence on the more far-reaching climate resilience impacts of current social protection interventions. This is partly because efforts to bring climate adaptation and social protection together remain in their early stages; but it is also because research has not focused on the purely adaptation impacts of social protection.

Three key shifts in the design and delivery of social protection can bring about more positive outcomes for social protection and more effective climate resilience through social protection:

- **Enhancing the effectiveness of existing social protection efforts** by supporting institutional coordination across the different agencies that implement social protection programs and increasing participation, transparency, and accountability. Adequate financing of fledgling social protection in poorer countries will ensure it delivers on the promise of improved wellbeing and lower vulnerability.
- **Integrating climate risk management components into social protection provision and adequately resourcing them.** Adaptive and shock-responsive social protection programs are already piloting a range of initiatives to support households. A more integrated approach would encompass climate-adaptive conditions for cash transfers and skill development; use early warning, forecast-based, and anticipatory disaster response mechanisms; and promote technically sound climate-resilient infrastructures in public works programs.
- **Converging and layering social protection instruments with other risk management instruments** and climate and development-focused programs — such as insurance for smallholders and other primary sector producers — that are currently implemented independently. Aligning these separate programs can improve available synergies, enable the scaling up of insurance, and make social protection more effective in a world of climate change.

Realizing these shifts is possible: social assistance programs have demonstrated positive impacts on reducing poverty and inequality, thus becoming politically attractive, even in politically unstable contexts. Additional financial mobilization (to strengthen incentives for collaboration), a better knowledge base (to target program components that enhance synergistic improvements in wellbeing and long-term climate adaptation), and effective alignment of program implementation structures will help realize the shifts needed in current social protection programs for more positive and far-reaching climate adaptation outcomes.

1. Introduction

Growing climate crises pose civilization-scale threats. Climate risks are already putting livelihoods, people, and ecosystems at risk. They threaten to reverse the development gains achieved over the last few decades. By 2050, climate change may thrust more than 720 million people back into poverty,¹ and make 140 million people climate refugees.² Escalating climate crises demand a concerted global response towards a transition that supports the vulnerable and strengthens their capabilities. Existing and anticipated emission levels are impacting both the planet and its people. Addressing this requires substantial policy and behavioral change, and the mobilization of financial resources.

This paper suggests that a better alignment of social protection (see Box 1) with climate adaptation goals is critically important for addressing climate change risks. The importance of social protection for climate adaptation stems from its scope and scale, its substantial institutional infrastructure with capacity to reach hundreds of millions of vulnerable households, and its overlap in objectives with climate adaptation goals.

Countries in the global South invest more than US\$500 billion each year in social protection; globally, such investments exceed US\$2 trillion.³ Nearly one-third of the population in low and middle-income countries benefits from some form of social protection, which is generally directed towards the poor and more vulnerable. And like social protection, climate adaptation instruments seek to get climate justice by supporting the wellbeing of the vulnerable and the poor. Few other social or climate policy instruments have the reach, resources or policy objectives overlap that social protection and climate adaptation do.

Even as this paper highlights the importance of social protection for climate adaptation and resilience, it

recognizes that in many low and middle-income countries, social protection infrastructure is relatively new and available resources are limited. We therefore emphasize strategies that will not unreasonably burden fledgling programs, focusing instead on approaches that will strengthen both social protection and climate resilience.

Incorporating greater climate resilience in the design and delivery of social protection is critical in a world of increasing climate risks. In this paper, we identify three shifts that could enable social protection to meet the goals of vulnerability and poverty reduction under a changing climate more effectively, even in emerging systems in poor countries:

- Enhancing the effectiveness of existing social protection efforts by supporting improved systems and increasing resource allocation;
- Integrating climate risk management components into social protection provision to increase the resilience of development outcomes against climate risks; and
- Converging and layering social protection instruments with other risk management instruments and climate and development-focused programs to deliver resilience at scale.

To realize these changes, donors and governments must allocate more resources to incentivize changes in institutional arrangements and policies. Researchers and decision-makers must provide a stronger evidence base that fills gaps in knowledge about the existing capacities of social protection systems and the effectiveness of specific social protection strategies in meeting climate goals. Policymakers and program implementers will need to better integrate climate and social protection actions across sectors, networks, and actors.

2. The Common Ground between Social Protection and Climate Resilience

There is substantial overlap between the conceptual core of social protection and efforts to strengthen climate resilience. Both seek to improve wellbeing and reduce risks that households and communities face. Both are concerned with promoting greater equity and improving opportunities for those at the margins. There is enormous promise for achieving climate adaptation and resilience goals through social protection and mobilizing additional resources for aligned social protection and climate resilience policies.

Realizing this promise is particularly important because poorer countries and societies confront the growing prospect and necessity of substantial adaptation in

the face of increasing emissions and climate risks. Climate impacts in both the rich and the poor world will disproportionately affect the same vulnerable groups that social protection seeks to support, and this will increase the costs of protection without action on adaptation. Large and growing government investments in social protection since the early 1990s – including in many low and middle-income countries – constitute a remarkable opportunity to enhance resilience to climate-related risks. By amending the structure, finance, and implementation of social protection systems, governments can achieve additional resilience to climate risks while reducing economic and social vulnerability. With greater integration of the two agendas, they could channel climate finance

BOX 1 What is Social Protection?

There is no universally accepted definition of social protection. Norton, Conway and Foster define it as: “public actions taken in response to levels of vulnerability, risk and deprivation which are deemed socially unacceptable within a given polity or society.” Social protection responds to the needs of the poorest members of society, and those of the non-poor who face difficulties, often as a result of life-course events, such as pregnancy and child-rearing, illness or death.

Cash or in-kind transfers often come to mind as examples of social protection in development policy. They are a form of **social assistance**, the primary objective of which is to provide regular and direct support to people experiencing or facing extreme poverty, whether chronic or transitory, as a result of livelihood shocks. A key aspect of social assistance programs is that they are non-contributory. ‘Social safety net’ is sometimes used interchangeably with ‘social assistance’.

Social protection can also take the form of **social insurance** or **labor market interventions**. But unlike social assistance, social insurance is contributory and offers protection to individuals and households by pooling resources from the beneficiaries themselves, their employers, and/or the state. Old age pensions in the rich world are an example of social insurance programs. Labor market programs include employment services, unemployment benefits, and skills/(re)training to enhance workers’ productivity and employability (often referred to as active labor market policies). Public works programs coupled with guaranteed employment schemes combine features of social assistance and labor market interventions with infrastructure development.

Social insurance and labor market protection both address factors that reduce income generation capacity over an individual’s life cycle. They reflect an interpretation of social protection that is dominant in higher-income countries. Social assistance and public works programs are more common social policy responses for addressing poverty and vulnerability in low and middle-income countries. The focus of this paper is therefore on non-contributory social assistance.

Sources: Norton et al. 2001; Barrientos 2017; Ellis, F., Devereux, S., and White, P. 2009. *Social Protection in Africa*, Cheltenham: Edward Elgar; Lowder et al. 2017; Tenzing, J. (forthcoming) *Social Protection and Climate Change Adaptation*. London: LSE.

into their under-resourced social protection systems, and substantially reduce the humanitarian burden of climate change-exacerbated disasters. Strengthening adaptation and climate resilience through social protection can also render social protection policies more effective under a changing climate.

Synergies between social protection, climate resilience and adaptation go beyond their programmatic logic and goals. The widespread social protection infrastructure in the lower-income world already covers around one-third of

the population, focusing on the more vulnerable.⁴ Although some have suggested that this is an overestimate,⁵ the infrastructure required for reaching billions of people could provide a readily available institutional framework to support the implementation of large-scale climate adaptation efforts. Indeed, given that social protection and climate adaptation often target the poorest and most vulnerable, there is a distinct advantage to channeling climate adaptation and resilience efforts through social protection institutions.

BOX 2

What is Climate Resilience?

Building on the work of Béné et al.,^a we see individuals, households and systems' long-term resilience to climate change as emerging from three critical and interdependent elements:

- **Absorptive capacity:**^b A system's ability to maintain its original structure or functioning by absorbing infrequent and low-magnitude risks, either by anticipating or responding to a shock.
- **Adaptive capacity:** A system's ability to make small adjustments to its existing risk management strategies, improving its original structure or functioning in anticipation of future risks.
- **Transformative capacity:** A system's ability to fundamentally change in its structure or functioning and adopt new strategies to move beyond vulnerability thresholds.

Conceptually, we can also link these responses to various intensities of shock or change. For example, a system is more likely to absorb a low-intensity shock. But when a stressor exceeds absorptive capacity, the system will respond by drawing on its adaptive capacity to make incremental adjustments to its core structure or functioning. Eventually, the magnitude of an impact will overwhelm adaptive capacity, requiring more drastic change in the system's structure or functioning. So, we cannot strengthen adaptive capacity without also enhancing absorptive capacity. Transformative capacity similarly arises from systems that already have strong absorptive and adaptive capacities.

A linear interpretation of resilience is risky and may be too simplistic. Multiple climate shocks and stressors often occur simultaneously, affecting human and social systems with varying intensities, at different scales, and in different ways. Such patchiness in the experience of disasters highlights the importance of strengthening all three dimensions of resilience — absorptive, adaptive, and transformative — together rather than thinking of them as independent from each another.

If it does not already do so, social protection has the potential to enhance the absorptive, adaptive and transformative resilience of individuals, households, and systems.

Notes:

^a Béné, C., Newsham, A., Davies, M., GodfreyWood, R., Ulrichs, M., and Godfrey-Wood, R. 2014. Resilience, Poverty and Development. *Journal of International Development*. <https://doi.org/10.1002/jid.2992>.

^b Absorptive capacity includes anticipatory capacity, which refers to "the ability of social systems to anticipate and reduce the impact of climate variability and extremes through preparedness and planning." (Bahadur, A., Peters, K., Wilkinson, E., Pichon, F., Grat, K., and Tanner, T. 2015. *The 3As: Tracking Resilience Across BRACED*. BRACED Working Paper).

Research is already attempting to highlight the links between social protection and climate resilience at a conceptual level. The terms 'adaptive', 'climate-responsive' and 'shock-responsive' social protection are often used interchangeably to describe an integrated social protection and climate resilience agenda. But there are some important differences between the three approaches.

Adaptive social protection (ASP): Since it was first introduced, ASP has sought to maximize synergies between social protection, disaster risk reduction and adaptation in rural agricultural contexts. It sees a role for social protection as a welfare measure to protect the poor against current and future weather extremes.⁶

Climate-responsive social protection: Initially proposed as a risk management instrument, this framework aims to strengthen social protection systems through climate-informed planning and by fostering cross-sectoral linkages.⁷

Shock-responsive social protection: The intersection of social protection, disaster risk management and humanitarian assistance, this approach focuses on complementing or making emergency responses to covariate shocks (not limited to climate-related ones) more effective by revising existing social protection systems.⁸

Evolving thinking on ASP seeks to bring these three approaches together, crystallizing around two areas of focus: building households' long-term resilience before shocks occur, and increasing the capacity of social protection systems to respond after the occurrence of shocks.⁹ Such a shift informs policy approaches and program design in, for example, the Sahel Adaptive Social Protection Program.¹⁰ However, empirical evidence on the impacts of an ASP approach remains limited. This paper seeks to bring forth 'lighthouse' examples and opportunities for integrating social protection and efforts to strengthen resilience to climate change.

BOX 3

Major Social Assistance Instruments

Conditional cash transfers: Involve the transfer of a sum of money to a targeted individual or household in exchange for prescribed changes in actions and behaviors, often in relation to education, schooling or health.

Unconditional cash transfers: Provide a fixed sum of money to a targeted individual or household without any conditions.

Employment guarantees: Provide a fixed number of days of usually unskilled labor/employment to eligible participants. Eligibility can be universal or means-tested.

Public works programs: Provide employment during periods of income shock, or to address chronic or seasonal unemployment and labor market disruptions, and ameliorate distress resulting from loss of income.

School feeding programs: Provide meals for school children to improve nutrition and calorie intake.

Fee waivers: Usually means-tested elimination of fees to enable greater access to schooling, health, or other fee-based services.

Sources: Browne, E. 2015. *Social Protection: Topic Guide*. Birmingham, UK: GSDRC, University of Birmingham.

3. Social Protection and its Contribution to Resilience

The substantial diversity of forms of social protection and their impacts makes it important to understand how social protection is practiced, and how it can broadly contribute to climate resilience. The family, kin, and community-based forms of social protection that predate today's formal, policy-driven approaches remain important for specific vulnerable groups in poorer parts of the world.¹¹ But without formal social protection, poor and vulnerable households often have to cope with shocks by reducing consumption and calorie intake, selling assets, or sinking further into destitution.¹²

Globalization, urbanization, and climate change are rendering customary social protection inadequate as communities lose members to outmigration and the scale of risks and potential disasters expands. Alongside customary protection mechanisms, governmental social protection provision is becoming more central to addressing risks and destitution.¹³ For example, Ghana's pension program allows self-employed citizens to contribute voluntarily to future pensions. Conditional cash transfer programs, first implemented in Latin America, are now expanding to sub-Saharan Africa. Unconditional cash transfers are also becoming increasingly common, and many low and middle-income countries are experimenting with public works and employment programs.¹⁴

These shifts are occurring even in the context of debates over how much revenue governments should allocate to social protection, how effectively social protection achieves its aims, and what forms of social protection are most effective.¹⁵ With climate change likely to disrupt both social and environmental relationships, questions about effectiveness gain new urgency, in terms of how climate risks may undermine past social protection achievements and how to structure social protection to secure continued or to increase effectiveness.

Available experience with social protection in Africa demonstrates an increase in types of program, government and donor outlays, per capita expenditures, and population coverage (Box 4).

Table 1 provides estimates of regional expenditure on social protection by low and middle-income countries. Aggregate expenditures in 2017 were nearly US\$500 billion and increased by more than US\$100 billion between 2014 and 2017.¹⁶

Nearly 2.7 billion people in low and middle-income countries are covered by social protection. But, despite widespread social protection infrastructure, a large proportion of these countries' vulnerable population is not covered (see Figures 1a and 1b).

TABLE 1 Estimated Social Protection Expenditures in Low and Middle-income Countries

Region	Total GDP	Expenditure		Total Population	Recipient Population	
	US\$, trillions	% GDP	US\$, billions	millions	% of total	millions
East Asia & Pacific	14.73	1.1	162.03	2,314	51	1,180.14
Europe & Central Asia	3.3	2.2	72.6	416	65	270.4
Latin America & Caribbean	5.97	1.5	89.55	644	60	386.4
Middle East & North Africa	3.28	1	32.8	444	43	190.92
South Asia	3.29	0.9	29.61	1,788	21	375.48
Sub-Saharan Africa	1.67	1.5	25.05	1,061	24	254.64
Total low and middle-income countries	32.24	1.5	483.6	6,667	39	2,657.98

Sources: Based on World Bank. 2018. *Population, Total*. <https://data.worldbank.org/indicator/SP.POP.TOTL>.

In Africa, social protection has expanded substantially since the turn of the century. More than half of African countries have developed social protection policies, and the African Union's 2008 Social Policy Framework has made it an important element of inclusive growth strategies. But the spread and implementation of social protection is uneven and context-specific, and many countries have only minimal coverage.

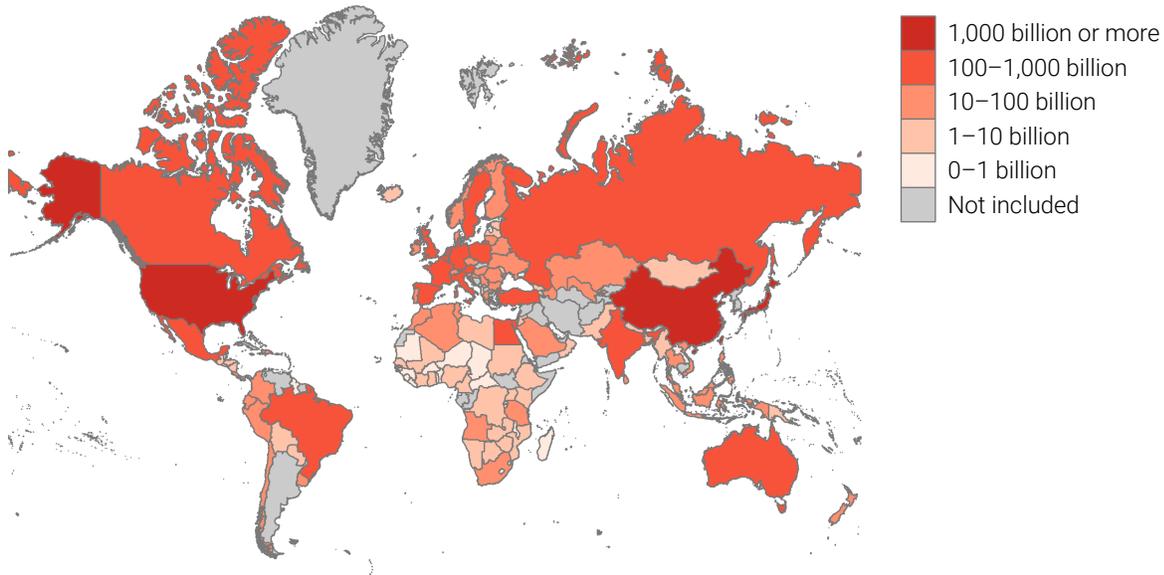
Sub-Saharan African countries spend 0.2 percent of gross domestic product (GDP) on child and family benefits, 0.5 percent on income support for people of working age and 1.3 percent on income security for older people. These figures are all below the global average. Other countries – most notably middle-income countries in southern Africa such as South Africa, Lesotho, Namibia and Botswana – have implemented and scaled up domestically financed unconditional transfers to children, disabled people and older people. The predominant form of social protection in Africa is social assistance in the form of cash and asset transfers and public works programs (PWP). Ethiopia, Rwanda, Malawi, and others have established their own programs combining PWP, cash transfers and credit programs with substantial financial and technical support from donors. These are designed to shift away from “reactive appeals for emergency food aid towards institutionalized ‘productive safety nets’ for protection against drought shocks but also for livelihood support.” In many countries, social protection remains heavily linked to donor agendas and is not deeply embedded in local institutions and political processes.

Key examples of social protection across different countries include:

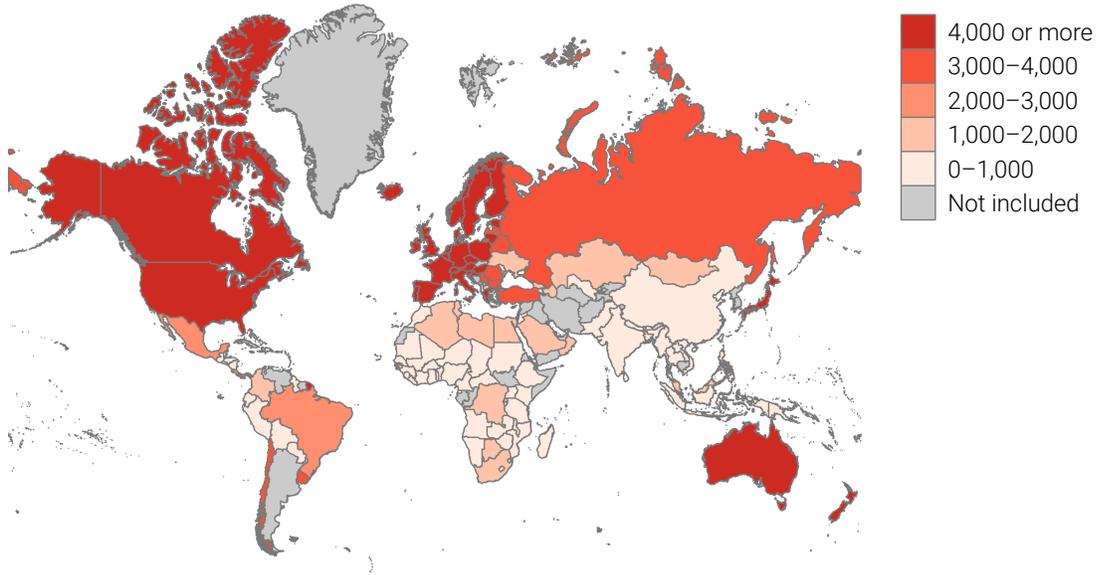
- South Africa's old-age pensions, which reduce the poverty gap by 2.5 percent, its disability grants, which reduce it by 5.1 percent, and its child support grant up to age 18, which reduces the gap by 21.4 percent;
- Namibia's health, employment, and pensions programs, which together add up to 6.6 percent of GDP and have a high impact on reducing poverty in vulnerable groups;
- Malawi's social protection program, which has significantly reduced hunger;
- Ethiopia's Productive Safety Net Programme (PSNP), which provides cash and food support to 8 million beneficiaries in 1.5 million households through public works in drought-affected areas;
- Rwanda's Vision 2020 Umurenge Program, which provides universal health insurance for 91 percent of the population, free education, and social transfers through a pension scheme – mechanisms that are linked to an overall decline in extreme income poverty from 39 percent of the population in 2006 to 34.5 percent in 2009;
- Ghana, Nigeria, Senegal, Kenya, Mozambique and Tanzania's safety nets, which include emergency food distribution, public works, and cash transfers to support vulnerable groups; and
- Benin, Burkina Faso, Mali and Niger's emergency food distribution schemes, which sell food staples through cereal banks at subsidized prices.

Sources: United Nations Economic Commission for Africa, African Union, African Development Bank and United Nations Development Programme. 2014. *MDG Report 2014: Assessing Progress in Africa Toward the Millennium Development Goals*; International Labour Organization. 2014. *World Social Protection Report 2014/15: Building Economic Recovery, Inclusive Development and Social Justice*. Geneva: ILO; Devereux, S., and White, P. 2010. "Social Protection in Africa: Evidence, Politics, and Rights." *Poverty and Public Policy* 2(3): 53–71; Harland, C. 2014. "Can the Expansion of Social Protection Bring About Social Transformation in African Countries? The case of Zambia." *European Journal of Development Research*, 26(3): 370–386; Devereux, S., Roelen, K., and Ulrichs, M. 2015. *Where Next for Social Protection?* Institute of Development Studies Evidence Report no 124.

Total spending



Annual per capita spending



Sources: World Bank 2019 and ILO 2017.
 Note: PPP – purchasing power parity.

Our analysis focuses primarily on social assistance programs, particularly PWPs and cash transfers, which have among the highest level of coverage and budgetary outlays in low and middle-income countries. Public works and employment programs provide important examples of how governments can combine social protection with climate adaptation and resilience using a mix of different

instruments.¹⁷ We also discuss other social assistance programs such as school feeding, non-contributory pensions, and fee waivers of different kinds. Within these broad categories, specific examples exhibit important variations in design, coverage, implementation, and effectiveness based on policy histories, political and social preferences, and donor support.

TABLE 2

Aggregate and Per Capita Expenditure on Social Protection Programs in Low and Middle-income Countries (2011)

Program Type	Aggregate Expenditure	Per Capita Expenditure
	US\$PPP, millions	US\$PPP
Conditional cash transfers	49,792	8.15
Unconditional cash transfers	160,325	26.27
Public works programs	33,048	5.41
Pensions	93,093	15.25
School feeding programs	47,000–75,000	N/A
In-kind transfers	122,445	20.06
Total	505,703–533,703	75.14

Source: World Bank 2017, 2019; WFP 2013.

Note: PPP – purchasing power parity.

3.1 Social Assistance as Cash Transfers

Conditional and unconditional cash transfers are among the most popular and widely implemented social protection instruments. Conditional cash transfers (CCT) ask recipients to make pre-specified behavior changes or meet some performance targets, often aimed at improving education or health, in exchange for cash. Unconditional cash transfers (UCT) have no behavioral or performance targets. There is substantial cross-country variation on cash transfer expenditure and coverage (see Figures 2a and 2b).

UCTs exist in more than 100 low and middle-income countries, with greater incidence in Europe, Central Asia and sub-Saharan Africa. Providing coverage to nearly 100 percent of the poorer population in countries such as Mongolia and Malaysia, UCTs vary widely in the extent to which they differentially benefit the poor. On average, 37 percent of beneficiaries come from the poorest quintile of the population.¹⁸

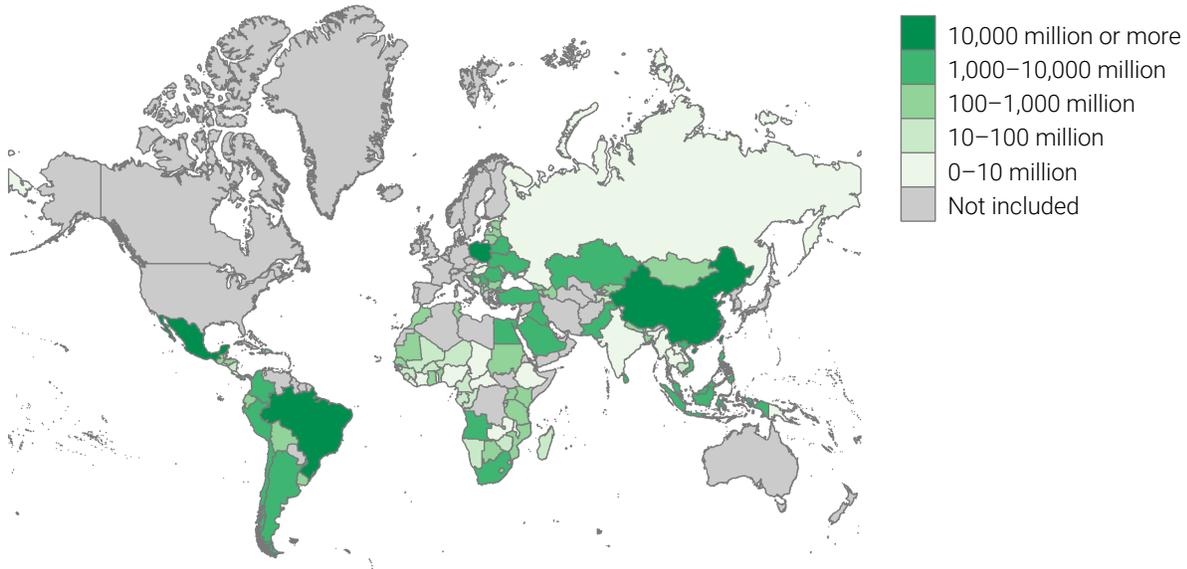
The experiences of well-known CCT programs such as Mexico's *Oportunidades* and Brazil's *Bolsa Familia* have made conditional transfers a rapidly growing instrument in the social protection arsenal.¹⁹ Widely prevalent in Latin America for more than two decades, their success has inspired the extension of analogous programs in other

countries, including in Southeast Asia and sub-Saharan Africa. CCTs are even more pro-poor than UCTs; on average, 45 percent of the households receiving them are in the poorest quintile.²⁰

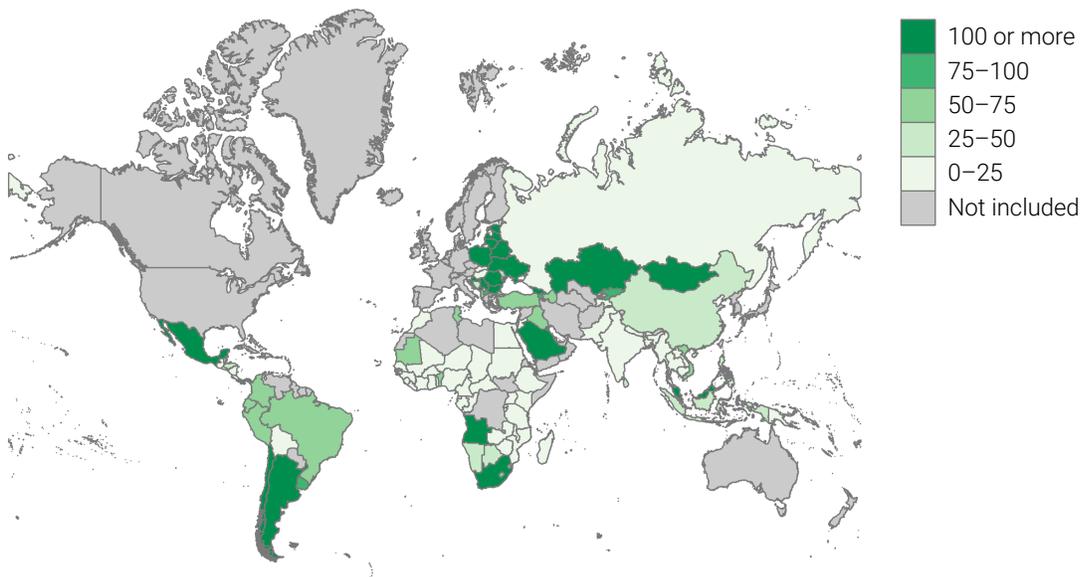
With the increasing incidence of cash transfers, a large number of studies have tried to estimate their direct and indirect effects.²¹ Several systematic reviews of the large body of empirical work on cash transfers provide key lessons about their impacts and the relative effectiveness of CCTs vs UCTs.²² For most measured wellbeing indicators, cash transfers are associated with (sometimes insubstantial) improvements. For economic indicators, one study found improvements in consumption and investments and reductions in child labor among boys.²³ Improved health outcome indicators have included improvements in maternal and child health,²⁴ healthcare access and immunization coverage,²⁵ and nutrition.²⁶

Findings were similar for schooling outcomes. Using data from 35 studies, one review found that cash transfers improved enrollment and school attendance, and that UCTs with stricter conditions had stronger positive effects on enrollments. However, evidence on the longer-term effects of cash transfers on education was inconclusive.²⁷ Some studies have raised concerns about the duration of the impacts of CCTs,²⁸ but a clearer assessment of longer-term outcomes will require more extensive research.

Total spending



Annual per capita spending



Sources: World Bank 2019 and ILO 2017.

Note: PPP – purchasing power parity.

Higher levels of cash transfers, directly transferring cash to beneficiaries without an intermediary, and stricter conditions and means testing for UCTs are all associated with improved wellbeing outcomes from cash transfers. So they evidently reduce some dimensions of household-level vulnerability. Although most available studies do not assess

how cash transfers may help households adapt to climate risks, it is likely that improved incomes, education, and health – the three key indicators of human development – confer some adaptive capacity for recipients and enable at least absorptive resilience.

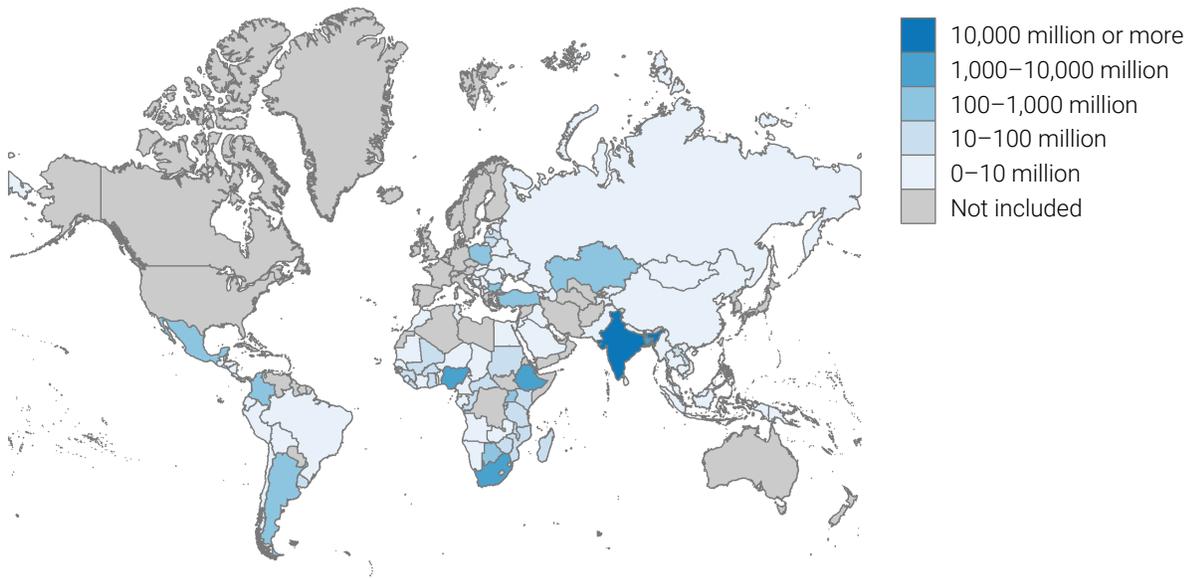
3.2 Social Assistance as Public Works and Employment Guarantees

Public works and employment guarantees give working-age adults some assurance of jobs and related benefits during unemployment. Job guarantees are typically coupled with infrastructure development work — one

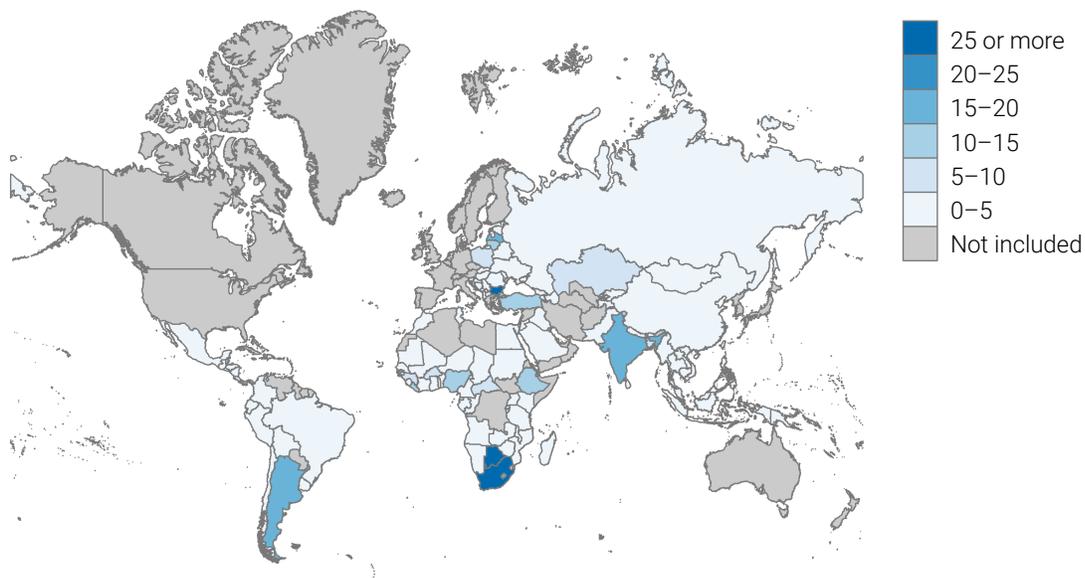
reason why these are also referred to as workfare or public works programs. These are most prevalent in South Asia, where India and Bangladesh allocate a significant part of their social protection budget to workfare. They are also present to a lesser degree in sub-Saharan Africa, especially Burundi, Central African Republic, Ethiopia, Liberia, Malawi, Mozambique, Tanzania and South Africa.

FIGURES 3A AND 3B Total and Per Capita Spending on Public Works/Employment by Country (2011 US\$PPP)

Total spending



Annual per capita spending



Source: World Bank 2019 and ILO 2017.
 Note: PPP — purchasing power parity.

There are widespread assessments of the impact of public works and employment guarantee programs, with most analyses pointing to improved nutrition, food consumption, incomes, asset ownership, and educational and rural labor market outcomes. Studies of India's workfare program, the Mahatma Gandhi National Rural Employment Guarantee Scheme (MGNREGS), have examined the effects of its multiple components — including infrastructure development, skills training and institutional strengthening — which also tend to generate overall positive effects, but less efficiently.²⁹

As with cash transfers, employment and public works programs are also pro-poor. Coverage among the poorest quintile varies from a high of 27 percent for MGNREGS in India to lows of 2 to 3 percent for Mexico and Rwanda.³⁰

One way employment and public works programs differ from cash transfers is that they use multiple instruments, such as skills training, institutional strengthening, and infrastructure development. This creates the possibility of policy redesign along a number of fronts for improving resilience and wellbeing outcomes through social protection. The expectation of work in exchange for a wage also means that recipients might see the social protection income as compensation for their work, and observers will not consider these free payments.

3.3 Other Social Assistance Programs

A number of other social assistance programs — non-contributory pensions for older adults, differentially abled people, widows and orphans, school feeding programs, fee waivers for transport services and health benefits — are also widespread in low and middle-income countries.³¹ Together, they represent substantial additional social protection expenditure in these countries beyond cash transfer and public works spending (see Table 2).

Widespread school feeding programs provide critical contributions to child nutrition and calorie intake. In aggregate, they feed more than 350 million children a day. Total annual outlay on these programs is probably in excess of US\$50 billion.³²

Non-contributory pensions for the elderly are especially important in the context of climate change, owing to a rapidly aging global population and the greater

vulnerability of older people to climate risks. Providing pensions for older adults, orphans, widows, and other disadvantaged groups combines a mix of contributory and non-contributory approaches and adds up to nearly US\$100 billion annually. Much of the poorer world will see a substantial increase in both the number and the proportion of its older population, and despite covering a large number of people, current pension programs are ill-equipped to cope with such increases or address the changing needs of an aging population.

Although the benefits of these programs are substantial in aggregate, they are small when considered on a per capita basis. They also vary greatly across regions and countries, with some types of program absent in many countries. Such variations reflect countries' political and economic conditions, available resources, and historical development trajectories. Distribution of benefits also varies, with some countries means testing and others giving universal access or according to residency, citizenship or age. These programs' contribution to some measure of dignity and independence is high, especially as much of the world urbanizes and moves toward nuclear families.

3.4 Suitability of Cash Transfers and PWP for Climate Adaptation

Most social protection programs rely on a specific instrument, such as monetary payments for pensions, UCTs, CCTs, and universal basic income. Employment guarantee and public works programs are different in that they provide employment and create infrastructure. India's flagship MGNREGS, Ethiopia's PSNP and Mexico's Temporary Work Scheme (PET) all seek to strengthen social protection while pursuing ecosystem management objectives and giving recipients an opportunity to acquire new skills.

Table 3 compares the mechanisms, expenditures, impacts, and suitability of cash transfer systems and PWPs for supporting greater climate resilience.

To assess how social protection can best be linked to climate resilience outcomes, it is important to understand its effects on wellbeing and resilience and which of its features yield differences in outcomes.

TABLE 3

Comparing Cash Transfers and Public Works/Employment Guarantee

Dimension of Comparison	Cash Transfers	Public Works and Employment Guarantees
Mechanisms	Cash with or without conditions	Wages and job provision, infrastructure, institutional strengthening
Expenditure	~US\$220 billion	~US\$33 billion
Positive impacts	Nutrition, consumption, health, education,	Wages, labor markets, infrastructure, skills development, education
Suitability for climate resilience	High for absorptive resilience; high potential for adaptive resilience	High for adaptive resilience; high potential for transformative resilience

Source: Authors' own

The literature on the impacts of different forms of social protection is vast and growing. Much of it focuses on how existing programs affect different socioeconomic and health outcomes. The evidence from social protection evaluations is fairly unambiguous: they contribute substantially to reducing poverty and inequality. Studies also examine the effects of social protection on a range of other dimensions of household and community wellbeing — including production — and their macroeconomic impacts, including spillovers.³³

CCTs and UCTs have been shown to increase incomes and assets, improve consumption and nutrition, and enhance health. Whereas we would expect to see direct income and consumption benefits, cash transfers also have positive effects on productive outcomes. A large study of the effects of cash transfers and pensions in sub-Saharan Africa found that consumption and productive investments increased, savings rose, and recipients did not reduce their labor supply.³⁴ There is little evidence to support one of the most common reservations against social protection and transfers — that they will promote laziness and reduce labor supply.³⁵

In many cases, these outcomes also have a clear bearing on some aspect of resilience — such as higher consumption, nutrition, incomes, and assets — that are likely to strengthen households and communities' absorptive resilience. Better education and health may even enable some households to explore and use adaptive resilience strategies. It is more difficult to connect

changes in socioeconomic outcomes from cash transfers to transformative resilience or transformative adaptive capacity. But these conclusions need more careful empirical assessment.

Existing assessments rarely compare outcomes across different forms of social protection. Several meta-analyses and systematic reviews compare CCTs and UCTs, with ambiguous conclusions about whether and by how much either is better. But comparisons with other types of social protection are less common. Indeed, comparisons with climate adaptation and resilience outcomes are rare to non-existent.

One of the few available reviews of social protection and climate resilience analyzed 65 social protection cases from 53 peer-reviewed studies for some common patterns in outcomes, and found that, as a whole, social protection contributes more to absorptive and adaptive than transformative resilience outcomes.³⁶ Both absorptive and adaptive resilience are critical for protecting vulnerable groups from the worst effects of climate risks, so it is important to consider how to combine social protection with other mechanisms to strengthen resilience to increasingly severe climate risks.

Among the components of social protection, wages through guaranteed employment in public and community-level infrastructure programs are more likely to strengthen absorptive resilience, particularly in combination with infrastructure enhancement. Institutional strengthening

and skill enhancement are more common in workfare-based social protection and more frequently associated with improvements in adaptive resilience. And, although social protection has the potential to contribute to transformative resilience, fewer than 20 percent of studies provide evidence that the potential is being realized, and only 5 percent find an association between social protection programs' wage and income components and transformative resilience. Indeed, it is more likely to result from skills development and institutional strengthening.³⁷

Another study on Ethiopia, Kenya and Uganda finds similar results on how social protection programs contribute to people's resilience to climate risks.³⁸ While social transfers

make a strong contribution to individuals and households' capacity to absorb the negative impacts of climate-related shocks and stresses, they do so by providing reliable, national social safety net systems, even when these are not specifically designed to address climate risks. The analysis finds that social protection can also increase the anticipatory capacity of national disaster response systems through scalability mechanisms, including linkages to early action and early warning mechanisms. This helps increase absorptive capacity. However, there is limited evidence of programs' contributions to the adaptive capacity, which is required for long-term resilience. A critical knowledge gap remains.

4. Strengthening Climate Resilience through Social Protection

Based on the discussion above of the scope, size, distribution, and current contributions of social assistance programs — particularly cash transfers and social protection — we identify three critical shifts that are necessary to align social protection more strongly and effectively with climate adaptation in a world threatened by escalating climate threats. These are:

- Enhancing the effectiveness of existing social protection efforts by supporting improved systems and increasing resource allocation;
- Integrating climate risk management components into social protection provision to increase the resilience of development outcomes against climate risks; and
- Converging and layering social protection instruments with other risk management instruments and climate and development-focused programs to deliver resilience at scale.

Climate risks, their associated shocks, and the longer-term impacts of climate change are context-specific, so it is important to consider the mix of appropriate actions for different contexts. Strengthening, integrating, and converging policy instruments is neither easy nor simple. But the payoffs of realizing these outcomes include more effective poverty reduction and a greater likelihood of inclusive and resilient development in a world of climate change.

4.1 Strengthening Social Protection Systems

Large-scale analyses of social protection programs routinely point to the positive effects of social assistance, public works, and labor market programs. Although social protection and climate adaptation may appear to have different goals, there is substantial overlap between them.

The basic indicators of poverty and wellbeing — nutrition, calorie intake, consumption, productive and non-productive assets, health and sanitation, literacy and education, and in some cases migration and crime — are not too different from those we use to measure climate resilience capacities. There is strong evidence of the positive impact of social protection on these indicators, and, hence on

supporting resilience, especially absorptive and, to a certain extent, adaptive capacities. When complemented with other approaches, social protection might also be able to support more far-reaching forms of climate resilience such as transformative capacity.

Addressing key obstacles that prevent social protection programs from achieving their potential to improve wellbeing and reduce vulnerability would substantially strengthen their contributions to climate adaptation. Moreover, even current achievements of social protection are threatened by escalating climate risks. Governments and international actors must therefore consider and incorporate shifts in how they pursue social protection, if they are to secure the gains in wellbeing and development outcomes of the past several decades.

One way to secure greater efficiencies for social protection and its existing contributions to climate resilience is by improving implementation, transparency, and accountability through better management and information systems. Well-designed and well-implemented social assistance programs lead to improved wellbeing and resilience outcomes. Achieving this requires having:

- Strong implementation structures that include well-specified criteria and transparent information around area and household selection, as well as regular and predictable transfers to beneficiaries;
- Well-functioning accountability mechanisms to enable transparent information sharing and beneficiary participation in the selection, design, implementation and maintenance of SP benefits and services;
- Higher budget allocation to increase social protection transfers and benefits to deserving populations.

Coordinating across the different agencies and decision-making levels involved in implementing social protection also makes the process more efficient, streamlining fund disbursement and reducing leakage and corruption. Strategies include involving beneficiaries in project selection and program implementation — often through social audit processes — providing access to grievance-handling procedures and inviting external agencies to oversee implementation. Coordination across ministries

of finance, agriculture, rural development, social welfare, disaster management, and communications is also critical for improving program design and delivering social protection benefits.

Current investment in social protection is relatively low. So, although organizational coordination, improved institutional structures, and greater accountability can secure substantial efficiency benefits for social protection outcomes, improving wellbeing and resilience outcomes will probably require increases in overall social protection budgets. This is particularly important if climate adaptation, improved ecosystem management, and greater social resilience become goals for social protection. As we saw in Table 2, total per capita benefits in low and middle-income countries from all major forms of social protection add up to less than US\$100 PPP. The levels are even smaller in lower-income countries. For social protection to be more effective, governments and international donors will need to increase budgets for different programs. Although there is evidence of such increases, for these to contribute to climate adaptation and resilience through forward-looking strategies of improved wellbeing and reduced vulnerability, governments need to change the way they integrate climate resilience in the design of social protection and align social protection interventions with other risk management instruments.³⁹

4.2 Integrating Climate Risk Management into Social Protection

Integrating climate risk management goals into the design and delivery of social protection could contribute to three objectives:

- Protecting and maintaining the development gains of social protection from the impacts of disasters;
- Preventing and mitigating loss of livelihoods and assets to escalating climate risks by enabling early action and disaster responses; and
- Mitigating unmanageable growth in both social protection and disaster management budgets as a result of rapid growth in intensity and frequency of disasters as climate risks escalate⁴⁰.

In this section, we highlight three mechanisms for integrating social protection and climate risk management

to improve the realization of development and climate adaptation goals: conditional transfers, early action and disaster response, and investing in climate-resilient infrastructure, skills, and behaviors.

4.2.1 CONDITIONAL TRANSFERS FOR IMPROVED CLIMATE ACTION

Many cash transfers are currently made available to beneficiary households without conditions (see Table 2). But conditional transfers are also common. Typically designed in ways that incentivize specified behavior change, the conditions attached have mostly been used to improve health and educational outcomes. There is evidence that conditions aimed at improving ecological and ecosystem outcomes can yield dividends. For example, conditional cash transfer programs that integrate payments for ecosystem services can also incentivize sustainable resource management and environmental conservation. Brazil's *Bolsa Floresta* program is one of these, providing cash rewards to forest-dwelling households in exchange for participating in income-generating activities that are consistent with the protected area management plan.⁴¹

Conditions that aim to increase individuals and households' ability to respond to climate shocks and opportunities can help improve climate adaptation outcomes. For example, results tied to school attendance can strengthen children's awareness and innovative capacity to address climate shocks. Payments tied to up-skilling rural labor can help beneficiaries access green or climate-resilient jobs and/or create resilient livelihood strategies.

Advocates for the Green New Deal and Just Transition have similar ideas: a job guarantee that also offers people without work and who are losing their livelihoods in high-carbon sectors the opportunity to re-skill in green and climate-resilient jobs and enterprises, alongside a big investment in greening transport, food production (including family farms), and retrofitting housing to be energy efficient.

4.2.2 LINKING SOCIAL PROTECTION WITH EARLY ACTION AND DISASTER RESPONSES

To manage climate-related risks, social protection systems — and social assistance programs in particular — should be linked with existing national disaster or humanitarian response mechanisms, or establish their own, built-in

mechanism to enable a timely and scaled-up response to shocks.⁴² A program might need to expand vertically by temporarily increasing the level of support provided to households, or prolonging the duration of support provision. It might also be able to expand horizontally, by temporarily increasing the number of households it covers to include those that are exposed or vulnerable to particular climate-related risks.⁴³

While it is important to ensure shock-responsive mechanisms are in place, this is only one part of managing climate risks through social protection. To reduce the burden of shocks, social protection systems must actively anticipate and reduce the impact of climate variability and extremes through greater preparedness and planning.⁴⁴ One way to achieve this is by linking social protection mechanisms with more accurate forecasting of potential impacts and triggers to enable early action. Early warnings and impact-based indicators linked to weather forecasts

and other observed variables such as vegetation growth, combined with appropriate anticipatory financing, might ensure social protection reaches those who are at risk faster; even before the impacts of foreseeable extreme events materialize. Such an approach would increase timeliness of interventions, improving both efficiency and the ability to address avoidable losses in assets and suffering.

Integrating social protection with early action and disaster response would further bridge development and humanitarian action and protect development gains from extreme weather and climate events. Key considerations for success of this emerging approach include sound analysis of forecasts, risks, cost and benefits, and ring-fenced funding. Systems would also need to link with up-to-date social registries and use information from vulnerability and risk analyses to pre-identify and register households that may not be regular social protection recipients.⁴⁵

BOX 5

Expanding Social Protection Programs in Response to Climate-related Shocks

Four examples from Asia and Latin America demonstrate how different countries have piloted climate-responsive components to scale up social protection responses during climate events.

India: The Mahatma Gandhi National Rural Employment Guarantee Scheme gives beneficiaries an additional 50 days to the standard 100 days of guaranteed wage labor during droughts, floods and cyclones. Between December 2017 and January 2019, the Indian government has responded to 13 requests from different states for an additional 50 days' work to deal with the impact of droughts, floods and cyclones.

Philippines: In response to Typhoon Haiyan in 2013, the government provided top-up cash and in-kind support to regular beneficiaries of the Pantawid Pamilyang Pilipino Program for two months, covering 100 percent of the food basket.

Argentina: The government doubled the benefits from core contributory and non-contributory social protection schemes over two to three months in response to several natural disasters (flooding, wildfires and volcanic ashes) in the early 2010s. The coordinated, rapid vertical expansion of these schemes supported workers, students, pregnant women, retirees, pensioners, unemployed people, and war veterans in affected areas.

Ecuador: The *Bono de Desarrollo Humano* conditional cash transfer has an emergency grant that gave 40,000 beneficiaries an extra US\$90 each to deal with the impacts of the 2012 floods.

Sources: Kaur et al. 2019; Bowen, T. 2015. *Social Protection and Disaster Risk Management in the Philippines: The Case of Typhoon Yolanda (Haiyan)*. World Bank; Beazley, R., Solorzano, A., and Sossouvi, K. 2016. *Study on Shock-responsive Social Protection in Latin America and the Caribbean: Theoretical Framework and Literature Review*. https://documents.wfp.org/stellent/groups/public/documents/liaison_offices/wfp292090.pdf.

Evidence shows that taking early action based on forecast information can reduce the cost and losses associated with climate shocks. Humanitarian and disaster manager practitioners are testing approaches that use forecasts to predict impacts and trigger action in advance of a shock. For example, Bangladesh has designed a forecast-based financing mechanism that triggers a cash transfer to support evacuation before a flood or cyclone hits, reducing the high costs of evacuating after a disaster has happened. Similarly, following a five-day forecast of cold waves in 2016, Peru used a similar system to support vaccination efforts and distribute veterinary kits to reduce the risk of mortality of alpacas, which are many families' only source of income.

Linking innovative approaches such as these with social protection programming aims to make better use of existing systems to protect people before disasters, rendering social protection systems more effective in managing climate risks. Although there are few experiences of social protection integrating early action or forecast-based payments, the Kenyan Hunger Safety Net Programme (HSNP) scheme is an important example of this approach. In late 2015, HSNP made payments to all registered households that had opened bank accounts (around 70 percent of all households) based on the El Niño seasonal forecast predicting heavy rains and floods. The forecast was available roughly three months before the expected rainy season, and funds were transferred a month in advance. Almost two-thirds of the 200,000 recipients were not receiving regular HSNP transfers, but had a registered HSNP account. The 2015 transfers were not based on vulnerability to flooding or elaborate flood forecast-based financing systems; they were one-off, ad hoc payments based on readily available El Niño early warnings. The extensive coverage was framed as a 'no regrets' transfer due to the high levels of uncertainty related to the seasonal forecast and the perceived urgency to act proactively for a sudden-onset event such as flooding.

Sources: Costella et al. 2017; Weingärtner L., Jaime, C., Todd, M., Levine, S., McDowell, S., and Macleod, D. 2019. *Reducing Flood Impacts through Forecast-Based Action Entry Points for Social Protection Systems in Kenya*. www.odi.org/sites/odi.org.uk/files/resource-documents/12645.pdf.

4.2.3 PROMOTING INVESTMENTS IN CLIMATE-RESILIENT INFRASTRUCTURE

PWPs can create infrastructure for natural resource management, agricultural productivity and rural development, contributing to the physical capital of households and the local economy. And while there are many challenges around ensuring the quality of assets under these schemes and timeliness of payments (which are linked to labor), when there is sufficient investment in the quality of the assets, there are significant benefits for livelihoods.

Investing in natural resource management infrastructure such as soil and water conservation infrastructure contributes to a household's absorptive capacity to withstand climate-related shocks by providing access to ecosystem services. Creating agricultural infrastructure such as water storage facilities and diversified agricultural assets (plantations, livestock shed, organic farming infrastructure) can enhance their longer-term adaptive

capacity by providing access to diversified productive assets. But building climate-resilient infrastructure such as off-grid renewable energy and green housing infrastructure can transform households and communities by providing access to new jobs and livelihood strategies.⁴⁶

To ensure that infrastructure created under social protection programs contributes to climate resilience in the context of escalating climate shocks, governments need to integrate climate risk management into selecting, designing and maintaining PWP works, and create new infrastructure categories to support livelihood diversification for low-carbon and climate-resilient development.

Box 7 illustrates how MGNREGS, one of the world's largest PWP programs, is creating climate-resilient public works and investing in climate resilience skill development to strengthen households and communities' absorptive, adaptive and transformative capacities to respond to climate change.

MGNREGS builds individual and public rural infrastructure to support long-term livelihood strategies and strengthen the local economy. It has created 3.8 million infrastructure assets to date, including:

- Integrated natural resource management infrastructure: water and soil conservation infrastructure — such as check dams, ponds and trenches — afforestation and land development works;
- Agriculture-based infrastructure: irrigation channels, plantations, livestock, fisheries infrastructure, water and grain storage structures; and
- Other infrastructure: roads, footpaths, sanitation infrastructure and community buildings.

In collaboration with the UK Department of International Development and German development agency GIZ, India's Ministry of Rural Development is piloting ways to integrate climate risk management into the selection, design and maintenance of rural infrastructure created under MGNREGS. This includes using climate vulnerability mapping tools, integrated natural resource management and climate information services to support the selection and design of climate-resilient public works programs. The program is also piloting the use of innovative technology such as drones and geo-spatial mapping and social auditing to improve the quality of assets created under MGNREGS.

Source: Kaur et al. 2019.

4.3 Aligning and Layering Social Protection with Other Risk Management Instruments

Aligning and implementing programs in coordination with other risk management instruments such as insurance will also strengthen social protection's contribution to climate resilience. Doing this would enable social protection agencies to draw on technical and financial resources from new sources to enhance synergies where programs have common goals, even when structured and implemented by different organizations. It would also build and sustain household and local economy resilience in the face of increasingly frequent and higher-magnitude climate hazards and uncertainty.

Layering social protection instruments, and complementing them with risk management mechanisms — such as insurance schemes — can help cover different levels of risks and protect households from a wider variety of hazards. For example, Ethiopia's Rural Resilience Initiative (R4) offers long-term weather-based insurance to poor farmers and rural households who are PSNP beneficiaries.⁴⁷ The PSNP public works program helps

them cope with low-level risks to livelihoods; insurance helps transfer higher-level risks by protecting farmers' investments during a bad season. R4 provides farmers with credit for investing in seeds, fertilizers, new technologies, and activities that may have higher risks but greater returns through improved productivity. The program also encourages small-scale savings so farmers can build reserves. Box 8 shows another example of managing climate risks through insurance.

Combining insurance with social protection measures is one option for enhancing vulnerable communities' ability to absorb climate impacts, but it is not without challenges. Because insurance focuses on clients that can afford premiums, it may not be an appropriate solution for the poorest populations who are the target group of many social assistance programs. Insurance may also require a range of solutions that are context-specific and consider the different levels of risk emanating from different hazards and the vulnerability profile of targeted populations. It may therefore be more appropriate to combine macroinsurance solutions where the government pays for a premium with social safety nets.⁴⁸

Macroinsurance schemes that include risk pooling might be a cost-effective way to finance the shock responsiveness of social protection systems. For example, the African Union's Africa Risk Capacity (ARC) aims to strengthen countries' disaster risk management mechanisms by allowing them to pool drought risk and

access insurance cover in exchange for a premium. By participating in this insurance scheme, Kenya can channel the insurance payout when a drought trigger is met, through direct payments into the pre-identified households' bank accounts under its Hunger Safety Net Programme.

BOX 8

Managing Climate Risks through Insurance

The government of Mongolia's Index-based Livestock Insurance Project makes private insurance available on more affordable terms to the one-third of Mongolian people who are herders. The scheme combines annual open livestock census data, easy-to-track geographical triggers for payouts, and underwriting of catastrophic losses, with payouts triggered when livestock losses exceed 6 percent of the herd. The government underwrites catastrophic losses of over 30 percent, effectively pooling climate risk across herders and transferring a share of the overall risk from individual households to a sovereign entity. For insurance programs to be successful against climate risks to farming and livestock-rearing households, they should include effective estimates of losses, some underwriting of risks by the government, and producer surplus to pay for insurance policies.

Sources: Skees, J., and Mearns, R. 2009. Livestock Insurance in Mongolia. In: *Climate and Society Issue 2: Index Insurance and Climate Risk: Prospects for Development and Disaster Management*. [Hellmuth, M., Osgood, D., Hess, U., Moorhead, A., and Bhojwani, H. (eds.)]. New York: International Research Institute for Climate and Society; DeAngelis, K. 2013. *Index-based Livestock Insurance: The Case of Mongolia*. London: Climate and Development Knowledge Network.

5. Taking Social Protection and Climate Resilience Forward

In the coming decades, it is crucial that social protection policies and systems in low and middle-income countries consider climate risk and help the most vulnerable anticipate, absorb and adapt to the impacts of climate shocks. This should be an integral part of country-led systems, supported by subnational, national and international partners. To achieve the shifts outlined in this paper, governments and international donors will need to:

- Mobilize new finance for social protection to incentivize stakeholders;
- Develop the knowledge base necessary to target existing and new resources towards programs and program components that can achieve enhanced social protection and climate adaptation; and
- Align programs and structures to support key stakeholders.

5.1 Improving the Quantity and Quality of Financial Investment

Although financing for social protection is significant when compared with other development interventions and continues to expand, large coverage gaps remain, especially for the poorest and most vulnerable in regions where social protection systems are nascent, such as Asia, Middle East and North Africa, and Sub-Saharan Africa, and which are also some of the most exposed to climate risks.⁴⁹ At the same time, financing for climate adaptation has not kept pace with the size of the challenge. And while humanitarian needs continue to grow, there is increasing recognition that financing one-off disaster responses is not cost-efficient: countries need multi-year, sustainably financed interventions.

Aligning social protection and climate resilience objectives can enable a more cost-effective allocation of public financing by supporting the establishment of long-term, more financially sustainable solutions to deal with climate risks. From a social protection standpoint, this would require aligning objectives, structures and financing to reflect the main risks in a specific context, including climate-related risks. From the climate resilience standpoint, it would require advocating for climate financing to support a policy shift towards long-

term social protection systems. Countries can use the limited climate finance available to strengthen social protection investments in the poorest households, so the development budget investment is effective in building resilient societies. In practice, this will need to translate into ensuring financing is available for joint or coordinated interventions in government budgets across sectors and at the global level.

It is also important to design comprehensive financing strategies that recognize different levels of risk arising from a changing climate, which range from impacts on seasonal livelihoods to catastrophic events. This will require layered interventions supported by layered financing instruments to ensure funds are allocated where they can have the biggest impact in reducing risks, mitigating or responding to impacts, depending on the level of risk and impact. Some countries are already re-thinking risk-financing instruments. In doing so, they also ensure the necessary financing mechanisms exist before shocks hit and that these can be used more effectively through existing mechanisms such as social protection to anticipate shocks and for response and early recovery.

5.2 Strengthening the Knowledge Base

There is substantial evidence that social protection programs generate positive outcomes for wellbeing. Although there is some variation in the quality and depth of such evaluative evidence across different program types, the conclusion is inescapable: social protection programs are a generally positive instrument for development among a very large number of instruments tested by governments, donors, non-government organizations and other decision-makers.

But knowledge is patchier around the many different indicators for assessing wellbeing, social and institutional processes, and ecosystem and climate resilience outcomes. And whereas researchers and program implementers have gathered substantial evidence for specific programs and program types, there is only limited knowledge on the relative effectiveness of different kinds of program or the extent to which similar investments in different programs yield similar outcomes along multiple indicators. There is some reliable evidence on the greater effectiveness of CCTs compared to UCTs for outcomes

related to specified conditions for conditional transfers, but far more research is needed to know whether CCTs are also better than UCTs for outcomes that are not part of the condition for transfers.

To target and channel financial resources more effectively – especially for integrated social protection and climate resilience, or for social protection programs that are layered and aligned with other related risk reduction and risk management initiatives – more evidence and a deeper knowledge base is critically important. The current evidence provides strong grounds for supporting such integration and alignment, but a stronger knowledge base about the relative effectiveness of different social protection interventions, different features of program design, and integrated social protection and climate adaptation programs would allow more effective use of available financial resources.

5.3 Aligning Policies and Programs with Stakeholder Interests

While national policies that recognize social protection as part of a long-term strategy for building climate resilience are crucial, most countries have not yet brought such vision into their policy instruments. Global frameworks could help move this agenda forward by ensuring they

fully integrate the role of social protection mechanisms in managing climate risks.⁵⁰ To support more integrated and streamlined policies for climate resilience, the type of evidence we describe in Section 5.2 will be essential, together with an improved understanding of differentiated climate risks and people’s vulnerabilities that are specific to each context. In this way, social protection might be able to support absorptive, adaptive and transformative resilience capacities through a comprehensive framework, linked to climate adaptation and to a certain extent mitigation. And while this could include programs that scale up during emergencies, it must also address vulnerability to long-term, climate-related risks.

Country governments will need to translate coherent national policies into action by implementing them across sectors and at different subnational levels. This will require technical and operational collaboration across a range of sectors – including climate adaptation, disaster response and social protection – to ensure programs are designed and operationalized with a proper understanding of risks and impacts in each context. For example, scaling up early warning, early action and disaster response through social protection might first require testing design and programmatic options, such as adequate targeting mechanisms that identify who is vulnerable to climate

BOX 9

Convergence through Aligned Policy Direction: the Case of Rwanda

The Rwanda’s Vision 2020 Umurenge Program (VUP) has been offering public works employment, cash transfers and subsidized credit services to poor households since 2008. With the overarching goal of reducing extreme poverty by 2020, the VUP aims to protect, strengthen and build household and community assets and livelihoods, increase productivity and access to finance and technical assistance, and improve natural resource management

In line with the National Social Protection Strategy, VUP administrators recognized the need to “climate-proof” this flagship social protection program, particularly against frequent floods and droughts and related food insecurity and health epidemic challenges. This is also reflected in the country’s recently formulated national climate change strategy, which includes the aim to “achieve social protection, improved health, and disaster risk reduction that reduces vulnerability to climate change” as one of its four strategic objectives.

Sources: Siegel, P., Gatsinzi, J., and Kettlewell, A. 2011. *Adaptive Social Protection in Rwanda: ‘Climate-proofing’ the Vision 2020 Umurenge Programme*. IDS Bulletin 42(6); Republic of Rwanda. 2011. *Green Growth and Climate Resilience: National Strategy for Climate Change and Low Carbon Development*.

shocks, triggers and early actions. Technical expertise on community-based adaptation mechanisms such as natural resource management might help improve the design and implementation of public works for better climate resilience. Integrating operational systems — such as social protection or national beneficiary registries, payments systems, and information management systems — is another important area for implementation. Overall, ensuring a space for technical interaction in global and national structures will be important to support such cross-fertilization.

For policy and program changes to be truly transformational, global and national stakeholders in social protection, disaster and climate risk management,

and humanitarian actors, will need to find better ways of coordinating across their sectors. Structuring financing in a way that supports these new ways of working will be essential to achieving such a transformation. It will also be important for increasing global, national and local decision-makers and technical staff's knowledge and understanding of social protection and climate resilience, as this will enable dialogue, joint action and overall capacity to deliver on this new area. While national ownership and commitment are important in all areas, they are paramount in establishing national social protection systems, including those that consider climate a key risk. This commitment will create more coherent systems that effectively bring together financing, policies, and programs.

6. Conclusion

It is clear that strengthening social protection, integrating climate resilience in social protection programs, and converging social protection and other risk management instruments can help low and middle-income countries achieve climate adaptation at scale. Such shifts can help countries address impending gaps in social protection effectiveness because of escalating climate risks.

The scope, scale, coverage, and diversity of social protection provides policymakers with choice and flexibility for addressing climate resilience; its infrastructure offers the reach needed; and its redistributive nature allows for climate justice. At the same time, there are few if any alternative social policies that could enable the kind of scaling up needed for effective climate adaptation.

Social protection policies are politically attractive across political systems. In democratic societies, providing a social system creates a persistent political constituency in its favor. Even in non-democratic societies, social protection is an important means to secure popular support, and cuts in social protection often meet resistance and protests. Political attractiveness, institutional reach, substantial and growing investments, and positive wellbeing and vulnerability reduction outcomes make the alignment of social protection with climate adaptation a winning policy message and proposition.

Realizing these proposed shifts will require mobilizing finance, developing stronger evidence to target resources more precisely and more accurately, and developing human and institutional infrastructure that is incentivized to seek synergies rather than remain in silos. Channeling climate finance through social protection instruments has the potential to achieve the first-order objectives of social assistance programs by increasing the total resources available for support. From a climate finance perspective, using social assistance programs increases the degree to which it can meet the climate justice principle of “sharing benefits and burdens equally”.⁵¹ The proportion of climate finance that reaches poor communities so they can adapt and build resilience in the face of climate impacts continues to be relatively small.⁵² The potential of social assistance programs to improve the social justice aspirations of climate finance is considerable; this is an added benefit of aligning and converging social protection with climate adaptation.

ENDNOTES

- 1 Granoff, I., Eis, J., Hoy, C., Watson, C., Khan, A., and Grist, N. 2015. *Targeting Zero Zero: Achieving Zero Extreme Poverty on the Path to Zero Net Emissions*. London: Overseas Development Institute.
- 2 Rigaud, K.K., de Sherbinin, A., Jones, B., Bergmann, J., Clement, V., Ober, K., et al. 2018. *Groundswell: Preparing for Internal Climate Migration*. Washington DC: World Bank.
- 3 ILO (International Labor Organization). 2017. *World Social Protection Report 2017–19: Universal Social Protection to Achieve the Sustainable Development Goals*. Geneva; World Bank. 2018. *The State of Social Safety Nets 2018*. Washington DC. <https://doi.org/10.1596/978-1-4648-1254-5>; World Bank. 2019. *GDP*. <https://data.worldbank.org/indicator/NY.GDP.MKTP.CD>. Accessed March 1, 2019.
- 4 Lowder, S. K., Bertini, R., and Croppenstedt, A. 2017. "Poverty, Social Protection and Agriculture: Levels and Trends in Data." *Global Food Security*, 15: 94–107.
- 5 Barrientos, A. 2017. "Design and Rural Context in Antipoverty Transfers: Implications for Programme Outcomes." *Global Food Security*, 12, 103–108.
- 6 Davies, M., Guenther, B., Leavy, J., Mitchell, T., and Tanner, T. 2009. *Climate Change Adaptation, Disaster Risk Reduction and Social Protection: Complementary Roles in Agriculture and Rural Growth?*. IDS Working Papers, (320), 01–37.
- 7 Kuriakose, A.T., Heltberg, R., Wiseman, W., Costella, C., Cipryk, R., and Cornelius, S. 2013. "Climate-responsive Social Protection." *Development Policy Review*, 31, o19–o34; World Bank. 2013. *Building Resilience to Disaster and Climate Change through Social Protection*. Washington, DC. <https://openknowledge.worldbank.org/handle/10986/16492>.
- 8 O'Brien, C., Scott, Z., Smith, G., Barca V., Kardan, A., Holmes, R., et al. 2018. *Shock-responsive Social Protection Systems Research: Synthesis Report*. Oxford, UK: Oxford Policy Management.
- 9 World Bank. 2018. *The State of Social Safety Nets 2018*.
- 10 World Bank. 2017. *Sahel Adaptive Social Protection Program – Addressing the Challenges of Climate Change and Disaster Risk for the Poor and Vulnerable*. Annual Report 2017. Washington DC.
- 11 Berry, S. 1989. "Social Institutions and Access to Resources." *Africa*, 59(1), 41–55; Scheer, J., and Groce, N. 1988. "Impairment as a Human Constant: Cross-cultural and Historical Perspectives on Variation." *Journal of Social Issues* 44.1: 23–37; Fiszbein, A., Schady, N., Ferreira, F.H.G., Grosh, M., Keleher, N., Olinto, P., et al. 2009. *Conditional Cash Transfers: Reducing Present and Future Poverty*. *World Bank Policy Research Report*. Washington, DC: World Bank. <https://openknowledge.worldbank.org/handle/10986/2597>; Norton, A., Conway, T., and Foster, M. 2001. *Social Protection Concepts and Approaches: Implications for Policy and Practice in International Development*. London: Overseas Development Institute; Devereux, S. and Sabates-Wheeler, R. 2004. *Transformative Social Protection*. Working Paper 232, Institute of Development Studies; World Bank. 2015. *The State of Social Safety Nets, 2015*. Washington DC; World Bank. 2018. *The State of Social Safety Nets 2018*.
- 12 Brouwer, R., Akter, S., Brander, L., and Haque, E. 2007. "Socioeconomic Vulnerability and Adaptation to Environmental Risk: A Case Study of Climate Change and Flooding in Bangladesh." *Risk Analysis: An International Journal*, 27(2), 313–326; Eriksen, S.H., and O'Brien, K. 2007. "Vulnerability, Poverty and the Need for Sustainable Adaptation Measures." *Climate Policy*, 7(4), 337–352.
- 13 Conning, J., and Kevane, M. 2002. "Community-based Targeting Mechanisms for Social Safety Nets: A Critical Review." *World Development* 30.3: 375–94.
- 14 World Bank. 2018. *The State of Social Safety Nets 2018*.
- 15 Barrientos, A., and Hulme, D. 2009. "Social Protection for the Poor and Poorest in Developing Countries: Reflections on a Quiet Revolution: Commentary." *Oxford Development Studies*, 37(4), 439–456.
- 16 World Bank. 2015. *The State of Social Safety Nets, 2015*; World Bank. 2018. *The State of Social Safety Nets 2018*.
- 17 Attansio, O., Battistin, E. and Mesnard, A. 2011. "Food and Cash Transfers: Evidence from Colombia." *The Economic Journal*, 122(559), 92–124; Blattman, C., and Ralston, L. 2015. *Generating Employment in Poor and Fragile States: Evidence from Labor Market and Entrepreneurship Programs*; Dutta, P., Murgai, R., Ravallion, M., and Van de Walle, D. 2012. *Does India's Employment Guarantee Scheme Guarantee Employment?* The World Bank; Kaur, N. Agrawal, A. Barnwal, A., Kumar, N., Manuel, C., Norton, A., et al. 2019. *Building Resilience to Climate Change*. Working Paper. London: IIED; Sabates-Wheeler, R., and Devereux, S. 2010. "Cash Transfers and High Food Prices: Explaining Outcomes on Ethiopia's Productive Safety Net Programme." *Food Policy* 35(4): 274–285.
- 18 World Bank. 2018. *The State of Social Safety Nets 2018*.
- 19 Fiszbein et al. 2009. *Conditional Cash Transfers: Reducing Present and Future Poverty*.
- 20 World Bank. 2018. *The State of Social Safety Nets 2018*.
- 21 Kabeer, N., and Waddington, H. 2015. "Economic Impacts of Conditional Cash Transfer Programmes: A Systematic Review and Meta-Analysis." *Journal of Development Effectiveness*, 7(3): 290–303.
- 22 Bastagli F., Hagen-Zanker J., Harman L., Barca V., Sturge G., and Schmidt T. 2018. "The Impact of Cash Transfers: A Review of the Evidence from Low-and Middle-Income Countries." *Journal of Social Policy*, 1–26. doi:10.1017/S0047279418000715; Garoma, D.A., Abaha, Y.G., Gebrie, S.A., Deribe, F.M., Tefera, M.H., and Morankar, S. 2017. "Impact of Conditional Cash Transfers on Child Nutritional Outcomes among Sub-Saharan African Countries: A Systematic Review Protocol." *JBI Database of Systematic Reviews and Implementation Reports*, 15(9): 2295–2299; Pega, F., Liu, S.Y., Walter, S., Pabayo, R., Saith, R., and Lhachimi, S.K. 2017. "Unconditional Cash Transfers for Reducing Poverty and Vulnerabilities: Effect on Use of Health Services and Health Outcomes in Low-and Middle-Income Countries." *Cochrane Database of Systematic Reviews*, (11).
- 23 Kabeer and Waddington. 2015. "Economic Impacts of Conditional Cash Transfer Programmes: A Systematic Review and Meta-Analysis."

- 24 Glassman, A., Duran, D., Fleisher, L., Singer, D., Sturke, R., Angeles, G. et al. 2013. "Impact of Conditional Cash Transfers on Maternal and Newborn Health." *Journal of Health, Population and Nutrition*, 31(4 Suppl 2): S48; Hunter, B.M., Harrison, S., Portela, A., and Bick, D. 2017. "The Effects of Cash Transfers and Vouchers on the Use and Quality of Maternity Care Services: A Systematic Review." *PLoS One*, 12(3), e0173068; Målqvist, M., Yuan, B., Trygg, N., Selling, K., and Thomsen, S. 2013. "Targeted Interventions for Improved Equity in Maternal and Child Health in Low-and Middle-Income Settings: A Systematic Review and Meta-Analysis." *PLoS One*, 8(6), e66453.
- 25 Owusu-Addo, E., and Cross, R. 2014. "The Impact of Conditional Cash Transfers on Child Health in Low-and Middle-income Countries: A Systematic Review." *International Journal of Public Health*, 59(4): 609–618.
- 26 Siddiqi, A., Rajaram, A., and Miller, S.P. 2018. "Do Cash Transfer Programmes Yield Better Health in the First Year of Life? A Systematic Review Linking Low-Income/Middle-Income and High-Income Contexts." *Archives of Disease in Childhood*, 103(10), 920–926.
- 27 Baird, S., Ferreira, F.H., Özler, B., and Woolcock, M. 2014. "Conditional, Unconditional and Everything in Between: A Systematic Review of the Effects of Cash Transfer Programmes on Schooling Outcomes." *Journal of Development Effectiveness*, 6(1): 1–43.
- 28 Oxman, A.D., and Fretheim, A. 2009. "Can Paying for Results Help to Achieve the Millennium Development Goals? Overview of the Effectiveness of Results-based Financing." *Journal of Evidence-Based Medicine*, 2(2): 70–83.
- 29 Kaur et al. 2019. *Building Resilience to Climate Change: Lessons from MGNREGS, India*; Narayanan, S., Das, U., Liu, Y., and Barrett, C. B. 2017. "The 'Discouraged Worker Effect' in Public Works Programs: Evidence from the MGNREGA in India." *World Development*, 100, 31–44; Pellissery, S., and Jalan, S. K. 2011. "Towards Transformative Social Protection: A Gendered Analysis of the Employment Guarantee Act of India (MGNREGA)." *Gender & Development*, 19(2), 283–294; Carswell, G., and De Neve, G. 2014. "MGNREGA in Tamil Nadu: A Story of Success and Transformation?" *Journal of Agrarian Change*, 14(4), 564–585.
- 30 World Bank. 2018. *The State of Social Safety Nets 2018*.
- 31 Bonoli, G. 2005. "The Politics of the New Social Policies: Providing Coverage against New Social Risks in Mature Welfare States." *Policy & Politics*, 33(3): 431–449; Holzmann, R. and Stiglitz, J.E., eds. 2001. *New Ideas about Old Age Security: Toward Sustainable Pension Systems in the 21st Century*; Holzmann, R. Robalino, D.A., and Takayama, N., eds. 2009. *Closing the Coverage Gap: Role of Social Pensions and Other Retirement Income Transfers*. World Bank; Munro, E. 2010. "Learning to Reduce Risk in Child Protection." *British Journal of Social Work*, 40(4): 1135–1151.
- 32 World Food Programme. 2013. *State of School Feeding Worldwide*. Rome.
- 33 Baird, S., Ferreira, F., Özler, B. and Woolcock, M. 2013. "Relative Effectiveness of Conditional and Unconditional Cash Transfers for Schooling Outcomes in Developing Countries: A Systematic Review." *Campbell Systematic Reviews* 9, no. 8; Balhara, K. S., Silvestri, D. M., Tyler Winders, W., Selvam, A., Kivlehan, S. M., Becker, T. K., et al. 2017. "Impact of Nutrition Interventions on Pediatric Mortality and Nutrition Outcomes in Humanitarian Emergencies: A Systematic Review." *Tropical Medicine & International Health*, 22(12): 1464–1492; Owusu-Addo, E., Renzaho, A. M., and Smith, B. J. 2018. "The Impact of Cash Transfers on Social Determinants of Health and Health Inequalities in Sub-Saharan Africa: A Systematic Review." *Health Policy and Planning*, 33(5): 675–696; Bastagli, F., Hagen-Zanker, J., Harman, L., Barca, V., Sturge, G., Schmidt, T., and Pellerano, L. 2016. *Cash Transfers: What Does the Evidence Say? A Rigorous Review of Programme Impact and the Role of Design and Implementation Features*. London: ODI.
- 34 Kabeer and Waddington. 2015. "Economic Impacts of Conditional Cash Transfer Programmes: A Systematic Review and Meta-Analysis."
- 35 Handa, S., Daidone, S., Peterman, A., Davis, B., Pereira, A., Palermo, T. et al. 2018. "Myth-busting? Confronting Six Common Perceptions about Unconditional Cash Transfers as a Poverty Reduction Strategy in Africa." *World Bank Research Observer*, 33(2). <https://doi.org/10.1093/wbro/lky003>.
- 36 Agrawal A., Kaur, N., Barnwal, A., Norton, A., Rockowitz, D., Shakya, C., et al. 2017. *Social Protection and Climate Resilience*. Report submitted to IIED, London.
- 37 Agrawal et al. 2017. *Social Protection and Climate Resilience*.
- 38 Ulrichs, M., Slater, R., & Costella, C. (2019). Building resilience to climate risks through social protection: from individualised models to systemic transformation. *Disasters*, 43(S3), S368–S387. <https://doi.org/10.1111/disa.12339>.
- 39 O'Brien et al. 2018. *Shock-Responsive Social Protection Systems Research: Synthesis Report*.
- 40 Kuriakose A. T., Heltberg, R., Wiseman, W., Costella, C., Cipryk, R., and Cornelius, S. 2013. "Climate-responsive Social Protection"; Béné, C., Newsham, A., Davies, M., Ulrichs, M., and Godfrey-Wood, R. (2014). "Resilience, Poverty and Development." *Journal of International Development*. <https://doi.org/10.1002/jid.2992>.
- 41 Börner, J., Shively, G., Wunder, S., and Wyman, M. 2015. "How Do Rural Households Cope with Economic Shocks? Insights from Global Data Using Hierarchical Analysis." *Journal of Agricultural Economics*. 66(2), 392–414. <https://doi.org/10.1111/1477-9552.12097>; Viana, V., and Salviati, V. 2018. Bolsa Floresta Program, Brazil. In: *Ecosystems, Poverty Alleviation and Conditional Transfers*. [Porrás, I., and Asquith, N., (eds.)] London: IIED.

- 42 O'Brien et al. 2018. *Shock-Responsive Social Protection Systems Research: Synthesis Report*; Costella, C., Jaime, C., Arrighi, J., Coughlan de Perez, E., Suarez, P., and van Aalst, M. 2017. "Scalable and Sustainable: How to Build Anticipatory Capacity into Social Protection Systems." *IDS Bulletin*, 48(4). <https://doi.org/10.19088/1968-2017.151>; Hallegatte, S., Bangalore, M., Bonzanigo, L., Fay, M., Kane, T., Narloch, U., et al. 2016. *Managing the Impacts of Climate Change on Poverty*. Shock Waves: Climate Change and Development Series; Slater, R., and Bhuvanendra, D. 2013. "Scaling Up Existing Social Safety Nets to Provide Humanitarian Response: A Case Study of Ethiopia's Productive Safety Net Programme and Kenya's Hunger Safety Net Programme." *The Cash Learning Partnership*; Kuriakose et al. 2013. "Climate-responsive Social Protection."
- 43 O'Brien et al. 2018. *Shock-Responsive Social Protection Systems Research: Synthesis Report*.
- 44 Costella et al. 2017. "Scalable and Sustainable: How to Build Anticipatory Capacity into Social Protection Systems."
- 45 Costella et al. 2017. "Scalable and Sustainable: How to Build Anticipatory Capacity into Social Protection Systems."
- 46 Kaur et al. 2019. *Building Resilience to Climate Change: Lessons from MGNREGS, India*.
- 47 Madajewicz, M., Tsegay, A.H., and Norton, M. 2013. *Managing Risks to Agricultural Livelihoods: Impact Evaluation of the HARITA Program in Tigray, Ethiopia, 2009–2012*. Evaluation Report. Boston, MA: Oxfam America.
- 48 Väänänen, E., Nett, K., Costella, C., and Mendler De Suarez, J. 2019. *Linking Climate Risk Insurance with Shock-Responsive Social Protection*. www.insuresilience.org/wp-content/uploads/2019/03/insuresilience_policybrief_1-2019_190312_web.pdf.
- 49 Fiszbein, A., Kanbur, R., and Yemtsov, R. 2014. "Social Protection and Poverty Reduction: Global Patterns and Some Targets." *World Development*, 61: 167–177.
- 50 Ulrichs, M., Slater, R., and Costella, C. 2019 (forthcoming). "Building Resilience to Climate Risks through Social Protection: From Individualised Models to Systemic Transformation." *Disasters*, 43(S3): S368–S387. <https://doi.org/10.1111/disa.12339>.
- 51 Mary Robinson Foundation Climate Justice. 2019. Principles of Climate Justice. www.mrfcj.org/principles-of-climate-justice/share-benefits-and-burdens-equitably/. Accessed June 2, 2019.
- 52 Soanes, M., Raid, N., Steele, P., Shakya, C., MacGregor, J. 2017. *Delivering Real Change: Getting International Climate Finance to the Local Level*. Working Paper, IIED.

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ACRONYMS

ARC	Africa Risk Capacity
ASP	adaptive social protection
CCT	conditional cash transfer
GDP	gross domestic product
HSNP	Hunger Safety Net Programme (Kenya)
MGNREGS	Mahatma Gandhi National Rural Employment Guarantee Scheme (India)
PPP	purchasing power parity
PSNP	Productive Safety Net Programme (Ethiopia)
PWP	public works program
R4	Rural Resilience Initiative (Ethiopia)
UCT	unconditional cash transfer

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