Climate change will increase the frequency and severity of certain shocks, including crop failures and spikes in food prices, natural disasters such as storms and floods, and climate-sensitive diseases such as malaria and diarrhea. In principle, households can use a range of private instruments to cope with the consequences of these shocks. They can draw on their savings, borrow from a bank or cooperative, rely on formal or informal community-based insurance, benefit from domestic or international remittances, and sometimes buy private insurance.

But there is only so much these private instruments can achieve. Access to bank accounts and credit remains limited in the developing world. And poor people do not have enough savings to smooth against large shocks. Amounts transferred through remittances are often too small, and remittances mostly go to wealthier households. For large-scale events, such as a big flood, entire communities are affected, making informal risk-sharing mechanisms ineffective. And transaction costs and other limitations often prevent private insurance uptake among poor people, unless it is heavily subsidized.

For the poorest, and for catastrophic shocks, governments need to provide social safety nets that can be scaled up rapidly after a shock and with flexible targeting systems able to redirect support toward affected households. Such a safety net system acts as an insurance facility for vulnerable households (figure 1), and is an effective means to support poor people hit by shocks and avoid detrimental coping strategies. In Mexico, beneficiaries of Prospera, the national cash transfer program, are less likely to withdraw their children from school when hit by shocks. In Kenya, the Hunger Safety Net Program prevented a 5 percent increase in poverty among beneficiaries following the 2011 drought.

**FIGURE 1** Poorer households need different types of solutions

- More intense events: International aid, Social insurance and scaled-up social safety nets, Government insurance and contingent finance, Government reserve funds, Market insurance, Savings, credit, and scaled-up remittances
- Smaller events: Basic social protection, remittances, and revenue diversification

Richer households

Poorer households
This policy note details options for governments to design responsive social protection programs. It also discusses mechanisms to ensure that liquidity constraints do not prevent the quick delivery of postdisaster support to the population.

**Rapidly Increasing Social Protection**

Social protection can be scaled up after a natural disaster hits, effectively acting as an insurance facility for vulnerable households. A key challenge is to strike a balance between providing rapid support after a shock and precisely targeting those most in need. Case studies from Ethiopia and Malawi suggest that the life-long cost of a drought to a poor household can increase from zero to about $50 if support is delayed by four months, and to about $1,300 if support is delayed by six to nine months. This rapid increase is due to irreversible impacts on children and distress sales of assets like livestock. Early basic support should thus favor timeliness even at the expense of targeting accuracy, with larger, more targeted reconstruction support following.

There are three main ways to rapidly increase social protection in response to a shock:

**Expand coverage**

Natural disasters such as floods or droughts can cause households above the poverty line to fall into poverty—possibly making them poorer than existing beneficiaries of social protection. It is important therefore to design social protection programs to expand and cover at-risk households when needed.

When the 2011 droughts caused food shortages and famine, Ethiopia’s *Productive Safety Net Program* (PSNP) expanded its coverage from 6.5 million to 9.6 million people in two months and increased the duration of benefits from six to nine months per beneficiary. Ethiopia’s program has access to contingency budgets it can draw upon when faced with a crisis to finance rapid scale-up. It uses a mix of geographic and community-based targeting in rural areas to identify the neediest.

Where governments have the capacity to maintain them, social registries are key to rapid and cost-effective expansion of social protection systems. In Brazil, the *Cadastro Unico* registry includes households with a per capita income below half the national minimum wage, a threshold that is higher than the income eligibility threshold of existing cash transfer programs. Such a design allows the rapid identification of potential beneficiaries and vulnerable households—even if they were not considered poor before the shock—and ensures that cash transfer schemes can rapidly respond to crises.

**Increase the amount or value of transfer**

Another option is to increase transfers to current beneficiaries of existing social protection programs. This works well when the disaster primarily affects the poorest people, and when there is already at least one large-scale social protection program in place in the country.

One example of a program that was scaled up in response to a shock is the Philippines’ *Pantawid Pamilyang Pilipino Program* (4Ps). After Typhoon Yolanda, the Philippines was able to use the 4Ps’ existing conditional cash transfer system to quickly release the equivalent of about $12.5 million between November 2013 and February 2014 in emergency funding. Organizations including the World Food Program and the United Nations Children’s Fund also channelled their support through the 4Ps, effectively increasing the amount transferred to beneficiaries.

Sometimes, increasing transfers also requires relaxing program rules and conditionality. Disasters may make existing program rules impractical or inappropriate: if a disaster destroys schools in a region, attendance is no longer an applicable condition for disbursing conditional cash transfers. In Colombia, the *Familias en Acción* program suspended conditionality temporarily in 2008 to accommodate the shortfalls
in service provision as a result of damaged infrastructure. In the Philippines, all conditionality linked to the 4Ps cash transfers was relaxed after Typhoon Yolanda in 2013.

Create a new program

A third way to respond to a crisis is to introduce a new program. The 1990 Honduran Programa de Asignación Familiar and the 2001 Colombian scheme Familias en Acción were launched during recessions and macroeconomic adjustment periods. In Guatemala, the food and fuel crisis of 2008 prompted the introduction of a new program, Mi Familia Progresa. All three programs were later institutionalized and became part of the regular social protection system.

Putting in place a new program takes time, while the postdisaster response is urgent. To work around this problem, the Citizen’s Damage Compensation Program (CDCP) that Pakistan established as a response to devastating floods in 2010 was introduced in two phases. The first phase provided quick assistance to the most affected families and was delivered through one-off cash grants—using the network of private banks—and was based on crude geographical targeting. The second phase provided larger cash payments that could be used to rebuild houses, restore livelihoods, or repay debt, and was allocated on the basis of a more precise survey of flood damages. To deal with unavoidable errors in selecting beneficiary households, a strong grievance mechanism is essential. In the CDCP, the grievance mechanism cut exclusion errors from an initial 61 percent to 32 percent.

An option for quickly creating new programs that does not require high institutional capacity is to use work programs. These programs provide jobs and income through public infrastructure projects (like road construction, maintenance, irrigation infrastructure, reforestation, and soil conservation) or, especially in postdisaster situations, debris removal, rehabilitation, or reconstruction tasks. Work programs are self-targeted: people join only if alternative income sources are lacking. The Productive Safety Net Program in Ethiopia is largely implemented through a public works component that supports income generation for poor people and explicitly encourages adaptation. In fact, 60 percent of the projects target soil and water conservation, strengthening both livelihoods and resilience to the impacts of variable rainfall.

How to pay for social protection

Experience shows that safety nets remain affordable and reduce the need for costly humanitarian interventions. Still, governments need to fund social protection systems, and ensure that financial liquidity is not a bottleneck to delivering adequate postdisaster support. Options include:

- **Reserve funds.** The Risk Financing Mechanism in Ethiopia is a fund dedicated to scaling up social protection, which allows the Productive Safety Net Program to increase its support to vulnerable people. Similarly, Mexico’s Natural Disasters Fund (FONDEN) was created as a budgetary tool to rapidly allocate federal funds for rehabilitation of public infrastructure affected by disasters.

- **International aid.** When a country’s capacity to cope with a disaster is exceeded, humanitarian emergency support is critical. But foreign aid’s response to disasters tends to be sensitive to media coverage, is unpredictable, and can be slow to arrive—all of which makes it unsuitable to use as the basis for contingency plans. Foreign aid should thus be regarded as a resource of last resort.

- **Insurance and catastrophe bonds.** Governments can use insurance to finance the scale-up of social protection—in that case the population is indirectly insured through the government budget, reducing transaction costs. In 2006, Mexico’s FONDEN issued a $160 million catastrophe bond to transfer part of the country’s earthquake risk to international
capital markets. Insurance products also offer benefits in the form of fiscal discipline and timeliness of budget allocation. But high premiums reduce the benefits from sovereign insurance.

- **Regional risk-sharing facilities.** The Caribbean Catastrophic Risk Insurance Facility currently pools disaster risk across 16 countries and provides participating governments with quick-disbursing, short-term liquidity for financing responses and early recovery from major earthquakes or hurricanes. In response to Cyclone Pam in March 2015, the Pacific Catastrophe Risk Assessment and Financing Initiative provided Vanuatu with a rapid $1.9 million payment to support immediate postdisaster needs, 8 times the government’s annual emergency relief provision.

- **Contingent credit: Cat-DDOs.** In 2007, the World Bank introduced Catastrophe Deferred Drawdown Options (Cat-DDOs), a financing instrument allowing countries to access budget support in the immediate aftermath of a disaster. A loan can be rapidly disbursed if a state of emergency is declared. Cat-DDOs can be used to back up existing insurance pools. Cat-DDOs also incentivize proactive actions to reduce risk: to be eligible, governments must demonstrate capacity to manage natural risks.

  Cat-DDOs are effective, but governments tend to favor cash in hand over contingent instruments. As a result—and despite strong interest from many countries—the uptake of Cat-DDOs has been limited. One option to improve access to contingent finance would be to remove this trade-off between cash in hand and contingent finance by separating the budget allocated to contingent instruments from the budget allocated to traditional lending.