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ECONOMIC CRISIS

## BUILDING ADAPTIVE SOCIAL PROTECTION SYSTEMS IN SOUTH ASIA

*Edited by Kelly Johnson and Thomas Walker*



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# FOREWORD



The work for this report began during the COVID-19 pandemic which severely impacted South Asia. The pandemic functioned as a real-life stress test and revealed the strengths and shortcomings of social protection and basic service delivery systems around the globe.

While the long-term impacts of the pandemic are still unclear, the immediate consequences of extraordinary losses of life, livelihoods and learning have forever marked the region and the globe. Countries are now seeking to recover from the pandemic while at the same time preparing for climate change and transitioning to greener economies. Building adaptive social protection systems is thus a priority for all countries, but especially for South Asia, which is home to so many of the world's poorest people and is extremely vulnerable to climate change.

The World Bank considers adaptive social protection to be an important characteristic of the best social protection programs. Adaptive social protection programs are those that are prepared to respond to covariate shocks of all kinds to prevent losses of human capital and increased poverty. This report piloted the use of a stress test methodology that was designed to examine and assess the key building blocks of each country's social protection systems and determine where investments are needed to ensure these systems can be used to respond to shocks in the future.

The report begins with an overview of the state of social safety nets in South Asia and the region's vulnerability to shocks, particularly natural disasters. It then examines the institutional arrangements within the region for adaptive social protection, including linkages to other sectors, such as disaster risk management authorities, and between different levels of government. This section includes analysis on the administrative, legal, and policy arrangements needed to maximize the adaptability of a social safety net. Next, the report covers the various financing models that can be used to support scaling a safety net up and out in times of crisis. This chapter looks at measuring the contingent liabilities government face and how to layer different financing options based on the likelihood of certain types and magnitudes of disasters. The report also examines the different program design and implementation modalities that adaptive social protection systems can take, as well as the data and information systems that are needed to support shock response. It finishes with critical recommendations for the region.



As the pandemic wanes we know there are other shocks on the horizon – many of which will be exacerbated by climate change. The findings and recommendations in this report can help guide governments as they develop adaptive social protection schemes before these shocks materialize. The World Bank Group is already working with governments around the world to develop adaptive social protection programs, including in South Asia. As this report was being finalized, Pakistan was hit by devastating floods. The Government of Pakistan and its development partners are banding together to respond, and World Bank teams are supporting the government to use its social safety net to help those who need it most.

We hope this report can provide the basis for a structured approach to investing in and implementing adaptive social protection systems, and help encourage further dialogue in the region so that we may all continue to learn about this critical new field of social protection.

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## ■ ACKNOWLEDGMENTS

This report is the result of sustained dialogue within the Social Protection and Jobs Global Practice of the World Bank and across the South Asia Region. It is based on background reports which used a stress test methodology to assess the relative strengths of each country's social protection systems and their ability to respond to shocks. The authors would like to thank to the teams that developed those background reports: Maria Virginia Ceretti (Extended Term Consultant), Kenichi Nishikawa Chavez (Senior Economist), Francesco Tisei (Consultant), Ambrish Shai (Senior Social Protection Specialist), Ali Nadeem Qureshi (Social Protection Specialist), Zaineb Majoka (Economist), Phillippe George Leite (Senior Social Protection Specialist), Jyoti Pandey (Senior Social Protection Specialist), Mira Saidi (Social Protection Specialist). The authors also benefited from the guidance and direction provided by Stefano Paternostro, (Practice Manager), Lynne Sherburne-Benz (Director) and Hans Timmer (Chief Economist). They would also like to thank Ugo Gentilini (Global Lead for Social Assistance), Asha Williams (Senior Social Protection Specialist), Francesca Lamanna (Senior Economist), and Thomas Bowen (Social Protection Specialist) for their comments and direction when reviewing various drafts of the report.

Finally, the authors wish to recognize the generous award of a grant from the World Bank's Rapid Social Response Adaptive and Dynamic Social Protection (RSR-ADSP) Umbrella Trust Fund Program, which is supported by the Russian Federation, United Kingdom, Norway, Sweden, Australia, Denmark, and the Bill and Melinda Gates Foundation, without which this work would not have been possible.







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## ABBREVIATIONS AND ACRONYMS

### ASP

adaptive social protection

### BISP

Benazir Income Support Programme  
(Pakistan)

### DRM

disaster risk management

### GDP

gross domestic product

### MODMR

Ministry of Disaster Management  
and Relief (Bangladesh)

### NGO

nongovernmental organization

### NNDIS

National Natural Disaster Insurance  
Scheme (Sri Lanka)


### OECD

Organization for Economic  
Co-operation and Development

### SEDATU

Secretariat for Agrarian, Land, and  
Urban Development (Secretaria de  
Desarrollo Agrario, Territorial y  
Urbano) (Mexico)

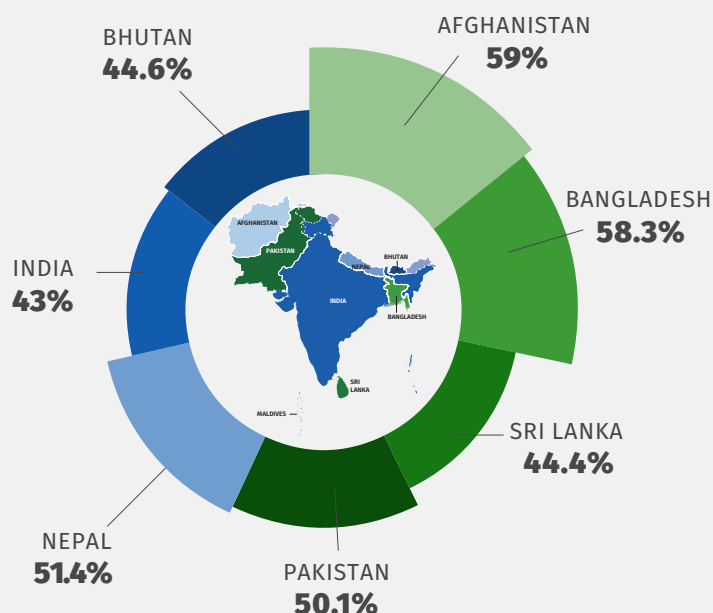




**Conventional approaches to social protection, such as targeted or categorically targeted social assistance programs, reach only a subset of the people in need of assistance following large shocks.**

# EXECUTIVE SUMMARY

The countries of the South Asia region have made tremendous progress in poverty reduction and human capital acceleration. However, the gains are at risk of setbacks caused by shocks to incomes and assets. Natural disasters, economic shocks, and disease outbreaks tend to disproportionately affect the poor and vulnerable, thereby widening the equality and opportunity divide (figure ES.1; map ES.1). The broad spectrum of risks and hazards to which countries in the region are exposed underscores the importance of adaptive social protection (ASP) to help protect the most vulnerable.



**FIGURE ES.1**

Population Exposure to Climate Hazards, South Asia

*Agarwal et al. 2021*



## MAP ES.1

Significant  
Disasters,  
South Asia  
(2001-Present)



**EARTHQUAKES**

Afghanistan- **166** (2002), **1,150** (2022)  
Pakistan- **825** (2005)  
India- **13,805** (2001), **75,000** (2005)  
Bhutan- **11** (2009)  
Nepal- **8,969** (2015)



**LANDSLIDES**

Sri Lanka- **101** (2016)  
Bhutan- **10** (2021)



**TSUNAMIS**

India- **16,269** (2004)  
Maldives- **108** (2004)  
Sri Lanka- **35,322** (2004)



**FLOODS**

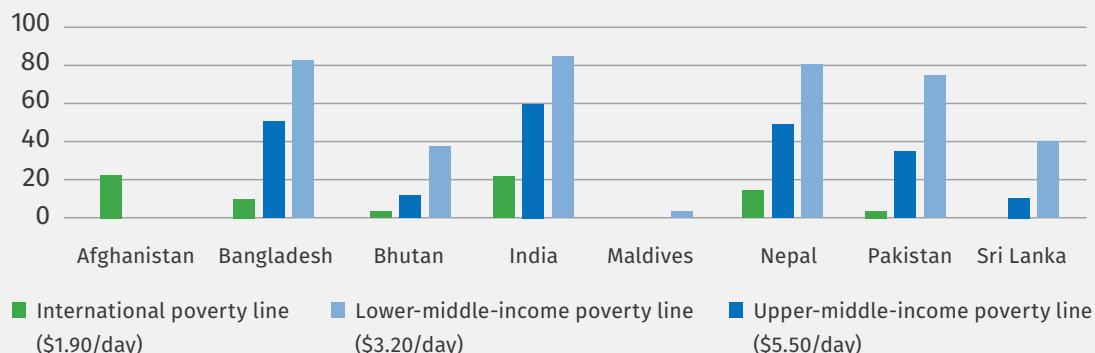
Pakistan- **1,985** (2010), **1,717** (2022)  
India- **6,453** (2005)  
Sri Lanka- **208** (2017)  
Bangladesh- **150** (2022)

The World Bank has developed a framework for ASP that illustrates the four elements that need to be considered in establishing an ASP system: institutional arrangements, financing, programs, and information and data systems. This report analyzes the social protection systems across South Asia to inform future dialogue and policy making, as well as to highlight both the functioning aspects of existing ASP systems and the areas in which further improvement is warranted. It is intended to be a practical and timely guide for government officials, development professionals, and researchers who are interested in enhancing the resilience of social protection systems and, by extension, households and societies.

Advancing the ASP agenda represents a crucial investment for the countries in the region in the 21st Century. Despite the significant progress in reducing poverty over past decades, a large share of the population in the region is still living below the lower-middle-income poverty line, making them vulnerable to extreme poverty if they become affected by even a moderate shock (figure ES.2). Given the increased risk of such shocks because of climate change, it is imperative that governments consider how to protect vulnerable groups against unexpected and sudden events at least in a contingent manner.

## FIGURE ES.2

Poverty  
Headcount  
Ratios,  
South Asia,  
2020



Source: Data at Poverty headcount ratio at national poverty lines (% of population) (dashboard), World Bank, Washington, DC, <https://data.worldbank.org/indicator/SI.POV.NAHC>. Data on lower and upper middle income poverty rates for Afghanistan were unavailable.



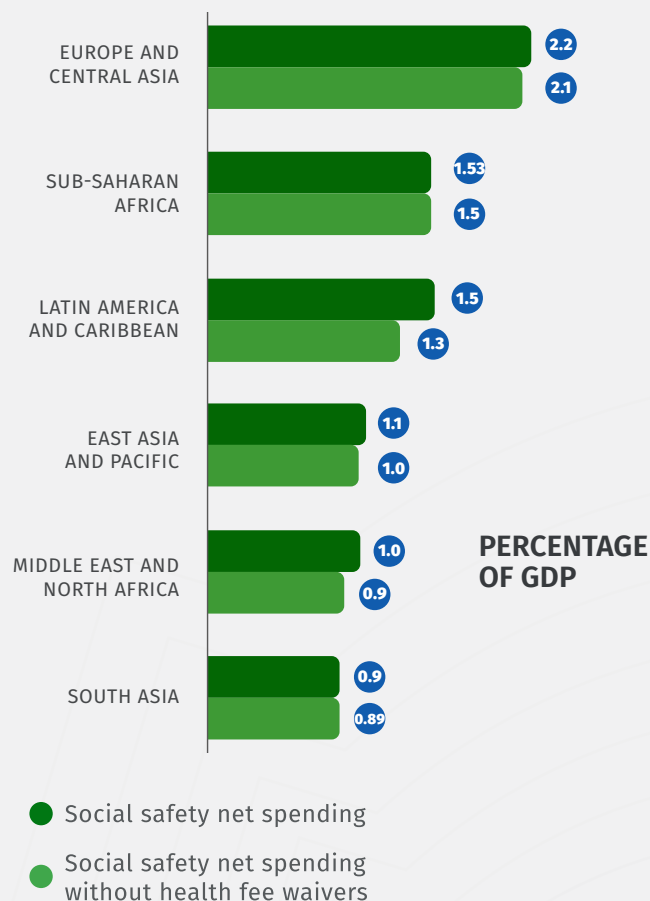
South Asian countries spend an average of 0.9 percent of gross domestic product (GDP) on social safety nets, which is lower than the global 1.5 percent average among low- and middle-income countries (Figure ES.3). The benefits provided through social protection programs in the region are generally inadequate and do not contribute substantially to poverty reduction. The region has historically relied on categorical transfers (for example, for the elderly, people with disabilities, and marginalized groups); only a few countries have broad-based cash transfer programs that can be scaled up in response to shocks.

ASP can effectively complement a government's disaster risk management (DRM) strategy by allowing for the deployment of empirical, time-bound assistance to households in need to provide cost-effective protection to human capital during and after shocks. In line with the principles of the Grand Bargain, the ASP framework is geared toward enabling governments gradually to take the lead on crisis preparedness, thereby cushioning their citizens from the negative socioeconomic impacts of shocks in an inclusive and sustainable manner.<sup>1</sup> Advancing the ASP agenda requires strong government ownership and high levels of accountability to facilitate the transition from reliance on ad hoc disaster relief responses to government-led shock responses embedded in government-owned systems. These are novel objectives for social protection worldwide, but particularly in South Asia, where there is a long-standing tradition of social assistance and social insurance, sometimes enacted in response to shocks, but rarely designed to respond to shocks.

1 See the Grand Bargain (official website), Inter-Agency Standing Committee, Geneva, <https://interagencystandingcommittee.org/grand-bargain>.

**FIGURE ES.3**

Average global and regional spending on social safety nets



Source: Authors



**Building an effective ASP system involves improving existing social protection arrangements along four key dimensions, as follows:**

## **1) INSTITUTIONAL ARRANGEMENTS**

Because disasters are usually unanticipated, novel events, interagency committees or task forces are normally established to coordinate the response. In recent years, DRM policies and even legislation have been adopted in many countries to streamline this process. However, these laws and policies may need elaboration to define clear roles and responsibilities for social protection in the response to disasters. Defining clear and formal links between DRM and social protection can allow for the deployment of timely assistance and avoid the duplication of efforts, ensuring that the benefits reach those who need them most and helping create social protection programs and systems that are responsive by design.

## **2) FINANCING**

Given the potentially significant costs associated with a large covariate shock, ex-ante financing plans and, in some cases, contingent financing are needed. Social protection responses are more rapid if the financial instrument or combination of instruments (for instance, the risk layering approach) that will be used during such crises is identified and established in advance. To do so, governments must determine how much financing is likely to be needed in the event of specific shocks and earmark funds each year according to the expected need, so that these resources are readily available if a shock hits. To facilitate this process, governments can adopt a risk layering approach consisting of three layers—risk retention, contingent financing, and market-based instruments—that allow for the mobilization of different financial instruments based on the nature and scale of the shock experienced.

## **3) PROGRAMS**

Ideally, the assistance provided to poor and vulnerable households in the event of a shock should be routed through existing government social protection programs, which, in many cases, have already been established and have ongoing relationships with beneficiaries. This enables the relief to be provided cost-effectively as needed and gradually phased out as the households recover. Some programs can also help build the resilience of households to future shocks, such as by diversifying household livelihoods and incomes, investing in local infrastructure and human capital, and educating households about risk mitigation and coping strategies. Worldwide evidence in fact shows that anticipatory resilience-building can result in a speedier recovery among shock-affected households. Moreover, the delivery systems associated with such programs are crucial in rapidly expanding assistance in times of shock, especially among those not typically reached by social protection programs and hard-to-reach populations.

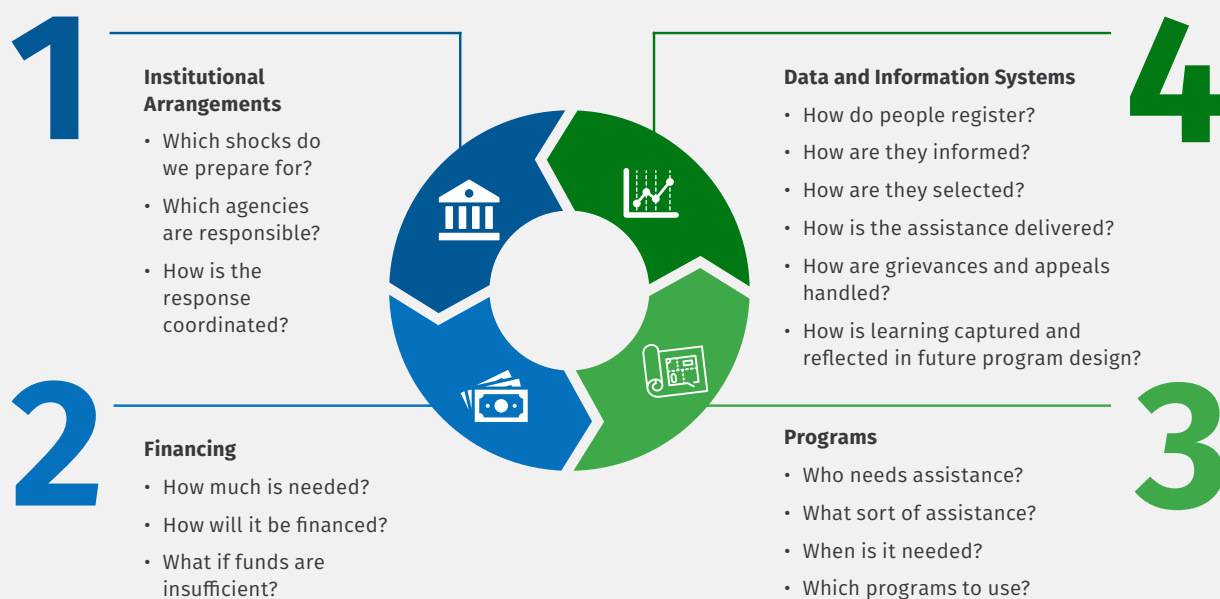
## **4) DATA AND INFORMATION SYSTEMS**

Reliable data and robust information systems are at the heart of ASP systems, as they inform and support the deployment of timely action during shocks. Governments require data to identify who needs help, determine eligibility, and facilitate payments. Social registries can help governments quickly determine need based on the socioeconomic status of households to facilitate the selection of beneficiaries for disaster relief. Linking early warning systems to social protection programs can also allow for more timely shock responses by offering a sense of the number of people likely to be affected and the expected level of payments. Electronic information systems are increasingly being used to facilitate rapid benefit payments to households, including through direct debit and mobile money methods.

In the event of a shock, the decision process followed by a government begins at the institutional level (guided by ex-ante arrangements and customary practices), is moderated by decisions on the amount of financing available and which programs are usable for the response, and finally depends on the data and information systems that can be used to deliver

assistance to those affected. In turn, the outcomes of this process inform changes to institutional arrangements and practices that will determine the response to subsequent shocks. In this sense, the ASP system is a cyclical one that evolves both through intentional reforms and organically in response to the major shocks experienced by a country.

**FIGURE ES.4** Four Elements of the ASP Framework



## ES. 1 ASP in South Asia

For each country, the World Bank team assessed the current social protection system, gauging its adaptability and identifying possible directions for reform to achieve the goal of an integrated ASP system. What has emerged

clearly from the analysis is that each country has relative strengths, but no country has an ASP system that is fully developed across all four elements. Accordingly, there are opportunities in every country in South Asia to make social protection more adaptive. The country-level findings are summarized below.

## ES.1.1 Institutional Arrangements

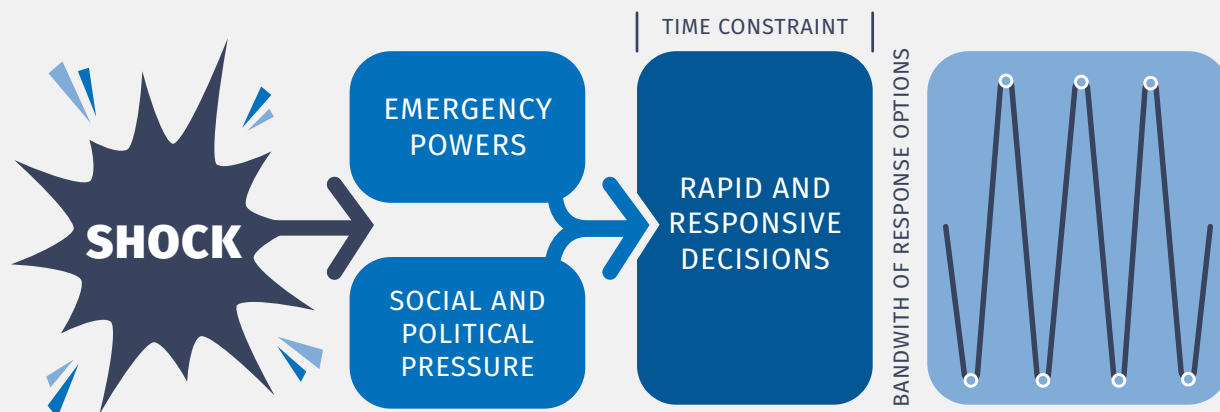
Reflecting the importance of governance and institutions to discussions on social protection in South Asia, this report argues that ASP systems should be responsive by design, that is, they should be prepared with robust pre-established institutional arrangements to respond to shocks (figure ES.5). But it can also be seen as an opportunity in the sense that social protection is more highly embedded in the extant social and policy framework, and therefore its continued relevance and ability to function in a changing world is more important to policy makers. The challenge is to identify institutional arrangements that enable long-standing programs to become more flexible and responsive to the evolving needs of the population.

Formalizing the role of social protection in the disaster response framework allows governments and other actors to channel assistance through existing programs and delivery systems in the event of a shock. Stronger synergies between DRM and social protection agendas in South Asia should be actively sought to allow for higher levels of coordination during shock responses,

as opposed to relying on ad hoc interventions and partnerships. In the case of Nepal, there is a certain degree of recognition of the role of social protection in the DRM policy, but such a link is not supported by a sound institutional framework to guarantee smooth coordination among government agencies. In Bangladesh, social protection's role is legally formalized, but the country's main social security actor, the Ministry of Social Welfare, is not included in the National Disaster Management Council, which oversees all disaster relief efforts. And in Sri Lanka, disaster compensation payments could be means-tested if the national disaster insurance system were linked to an updated social registry.

In planning for shock responses, it is important to consider all types of resources required for the relief effort, given that the efficacy of such responses is contingent on the capability of mobilizing people, material resources, and outsourced capacity. Formalizing a pathway for the use of these resources in the event of a shock helps mitigate the misuse and lowers the risks for program administrators. Many countries have pre-established mechanisms for shock

**FIGURE ES.5** Decision-Making and the Bandwidth of Policy Options during Emergencies



Source: Authors



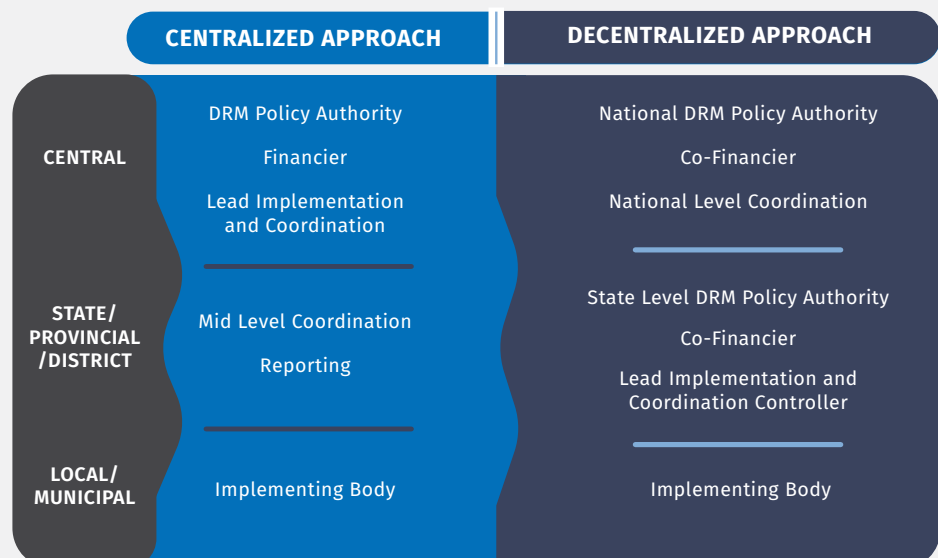
**Formalizing the role of social protection in the disaster response framework allows governments and other actors to channel assistance through existing programs and delivery systems in the event of a shock.**

response, usually comprising three main bodies: a DRM policy authority, a management authority, and an incident command system. An example of a DRM policy authority in South Asia is Bhutan's National Disaster Management Authority, a high-level committee comprised of the prime minister and a number of ministries and secretariats within ministries. Most countries in South Asia have a management authority that falls under the executive branch, but in Bangladesh and Sri Lanka this authority falls under a disaster management ministry. India's incident command system—a flexible organizational structure activated in a crisis—is notable in that the National Disaster Management Authority formally designates a nodal ministry to lead the various shock responses.

Because post-shock coordination must occur simultaneously at different levels, ASP systems can only function properly if they are well integrated into government structures. Following a shock, vertical coordination helps facilitate the decentralization of responses across the various levels of government administration (figure ES.6). Bangladesh, Bhutan, and Sri Lanka all have centralized systems with deconcentrated government units at the regional and local levels to which they delegate a number of responsibilities. Meanwhile, India, and Nepal have decentralized systems and devolve responsibilities to states and provinces. In both models, local capacity remains a significant constraint, given the lack of technical expertise and resource endowments to address the rise in needs caused by a shock.

**FIGURE ES.6**

**Centralized vs  
Decentralized  
Approaches  
in Disaster  
Management**

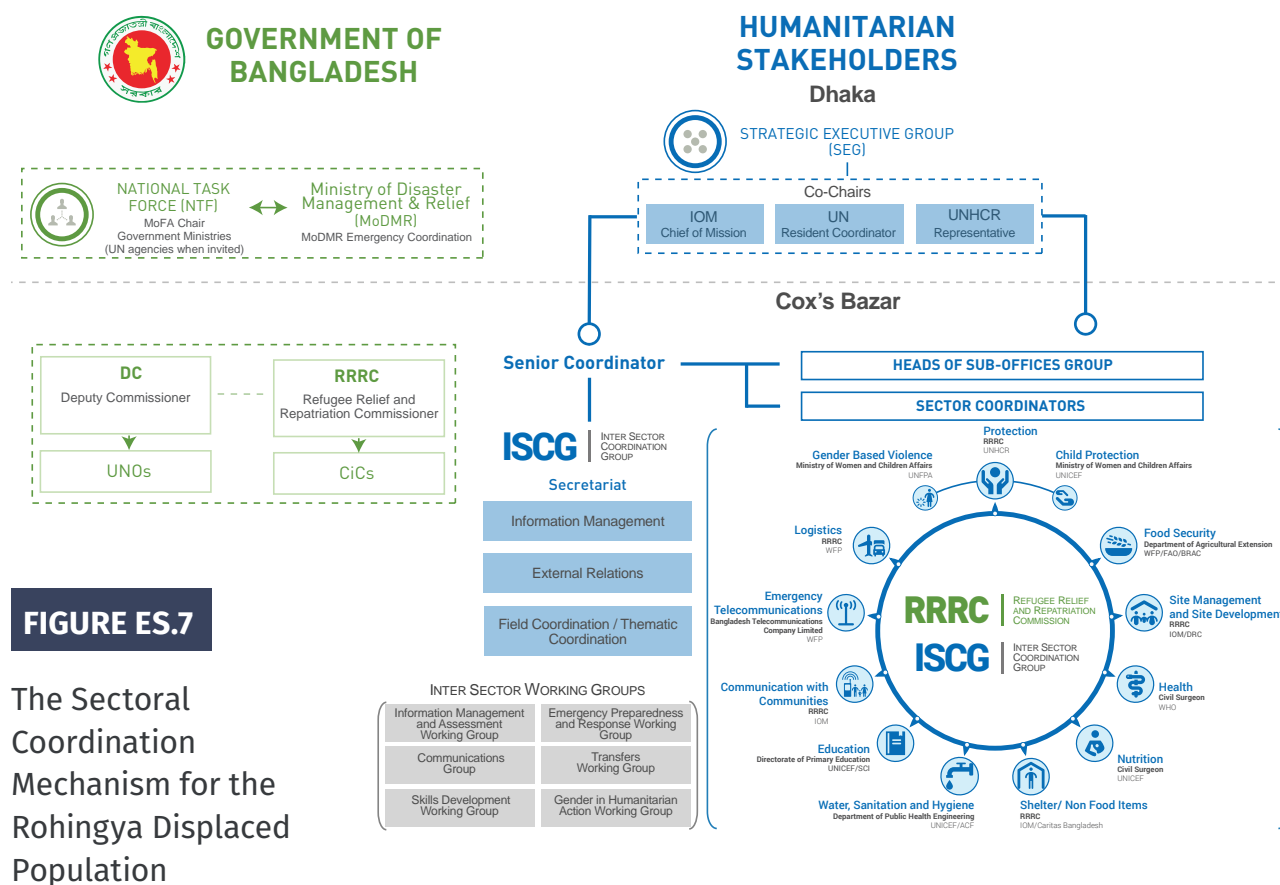


Source: Authors



The role of humanitarian actors varies greatly across countries. In Afghanistan, humanitarian agencies have typically taken the lead in coordinating shock responses to compensate for the absence of government-led shock responses. In Nepal, government and humanitarian actors run parallel initiatives, and disaster coordination is carried out ex-post in an ad hoc manner. Such a heavy reliance on humanitarian aid is often associated

with delays in deploying assistance to the most vulnerable. In Bangladesh, India, and Pakistan, humanitarian actors play a complementary role, in close coordination with national governments, but mostly for large-scale shocks and crises, such as in the case of the displaced Rohingya population crisis, which has required the creation of the Inter Sector Coordination Group under the supervision of the government of Bangladesh (figure ES.7).



**FIGURE ES.7**

The Sectoral Coordination Mechanism for the Rohingya Displaced Population

Source: Inter-Sector Coordination (dashboard), Inter Sector Coordination Group, Cox's Bazar, Bangladesh, [https://www.humanitarianresponse.info/sites/www.humanitarianresponse.info/files/documents/files/211213\\_rohingya\\_response\\_coordination\\_mechanism.pdf](https://www.humanitarianresponse.info/sites/www.humanitarianresponse.info/files/documents/files/211213_rohingya_response_coordination_mechanism.pdf)



### KEY RECOMMENDATIONS FOR THE INSTITUTIONAL ARRANGEMENTS BUILDING BLOCK

- Responsive by design means being prepared. An essential part of preparedness is having pre-established institutional arrangements. There are four basic institutional underpinnings for ASP: first, establishing a clear role of ASP in the country's DRM framework; second, developing ASP specific guidelines or policies; third establishing clear linkages to financing mechanism, and fourth having prepared administrative resources.
- While shifting toward the institutionalization of ASP, it is essential to understand the perspective of government constituencies to garner their buy-in and ultimately enable the integration of social protection across all phases of the shock cycle.
- To facilitate a more rapid and coordinated disaster response, social protection should be embedded in the DRM policy and institutional framework.
- It is essential to clearly define the roles and responsibilities of nongovernmental and humanitarian actors in times of crisis and foster collaboration with government programs to improve the effectiveness of shock responses and build government capacity.

## ES.1.2 Financing

Financing ASP requires an understanding of the resources required for events of various magnitudes, the identification of preplanned financial instruments that release financing when needed, and the selection of distribution mechanisms (figure ES.8). The absence of any of these components can hinder the deployment of financial support for shock responses or raise the cost.

**FIGURE ES.8** Financing ASP



Source: Authors

Prearranged financing for emergencies permits a greater degree of efficiency in public financial management by making responses timelier and more cost-effective and the disbursement of resources more predictable. Financial instruments that can be used for this purpose include contingency budgets and dedicated disaster

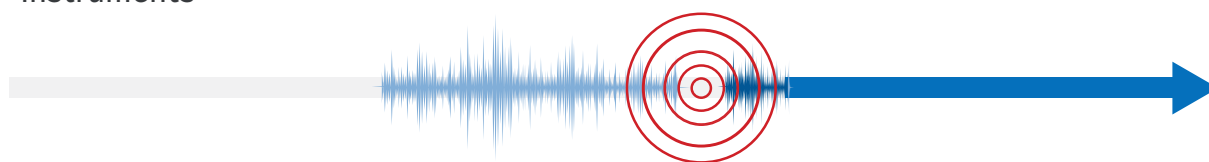
reserve funds, which provide rapid, flexible financing for smaller events (figure ES.9). Market-based risk transfer instruments, such as contingent credit and sovereign insurance, are more suited to major emergency financing needs.

**FIGURE ES.9.**

**There are multiple financing instruments that allow governments to finance the cost of disasters.**

Overview of  
Disaster Risk  
Financing  
Instruments

These instruments can be categorized as those arranged before a disaster (ex ante) versus those mobilized after a disaster (ex post). The list below offers examples of financial instruments that have been used to finance post-disaster activities.



## EX-ANTE FINANCING INSTRUMENTS

- 1 DISASTER RESERVE FUND**  
A dedicated disaster response fund, where undisbursed funds can be rolled over.
- 2 CONTINGENCY BUDGET**  
A separate budget line that is drawn down in the event of a disaster shock.
- 3 CONTINGENT CREDIT**  
A loan arranged in advance that provides immediate liquidity once a predetermined trigger is met.
- 4 (SOVEREIGN) RISK TRANSFER INSTRUMENTS**  
Instruments such as insurance and catastrophe bonds that allow governments to transfer disaster risks to the markets and rapidly access payouts in the event of a major disaster.

## EX-POST FINANCING INSTRUMENTS

- 1 BUDGET REALLOCATION**  
Redistribution of funds from other programs to cover emergency response and recovery needs
- 2 BORROWING**  
Raising of funds by issuing bonds or contracting loans from recovery and reconstruction.
- 3 TAX INCREASE**  
Temporary or permanent tax increases as a last resort to finance post-disaster activities
- 4 INTERNATIONAL AID**  
External development partners' assistance, which is often unpredictable.

Source: World Bank 2019



Relying solely on international humanitarian aid is time-consuming and the levels of mobilized funding are unpredictable because of frequent gaps in funding pipelines. The establishment of a robust and transparent social protection system, supported by sound institutional arrangements that can be adapted to address the increase in needs caused by a shock, can in fact encourage donors to channel post disaster funds through government systems.

Two-thirds of the countries in South Asia have dedicated reserve funds for disasters. However, these are not linked to the respective social protection systems. All countries in the region leverage ex-post instruments. While effective for securing funds, these can also lead to delays in releasing funding for shock responses. Some countries thus rely on budget reallocations, which, however, can be time-consuming and hence not desirable from an ASP perspective.

India, Nepal, and Pakistan have dedicated disaster contingency funds at the state and federal levels. These have been used to respond to the pandemic. By contrast, Afghanistan did not benefit from any overarching policy linking disaster financing to social protection systems, despite a revision of the government's contingency fund allocation in early 2020, which had been revised to commit up to 25 percent of available funds for disaster response.

A few countries, such as Nepal and Sri Lanka, have piloted risk transfer schemes, but no country has yet purchased a sovereign risk transfer product. There are, however, some examples of sectoral or subnational risk transfer schemes, such as the Natural Disaster Risk Group Insurance Program, which extended insurance to over 1.7 million people in Karnali Province of Nepal and the former National Natural Disaster Insurance Scheme in Sri Lanka.

In recent years, many countries in South Asia have made progress in establishing preplanned financial instruments to enable rapid response, but the development of risk financing strategies is still nascent. Developing realistic risk financing strategies can enable the inclusion of ASP measures in multisectoral responses to covariate shocks. Only Nepal has a national disaster risk financing strategy, but this has not been linked to existing social protection systems.

The majority of countries in South Asia have not quantified the financial need to cover future disasters. They should do so with urgency as the region deals with the complexity of compound risks. Such an effort could help inform the selection of preplanned instruments that release financing as needed and enable timely shock responses that can prevent dramatic losses in lives and livelihoods.



## KEY RECOMMENDATIONS FOR THE FINANCING BUILDING BLOCK

- Promote links between social protection systems and disaster risk financing strategies through a risk layering approach, using robust disaster data and analytics for decision-making.
- Establish cost-effective disaster risk financing strategies based on robust public financial management principles and a scientific assessment of the potential impact of shocks on the socioeconomic well-being of the population.
- Conduct thorough reviews of existing funding sources for complementary sources of funding, such as contingent credit with private sector institutions.
- Consider market-based instruments, such as sovereign risk transfer, given their potential in expanding the available financing capacity rapidly following a shock.

### ES.1.3 PROGRAMS

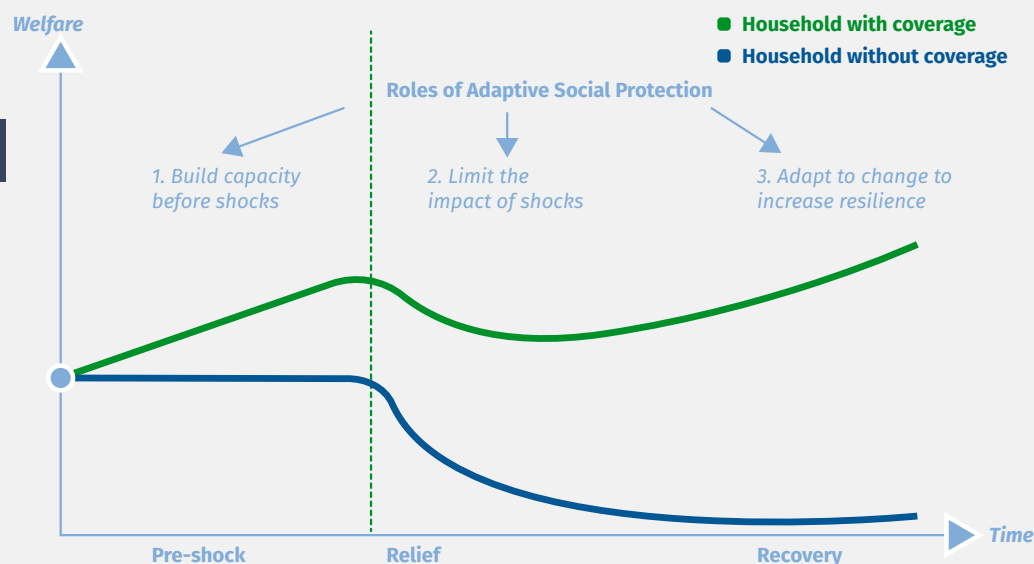
Social protection programs play a key role in addressing the impacts of different types of shocks and providing tailored assistance to multiple groups of shock-affected populations. Assistance can be

beneficial to affected populations at various stages in the timeline of a given shock, helping them build capacity before shocks occur, cope with shocks at the time of occurrence, and recover and adapt livelihoods after a shock has passed (figure ES.10).

**FIGURE ES.10**

The Role of ASP during the Different Phases of Shocks

Source: Adapted from OECD 2021



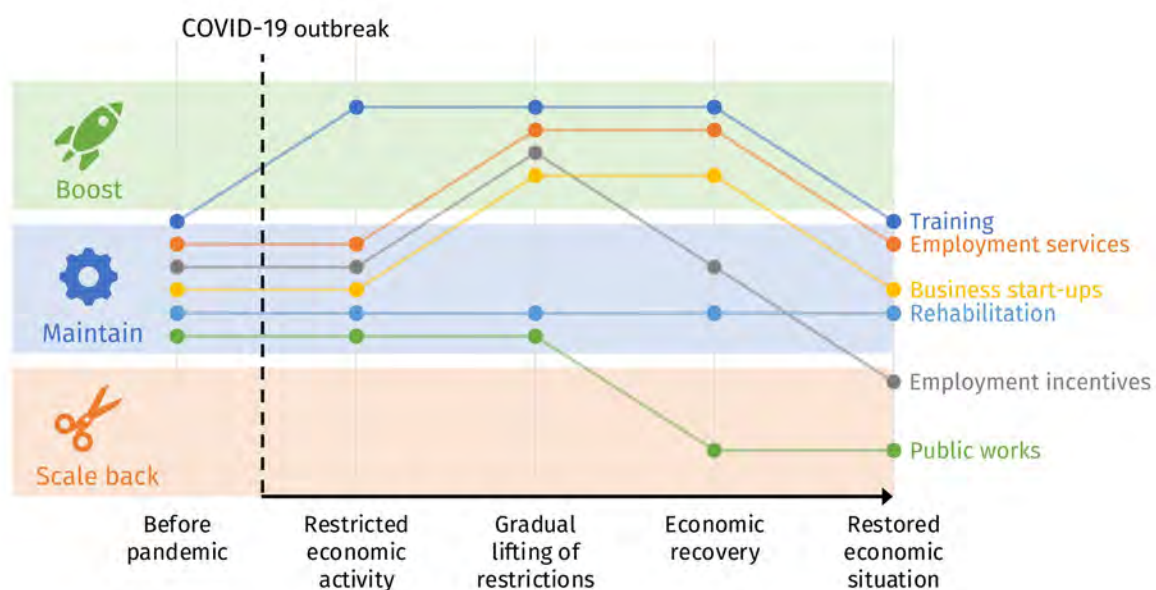
Worldwide evidence shows that robust social protection systems can serve as solid foundations for shock response, and investing in adaptive programs (for example, by strengthening government capacity, improving program systems and processes, and increasing coverage) can help enhance the everyday effectiveness of social protection programs. For instance, streamlining intake registration procedures or making information systems interoperable with those in other areas of public administration has helped the government of Nepal reach regular welfare beneficiaries with greater precision.

The limited coverage of social protection systems in South Asia limits the options available to governments in responding to crises. It is critical for each country to identify programs and systems that can be used in response to shocks as a means to provide tailored support to multiple groups of the shock-affected

population across the various phases of shocks. Labor market programs can also play a role in responding to crises by stimulating labor demand and promoting training programs, thereby promoting resilient livelihoods among vulnerable households.

To respond more effectively to the heightened needs caused by covariate shocks, all program features, including targeting, transfer modalities, the value of entitlements, and program expansion mechanisms, can be adapted as required (figure ES.11). During the COVID-19 pandemic, India opted to scale up existing large-scale programs horizontally and vertically, while Maldives and Pakistan established new programs that piggybacked on existing delivery systems. In some cases, governments prefer to rely on stand-alone programs to help people distinguish between regular programs and the shock response and make it easier to scale back assistance after the crisis.

**FIGURE ES.11** Scaling up and down labor market programs in times of shock



Source: OECD 2021.

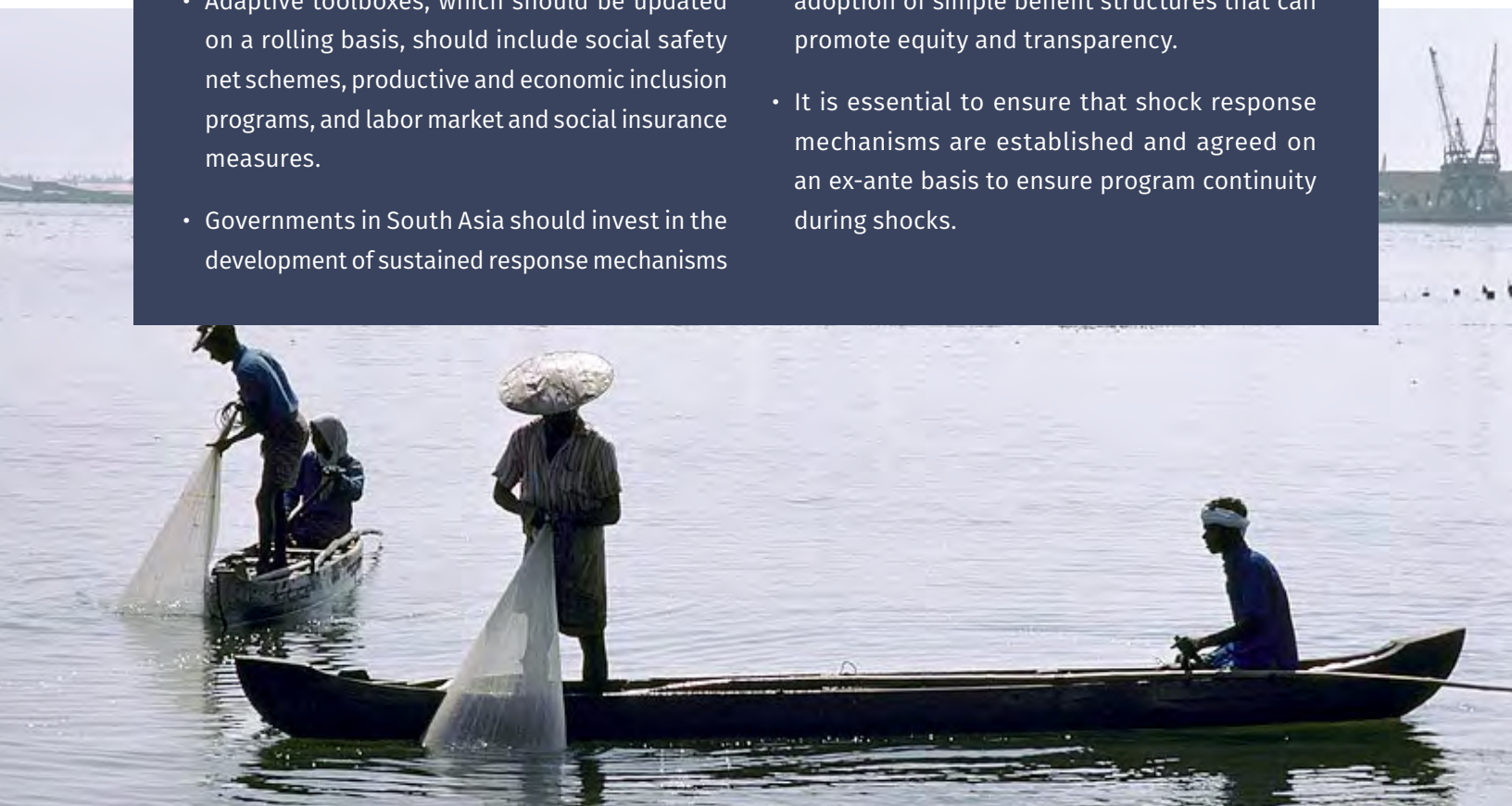


One of the added benefits of building links between shock response and social protection programs is the ability to include resilience-building interventions to reduce the risks households face. This should be actively explored by governments on both an ex-ante and ex-post basis as a means to enable a speedier recovery in the aftermath of a shock. For instance, in India, the introduction of climate-sensitive public works in the framework of the Mahatma Gandhi

National Rural Employment Guarantee Scheme has been instrumental in building climate resilience through the promotion of agriculture-based investments, the provision of soil conservation infrastructure, and building infrastructure at the local level. Similarly, in Bangladesh, shock-responsive elements were introduced in the Employment Generation Program for the Poorest, which entails public works programs during the two lean seasons.

## KEY RECOMMENDATIONS FOR THE PROGRAMS BUILDING BLOCK

- Given the diversity of impacts and the magnitude of covariate shocks across population groups, governments in South Asia should invest in the development of adaptive toolboxes that can be harnessed in response to shocks.
- Adaptive toolboxes, which should be updated on a rolling basis, should include social safety net schemes, productive and economic inclusion programs, and labor market and social insurance measures.
- Governments in South Asia should invest in the development of sustained response mechanisms to be integrated into regular systems and programs.
- Governments should ensure program and policy coherence by harmonizing the values of entitlements across interventions through the adoption of simple benefit structures that can promote equity and transparency.
- It is essential to ensure that shock response mechanisms are established and agreed on an ex-ante basis to ensure program continuity during shocks.



### ES.1.4 Data and Information Systems

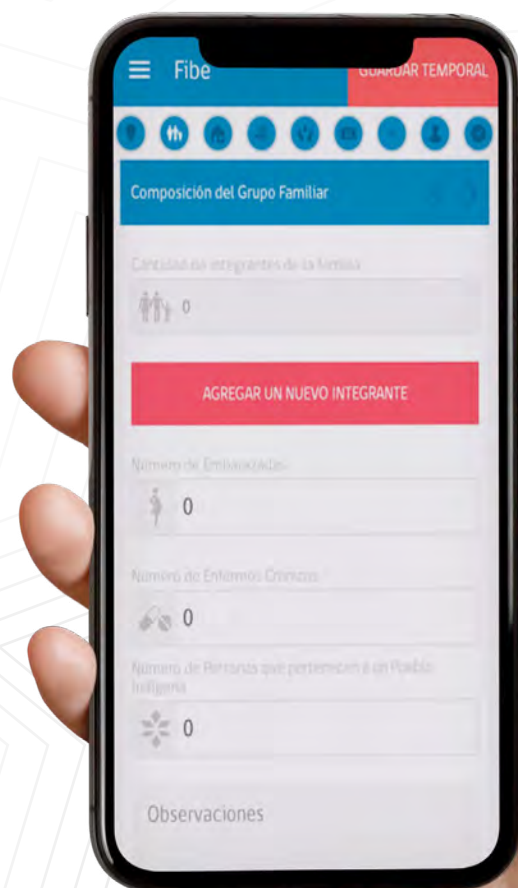
Reliable data are at the core of the ASP agenda because they help policy makers understand shock-related risks and design appropriate responses to mitigate the impacts. National identification systems, household survey data, integrated social protection delivery systems, and payment systems can all help policy makers reach and assist affected populations more rapidly. For instance, in response to the pandemic, the government of India launched the Pradhan Mantri Garib Kalyan Yojana scheme using existing large beneficiary registries to provide cash-based transfers to beneficiaries and employing the Aadhaar individual ID number to avoid the risk of benefit duplication. Capitalizing on existing technology for data collection is becoming increasingly important in ensuring the timeliness of shock responses channeled through ASP systems, as demonstrated by the widespread use of mobile phones and tablets to carry out household-specific needs assessments (figure ES.12).

Through early warning systems, governments can benefit from monitoring information systems that trigger early actions, especially in a context of growing climate-related risks that are more easily predicted. While such systems are still fragmented in South Asia and not necessarily linked to social protection systems, some countries (for example, Bangladesh, Maldives, and Sri Lanka) have ambitious development plans for early warning systems. The main challenges associated with the creation of links between social protection systems and early warning systems in South Asia include fragmentation, limited coverage, lack of interoperability, and issues related to the lack of robust information-sharing mechanisms.

There are a number of challenges related to data in South Asia, including the inadequacy of social registries, the variable quality and frequency of nationally representative household surveys that can inform risk and vulnerability assessments, and the lack of equitable and empirical targeting methodologies (figure ES.13). For instance, Nepal's social security allowance system covers only 3 million individuals (10 percent of the population) across all program categories. Meanwhile, Afghanistan and Sri Lanka have never had an integrated social registry. Regarding risk and vulnerability assessments, most South Asian countries carry out cross-sectional surveys only every five years, with the exception of Bhutan.

**FIGURE ES.12**

The FIBE App for Post shock Assessment



Note: FIBE = ficha básica de emergencia. The page shows a basic emergency factsheet to be filled out.

**FIGURE ES.13** Programs linked by social registries



Data protection protocols are also an important prerequisite for social protection systems. They are nascent in the region. In the case of India, the National Data Sharing and Accessibility Policy facilitates access to shareable government-owned data through a network with national coverage. In Pakistan, existing data-sharing platforms and protocols could be improved to enhance the synergies among provincial and federal initiatives and avoid the duplication of efforts.

Multiple administrative data and information sources are typically required to coordinate a social protection response (map ES.2). To ensure that this interoperability occurs in a streamlined manner during a crisis, it is helpful to define a multisectoral strategy and build consensus among stakeholders on the respective roles and responsibilities. In Bangladesh, for instance, a wide range of actors are engaged in data collection



without agreed standards for the collection and processing of the data. Building consensus around such standards could translate into improved targeting accuracy and reduce the duplication of efforts in the response to shocks.

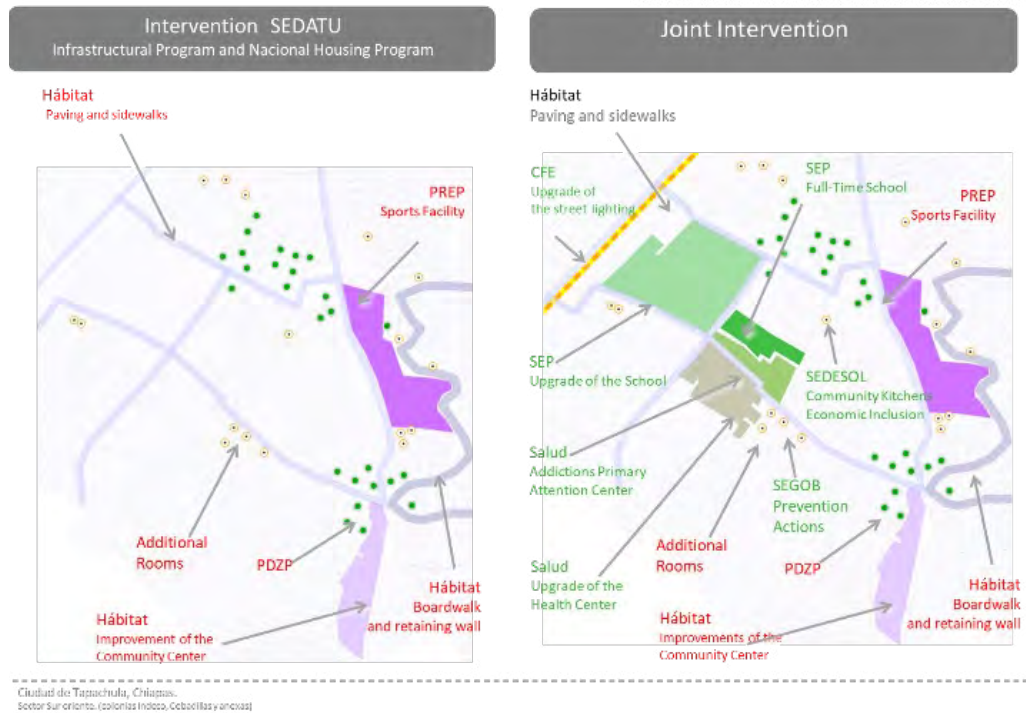
The pandemic has underscored the need to continue intensifying investments to increase the availability and interoperability of data in South Asia. This has the potential to improve the efficiency of ASP systems. As information systems become increasingly more relevant for ASP, associated mechanisms will need to evolve to promote higher levels of data quality and more robust data verification and validation processes.



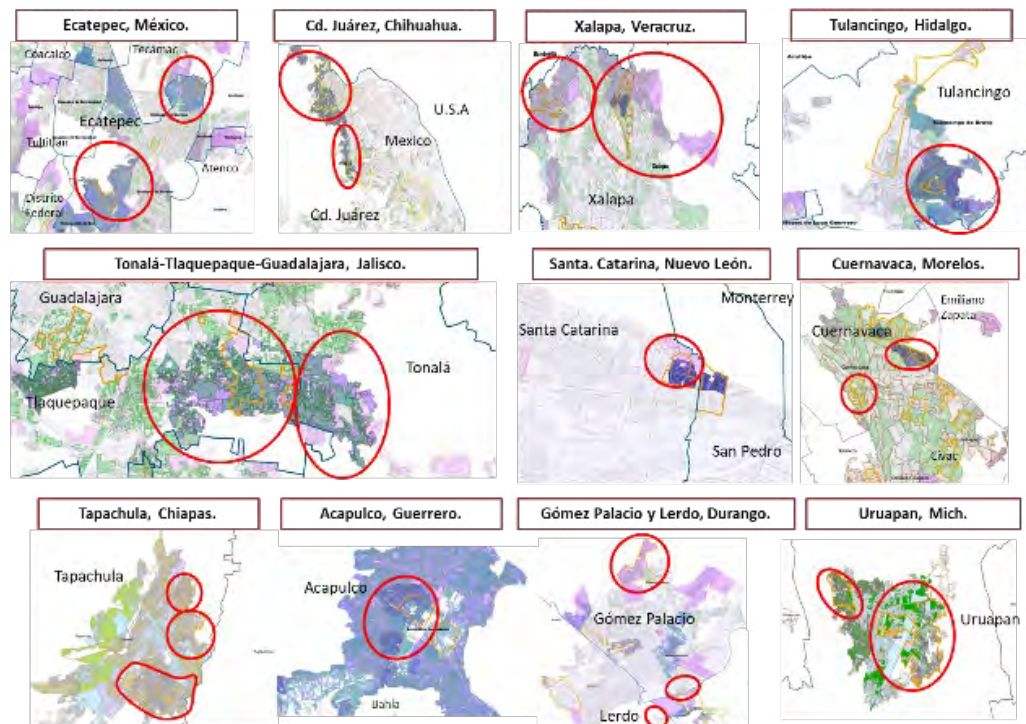
## MAP ES.2

Maps  
Generated  
through the  
Interoperability  
of Various  
Data Sources,  
Mexico

Intervention proposal  
of the Secretary  
of Agricultural,  
Territorial and Urban  
Development (SEDATU)  
and the Joint Socio-  
Urban Intervention



145 Urban  
Localities with  
Georeferenced  
Information

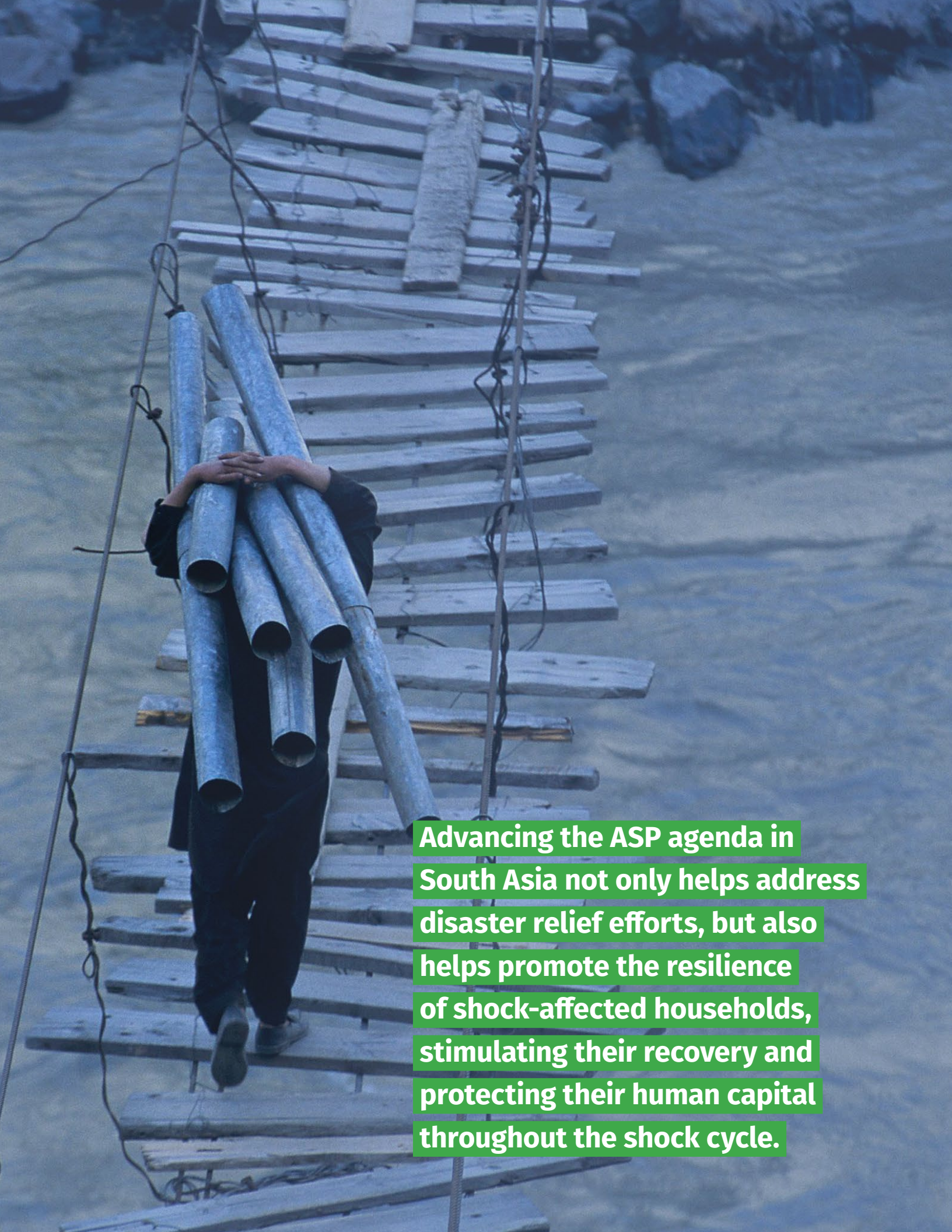


## KEY RECOMMENDATIONS FOR THE DATA AND INFORMATION SYSTEMS BUILDING BLOCK

- Governments across South Asia should continue intensifying investments in the development of comprehensive social registries and identification systems that can enable them to register and verify households rapidly in the aftermath of a shock.
- It is crucial to frequently update social registry data and establish mechanisms to update data more often during and following shocks.
- Further investments to make social protection systems interoperable can provide individuals with more efficient social assistance and labor market schemes.







**Advancing the ASP agenda in South Asia not only helps address disaster relief efforts, but also helps promote the resilience of shock-affected households, stimulating their recovery and protecting their human capital throughout the shock cycle.**



## CONCLUDING REMARKS

Considering the increasing frequency and severity of shocks in South Asia, there is a clear need for urgent investment in ASP systems. Reframing social protection as adaptive can help governments react more quickly and efficiently to shocks, while broadening the coverage and duration of assistance in accordance with needs, based on reliable data, financed through reallocated resources, and coordinated at the various institutional levels of governmental and nongovernmental actors.

Advancing the ASP agenda in South Asia not only helps address disaster relief efforts, but also helps promote the resilience of shock-affected households, stimulating their recovery and protecting their human capital throughout the shock cycle. It can also make social protection programs more effective and efficient

overall, enhancing their credibility and that of the government. Working toward the development of ASP systems requires strong government ownership and high levels of accountability.

The assessment of the social protection systems in South Asia underscores both the strengths and the areas for further investment and improvement across countries. Such improvements can be promoted by investing in broad-based social safety nets that can be expanded during crisis and by making the institutional and policy frameworks in which they are embedded more adaptive and tailored to the specific challenges faced because of shocks.



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**The pandemic has underscored the value to governments of robust social protection systems that can rapidly deliver assistance to households and build their resilience to shocks.**





# CHAPTER 1

## OVERVIEW

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**AUTHORS:** Kelly Johnson, Francesco Tisei, Thomas Walker, and Thisuri Wanniarachchi

### 1.1 Background

**Countries in the South Asia region have made tremendous progress in reducing poverty and accelerating human capital development. However, the gains remain vulnerable to setbacks caused by shocks to incomes and assets.** Changing climate patterns, rising temperatures, and steady growth in the number and magnitude of extreme weather events have worsened the risk profile in all eight South Asian countries (Amarnath et al. 2017). Urbanization has increased the concentration of household incomes and put additional pressure on limited natural resources. More than half of South Asians have been affected by one or more climate-related disasters in the past two decades (Roome 2022). Considering that the South Asia region comprises almost half the world’s remaining extreme poor, mitigating the region’s vulnerability to shocks and building household resilience will be a major factor in the eradication of extreme poverty by 2030, a goal that underpins the World Bank’s twin goals and the United Nations 2030 Agenda for Sustainable Development (Dixon 2016).<sup>2</sup>

**The socioeconomic impacts of the COVID-19 pandemic across South Asia have disproportionately affected the poor and vulnerable, thereby widening the equality and opportunity divide.** Estimates suggest that it may take years for South Asian economies to recover fully from the impacts of the pandemic, with

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<sup>2</sup> Resilience here is defined as the ability of a household to prepare for, cope with, and adapt to shocks in a manner that protects the well-being of the household.



severe repercussions on human capital, including the loss of jobs, the depletion of assets, and setbacks in children's educational progress (Otero Nule and Xie 2021). The pandemic has put the region's demographic dividend in peril, given that the majority of youth are either unemployed or in informal employment, a sector that has been disproportionately affected by the pandemic. Moreover, the extremely low rate of labor force participation among women across the region (23 percent, compared with 47 percent globally) has likely declined even further because of the disproportionate impact of the pandemic on women's employment. Addressing gender disparities will be an important step in reversing the devastating socioeconomic impacts felt over the past two years.

**While attitudes to social protection vary across South Asia, governments have shown an increasing willingness to extend temporary support to shock-affected individuals and households.** The pandemic and its ongoing socioeconomic repercussions have drawn attention to the risks faced collectively by societies including those exacerbated by the divide in outcomes between rich and poor. This has underscored the value to governments of robust social protection systems that can rapidly deliver assistance to shock-affected households and build their resilience against future shocks (box 1.1). Development partners are similarly keen to invest in social protection where it can protect human capital and reduce the impact

of economic and environmental shocks on the poor. From a political economy perspective, the notion that all households should be protected against the uninsurable risks posed by economic shocks and natural disasters is more widely appealing as a basis for investment in social protection than motives of charity or redistribution. However, the pandemic has also sharply worsened the fiscal situation, making it imperative to find innovative ways to finance social protection out of smaller fiscal and development financing envelopes.

**Notwithstanding the enormous reduction in poverty and the acceleration in human capital development achieved by the South Asian countries over the past few decades, millions of people remain clustered only slightly above the poverty line and are prone to falling back into poverty as the result of shocks.** Many vulnerable households rely on informal employment, which means their incomes are more sensitive to shocks and their access to formal insurance programs is hampered. Exposure to such risks, combined with low levels of savings, is a factor that dissuades many poor individuals from taking entrepreneurial risks or investing scarce savings in income-generating activities. Moreover, evidence shows the extensive damage provoked by recurrent shocks on destitute households. The shocks thus erode the limited human and physical capital of such households and perpetuate the vicious cycle of intergenerational poverty traps.



## BOX 1: THE IMPLICATIONS OF COVID-19 FOR WELFARE AND VULNERABILITY IN NEPAL

The impact of the pandemic on poverty is expected to be particularly severe in South Asia. According to estimates, the pandemic may account for approximately half of the increase in extreme poverty since its onset. In Nepal, the negative socioeconomic repercussions of the pandemic and the policy measures adopted in response have led to a contraction in all sectors of the economy. Given the country's consistently high levels of vulnerability and exposure to a multitude of hazards and shocks, Nepal was already at risk of a major rise in poverty prior to the pandemic. The reduction in poverty rates achieved between 1995 and 2010 was modest, given that two Nepalese in five were still vulnerable to falling back into poverty after a shock.

Nepal's continued reliance on the agricultural sector and its exposure to natural disasters and climate change raise the population's risk of falling into poverty. Health shocks and a decline in remittances may drive many Nepalese into poverty. Remittances have been a key driver of poverty reduction, providing direct income support among households with migrant workers and indirectly boosting local wages. Nepal has the world's fourth-largest share of remittances in gross domestic product (GDP): a quarter of households receive remittances. Given that remittances depend on global labor markets and exchange rates, they are especially vulnerable to external shocks.

Nepal's largest social assistance program, the Social Security Allowance, comprises five allowance schemes—senior citizens' allowance, single women's allowance, disability allowance, endangered ethnicity allowance, and child grant—covering close to 3.2 million individuals,

with benefits ranging from NPR 532 (USD 4.20) to NPR 4,000 (USD 32) a month. The Prime Minister's Employment Program is a minimum employment guarantee program that aims to provide up to 100 days of work annually to the poor and unemployed. The COVID-19 pandemic has underscored the modest impact that Nepal's social protection programs have had on poverty reduction. The reasons for this include the fragmented nature of safety nets, a lack of empirical targeting, and the inadequacy of the benefit amounts. Estimates show that these programs reduce the poverty headcount by only 0.5 percentage points.

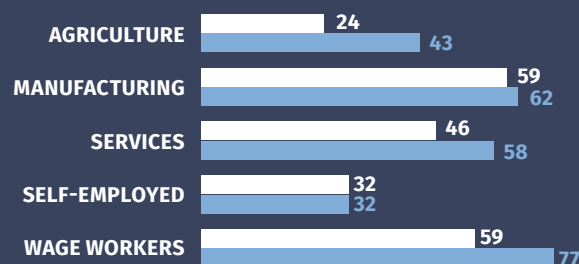
Nepal has suffered the highest relative aggregate job losses in South Asia as a result of the pandemic. New data suggest that 61 percent of economically active Nepalese suffered at least one deterioration in labor income and that the exposure to such losses was uneven. Wage workers were more negatively impacted than the self-employed across all sectors, while daily wage workers (including those in the agricultural sector) reported more significant losses relative to monthly wage workers (figure B1.1.1).

Despite the tangible negative impacts of COVID-19 on lives and livelihoods, the government of Nepal reported the least significant expansion in access to any new types of formal assistance among countries in South Asia. In the absence of versatile, adaptive social protection (ASP) programs that could be scaled up to reach shock-affected households across the country rapidly, the only additional assistance provided to the vulnerable has been channeled through existing categorical social assistance programs.

### BOX FIGURE 1

The Economically Active: Job Losses  
by Gender, Sector, and Type, 2020

■ MEN ■ WOMEN



## 1.2 Objectives of this Report

**Recognizing the importance of a shock-responsive social safety net system that protects all households from falling into poverty, governments and development partners are seeking guidance on how to make social protection programs and delivery systems more flexible and responsive to shocks.**

Although South Asian countries exhibit a diverse range of development levels, geographic profiles, and demographic characteristics, there is a broad interest among policy makers in learning from the experience of other countries about the role social protection can play in preparing for and responding to shocks. The literature on this subject is nascent, but the World Bank recently published a global report on adaptive social protection (ASP) that lays out a framework for guiding the design of such programs and systems. Following that report, ASP is defined here as “a dedicated area of focus within the wider field of social protection, examining and identifying the ways in which social protection systems can be prepared and enhanced ahead of large covariate shocks like COVID-19 to build the resilience of poor and vulnerable households—before, during, and after such shocks occur” (Bowen et al. 2020, vii).

**The purpose of this report is to apply the ASP framework to the South Asian context to guide future dialogue and policy making.** In responding to the COVID-19 pandemic, South Asian governments and development partners have demonstrated the capacity of their respective systems to respond to a major national crisis. This report draws on such insights, highlighting both the functioning aspects of existing ASP systems and the areas in which further improvement is desirable. It is intended to be a practical and timely guide for government officials,

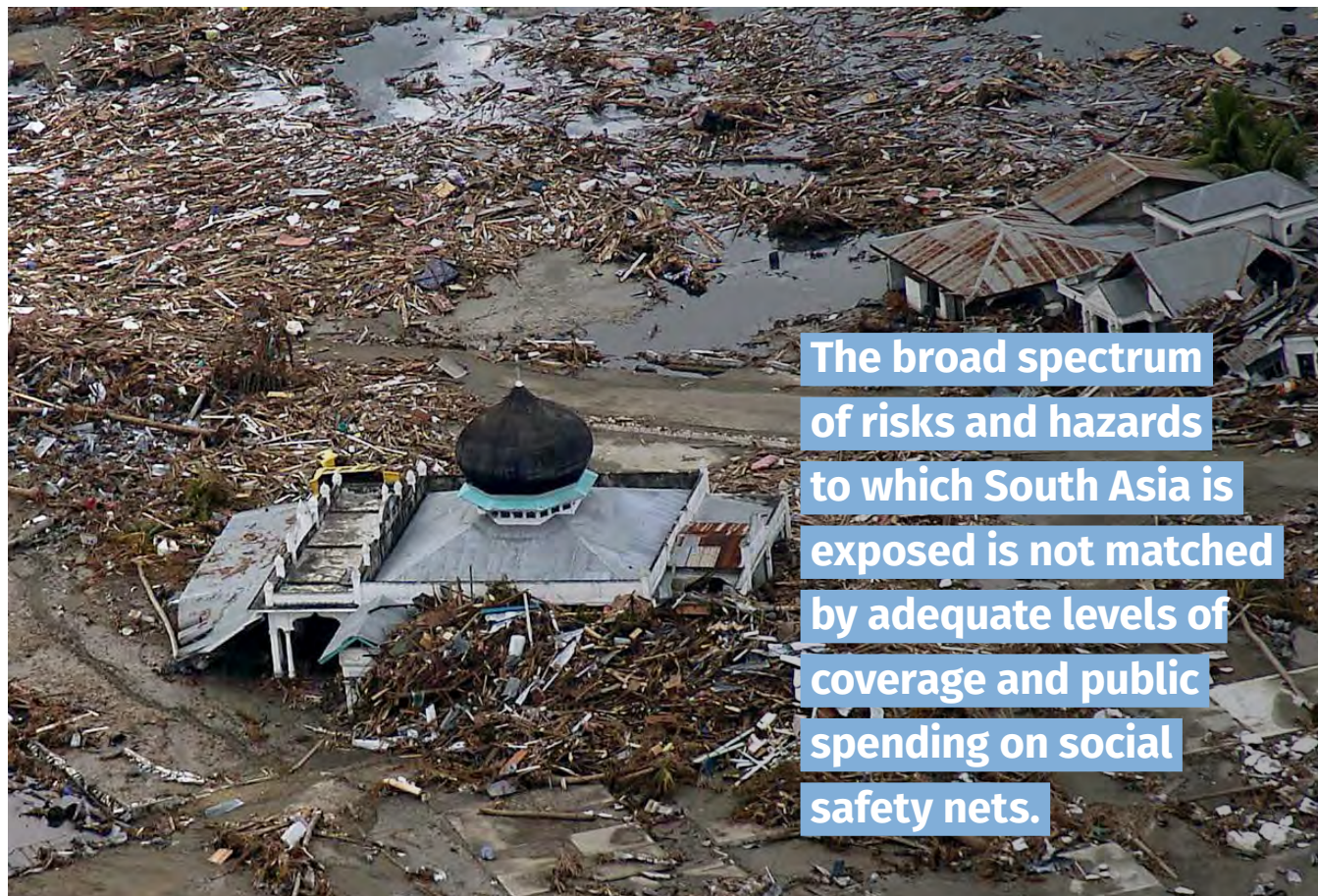
development professionals, and researchers who are interested in enhancing the resilience of social protection systems and, by extension, households, and societies.

**Because of the specificities of the South Asian context and the compatibility of social assistance and cash transfer programs with shock responses, the report mainly focuses on this subset of social protection.**

While the report touches upon the potential role of other social protection measures in times of shock (for example, social insurance schemes and active labor market measures), it analyzes and discusses only social assistance and cash transfer programs from an adaptive perspective because of their potential to be scaled up and down during and after shocks. Moreover, in comparison with other regions, the high level of informality in South Asia makes social insurance programs and associated delivery systems less appropriate for shock response.

**The diagnosis of the current status of ASP systems in the region draws on the results of a stress test tool and assessment carried out in the eight South Asian countries between March and June 2021.** The stress test, developed by the World Bank’s Social Protection and Jobs Global Practice, is a questionnaire-style diagnostic tool that assesses the level of development of the various elements of an ideal ASP system. The results represent an evaluation of the relative fitness of these elements to respond to the types of recurring covariate shocks experienced in each country (see section 1.8).





The broad spectrum of risks and hazards to which South Asia is exposed is not matched by adequate levels of coverage and public spending on social safety nets.

### 1.3 Social Safety Nets in South Asia

#### **The intent and scope of social protection have evolved.**

The first government social protection programs in Europe were aimed at addressing the problem of extreme poverty and destitution through handouts to the poor, and beneficiaries were perceived pejoratively at a time when most people lacked adequate resources. In South Asia, many current social assistance programs have their origins in the interwar or postwar years, when food aid was distributed widely as a means of ensuring social stability and avoiding famine. As countries have become more affluent, the threat of extreme poverty has waned for most citizens, and smaller numbers require sustained assistance to survive.

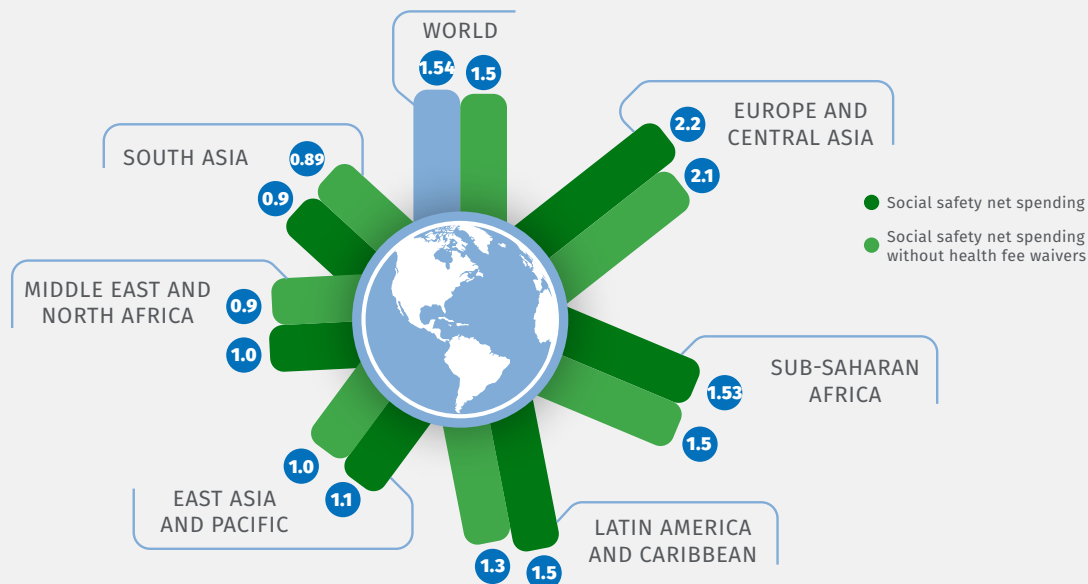
#### **Nonetheless, South Asia is second only to Sub-Saharan Africa in the share of the global poor (Dixon 2016).**

The broad spectrum of risks and hazards to which South Asia is exposed is not matched by adequate levels of coverage and public spending on social safety nets. South Asian countries spend an average of 0.9 percent of GDP on social safety nets, which is lower than the global 1.5 percent average in low- and middle-income countries (figure 1.1).



**FIGURE 1.1**

Average Regional and Global Spending on Social Safety Nets



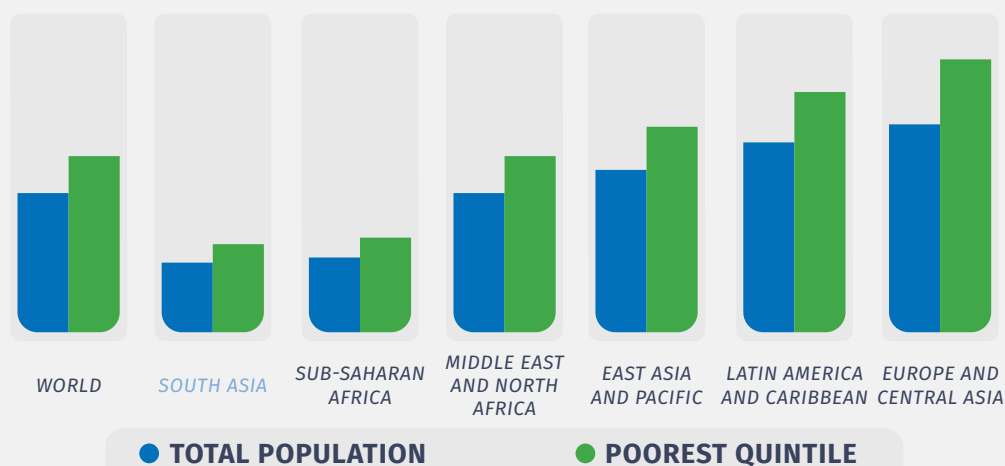
Source: World Bank 2018.

The nature of social safety net programs varies across countries in the region, ranging from conventional targeted or categorically targeted economic assistance programs to more predictive and inclusive social protection systems. Generally, only a subset of the workers in the formal sector benefit from any form of social insurance or labor market scheme, leaving informal workers especially vulnerable to poverty as

the result of a shock. Moreover, the low levels of public spending, combined with the fragmented nature of social welfare programs, mean that the coverage of social protection programs is more limited in South Asia than anywhere else in the world (figure 1.2; table 1.1). According to recent data, only 28 percent of the poorest quintile in the region currently benefit from any form of social protection.

**FIGURE 1.2**

Coverage of all social protection or labour market programs by region



Source: ASPIRE (Atlas of Social Protection Indicators of Resilience and Equity) (dashboard), World Bank, Washington, DC, <https://www.worldbank.org/en/data/datatopics/aspire>.

**TABLE 1.1** Main Social Protection Programs, South Asia

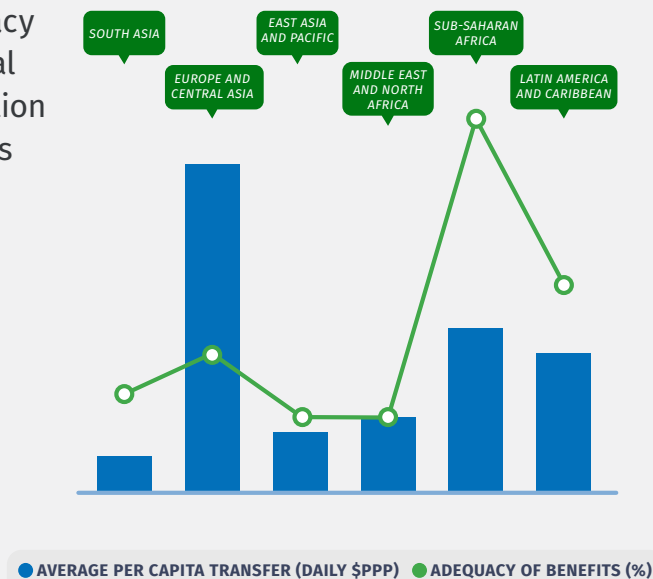
Country	Program	Type	No. of beneficiaries	Coverage
Afghanistan	Martyrs and Disabled Pension Program	Categorical	1.4 million	4.6%
	Citizens' Charter Afghanistan Program		301,718	
	Women's Economic Empowerment Rural Development Project	Categorical	100,000	
Bangladesh	Old-age allowance	Categorical	4.4 million	29.7%
	Vulnerable Group Development Program	Targeted	14.25 million	
	Allowances for the Financially Insolvent Disabled	Categorical	1.55 million	
	Income Support for the Poorest Program (Jawtno)	Targeted	1.08 million	
	Maternity Allowance Program for the Poor	Categorical	0.77 million	
	Primary school stipend	Categorical	14.4 million	
	School Feeding Program	Categorical	2.5 million	
	Stipend for Disabled Students	Categorical	10 million	
Bhutan	Accelerated Mother and Child Health	Targeted	25,833	53.7%
	Specialized Care Referral	Categorical	1,081	
	National School Feeding Program	Targeted	88,320	
	Central School Program	Categorical	41,134	
	Startup and Cottage and Small Industry Development Flagship Program	Categorical	4066	
	Electricity subsidies	Subsidy	124,225	
	Employment service centers	Categorical	861	
	Youth Engagement and Livelihood Program	Categorical	848	
	Build Bhutan Project	Categorical	7,000	
	Special Skills Development Program	Categorical	77	
	Village Skills Development Program	Categorical	78	
	Highland Development Program	Categorical	1,056	
	Kidu Program	Targeted	55,380	
	Pension and Provident Scheme	Fund	65,414	
India	PAHAL	Targeted	262.8 million	51%
	Mahatma Gandhi National Rural Employment Guarantee Scheme	Targeted	119.1 million	
	National Social Assistance Program	Targeted	34.6 million	
	Prime Minister's Rural Housing Scheme	Targeted	13.8 million	
	Scholarships	Targeted	9.3 million	
	Others (357 cash programs)	Targeted	265.9 million	
Maldives	Single parent allowance	Categorical	4,426	2.3%
	Foster parent allowance	Categorical	147	
	Disability allowance	Categorical	7,164	
	Food Subsidy Program		481	
Nepal	Social security allowances	Targeted	3.1 million	27.8%
	Scholarships		3.2 million	
	Mid-day Meals	Targeted	1.3 million	
	Safe Motherhood Program	Categorical	0.43 million	
	Poor Citizens Medical Treatment Fund	Categorical	0.02 million	
	Prime Minister's Employment Program	Categorical	0.06 million	
Pakistan	Benazir Income Support Programme	Targeted	34.68 million	28.2%
		Targeted		
Sri Lanka	Samurdhi Program	Targeted	1.48 million	11.2%
	Senior citizens allowance	Categorical	386,080	
	Disability allowance	Categorical	28,822	
	Public assistance to low-income households	Targeted	580,720	

Source: Authors' compilation

The benefits provided through social protection programs in the region are generally inadequate and do not contribute substantially to poverty reduction (figure 1.3). According to regional estimates, social protection benefits in South Asia cover an average of only 6 percent of household expenditures. In addition, the region has historically relied on categorical transfers (for example, for the elderly, people with disabilities, and marginalized groups), and only a few countries run broad-based cash transfer programs suitable for scaling up in response to shocks.

FIGURE 1.3

Adequacy of social protection benefits



Source: ASPIRE (Atlas of Social Protection Indicators of Resilience and Equity), World Bank, Washington, DC, <https://www.worldbank.org/en/data/datatopics/aspire>.

## 1.4 Defining Vulnerability and Shocks

In discussing how to respond to shocks, it is important to make distinctions between the interconnected concepts of poverty and vulnerability and between the different types of shocks in terms of the impacts and the rapidity of onset. Ultimately, the objective of ASP is to prevent households from falling into poverty or falling more deeply into poverty as a result of shocks.

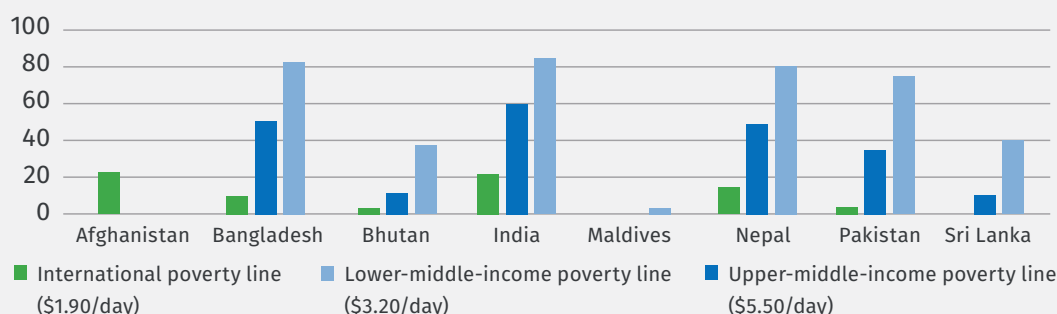
### 1.4.1. Poverty and Vulnerability

**Poverty may be defined as a deprivation in individual well-being characterized by an inability to satisfy socially accepted basic needs, such as food, clothing, shelter, basic assets, education, and health care.** Levels of poverty are often measured in monetary terms based on the monthly expenditure of a given individual or household, which is then compared with a monetary poverty line.<sup>3</sup> Despite the significant progress in poverty reduction in recent decades, poverty is still widespread in South Asia (figure 1.4).

<sup>3</sup> An alternative approach is to measure poverty multidimensionally by taking into account relative deprivations along various dimensions, such as access to basic needs, health care, and education (Alkire et al. 2015). While this approach can lead to differing conclusions about the level and nature of poverty, the basic distinction between poverty and vulnerability still applies because many multidimensionally near-poor households are also vulnerable to falling into multidimensional poverty because of shocks. The monetary definition is used here for presentational simplicity.

**FIGURE 1.4**

### Poverty Headcount Ratios, South Asia, 2020



Source: Data at Poverty headcount ratio at national poverty lines (% of population) (dashboard), World Bank, Washington, DC, <https://data.worldbank.org/indicator/SI.POV.NAHC>. Data on lower and upper middle income poverty rates for Afghanistan were unavailable.

**Vulnerability for the purposes of this report is defined as the risk facing an individual or household of falling into poverty as the result of a shock.<sup>4</sup>** It can be measured by using indicators of variability in well-being, such as the level and volatility of consumption or income relative to the poverty line or by using socioeconomic proxies for risk exposure, including exposure to shocks, exposure to disease, occupation, or ownership of assets (Yemtsov 2013).

## 1.4.2. Types of Shocks

**Shocks may be classified according to the extent and speed of their impacts, as follows:**

- **Idiosyncratic shocks** affect specific individuals or households rather than entire communities. Examples of such shocks are disease, disability, or job loss. People suffering idiosyncratic shocks may obtain assistance from private (insurance), community (coinsurance), or public (social protection) sources.
- **Covariate shocks** affect multiple individuals and households in a community simultaneously. Examples of such shocks are natural disasters and pandemics. Large covariate shocks can overwhelm the capacity of informal support networks and self-insurance mechanisms and often require outside assistance through disaster relief and subnational or national recovery programs.
- **Slow-onset shocks**, such as seasonal food insecurity and economic crises, leave decision-makers with more time to mobilize a response, but are more difficult to identify and require longer-term support measures to address the impacts. Slow-onset shocks tend to have a disproportionate effect on the welfare of households that are already clustered around the poverty line or that have suffered prolonged impacts that erode normal buffer stocks of savings and assets.
- **Rapid-onset shocks**, such as earthquakes or floods, are generally easier to identify than slow-onset shocks, but the required preventive, preparedness, and early warning measures are usually more complex to establish. In contrast with slow-onset shocks, rapid-onset shocks tend to affect the population transversally, that is, across the population rather than specific population segments. Such shocks tend to have more severe impacts on household assets than on household incomes (O'Brien, Holmes, and Scott 2018).

<sup>4</sup> The term vulnerable is often used in the South Asia region to refer to individuals with characteristics that place them in a socially disadvantaged or at-risk situation, such as people with disabilities, the elderly, women, and children. While these groups are often more vulnerable than others to shocks, it is important to recognize that a broader subset of the population is at risk of severe loss as the result of shocks and should be considered in social safety net policies.

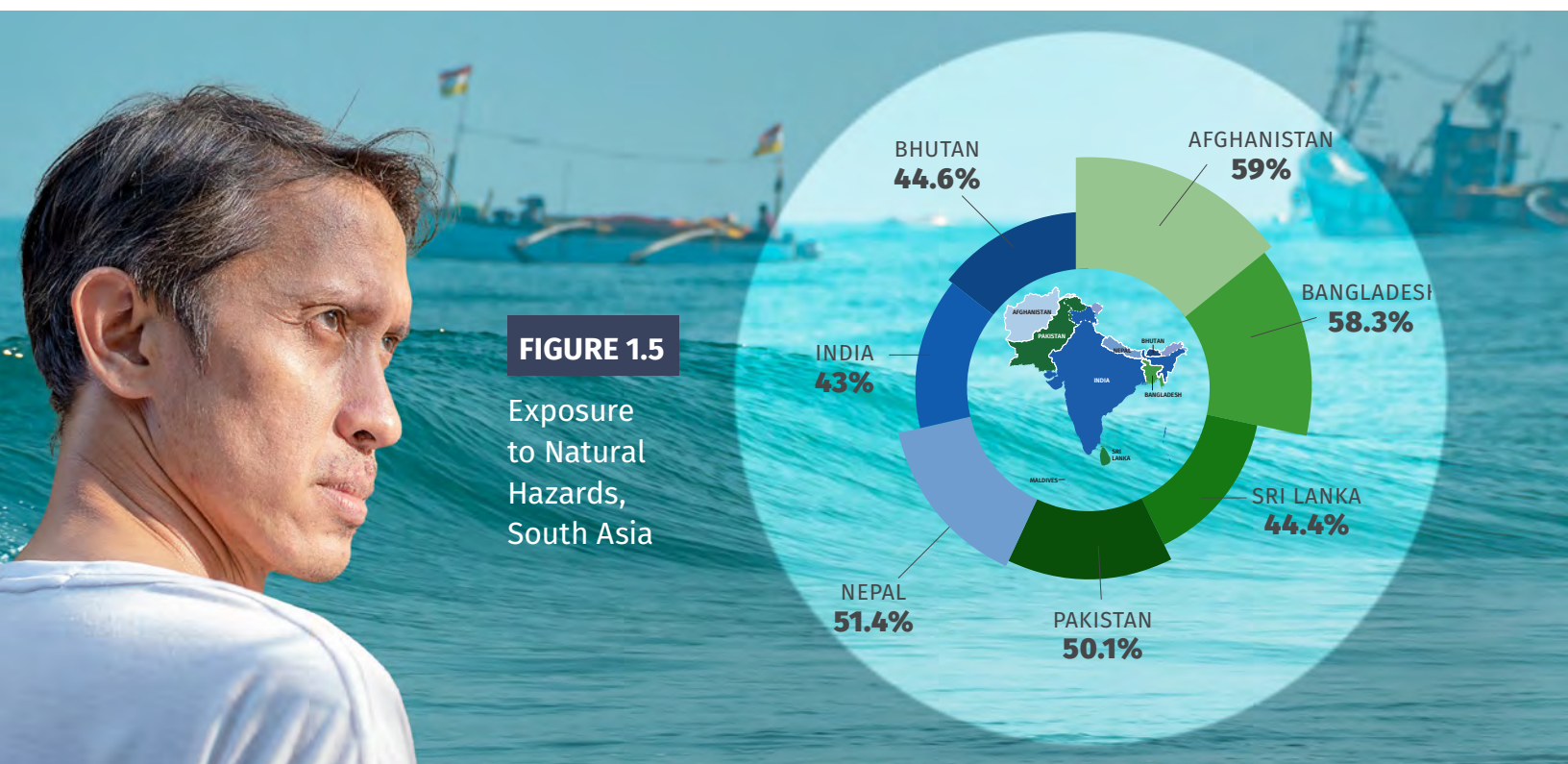


## 1.5 South Asia's Vulnerability to Climate Change and Covariate Shocks

**Because of increasingly frequent and severe weather events, sea level rise, and less predictable rainfall and agricultural output, South Asia is one of the regions most vulnerable to climate change (Agarwal et al. 2021).** It is home to many climatic conditions over a wide and diverse geographic area: arid areas subject to severe droughts, low-lying coastal areas subject to flooding and coastal erosion, islands the existence of which is threatened by the rise in sea levels, tropical zones subject to increasingly frequent and devastating cyclones, and mountain ranges affected by landslides, earthquakes, and the melting of glaciers. These natural hazards, exacerbated by climate change, can cause significant loss and damage to lives, property, and public infrastructure. For example, an estimated 22 million Afghans (59 percent of the population) reside in

areas that are susceptible to climate shocks, and this share is expected to expand. Bangladesh faced 280 natural disasters between 1980 and 2020, resulting in close to 200,000 deaths. In total, it is estimated that over 800 million people are vulnerable to the negative impacts of covariate shocks in South Asia (figure 1.5).

**River and urban flooding caused by a combination of greater precipitation, inadequate drainage systems in urban areas, and more rapid snowmelt in mountainous regions is a growing risk in many South Asian countries.** Urbanization has led to the emergence of densely populated informal settlements in shock-prone areas, such as riverbanks and hillsides. Afghanistan is considered high-risk for river and urban floods. Bangladesh and Pakistan, given their



**FIGURE 1.5**

Exposure  
to Natural  
Hazards,  
South Asia

Source: Amarnath et al. 2017; Global Climate Risk Index (dashboard), German watch, Bonn, Germany, <https://www.germanwatch.org/en/crri>.



respective locations in the Ganga-Brahmaputra-Meghna River basin and Indus River plains, are prone to frequent floods with rising regularity as climate change accelerates. Over 12 percent of India's land area is subject to flooding and river erosion. In Bhutan, glacial lake outburst floods and flash flooding during monsoon season are regarded as significant hazards, while, in Nepal, it is estimated that the number of people affected by river flooding could more than double by 2030 as a result of climate change.

**Sea level rise, cyclones, and tsunamis are also affecting countries with growing frequency.**

In India, approximately three-quarters of coastlines are prone to cyclones and tsunamis; the coastal areas of Pakistan are subject to cyclones and storm surges; and Sri Lanka suffers from coastal erosion, landslides, tsunamis, sea surges, and sea level rise. The most dramatic situation, however, is in Maldives. Because of its low elevation and rising sea levels, Maldives is among the few countries in the world facing the near-complete or complete submersion of all national territory in the future (Agarwal et al. 2021).

**Drought, exacerbated by climate change, is another recurring shock affecting many countries in South Asia.** During the 2017–18 drought in Afghanistan, approximately 300,000 households were displaced,

while in India, 68 percent of the cultivable area is vulnerable to drought. Bangladesh and Sri Lanka are susceptible to recurring large-scale droughts, resulting in environmental degradation, and causing billions in economic losses. Slow-onset shocks, by their nature, often do not attract the attention of the public or policy makers until the effects are well established. Drought events lasting for months, or years are also more likely to exceed the capacity of limited fiscal envelopes for emergency funding. In some ways, this makes them more difficult to manage relative to rapid-onset shocks.

**Given the differentiated impacts of slow- and rapid-onset shocks on household assets and incomes, the nature and duration of the assistance measures planned and adopted by governments to tackle the negative effects of such shocks vary significantly (box 1.2).**

Planning effective assistance measures is becoming progressively more challenging in a world affected by climate change because of the greater frequency and severity of extreme weather events (Agarwal et al. 2021). It is therefore important for governments to have a good understanding of local disaster risk profiles to inform the planning of appropriate and tailored responses to the shocks that climate change is creating. It is also important to be adaptable in the planning process and facilitate learning from past experiences.



## BOX 1.2: THE POVERTY IMPACTS OF CLIMATE SHOCKS

The World Bank predicts that South Asia will be one of the world's most climate-impacted regions by 2050 (Hallegatte et al. 2017). Data from many South Asian countries show that climate hotspots tend to have lower living standards relative to national averages, and changes in average weather will hurt poor households disproportionately and therefore increase poverty and inequality.

There is a causal relationship between climate shocks and poverty. In India, for example, data collected from 36 communities in Andhra Pradesh from 1990 to 2005 reveal that, among households that fell into poverty, 44 percent cited drought, irrigation failure, or crop disease as a reason for income losses (Krishna 2006). In Bangladesh, 15 percent of rural households surveyed claimed natural disasters and 18 percent claimed loss of natural assets as the main reasons for falling into poverty. In coastal communities affected by Cyclone Aila in the southwest of Bangladesh in 2010, unemployment soared from 11 percent to 60 percent in 2010, and the poverty headcount ratio jumped from 41 percent to 63 percent.

Climate shocks also have a direct impact on food security. Natural disasters can result in food price spikes as a result of supply shocks in both developed and underdeveloped areas. Crops and seed reserves are impacted, reducing yields, and

sparking food price shocks as seen following the 2010 floods in Pakistan. The floods destroyed 2.1 million hectares of agricultural land, decimating production, and sending the price of wheat up by more than 50 percent.

The poor are more vulnerable to the impacts of natural disasters. The poor typically have fewer assets ex-ante to cope with shocks and tend to be otherwise less well prepared for disasters. Capital losses from natural disasters can be curbed substantially by introducing early warning systems. However, surveys conducted in South Asia suggest that access to early warning systems remains low and tends to be biased against the poor. A study in the subdistrict of Shyamnagar, Bangladesh, found that only 15 percent of nonpoor people and 6 percent of poor people attended cyclone preparedness training. In Lamjung, Nepal, the coverage of early warning systems in flood- and landslide-prone communities is below 1 percent.

South Asia's poorest also tend to receive less post disaster support than the nonpoor. For example, in response to the floods and landslides in Nepal in 2011, only 6 percent of the extreme poor sought government support, in contrast to almost 90 percent of the better off.

Sources : Hallegatte et al. 2017 ; Mani et al. 2018.



## 1.6 Adaptive Social Protection

**Conventional approaches to social protection, such as targeted or categorically targeted social assistance programs, reach only subsets of the people who need assistance following large shocks.** The focus on categorical programs across the region has resulted in inadequate coverage of the working poor or middle class, representing individuals who are normally self-sufficient, but may be temporarily unable to satisfy basic needs in the event of a severe shock. This segment of society is also disproportionately employed in the informal sector and therefore lacks access to conventional social insurance and labor market programs. Social insurance schemes in South Asia are typically reserved for the public sector and the formal private sector, which account for only a modest share of the overall labor workforce, while labor market programs are often limited in scope and are focused on the poorest segments of society (such as the Mahatma Gandhi National Rural Employment Guarantee Scheme in India).

**Disaster relief provided by governments and humanitarian partners also has limitations.** The provision of unconditional cash transfers in response to a shock helps save lives and prevents households from falling into extreme poverty, while also allowing for a more rapid recovery. However, ad hoc disaster relief interventions are costly and thus financially unsustainable in the longer term. Similarly, temporary rural youth employment schemes are, in many instances, not in line with current needs and modern-day lifestyles. Because of the growing frequency and intensity of covariate shocks, many governments in South Asia have invested in the development of subnational and national disaster response plans, but these typically lack links to social protection

systems. Intensifying efforts to institutionalize the links between disaster management and social protection systems would enable governments to capitalize on existing programs and delivery platforms to channel the response to disasters.

**There is consensus among governmental and nongovernmental stakeholders about the need to invest in ASP.** The World Bank argues that ASP “helps to build the resilience of poor and vulnerable households by investing in their capacity to prepare for, cope with, and adapt to shocks: protecting their well-being and ensuring that they do not fall into poverty or become trapped in poverty as a result of the impacts” (Bowen et al. 2020, 6). Such a paradigm shift is based on the notion that social protection programs should not focus solely on the poorest households, but rather extend protection to a broader set of households that may also become impoverished if they are hit by a severe shock. Such households are often completely outside the social safety net in South Asian countries, not poor enough to be regular beneficiaries of welfare programs and not employed in jobs with formal social insurance entitlements. Building social safety nets that are accessible to all citizens is in line with the principle of universality espoused by the World Bank that is centered on the idea that all people should be protected against poverty throughout the life cycle.

**This view of social protection does not absolve individuals of responsibility to manage risk, nor does it discredit the role of informal support networks.** Instead, it complements these measures. The provision of temporary assistance to individuals who can usually meet their own needs is often seen as an invitation to moral hazard. Nonetheless, a safety

net program that provides time-bound assistance to shock-affected households on a means-tested basis can improve the incentives of workers to invest in human and physical capital and take entrepreneurial risks, while greater investment is undertaken in welfare programs among the poorest.

**ASP systems also have the attractive feature of offering differentiated and tailored support to beneficiaries based on their vulnerability and needs.** Such versatility is contingent on the quality of available data and on existing coordination mechanisms. Especially in the case of rapid-onset shocks, the ability to rely on high-quality data and mechanisms for coordination with other disaster relief actors allows for a more rapid and efficient deployment of assistance to those in need. ASP systems can complement other disaster relief efforts by identifying shock-affected households and determining the duration and type of support they

require to cope with the shock. Relying on systems that can enable a rapid, time-bound, and informed response to shocks and clear plans for scaling down and discontinuing assistance once conditions normalize allows governments to protect human capital during a shock without the need for a substantial expansion of fiscal obligations. Hence, investing in ASP allows governments to continue focusing on longer-term poverty reduction and development goals without relying on costly, fragmented, and protracted disaster relief programs.

**The purpose of developing an ASP system is not to anticipate and prepare for every possible shock, but rather to establish a framework for response based on the specific needs that arise.** Shocks vary in extent, duration, and impact, and countries are exposed to many natural and social hazards that cannot be predicted ex-ante. The emphasis is on preparedness.





An ASP system furnishes policy makers with a versatile tool to provide rapid and targeted assistance at scale, using predetermined processes, data, and methods. Such an approach saves time at the onset of a disaster, avoids unnecessary program duplication, and enables better coordination among actors in delivering relief. Social protection programs can also assist traditional government and humanitarian emergency services by helping prioritize relief for more vulnerable households, offering established channels for the distribution of monetary and nonmonetary assistance, and fostering the longer-term relief and recovery of the most severely affected and impoverished households.

**Extreme climate events are increasing in frequency and severity, and the impacts of climate change have become ever more tangible across the region.** This calls for innovative approaches to address and mitigate the impacts. ASP systems have originally been conceived and deployed in response to cyclical natural disasters such as floods and droughts, but the effects of changing climate suggest that a larger share of the region's population will require support to meet their basic needs at least periodically. ASP can help cushion the segments of the population that will be most severely impacted by the effects of climate change to help boost their productivity and build their resilience to future shocks.<sup>5</sup> Social protection and ASP are essential areas of

investment given their potential to enable households across the region to adapt to climate change.

**ASP, dynamic social protection, and universality are mutually reinforcing concepts: all recognize the dynamic nature of poverty and vulnerability.** While ASP relies on the versatility of social protection systems to expand vertically and horizontally to absorb shocks, dynamic social protection systems allow for the flexible and smooth provision of assistance on the basis of needs. Ideally, social protection systems should have both adaptive and dynamic features, whereby the adaptiveness of the system allows social protection programs to respond to large-scale covariate shocks that impact entire communities, while the dynamism helps address the needs of individuals or households relative to idiosyncratic shocks and life-cycle events (box 1.3). Universal social protection reinforces these concepts with the vision that all people, at some point in their lives, may require a certain type of support and should thus have access to social protection programs when such a need arises. ASP not only provides such support to people in need as the result of a shock, for example, but also builds their resilience and capacity to manage future shocks. This can translate into a reduced need for additional support after a covariate shock and a reduced probability of falling into extreme poverty.

<sup>5</sup> Robust links between ASP and climate-smart productive economic inclusion schemes can contribute to livelihood enhancement and inclusive socioeconomic growth and prosperity. This report focuses primarily on social assistance and insurance schemes, which are more commonly scaled up in response to shocks. Productive economic inclusion schemes are equally important in building resilience and helping households manage transitory shocks. They should complement scalable cash transfer and emergency assistance programs.



## BOX 1.3: COVID-19 RESPONSES THROUGH SOCIAL PROTECTION SYSTEMS, SOUTH ASIA

The various COVID-19 responses across South Asia have underscored the overall limited adaptability of social protection systems in responding to large-scale shocks. Only a fraction of the government-led COVID responses in South Asia were channeled through existing social protection systems in most cases, responses were undertaken through ad hoc disaster relief schemes, along with substantial support from humanitarian partners. Given the sweeping impact of COVID-19 on poverty rates and human capital gains in South Asia, the pandemic has highlighted how investment in making social protection systems more adaptive can allow for the more rapid identification of vulnerable groups and the delivery of empirical, time-bound, and cost-effective assistance. Investments in advancing the ASP agenda can thus ultimately prevent shock-affected households from falling into acute poverty, while enabling them to recover more quickly from the repercussions of covariate shocks.

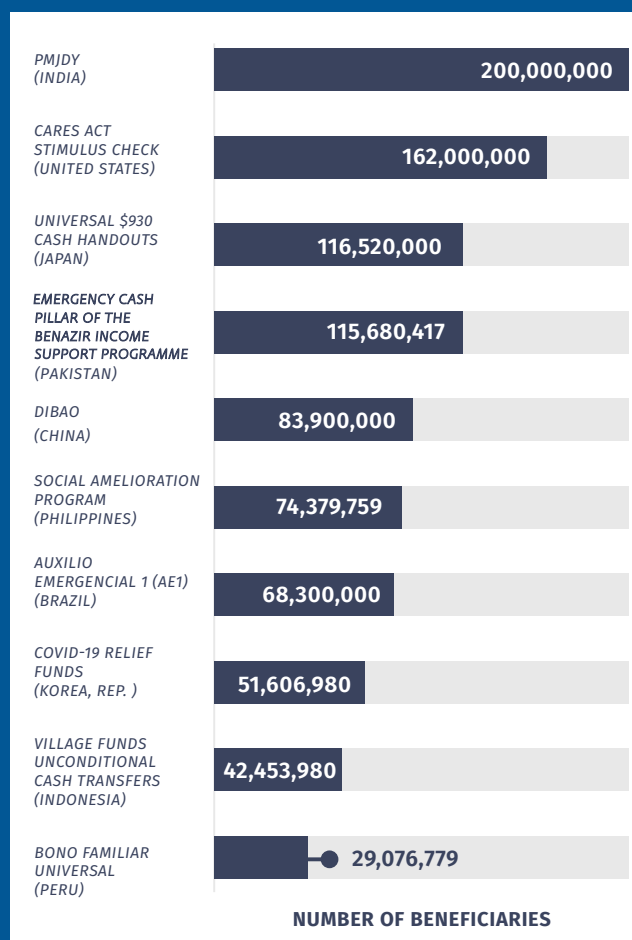
Some countries in the region have demonstrated adequate adaptiveness in certain elements of the ASP framework. For instance, in Pakistan, prior investments in strengthening national social protection system platforms and delivery systems allowed for a rapid scale-up and deployment of socioeconomic assistance to cushion the most vulnerable from the pandemic. Thus, the government was able to expand the Benazir Income Support Programme rapidly horizontally and reach a total of 115 million people thanks to the efficiency of the consolidated delivery systems (figure B1.3.1). In India, the Pradhan Mantri Jan Dhan Yojana COVID-19 relief package reached a total of 200 million vulnerable households thanks to the country's robust contingency financing and established institutional arrangements that allowed for a quick disbursement of earmarked disaster relief funds to mitigate the impacts of the pandemic.

While such efforts were essential to save lives and protect livelihoods in the short-term, the ability to rely on an existing social protection system, informed by empirical targeting methodologies, would have reduced the delay of the provision of assistance to the most vulnerable.

Finally, the Maldives was able to piggy-back on established aspects of its social protection delivery system (including online presence, ID, system interoperability and electronic payments) to rapidly

### BOX FIGURE B1.3.1.

#### Largest COVID-19 Cash Assistance Relief Measures Worldwide



introduce a new emergency Income Support Allowance (ISA) program for displaced workers in only a few weeks. Through the program, the government further developed its capacity to locate and communicate with potential beneficiaries, link to other government databases to screen out fraudulent applications, and evaluate progress with just-in-time SMS-based beneficiary feedback surveys.

Countries that are highly exposed to recurring shocks, such as Bangladesh, have been able to leverage institutional arrangements and capitalize on their disaster risk management (DRM) expertise and experience to channel relief assistance through social safety net programs, such as the Poor Families Cash Assistance Program, which was expanded to reach over 14 million people in need.

In countries lacking a consolidated social protection program, such as Afghanistan, the bulk of assistance has been channeled through government-led, community-driven programs, which typically rely on handouts and distributions in cash or in kind and community-based targeting. The relief package provided through the Relief Effort for Afghan Communities and Households included essential food staples and hygiene products for rural households living on USD 2 or less a day. While such efforts were essential in saving lives and protecting livelihoods in the short term, greater reliance on a social protection system and empirical targeting methodologies would have reduced the delays in the provision of assistance to the most vulnerable.

**Only a fraction of the government-led COVID responses in South Asia were channeled through existing social protection systems.**







## 1.7 Methodology

**This section reviews the ASP framework and its application and relevance to South Asia. It builds on the model presented by Bowen et al. (2020) extended to account for two important features.** First, ASP is a flexible arrangement of robust delivery systems and programs that can be adjusted as needed to respond to shocks of various types. Each shock response may vary depending on the characteristics of the shock and may be a source of learning or program adjustment that is then factored into the plan for the response to future shocks. Second, there is greater detail in this report than in previous work on the political economy challenges associated with building an ASP system in a relatively well-established social protection policy landscape. In contrast to the experience in Sub-Saharan Africa, on which much recent literature on ASP has focused, South Asian countries have well-developed but limited safety nets that are defended by strong political constituencies. Reforms aimed at changing delivery systems or program rules can be more complex in South Asia than in Sub-Saharan Africa, where ASP programs have been built from scratch.

**It is generally accepted that governments should assist the elderly, people with disabilities, and children lacking sufficient means, while work-able individuals are expected to work or be assisted in finding work.** However, while the number of individuals needing sustained social assistance may decline as incomes rise in a country, there are good economic arguments in favor of a safety net that provides (temporary) support to all those who suffer misfortune and fall into a state of need, which may include people who might normally be self-sufficient. This approach would prevent an increase in the poverty rate and reduce the risk that shock-affected individuals will suffer longer-term damage to human and physical capital, especially children who might suffer permanent damage to their health and earnings potential.



**Broadening the definition of social safety nets to encompass shock-affected nonpoor households requires an emphasis on temporary support for this category to maintain the financial viability and credibility of the program.** A methodology for examining the key elements of such a system is needed to assess the adaptiveness of the current social protection systems of South Asian countries and the scope for improving these programs. The metrics of success are timeliness, targeting accuracy, the relevance of the assistance, and accountability for the program and its outcomes.

**In assessing the adaptiveness of the social protection programs in South Asia, the objectives of ASP systems should be considered.** Following Bowen et al (2020, 6), these are “to build the resilience of poor and vulnerable households by investing in their capacity to prepare for, cope with, and adapt to shocks,” while “protecting their well-being and ensuring that they do not fall into poverty or become trapped in poverty as a result of the impacts.” There is thus a clear need

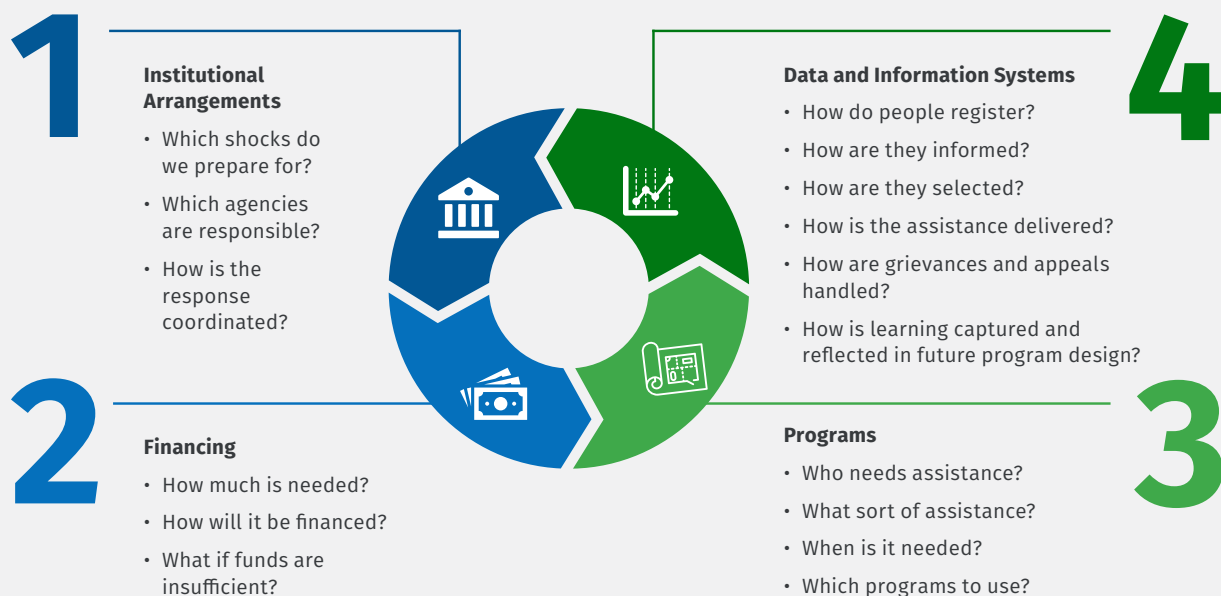
to distinguish between the four phases of any shock, as follows: (1) the preparation and risk reduction prior to a shock, (2) the mitigation of the impacts of a shock, (3) the provision of assistance to cope during shocks, and (4) the recovery and reintegration phase. Moreover, it is also crucial to recognize the diversity of shocks and the implications for resilience, given that anticipating and preparing for some of the impacts are complex undertakings, for example, extended lockdowns during the COVID-19 pandemic. Meanwhile, the impacts of and policy responses to asset shocks, economic shocks, and health shocks are completely different.

**Four elements of the ASP framework are considered here in the development of the system (figure 1.6).**

(The order in which the building blocks of the ASP framework are presented is not prescriptive, given that these elements can be addressed in parallel or prioritized according to specific needs, for example, based on the areas of investment that are most urgent.)



**FIGURE 1.6** Four Elements of the ASP Framework



## 1) INSTITUTIONAL ARRANGEMENTS

**The shocks that government preparedness and relief programs should plan for, the agencies that will be involved in preparedness and relief activities, and how these responses will be coordinated should be determined.** A government's capacity to accomplish this depends on the nature of the leadership in responding to shocks, the quality of the current institutional arrangements and cross-sector collaboration, and strategic partnerships with nongovernmental actors. Given the importance of robust institutional arrangements and partnerships in the delivery of ASP, this building block captures the profusion of policies, actors, and programs in disaster risk management (DRM), climate change adaptation, and social protection. By aiding an understanding of the various roles and responsibilities of the governmental and nongovernmental partners in the event of a shock, this building block stimulates reflections on

how to streamline coordination through operational partnerships that can leverage the respective comparative advantages of the various actors involved. **Institutional arrangements are examined in chapter 2.**

## 2) FINANCE

**Once the shocks that are to be prepared for and the nature of the required responses have been established, the resources required and the ways to mobilize them should be determined.** This depends on the capacity of the government to model the expected cost of relief, preposition resources, and arrange contingency financing. Risk financing methods can be used to prepare the government response to shocks of varying magnitudes, establish reliable, rapid disbursement mechanisms, and ensure the long-term fiscal sustainability of government relief programs. This building block underscores the importance of linking social protection systems and risk financing

instruments. Such a link is fundamental to raising the speed at which assistance can be provided to shock-affected households. **Financing is examined in chapter 3.**

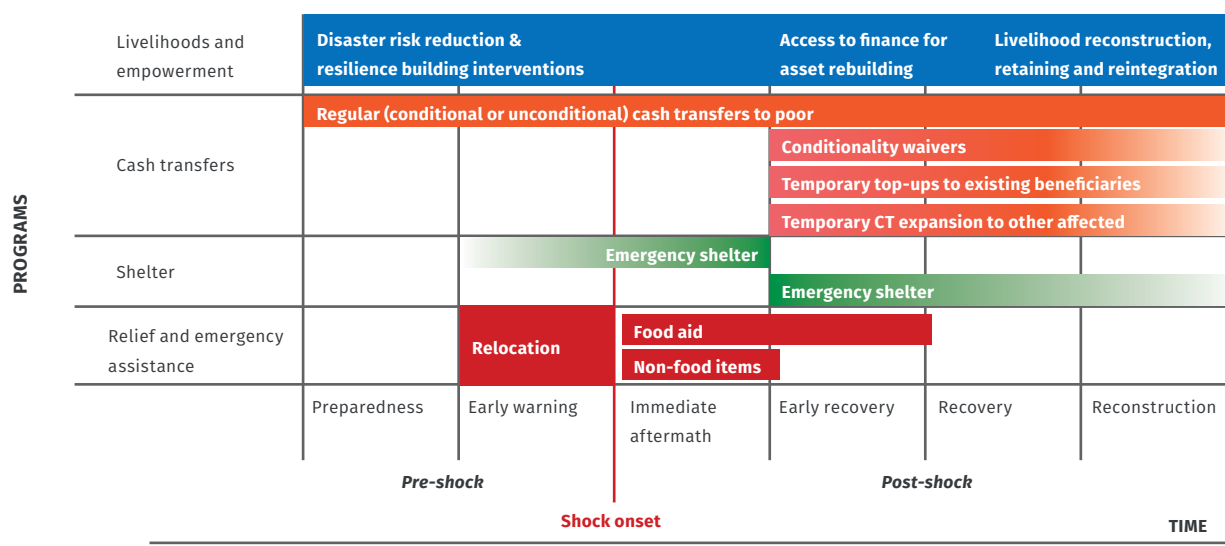
### 3) PROGRAMS

The types of social assistance that will be required and the target beneficiaries must be considered. These may vary according to the shock. For instance, farmers may be affected the most by a drought, but benefit from or be unaffected by exogenous food price inflation. The duration of the assistance should be examined. This may be longer for a slow-onset shock than for a rapid-onset shock. Understanding the nature of the required assistance can help determine which programs to use in the response. A variety of interventions are likely to be needed at various points before, during, and after the shock (figure 1.7). For each type of assistance, a decision should be made on whether the support might be provided through an existing program, perhaps with modifications, or whether a supplementary program is needed. **These considerations are discussed in chapter 4.**

### 4) DATA AND DELIVERY SYSTEMS

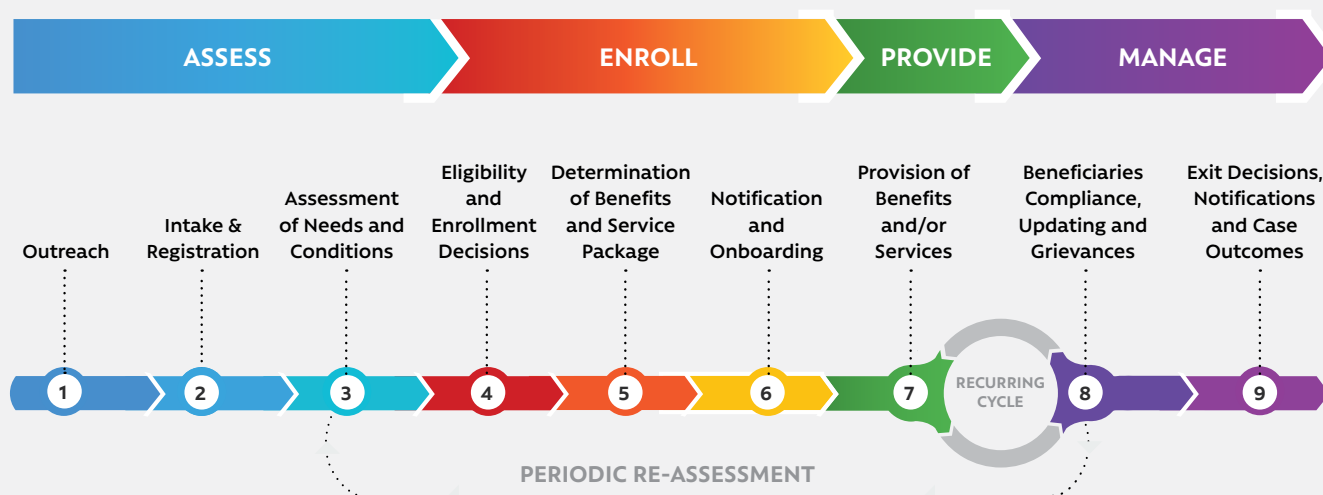
Once the required response and the appropriate programs have been selected, how to prepare the delivery system to identify those in need, register them, and deliver the assistance rapidly (whether cash or in kind) should be considered. The delivery system covers all program functions (figure 1.8). Many countries are switching to digital delivery systems, which make it easier for beneficiaries and officials to navigate complex programs and monitor outcomes in real time. To facilitate a rapid response, it is ideal if available data and information can be used to identify the households likely to be in need after a shock, such as households near the poverty line. Additionally, data collected through a program management information system could be fed back into the policy cycle to prepare for future shocks. For example, data on shock-affected households can be used to anticipate the impact of shocks, while the monitoring and evaluation of program implementation can be used to refine program design and delivery. **These considerations are discussed in chapter 5.**

**FIGURE 1.7.** Types of interventions in different phases of a shock





**FIGURE 1.8** The social protection delivery chain

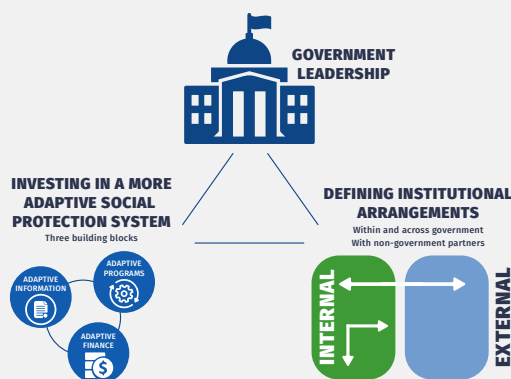


Source: Bowen et al., 2020

**FIGURE 1.9**

Government leadership and investments in ASP

Source: Bowen et al., 2020



**Strong government ownership and high levels of accountability in promptly addressing the evolving needs of the population are prerequisites for achieving progress in any of the four key building blocks.** Despite the reliance of many risk-prone countries on humanitarian responses, which are typically fragmented, delayed, and inadequate, the involvement of government is always expected in times of shock. In line with the humanitarian Grand Bargain, which outlines the need to shift the responsibility for responding to recurrent shocks

gradually to governments and their development partners, ASP can serve as an effective framework to facilitate such a transition.<sup>6</sup> Intensifying efforts around the strengthening of government-owned ASP systems that allow for the rapid deployment of empirical, efficient, and time-bound interventions can effectively enable governments to take the full lead on crisis preparedness and intraministerial coordination gradually and ultimately meet the needs of the population in a proactive and inclusive manner (figure 1.9).

<sup>6</sup> See the Grand Bargain (official website), Inter-Agency Standing Committee, Geneva, <https://interagencystandingcommittee.org/grand-bargain>.

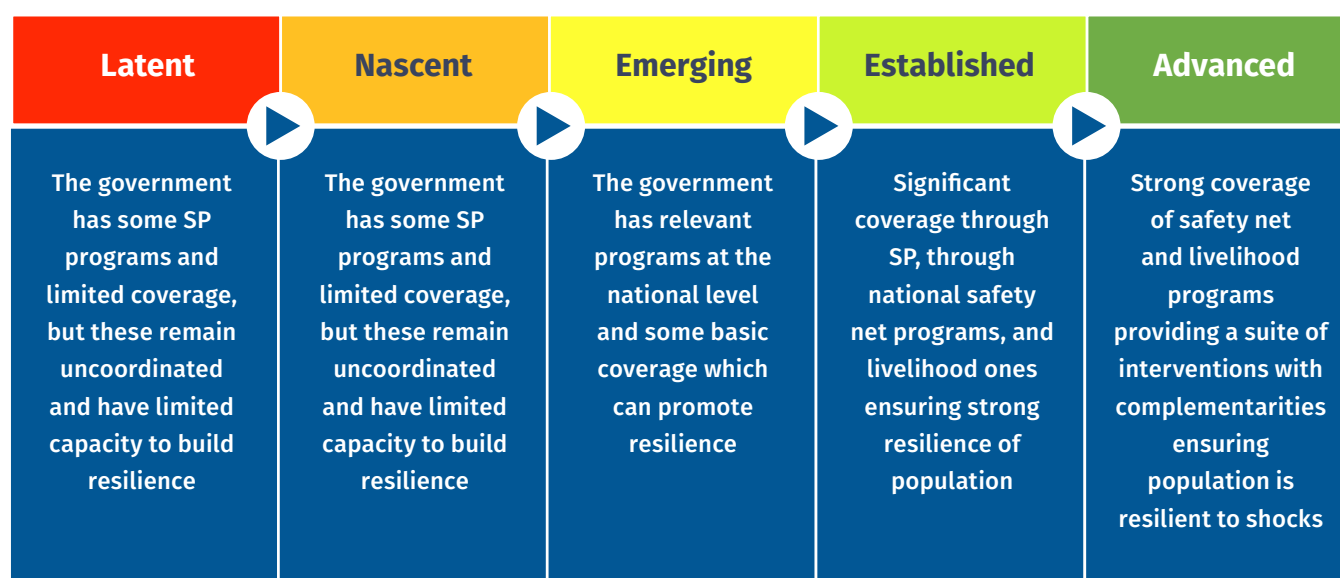
## 1.8 Assessments of ASP Readiness by Country

### 1.8.1 ASSESSMENT METHODOLOGY

The analysis in this report is informed by country-level assessments carried out by the World Bank between March and June 2021 that measured the adaptiveness of national social protection systems. The assessments were guided by the World Bank's new

stress test methodology, which assesses the strength of a country's social protection system in adapting and building resilience to shocks to which the country may be exposed. The questionnaire associated with the stress test tool has been drafted according to the

**FIGURE 10** Key to overall stress test scores



ASP framework, that is, the four key building blocks (1) institutional arrangements and partnerships, (2) finance, (3) programs, and (4) data and information. Each building block is scored based on a set of graded questions, and the overall country score is based on a weighted average of the building block scores. Table 1.2 illustrates a key to the final scores.

**The exercise yields an insightful cross-country comparison of the state of ASP development across the region, highlighting the progress and important areas for future work.** These findings are drawn on throughout the report in discussing the various elements of the ASP system.<sup>7</sup>

<sup>7</sup> While the country assessments follow the stress test methodology, the tool is most suitably applied in collaboration and consultation with government officials. This exercise is likely to yield a more contextually relevant assessment and also serve as a means for opening a dialogue on ASP. Some of the governments in South Asia have already begun undertaking the stress test in this collaborative manner, and the findings may differ from the findings outlined here. For this reason, the country-level results are not presented in detail.



## 1.8.2 OVERVIEW OF RESULTS

**Among other findings, the country assessments shed light on the diversity of institutional arrangements in South Asia, especially relative to social protection and DRM.** For instance, the assessment on Bangladesh emphasizes the intimate link between social protection systems and DRM mechanisms, which is a result of the increased levels of government ownership and accountability. Meanwhile, in Nepal, the lack of institutionalized links between DRM and social protection has led to relief coordination efforts that are carried out on an ad hoc and ex-post basis and that are highly dependent on international humanitarian relief actors. In Afghanistan, the lack of clear coordination mechanisms between government and nongovernmental partners and their often-overlapping mandates have resulted in delayed, ad hoc, and costly responses to shocks.<sup>8</sup>

**The assessment underscores the need for all countries in the region to continue to strengthen ASP delivery systems.** These remain underdeveloped, especially in the use of digital technologies in benefit registration and payment. One exception is India, which has established efficient disbursement and coordination mechanisms brokered between the central government and the semiautonomous institutions under the administrative control of the various ministries.

**The assessments analyze the robustness and shock-readiness of social protection programs across South Asia.** From an ASP perspective, India, and Pakistan still need to address the fragmentation of their social protection programs, while others, such as Bhutan, have carried out commendable efforts to expand the coverage and effectiveness of the programs. In payment systems, the assessments highlight the substantial effectiveness of the mechanisms in Bhutan and Pakistan that facilitate the timely expansion of assistance nationwide during shocks, while Maldives relies on effective digital communication mechanisms to disseminate critical information rapidly to beneficiaries. The data and information building block of the assessments shows mixed results across the region (table 1.3). For instance, the assessment in India detected the challenges in accessing disaster risk-related data and the issues around data privacy protocols. Improvements were noted in Afghanistan and Sri Lanka on the development of early warning systems. In terms of social registries, the data used to target beneficiaries tend to be updated irregularly across the region and therefore are not of much value in supporting the response to shocks. In Bangladesh, Maldives, Pakistan, and Sri Lanka, governments are actively addressing this limitation.

<sup>8</sup> The assessment on Afghanistan was conducted in early 2021 and does not reflect the current situation. The results cited here should therefore be interpreted with care.



	Building Blocks				Overall country ASP system score
	Institutional arrangements	Financing	Programs	Data and information	
<b>Afghanistan</b>	Nascent	Nascent	Latent	Nascent	Latent-Nascent
<b>Bangladesh</b>	Emerging	Latent	Nascent	Nascent	Nascent-Emerging
<b>Bhutan</b>	Emerging	Nascent	Emerging	Nascent	Nascent-Emerging
<b>India</b>	Emerging	Established	Emerging	Nascent	Emerging
<b>Maldives</b>	Nascent	Nascent	Emerging	Latent	Nascent
<b>Nepal</b>	Nascent	Latent	Nascent	Nascent	Nascent
<b>Pakistan</b>	Nascent	Nascent	Emerging	Emerging	Emerging
<b>Sri Lanka</b>	Nascent	Emerging	Emerging	Emerging	Emerging

## KEY



**Afghanistan:** The stress test assessment was carried out prior to the shift in power in August 2021, and the results should be taken as representative of the system at that time. While the country was still lagging from a social protection standpoint compared with many of the countries in South Asia, tremendous progress had been achieved against most of the ASP framework building blocks in the years leading up to the 2021 shift in power. In terms of early warning systems, the assessment highlighted the existence of functioning weather, water, and climate services, although they were fragmented and not yet as advanced as in other countries in the region. Programs and delivery systems showed limitations in scope and coverage, combined with a lack of shock-responsive elements. Payment systems, the weakest aspect of the country's ASP system, mostly relied on physical in-person cash handouts, impeding a rapid expansion of the programs in response to a shock. Institutions, partnerships, and finance were nascent and had had a strong donor-driven element. The coordination between DRM and

social protection systems across ministries and other institutions was weak. Overlapping mandates and unclear responsibilities in undertaking a response to shocks often resulted in fragmented and inefficient coordination.

**Bangladesh:** The social protection system of Bangladesh has been steadily improving over the years, but still requires significant investment to enhance its adaptiveness. The strengthening of institutions and payment systems is closely linked with disaster management mechanisms, given the country's exposure to a wide range of hazards and shocks. In light of Bangladesh's vulnerabilities, the legal and policy framework and the institutional infrastructure for disaster response are well defined. However, social registry and delivery systems remain nascent. Finance is the weakest aspect of the Bangladesh ASP system. Bangladesh's social protection expenditure represents nearly one-10th of total government expenditures, and most funding is channeled on-budget rather

than donor-financed. However, Bangladesh does not currently have an overarching financing strategy for disaster responsive safety nets. Budgetary allocations are carried out ad hoc and are not risk informed, resulting in substantial reallocation, delays, and post disaster funding gaps.

**Bhutan:** Bhutan's social protection system is comprised of robust programs and delivery systems, supported by emerging institutions and partnerships. The system covers the majority of the vulnerable, while the payment procedures are one of the strongest aspects of the system. Beneficiaries receive their entitlements directly into their bank accounts, which they can either withdraw or digitally spend at various points of sale. Although the availability of data and information is limited, the early warning systems are rated as emerging. There are no early warning mechanisms for disasters other than glacial lake outburst floods, landslides, and fires. Financing mechanisms have been rated as nascent because of the lack of in-house capacity to analyze the potential cost implications of various shocks, combined with the lack of clear financing mechanisms finance ASP interventions.

**India:** Financing is the highest-rated aspect of India's social protection system. The central government makes funds available for several sectoral schemes by transferring resources to semiautonomous institutions under the administrative control of ministries. The public procurement system is moderately well functioning. Programs, delivery systems, and institutional arrangements are rated as emerging. The central government and state governments run hundreds of social protection schemes and programs. India is also home to Aadhaar, the largest unique ID project in the world, which is designed to provide a unique form of identification for all individuals.

The data and information pillar fell just short of an emerging rating because, while the system has good coverage and protocols for data update, there is limited interoperability, disaster risk information has limited accessibility, and data privacy laws are inadequate. However, India's overall rating conceals wide variation within the country; some state systems are considerably more adaptive than others.

**Maldives:** The most highly rated aspects of the social protection system in Maldives in terms of adaptiveness and scalability are the programs and the delivery systems, reflecting the functioning social registry and the electronic systems for enrollment and the payment of benefits. Comprehensive communication mechanisms can be leveraged during shocks to inform target beneficiaries about their entitlements and the associated payment systems. Entitlements are transferred directly to beneficiary bank accounts and may be withdrawn from ATMs in the main islands and from boat-based ATMs that visit the smaller islands regularly. The weakest aspect is data and information. The system suffers from a lack of a functional early warning system, inadequate monitoring and warning capability for most hazards, and the lack of detailed vulnerability and risk assessments. Financing and institutional arrangements can be improved, given the outdated disaster risk financing policies, the lack of a DRM policy, and inadequate interagency coordination.

**Nepal:** According to the stress test results, the weakest aspect of the adaptiveness and scalability of the Nepalese social protection system is the financing mechanisms. Disaster risk financing policies are inadequate, and there are no clear mechanisms for scaling up ASP assistance. Programs are operated at the national level, with extremely low benefit adequacy. Data and information are nascent, with a partially functional early warning



system, but outdated risk and vulnerability assessments. In terms of institutions and partnerships, there is no clear mechanism for scaling up ASP assistance, and links are often established in an ad hoc manner. The government is currently building up a capacity in this area.

**Pakistan:** Pakistan has emerging programs and delivery systems. Several emergency response social protection approaches have been adopted over the years to respond to various shocks, such as the Citizen's Damage Compensation Program (for floods, in 2010), the FATA Temporarily Displaced Persons Emergency Recovery Project (in 2015), and the **Emergency Cash Pillar of the Benazir Income Support** (for COVID-19, in 2020–21). Payment systems are emerging, given that most payments are digitally executed, but there are short delays in expanding coverage and benefit amounts. Data and information systems are rated emerging and have room for growth in terms of the functionality, vulnerability, and risk assessment of early warning systems and the more frequent updating of the social registry. The financing aspect is nascent given the absence of formal mechanisms for the mobilization of emergency funds. Ex-post emergency response social protection programs have relied primarily on a reallocation of funds rather than the earmarking of funds specifically for emergencies. Institutions and partnerships need to be improved

mainly because of the outdated response plans and the inadequacy of contingency plans. Ad hoc links and weak coordination across social protection agencies and DRM counterparts have also been highlighted by the stress test.

**Sri Lanka:** Sri Lanka has relatively robust programs and delivery systems, while payment systems need improvement, especially in digitalization and timeliness. Sri Lanka has a partially functioning early warning system, while the main registry does not comprise enough data to support an empirical shock response. The government is currently developing a centralized social registry that can help various programs to target vulnerable households in a systematic way. Financing mechanisms are inadequate for ensuring a timely ASP response to disasters, despite the existence of a disaster risk financing policy, which only covers a number of shocks. The government partially finances the National Natural Disaster Insurance Scheme (NNDIS) to protect uninsured households, small and medium enterprises, and fisherfolk from the financial impacts of natural disasters by providing financial support in case of property damage or accidental death. Institutional arrangements are the weakest aspect of the social protection system, given the lack of actionable implementation roadmaps for effective shock responses.



## 1.9 Conclusion

**In a region extremely prone to natural hazards and the negative effects of climate change, ASP can play a key role in building resilience to covariate shocks and protecting human capital.** Building on the findings of the country assessments and on the results of the stress test tool, this report presents a nuanced examination of the adaptiveness of the social protection systems across the region and provides greater clarity on the types of investments and efforts required to advance the ASP agenda in each country.

**The report takes stock of the progress that has been achieved in each of the countries over the past decade, bringing together the latest worldwide evidence and information on best practices and exploring options for enhancing the adaptiveness and universality of social protection systems.** While this overview supplies key definitions and describes the overarching framework of ASP in South Asia, the rest of the report illustrates the latest international best practices and

evidence with respect to the four building blocks of ASP: (1) institutional arrangements and partnerships, (2) finance, (3) programs, and (4) data and information systems. Structured around these four building blocks, the report draws cross-country and country-specific comparisons and underlines the potential applicability to the countries in the South Asia region, considering their respective priorities, key investments, and policy contexts.



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**Social protection and  
ASP are essential areas  
of investment given  
their potential to engage  
households across the  
region to adapt to  
climate change.**





## CHAPTER 2

# INSTITUTIONAL ARRANGEMENTS FOR ADAPTIVE SOCIAL PROTECTION

**AUTHOR:** Kenichi Victor Nishikawa Chavez

## 2.1 Introduction

**The countries of the South Asia region have their own unique institutional arrangements, which can be classified by the level of decentralization and devolution.** Whether a country operates under a unitary or federal model is relevant to adaptive social protection (ASP) because it determines the roles and layers of responsibilities in the management of shocks in each country context. Afghanistan, Bangladesh, Bhutan, Maldives, and Sri Lanka have institutional arrangements that are closer to the unitary government model. India, Nepal, and Pakistan, each with different levels of devolution, have an established federal model.

**A natural question that arises in relation to ASP is what makes some arrangements more well suited for response?** An intuitive answer may be that unitary governments have greater control over all the government apparatus and can more rapidly articulate all the elements of an effective response. Others might argue that

decentralized governments benefit from a higher endowment of responsibility, capacity, and resources at the local level, allowing for a more rapid and well-tailored response.

**A more common answer, normally decentralization-agnostic, attributes response capacity to the black box of government leadership, which is articulated in the expression “if the government wants to respond rapidly, it will.”** This perception is built on assumptions that oversimplify government institutions, and its approach is far from accurate in explaining the issue, which is framed by a variety of constraints.

**The first inherent assumption in this line of thinking considers government as a monolithic system.**

Normally, a decision-making body designed for disaster management will involve elected officials, politically appointed officials (such as ministers or vice ministers), high-level civil servants (such as secretaries or directors general), and technical program implementation staff. Most of the time, the knowledge of a system and ideas on how to respond vary across these constituencies. Complexity is added if the constituencies represent diverse levels of government, as in the case of the federal model.

**The other inherent assumption is based on the idea that the main issue is government will.** Unlike the private sector, where the repurposing of funds and resources may be decided upon by a chief executive officer or a manager, funds and resources in the public sector are normally allocated according to legally authorized procedures. Mobilizing these funds and resources for other purposes may be illegal or require legislative authorization or an executive order.

**However, the repurposing of funds is not the only issue.** In most cases, programs, human and physical resources

also need to be repurposed, and this may not be so straightforward. For instance, some government staff positions are regionally tagged and require additional authorizations to be deployed elsewhere. Government programs normally have clear objectives and guidelines that limit the scope of the use of staff. Some government vehicles may not be used for any but the original intended purpose. Such regulatory constraints have been established to guarantee a more accountable and transparent application of government resources and limit the possibility of abuse. So, the question should be how to address the constraint that limits the scope of government resources in a manner that temporarily allows for another use within an acceptable level of transparency and accountability.

**Another dimension of this issue is how decisions are made and by whom. In emergency situations, it is common that instructions on how to respond are given verbally in a disaster management committee meeting.**

It is also common that these instructions entail the repurposing of programs, funds, and resources. In many cases, those providing the instructions are high-level officials who may not accept any discussion of other options. Those carrying out the instructions are civil servants who will carry the fiduciary burden and risk of implementing the instructions. Thus, the risk of mobilizing programs, resources, and people outside the legally mandated structure is not distributed equally across internal government constituents. The establishment of modes of response and the capacity to repurpose programs and resources minimizes the risk across government constituents and allows for a much more agile decision-making process. Another dimension of answering the who part of the issue involves looking at who is at the helm of the response. Is it a national government, an international institution, or a nongovernmental organization (NGO)? There are some cases in which the

response is determined by international organizations through their own mandates and resources and only coordinate with national governments as needed or ex-post.

**This chapter addresses these and other key topics in the institutional arrangements of ASP. Preparedness plays a major role.** Governments should be able to manage a shock through the application of pre-established policy options and administrative and coordination arrangements. The availability of institutional arrangements that have been pre-established for several shock scenarios, pre-established modes of flexibilization (that is, controlled flexibilization), preconceived authorization pathways for programs, funds, and resources, and a dynamic governance management arrangement is an essential pillar for the effective and efficient deployment of social protection as a response tool.

**From an institutional perspective, adaptability is a complex endeavor.** It entails significant institutional preparedness to allow for rapid, but flexible responses. This chapter examines some of the most important elements required from the institutional side to shift

from an ad hoc institutional framework, conceived and deployed hastily for each shock event, to a framework that allows for responses that follow a pre-established process, that is, response by design). It draws on the experience of South Asian countries to describe how these elements function across the countries in the region. For this purpose, the rest of this chapter is organized into five main sections. It begins with a section that looks at policy-level preparedness, that is, the establishment of a clear role for social protection in a country's disaster management strategy and the development of program-specific guidelines to channel and regulate the use of designated interventions in the event of a shock. The subsequent section focuses on administrative preparedness and the adaptations necessary in government regulations and protocols related to people, material resources, and contracts. This is followed by a section on the coordination mechanisms employed to respond to shocks and their relevance to social protection implementing units. The penultimate section addresses the role and participation of humanitarian actors. The final section concludes by outlining elements to consider during the establishment of adaptive institutional arrangements.





## 2.2 Policy Level Preparedness

**Establishing the basic policy underpinnings for the adoption and use of social protection in response to shocks should be considered as one of the starting points in the creation of a sustainable ASP strategy.**

As in most parts of the world, social protection's role in disaster management in South Asia began in an ad hoc manner and has, in some countries, gradually developed functional linkages that may later be formalized.

This section looks at the basic policy elements that governments might consider during the process of formalizing the use of social protection in disaster response strategies, as follows:

- The clear role of social protection in the disaster risk management (DRM) framework
- The adoption of ASP policies and guidelines
- The establishment of clear financing mechanisms through laws, regulations, decrees, or guidelines
- Modalities for coordination among state and non-state actors in carrying out an effective program of disaster relief and recovery

### 2.2.1 THE ROLE OF SOCIAL PROTECTION IN DRM FRAMEWORKS

**This subsection examines the role of social protection in formal shock response systems in South Asia that is normally defined in DRM strategies, that is, the level of formalization (or institutionalization) of the links between social protection and DRM through laws, regulations, and formalized strategies.** This level of formalization of the role of social protection in DRM represents a good measure for determining how far a country has progressed in shifting from the ad hoc use of social protection programs to a pre-established framework. An obvious question to be addressed is: what are the tangible benefits of reign a role for social protection?

- From a country's disaster management framework, it adds readymade, field-tested policies for improving household resilience to shocks.
- From the DRM authority perspective, it adds social protection policies and delivery systems to the available response menu for rapid decision-making.
- From the social protection program administration side, it provides legal certainty by enabling the formal use of program resources in emergency or disaster situations by augmenting their mandate.
- From the intermenstrual perspective, it allows for a long-term view on the relationship so that agencies on both the social protection and DRM sides can monitor and evaluate shock response performance and allow for continuous improvements.
-

## Based on the above analysis, the role of social protection in the eight countries is as follows:

In **Afghanistan**, social protection has only a weak underpinning in the 2004 constitution.<sup>9</sup> The role of social protection in the country's disaster management framework is also limited, as reflected in the weak interactions between the DRM and social protection sectors.<sup>10</sup> The National Disaster Management Law of 2012 does not provide for any functional linkages between the Afghanistan National Disaster Management Agency (the primary authority for the management of shocks) and the social protection sector. Overlapping mandates and unclear responsibilities for shock response often result in fragmented and inefficient coordination. The government is heavily reliant on humanitarian partners, given the limited public social protection sector.

**Bangladesh** has a long-standing tradition of using social protection programs as an integral part of shock response. This is reflected in the formalization of these functions. In both the Disaster Management Act, first approved in 2012, and the Standard Orders on Disasters of 2010 and 2019, the role of social protection implementing agencies, such as the Ministry of Social Welfare and the Ministry of Woman and Children's Affairs, was established. Even more significantly, the Ministry of Disaster Management and Relief (MODMR), the leading agency in the country's DRM strategy, manages 4 of the 10 largest social assistance programs in the country (World Bank 2021).<sup>11</sup> All these were institutionalized with the aim of responding to shocks and include official program guidelines. Additionally, the proposed National Plan for Disaster Management 2021–25 establishes the strategic direction of setting

intersectoral linkages with social protection policies and programs to address poverty and vulnerability and contribute to resilience (MODMR 2020). However, despite the formal links described above, the Ministry of Social Welfare, the main social security agency of the country, is not included in the National Disaster Management Council, the supreme body that provides overall direction in disaster management, or in the National Disaster Response Coordination Group, which is responsible for the coordination of emergency response, humanitarian assistance, and recovery activities across all levels of government.

In **Bhutan**, the risk management strategy formulated through the Disaster Management Act of 2013 states that DRM measures should contribute to social protection objectives but does not elaborate. The Department of Disaster Management is the main authority for the management of natural disasters, while local disaster management units are responsible for direct response efforts. The lack of clarity on the role of social protection has translated into ad hoc participation in disaster response and in the coverage of this function by ministries with no mandate for social protection.

**In India**, the 2019 National Disaster Management Plan includes the ASP-related objective of building and strengthening the resilience of poor communities so that disasters do not aggravate poverty and livelihoods are protected. National DRM strategy documents—the Disaster Management Act of 2005, the 2009 national policy for disaster management, and the National Disaster Management Plan of 2019—make no explicit mention of the social protection sector or related ministries. Decisions on the participation

<sup>9</sup> This is based on an assessment conducted in early 2021. The situation is likely to have changed substantively since then because of the change in government.

<sup>10</sup> The Social Policy and Social Support Law had not yet been approved.

<sup>11</sup> The four are the Employment Generation Program for the Poorest, Test Relief, Vulnerable Group Feeding, and Food for Work.

of various sectors, particularly in the response and recovery phases, are made on a case-by-case basis through the appointment of a nodal ministry and the articulation of actions by the states to manage the specific shock or disaster. In practice, linkages with social protection programs (such as the five programs under the Pradhan Mantri Garib Kalyan Yojana scheme) and systems (such as the direct benefit transfer system) have been established and are used as an essential part of the response by state and federal governments.

In **Maldives**, the Disaster Management Act of 2006, revised in 2015, does not assign a role in disaster management the National Social Protection Authority (NDMC 2015). Social protection's role in disaster response functions on an ad hoc basis in coordination with the National Disaster Management Authority. The lack of a functional, scalable safety net program constrains the scope of the social protection sector's participation in DRM-related activities.

In **Nepal**, there is some recognition of the role of social protection in the DRM policy. According to the disaster relief and response policy of 2018, a social security program is to be actively involved in disaster response, post disaster recovery, and reconstruction. Furthermore, the National Disaster Relief and Response Strategic Action Plan (2018–30), under the oversight of the National Disaster Risk Reduction and Management Authority, gives special attention to social security as a strategic activity. However, how such linkages can be managed successfully is an issue that has yet to be explored and resolved. Moreover, the current institutional framework does not include a mechanism to ensure greater coordination among agencies delivering DRM and social protection.

**Pakistan** has had considerable experience in implementing shock-responsive safety nets since the 2005 earthquake, particularly through cash transfers. The DRM framework is anchored in the 2010 Disaster Management Act establishing the National Disaster Management Authority (Gazette of Pakistan 2010). Following floods in 2010, the federal government developed a national Federal Disaster Response Action Plan in consultation with provincial authorities to outline how cash transfers could be applied to prepare for, mitigate, and respond in the aftermath of disasters. However, the plan has still not been operationalized or supported by legislation, and major gaps in institutional capacity persist. The federal and provincial governments have designed and launched various programs in response to a variety of emergencies. However, no policy or framework has been developed to support ASP. Although participation in the social protection sector is still undertaken in an ad hoc manner, the government makes regular use of social protection programs and systems, such as the Kafaalat unconditional cash pillar of the Benazir Income Support Programme.

In **Sri Lanka**, the role of social protection agencies in the response to shocks is limited. The Disaster Management Act of 2005 established the National Council for Disaster Management as the main policy body for disaster management in the country (Parliament, Sri Lanka 2005). The council includes the participation of the Ministry of Social Welfare. The National Disaster Relief Services Center has the mandate to undertake post disaster activities, such as disaster relief, rehabilitation, and reconstruction. The center coordinates with the military and police to carry out ad hoc relief programs, including social protection actions, during disaster recovery and rebuilding initiatives.



**All eight countries in the region thus have a DRM framework created through a disaster management act approved 10–15 years ago.** In all cases, the DRM framework contemplates the establishment of an inter-ministerial committee or council and an incident command system primarily to manage natural disasters. In countries with federal governments, the national framework is mirrored at the state or provincial levels.

**The formalization of social protection's role in DRM is only nascent in these countries, except in Bangladesh, in which, however, the main social protection ministries are excluded from the disaster response coordination committees.** In the case of India and Pakistan, de facto functional linkages exist, are continuously used, leverage existing policies, and piggyback delivery systems (for example, the use of direct benefit transfer system in India or the national socio-economic registry in Pakistan). In both cases, the cumulative set of experiences can become an enabling factor in formalization. The government of Pakistan has already taken steps in this direction with the drafting of the Federal Disaster Response Action Plan. Achieving this objective in federal scenarios, such as Nepal, may prove be more complex because there is an additional requirement to integrate social protection into state or provincial disaster response frameworks. In Afghanistan, Bhutan, Maldives, and Nepal, the absence of a proven social protection program or policy framework is the main impediment to closer links between the DRM and social protection sectors.

**The takeaway from these experiences is that it is important, first, to foster functional linkages, even if only informally, as a means to build the political buy-in and capital to push for the expansion of the social protection mandate into DRM, which, in some cases, is fenced off by the respective disaster management authorities.**

## 2.2.2 DEVELOPING ADAPTIVE SOCIAL PROTECTION PROGRAMS OR MODALITIES

**Another basic policy element is the development of formalized ASP policies and guidelines that allow the use of one or a selected number of social protection programs in a shock response scenario.**

The programs may be strategically selected for their potential contribution to shock response, or their importance may stem from the natural formalization of existing functional linkages with the DRM sector. This subsection first addresses the recurrent dilemmas in ASP policy design and then focuses on elements that governments may emphasize throughout the process.

### USE OF EXISTING PROGRAMS VS. STANDALONE SHOCK RESPONSIVE PROGRAM

**A common dilemma among policy makers confronted by the need to develop shock-responsive programs is whether to amend existing programs or develop stand-alone programs.** Enhancing existing programs allows the government to tap into ready-made, field-tested programs with beneficiary rosters and well-oiled delivery systems to respond to shocks. This may be possible in India and Pakistan, for instance, which have well-established social protection programs with mature delivery systems. In such cases, rather than venturing into the development of a new policy, these countries could focus on a shock-responsive version of existing policies. In Bangladesh, the government developed a shock-responsive version of an existing public works program, the Employment Generation Program for the Poorest Plus. The guidelines for this version were approved in January 2021 as an annex to the regular program guidelines. Keeping the ASP guidelines as an annex or chapter in the existing

guidelines may help increase ownership by program administrators because the ASP version is considered a regular program enhancement.

**In the absence of a social protection program with adequate benefits, services, experience, and coverage, governments may opt for the creation of a stand-alone program.** An important factor in this case

would be to link the new program to existing program infrastructure and delivery mechanisms to piggyback on the human, technological, and material resources already in place. This would allow the new program to benefit from the experience gained in regular day-to-day implementation and avoid process glitches or bottlenecks during the critical deployment. A simple analogy would be to ask individuals to imagine themselves in the midst of an emergency and provide the choice: would you rather use a car that is turned

on and used once a year or one that is used every day (figure 2.1)? In most cases, a person will choose the car that is used every day because of its reliability. A similar logical approach can be adopted for program delivery systems. Thus, developing a stand-alone ASP program with its own siloed delivery systems may not be the best option given that such systems need time to mature.

### FLEXIBLE VS. RIGID APPROACH

**Another dilemma confronting policy makers is the design of ASP programs.** Should the design be tailored to recurring hazards or should it expand the scope through a multi-hazard approach? Each shock event is unique in speed of onset (rapid or slow), impact, predictability, magnitude, duration, and geographical distribution. An interesting example in the South Asian

**FIGURE 2.1**

Choosing the most reliable option.

**Would you rather use a car that is turned on and used once a year, or the one that is used every day?**



Source: Authors

region is the conceptual evolution of Bangladesh's Employment Generation Program for the Poorest. This program evolved from an ad hoc response to the fuel and financial crisis of 2007 to a formal shock-responsive program with guidelines and a budget code in the revenue budget. Subsequently, the program was shifted from a rigid, single-hazard approach to a flexible multi-hazard design to address a larger number of shocks (box 2.1).

**Developing shock- and hazard-specific guidelines may be necessary in some cases if the political economy is not favorable to the adoption of a multi-hazard approach.** In a mid- to long-term perspective, this can be considered a positive first step.

**There are few documented experiences of the design of multi-hazard policies and guidelines.** The next subsection examines elements that policy makers may draw on in this process.

## BOX 2.1: EMPLOYMENT GENERATION PROGRAM FOR THE POOREST: FROM A RIGID TO A FLEXIBLE APPROACH

The food, fuel, and financial crisis in 2007–09 pulled over 4 million people into poverty in Bangladesh. Moreover, devastating cyclones Sidr (2007) and Aila (2009) exacerbated the poverty trend. In response, the government instituted the 100 Day Employment Generation Program at the Ministry of Disaster Management and Relief (MODMR) in 2009. In 2011, with the support of the World Bank, the program evolved into the Employment Generation Program for the Poorest, and formal program guidelines were published. The program thereby evolved from an ad hoc shock response tool to a formalized public works policy tool. It was designed to create employment among able-bodied, unemployed poor for 80 days a year in two phases during the seasonal lean period to reduce poverty and enhance the disaster resilience of vulnerable households.

The program guidelines were reviewed and updated in 2013 and 2014 to include geographical targeting, the digital administration of the beneficiary roster, and other features. In 2020, as part of the engagement with the World Bank, the guidelines were updated once more to include a flexible version, the Employment Generation Program for the Poorest Plus, that could be expanded vertically and horizontally to respond to shocks throughout the year. This allowed the program to be utilized in hazards beyond the seasonal lean period for which it was used and expand to cover a variety of issues as the inflow of Displaced Rohingya Nationals to the Cox's Bazar District.



## ELEMENTS TO CONSIDER IN ASP GUIDELINES

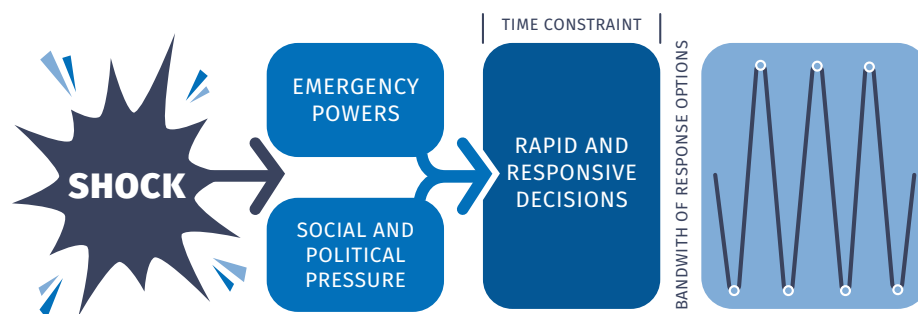
**Crisis opens the door to drastic measures, as elected officials and high-level bureaucrats are subjected to public and political pressure after being given emergency powers to respond rapidly (figure 2.2).** In many cases, this may translate into a departure from long-standing rules and principles behind social protection programs. In such emergency situations, governments should not rely on institutional forbearance to avoid potential intentional or accidental misuse or abuse of social protection instruments. Guardrails need to be established to safeguard these programs. India and Pakistan have been effective in creating ad hoc responses to various

types of shocks. This may lead to a perception that the experience may be cumulative and that approaches do not require formalization. However, institutional memory is never guaranteed, particularly in civil service arrangements, which entail the continuous rotation of civil servants or political systems that renew program administrator rosters within each administration. The availability of pre-established policy options to guide the decision-making process allows for controlled and predictable responses. Formalizing ASP guidelines turns institutional forbearance into guiding legal boundaries to contain the misuse of social protection programs. This is the essence of controlled flexibilization.

**FIGURE 2.1**

Decision-Making & Bandwidth of Policy Options during Emergencies

Source: Authors



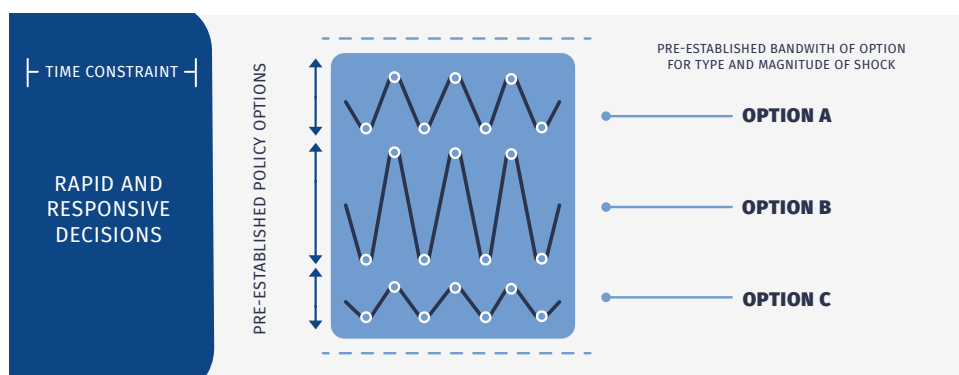
**Multi-hazard ASP policies function within a controlled flexibilization approach.** Such an approach provides a bandwidth of options so programs may be adapted to specific shocks, within a pre-established menu which

allows for better control and decision making (figure 2.3). Unlike regular guidelines, which establish a linear set of procedures and criteria, ASP guidelines tend to focus on the process of decision-making.

**FIGURE 2.3**

Decision-Making and a Pre-established Menu of Response Options

Source: Authors



**TABLE 2.1** Elements to be considered for the design of ASP Guidelines

	Element	Description
i.	<b>Alignment to DRM Framework</b>	<ul style="list-style-type: none"> <li>Establish a clear link to the country's DRM framework by linking the program to objectives and plans describing the contribution and the rationale. All eight South Asian countries have passed a disaster management act, a plan, and, in some cases, a policy.</li> </ul>
ii.	<b>Decision Making Body</b>	<ul style="list-style-type: none"> <li>Define the government body that has the authority, competence, and technical characteristics to deploy the program in the event of a shock.</li> </ul>
iii.	<b>Eligible Shocks</b>	<ul style="list-style-type: none"> <li>Determine the shocks that can trigger the program.</li> <li>Determine the magnitude threshold.</li> </ul>
iv.	<b>Trigger</b>	<ul style="list-style-type: none"> <li>Define the criteria for program activation.</li> <li>Define the effects of the trigger, for example, the release of contingency funds, early actions, the mobilization of field resources, and so on.</li> </ul>
v.	<b>Policy Parameters</b>	<ul style="list-style-type: none"> <li>Intervention characteristics: define the options for the benefits or services to be provided by the program.</li> <li>Amount: in case of cash transfers, provide benefit options using the regular program transfer as a reference.</li> <li>Target population: provide a set of options of ways to define the target population, for example: existing beneficiaries in the affected areas, households assessed as affected by the hazard, extreme poor households in the affected areas, and so on.</li> <li>Assign geographical coverage.</li> </ul>
vi.	<b>Delivery Service Arrangements</b>	<ul style="list-style-type: none"> <li>Beneficiary selection: provide options for the beneficiary selection process, for example, regular selection process, households deemed to be affected by the post disaster, door-to-door assessments, households affected and deemed poor through the social registry, and so on.</li> <li>Define delivery: describe the options for benefit delivery if any.</li> <li>Define grievance: redress options if any.</li> </ul>
vii.	<b>Periodicity and Duration</b>	<ul style="list-style-type: none"> <li>These may not require pre-established options, but the guidelines must establish that the decision-making body is responsible for these definitions.</li> </ul>

**Table 2.1 illustrates elements governments may consider during the process of designing ASP policies and guidelines.**

**All eight South Asian countries have an incident command management system that is activated in the event of a shock.** These systems are normally led by an inter-ministerial committee that operates within

a collective decision-making process. The program may leverage this body for such purposes. If, in practice, most of the decision-making is conducted by the head of the executive branch, guidelines might include the Office of the Prime Minister or the President as an additional decision-making body to account for formal and informal practices.

**The triggers for activating an ASP program should be controlled and practical.** Establishing adequate triggers requires a comprehensive understanding of a country's disaster management framework, early warning systems, and response practices. The activation of an ASP program should be pegged to an adequate decision-making process ensuring that utilization is reserved exclusively for shock response. Because the ASP program entails the flexibilization of program parameters, including vertical and horizontal expansion, the lack of controls over the trigger may lead to the politicization of the use of these programs, particularly during elections. However, the trigger parameters should not be restrictive to the point of preventing or significantly delaying the timely use of the ASP program because of bureaucratic hurdles. The case of Mexico's Temporary Employment Program illustrates this issue (see box 2.2).

**Regarding the policy parameters and delivery service arrangements, the default option provided can always follow the existing criteria and procedures.** In such a case, the guidelines can refer to the regular program documents without adding more detail.

## UPDATING SERVICE DELIVERY PROCEDURES

**The implementation of ASP programs and other activities requires a differentiated approach to implementation.** In some cases, this entails separate processes for assessing household needs and conditions, determining eligibility, and delivering benefits. In many cases, especially if horizontal expansion is required, program administrators may need to document exiting procedures associated with the beneficiary roster that resulted from the horizontal expansion. This may also warrant changes in information management systems

### BOX 2.2: DEFINING ADEQUATE TRIGGERS FOR THE TEMPORARY EMPLOYMENT PROGRAM, MEXICO

The Temporary Employment Program (Program de Empleo Temporal) was a public works program in Mexico that provided temporary income support to unskilled and unemployed individuals. In 2003, the program incorporated the Immediate Temporary Employment Program, a relief support for households relying on livelihoods that had been affected by natural disasters or other crises. When the latter was introduced, an emergency or disaster declaration had to be issued to trigger the program.

During an annual guidelines review, the Secretariat of Welfare identified this trigger as a bottleneck in the rapid deployment of post disaster relief. Disaster declarations would usually take over a week to be published, which hindered early program activation. The secretariat amended the guidelines to eliminate the disaster declaration institute an official request from the Temporary Employment Program Steering Committee as the trigger.



and mobile software applications, which would require updates to the user manuals. These new procedures should be documented, integrated in the program operations manual, and communicated to the relevant stakeholders mainly through training sessions. Special attention should be devoted to the shortening of delivery cycles. Regular program delivery cycles function on a bimester, quarterly, or monthly timeline. This covers the continuous cycle of updating information in the system, processing the payroll, requesting transfers to the payment service provider, and deposits by the payment service provider to beneficiary accounts. In rapid onset shock scenarios, the delivery cycle may need to be cut down from two or three months to one week or a few days. Establishing the protocols and expected processing times is essential in aligning all the internal and external stakeholders who participate in the delivery cycle. This includes not only internal stakeholders, but also external providers of outsourced activities, such as payment service providers.



## 2.2.3 FINANCING MECHANISMS BASED ON LAWS, REGULATIONS, DECREES, OR GUIDELINES

**Another basic policy element in ASP programs is related to the establishment of a clear financing scheme in laws, regulations, decrees, or guidelines.**

South Asian countries depend heavily on a mix of dedicated reserves, contingency funds, budget reallocations, and external aid to finance responses to shocks caused by disasters and other types of crises. However, there is no evidence of formal linkages between financing instruments and ASP programs.

**In Pakistan, there are no formal emergency finance mobilization mechanisms to facilitate ASP.** A formal emergency finance mobilization strategy should be developed within the overall DRF strategy framework, which clearly delineates budgetary instruments, and access to emergency funds at both the provincial and federal levels (the **Benazir Income Support Programme**). Moreover, while programs, such as the **Benazir Income Support Programme**, have been able to mobilize funds quickly in the aftermath of crisis, there are no formal mechanisms for the mobilization of emergency funds. In ex-post emergency response, social protection programs have relied primarily on the reallocation of funds rather than funds earmarked for emergency situations.

**Building on the example presented in box 2.2, Mexico's Temporary Employment Program had three formal financing sources.** According to the program guidelines, the Secretariat of Welfare was required to allocate at least 30 percent of the program's annual budget to the program's post disaster relief activities. In case this reserve was exhausted, additional funding could be requested from the Disaster Management Fund or from the Secretariat of the Treasury and Public

Credit, which, according to the Article 19 of the Federal Law on Budget and Treasury Responsibility, could reallocate savings from efficiencies or undisbursed funds to other secretariats. Establishing predefined financing schemes allows, from the institutional perspective, both program administrators and the disaster management authority to ensure higher levels of certainty, transparency, and accountability around the use of ASP instruments.

**When governments are determining budget allocations for ASP they should include the administrative or operating costs needed to facilitate the distribution of funds to beneficiaries.** Because the operational costs may increase as a result of rapid assessments or the rapid mobilization of payments, the government can implement a separate parameter to calculate operational costs in emergency situations that adhere more closely to reality.

## 2.3 Administrative Preparedness

**The management of human resources, material resources, and government contracts is typically overshadowed in discussions on resources by the focus on financial resources.** Program administrators must also consider how to mobilize human, technological, and material resources (for example, vehicles) within the constraint of government administrative laws, regulations, and terms of reference in a rapid decision-making environment. This section provides a brief overview of these indispensable elements of shock response among program administrators.

### 2.3.1 ADAPTIVE HUMAN RESOURCE MANAGEMENT

**The common understanding of capacity in the development sector refers to the ability of relevant actors to perform the actions required in their terms of reference in an effective manner.** In operations analysis in the private sector, capacity is also used to define the ability of a unit to absorb or process a given load of work. Participation in disaster response entails, in many cases, the need to increase capacity temporarily in the affected areas according to the latter definition. This requires pre-establishing arrangements to increase the number of field staff. In some cases, this may only require the temporary deployment of existing field personnel from unaffected to affected areas. In other cases, as in more widespread disasters, this may entail the hiring of additional temporary personnel. The social protection ministry can consider creating internal procedures that allow for a surge of personnel in an orderly and predefined manner.

**ASP strategies need to account for staff training under the first definition of capacity.** Emergencies are stressful situations that typically entail increases in workload and that are associated with great uncertainty. The availability of pre-established protocols on procedures, on the use of systems, and on potential temporary assignments is essential. Protocols allow for program administrators and field staff to manage uncertainty in high-pressure circumstances. In designing guidelines and procedures, program administrators should consider the development of training curricula that can be provided as part of regular capacity updating or as onboarding materials for incoming personnel.

## 2.3.2 MANAGEMENT, MATERIAL RESOURCES AND OUTSOURCING

**A government's implement transparency and accountability practices and regulations, the use of public resources require a higher level of specification in terms of their authorized utilization with the objective of limiting any potential abuse.** In ad hoc shock responses, these practices may represent a constraint because the procedures allowing a repurposing of resources can entail a time-consuming bureaucratic process. The availability of pre-established paths for the authorization of operational resources can facilitate this task while maintaining transparency and accountability. Managing Outsourced Contracts

### MANAGING OUTSOURCED CONTRACTS

**Private sector involvement in ASP normally takes the form of an outsourced provider in the service delivery process, such as payment service providers.** This includes commercial banks and mobile financial service providers. A common issue in providing cash transfers to affected populations in the aftermath of a shock is the inability of payment service providers to process payrolls quickly, mobilizing large sums of cash (liquidity constraints), and establishing sufficient temporary cash-out points to serve the affected populations. In these instances, ASP program administrators should work ex-ante with banks or mobile financial service providers on adding provisions to contracts to ensure that, in emergency situations, private service providers can promptly process payrolls, access liquidity, and mobilize additional field personnel to expand cash-out points. This may entail transaction fees that are higher than in regular program operations; such fees should be agreed beforehand to provide certainty to both the government and the service providers.

**Another aspect of the implementation of ASP programs that is also subject to outsourcing is the identification of eligible households.** For example, door-to-door assessments require rapid field deployment and are sometimes outsourced to NGOs to leverage their geographical coverage, their resources, and, in many cases, their ability to access hard-to-reach areas. In Pakistan, household assessment activities are regularly outsourced to NGOs. Regularly updating service agreements that can be activated in the event of a shock is another way of minimizing transaction costs and improving the efficiency and predictability of ASP implementation.

## 2.4 Multisector Coordination

**Government organizational structures are created to function in stable environments and are governed by rules and principles designed for performing predictable, routine activities.** Such organizational structures are often unable to cope with rapid change. Governments have therefore developed network-based approaches that allow for the rapid intake and distribution of information, collective decision-making, and coordinated action. The eight countries in South Asia adopted and formalized these coordination mechanisms during the 2000s as part of the enactment of disaster management laws. This section analyses these mechanisms, both horizontal and vertical, in South Asian countries and provides insights into their importance in ASP development.



### 2.4.1 HORIZONTAL COORDINATION MECHANISMS

This subsection describes the mechanisms for coordination among relevant central agencies and discusses the practical implications for the adoption and implementation of ASP.

Developing effective ASP mechanisms requires a minimum understanding of the institutional arrangements that have flourished since the mid-2000s. For this reason, the following unbundles the essential functions of disaster management arrangements and describes their importance to ASP development.

### ESSENTIAL FUNCTIONS

The central DRM institutional structure normally has three essential functions that are important in the development of an ASP strategy:

#### 1) DRM Policy Authority

This is normally a collective body chaired by a head in the executive branch. It is the supreme body of the DRM national framework. It is responsible for setting strategic objectives and approving related policies and plans. Each of the South Asian countries has a supreme policy body established by the respective disaster management law (table 2.2).

**TABLE 2.2** Policy and Administrative Bodies in the DRM Framework, South Asia

Country	DRM Policy Body	• DRM Administration Body
<b>Afghanistan</b>	National Disaster Management Authority	• Afghanistan National Disaster Management Agency
<b>Bangladesh</b>	National Disaster Management Council	• Department of Disaster Management • Ministry of Disaster Management and Relief
<b>Bhutan</b>	National Disaster Management Authority	• Department of Disaster Management
<b>India</b>	National Executive Committee	• National Disaster Management Authority
<b>Maldives</b>	National Disaster Management Council	• National Disaster Management Authority
<b>Nepal</b>	National Disaster Management Council	• National Disaster Risk Management Authority
<b>Pakistan</b>	National Disaster Management Commission	• National Disaster Management Authority
<b>Sri Lanka</b>	National Council for Disaster Management	• Disaster Management Center • Ministry of Disaster Management

For example, Bhutan's policy body, the National Disaster Management Authority, is a collective high-level committee comprised of the prime minister; the minister of home and cultural affairs; the finance minister; the secretaries of all ministries; Gyalpoi Zimpon, the head of the National Environment Commission; the secretary of the Gross National Happiness Commission; the president of the Bhutan Chamber of Commerce and Industry, and the head of the Department of Disaster Management (Parliament of Bhutan 2013).

## 2) Management Authority

**This is an administrative unit, with its own personnel structure and regular budget allocations, It is responsible for the preparation, implementation, monitoring, and coordination activities related to disaster management in the country.** Such units play a lead role in both regular and emergency periods. In some cases, the authority is structurally under a disaster management ministry, as in the case of Bangladesh and Sri Lanka. In other cases, it falls under the office of the head in the executive branch. The eight

South Asian countries each has a DRM administrative authority (see table 2.2).

## 3) Incident command System (ICS)

**This is a flexible, dynamic temporary organizational structure that governments activate in the event of a shock to assess the crisis situation rapidly, distribute information among relevant bodies, take collective decisions, and coordinate collective action.** The system normally consists of an inter-ministerial committee. In Bangladesh, for example, this is the role of the National Disaster Response Coordination Group, and, in Nepal, the Central Natural Disaster Relief Committee. In federal countries, incident command system units have been instituted in the states or provinces and at the national level. In India, for example, it is common practice to establish a joint incident command system unit with state and federal officials. The prime minister, in his role as head of the National Disaster Management Authority, formally designates an appropriate ministry to lead the response effort depending on the particular shock.

### *The Incident Response System guidelines state:*

**"The management of other major natural and manmade disasters will also require Lead and Supporting agencies. Different disasters require different types of expertise for response. Thus, in case of rescue and relief in natural disaster, it will generally be the local Police and the NDRF / SDRF, in case of Fire it will be the Fire department, in case of drought it will be the Agriculture department, in case of Epidemics and other Biological disasters it will be the Health department that will have to play the lead role and the remaining departments will have to play the supporting role as per requirement and their core competencies." (NDMA 2010, 25)**



### RELEVANCE FOR ASP

- Formalizing the participation of social protection programs in the DRM system may, in most cases, require review and authorization by the DRM policy authority. The approval of this body may also provide the level of formalization the ASP program needs to access contingency and other sources of funding.
- Coordination with the country's disaster management authority is essential in the development of an ASP strategy. It may be important to determine the contributions of the ASP program, plan the potential approach to various hazards, establish coordination mechanisms, and so on.
- Understanding the country's incident command system assures that the planned ASP program deployment adheres and contributes to the existing norms and practices.

### 2.4.2 VERTICAL COORDINATION: SUBNATIONAL AND DECONCENTRATED UNITS

**Vertical coordination refers to the distribution of roles and responsibilities among central, mid-level, and local units.** The institutional arrangements in South Asian countries follow two main systems. Centralized systems are characteristic of unitary states, while decentralized systems are characteristic of federal states. In both cases, there are at least three layers of government administration according to various configurations. For practical purposes, these can be classified as central government, provincial or state governments or units, and local or local government units. Centralized systems, such as in Bangladesh, Bhutan, and Sri Lanka, have deconcentrated government units at the regional and local levels to which they delegate roles and responsibilities, always under the control of the central government. Indeed, the deconcentrated units are considered an administrative extension of the central government. Decentralized or federal systems rely on autonomous subnational



governments that are normally constituted by state or provincial governments and local governments. Roles and responsibilities in the decentralized system are devolved or delegated to the states or provinces. In several cases, such as in India, Nepal, and Pakistan, these may be concurrent with the central government's responsibilities, making coordination a requirement to avoid redundancy and foster complementarity. Figure 2.4 illustrates the similarities and differences between the two systems. The main differences are that, in the decentralized approach, states have an essential role in financing and in leading the implementation and coordination efforts.

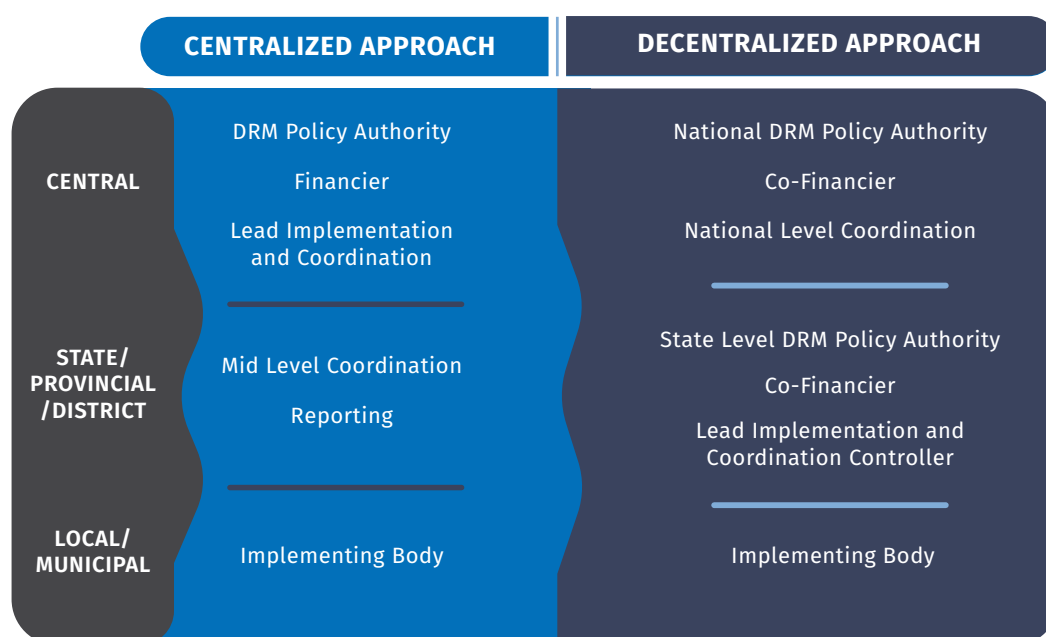
**The Indian administrative system is a federal arrangement whereby the responsibilities for various aspects of governance have been distributed between the center and the states.** The central government decides on policy matters, while the states implement the policies through the district and local administrations. Every program falls under a particular ministry at the center, and a similar structure is followed in the states. The primary

responsibility for disaster management falls to the states, and the institutional mechanisms at the center, state, and district levels support the state's capacity to manage disasters in an effective manner. The Disaster Management Act of 2005 mandates that state governments take measures to prepare state disaster management plans, integrate measures for the prevention of disasters or mitigation into state development plans, allocate funds, establish early warning systems, and assist the central government and other agencies in various aspects of disaster management (Ministry of Law and Justice 2005).

**In Pakistan, at the federal level, the National Disaster Management Commission, headed by the prime minister, is the highest policy-making body.** The National Disaster Management Authority serves as the secretariat and has overall responsibility for coordinating and operationalizing DRM implementation through the entire disaster management cycle, including preparedness, mitigation, risk reduction, relief, and rehabilitation. This structure is replicated at the provincial level, where the provincial disaster

**FIGURE 4**

Centralized vs Decentralized Approach in the Institutional disaster management Framework



management commissions serve as decision-making bodies. These are headed by the respective provincial chief minister, and provincial or regional disaster management authorities serve as both secretariat and the operational arm. At the district level, district disaster management authorities have been established to be responsible for the whole spectrum of DRM in their jurisdictions, while district commissioners oversee operational systems. However, because disaster management is only one of the roles covered by the district commissioners, implementation often lacks adequate effort and resources.

**In both centralized and decentralized approaches, despite improvements in coordination, local capacity continues to be a constraint across South Asia.** Local government units, whether decentralized or deconcentrated, do not have sufficient technical capacity to perform the activities nor the resource endowment to absorb the surge in activities that arise in the event of a shock. In most cases, all shock response actions (sometimes involving five or six ministries) are implemented by the same local body that may consist of three or four people.

**The relevance for ASP of the different approaches is as follows:**

- Coordination is required at various levels of government. ASP agencies should recognize this and align business processes to prevailing practice.
- In federal countries, ASP programs must work together with state and provincial governments to tailor implementation and coordination schemes.
- There are some examples in the region of social protection programs that have a considerable endowment of resources at the field level that can be mobilized in the event of a shock. This may be seen as one of several contributions of the social protection program.





**63 percent of the countries in South Asia have dedicated reserve funds for disasters. However, they are not linked to their respective social protection systems.**

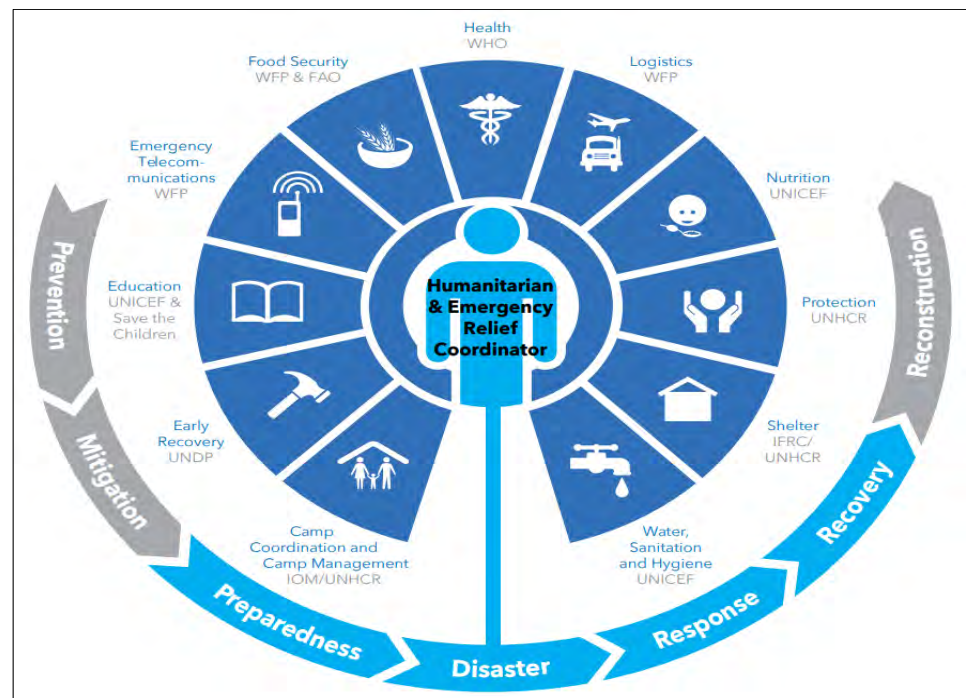




**FIGURE 2.5**

### Cluster Coordination for Humanitarian Response

Source: IASC 2015.



## 2.5 Participation of Humanitarian Actors and NGOs

**The participation of humanitarian actors and NGOs in the region varies significantly in their roles, leadership, and coordination across countries.**

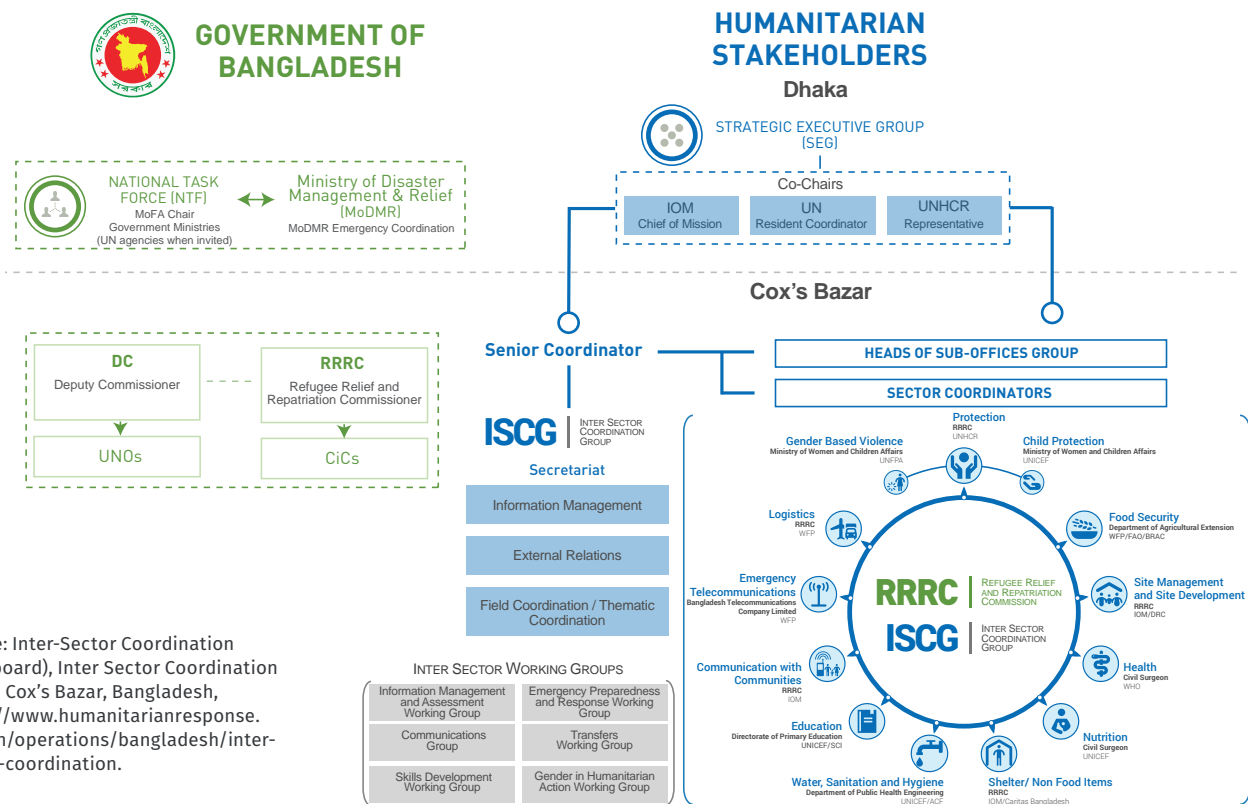
**In Afghanistan, the humanitarian sector has served to compensate for the absence of government-led shock response capacity.** Afghanistan is heavily reliant on international support, given the ability of humanitarian actors to mobilize resources and deploy assistance rapidly to shock-affected areas. Between April and June 2021, 156 organizations were providing humanitarian assistance in Afghanistan: 11 United Nations agencies, 71 international NGOs, and 74 NGOs.<sup>12</sup> Because of the complexity of managing

the large number of organizations, the United Nations established the cluster system in Afghanistan in 2008 to provides leadership, collective decision-making, and a clear division of labor, with the objective of increasing effectiveness and improving the predictability and accountability of international responses to humanitarian emergencies (figure 2.5). There are currently six clusters in Afghanistan: emergency shelter and nonfood items, food security and agriculture, health, nutrition, protection and water, and sanitation and hygiene, as well as the Education in Emergencies Working Group. The protection cluster hosts four subclusters: child protection in emergencies; gender-based violence; the housing, land, and property task force; and mine action (OCHA 2021).

**In Nepal, governmental and nongovernmental agencies run parallel relief initiatives involving ad**

<sup>12</sup> See “Who Does What, Where (3W), Afghanistan: Humanitarian Operational Presence (April to June 2021),” United Nations Office for the Coordination of Humanitarian Affairs, Geneva, <https://www.humanitarianresponse.info/en/operations/afghanistan/3w>.

**FIGURE 2.6** The Sectoral Coordination Mechanism for the Displaced Rohingya Population



Source: Inter-Sector Coordination (dashboard), Inter Sector Coordination Group, Cox's Bazar, Bangladesh, <https://www.humanitarianresponse.info/en/operations/bangladesh/inter-sector-coordination>.

**hoc post disaster coordination.** The government has established a one-door policy to channel all shock response work from nongovernmental agencies through one coordinating entity. However, this is not always followed because of the slowness of the coordination process and the need for urgency in the response.

**In Bangladesh, India, and Pakistan, the humanitarian sector complements government shock response capacity.** This normally occurs after large-scale shocks that exceed the immediate capacity of the national authorities. For example, since 2017, Bangladesh has experienced an inflow to Cox's Bazar District of 1.1 million displaced Rohingya people from Myanmar. Because of the cross-national complexity and magnitude of the inflow, the United Nations and humanitarian

NGOs mobilized a large-scale operation. Similar to the cluster system in Afghanistan, the humanitarian sector, which is led in this case by Inter Sector Coordination Group established by the United Nations, works directly with the government's coordination and oversight structure. On the government side, the coordination is led by the National Task Force headed by the Ministry of Foreign Affairs and MODMR, which has been responsible for the management of the Rohingya inflows since the early 1990s. The National Task Force and MODMR are also responsible for the policy decisions. In the field, the government operates within the dedicated structure led by the district refugee relief and repatriation commissioner in the district and by the camp-in-charge administrator in the camps. Mirroring this structure, the humanitarian sector includes a Strategic Executive Group formed



by the heads of mission of the United Nations and bilateral agencies and a field secretariat that, through the cluster system, coordinates all work with the district commissioner and the camp administrator (figure 2.6). As of July 2020, there were 59 United Nations organizations, 53 international NGOs, 28 national NGOs, and 2 government ministries working with the Rohingya community (OCHA 2020).

**A major issue pertaining to partnerships with humanitarian actors (whether from the UN or NGOs), is how to predefine their roles in the event of a shock.** In cases such as Afghanistan, where the onus of leading the humanitarian work falls on the head of the cluster coordination (in many cases the UN representative to the country), the responsibility of building a pre-established response framework falls on them. In cases where the work of humanitarian agencies is complementary and coordinated or agreed

upon with Government, the latter should take the leadership in addressing the roles and responsibilities that the humanitarian agencies should cover, as well as identifying the gaps and establishing potential agreements on financing and actions.

**While the contribution of humanitarian partners is providing lifesaving support to the most vulnerable households in countries as Afghanistan, it is not necessarily conducive to the development of government-owned predictive systems as well as long-term community resilience.** Partnerships must continue addressing the question of how to leverage humanitarian assistance to build long-term in-house capacity in the country to increase the level of self-reliance of government systems. This may not necessarily be an easily attainable goal in cases where government capacity is absent and in constant flux.





## 2.6 Conclusions and Pathways

### 2.6.1 ADAPTABILITY AND BEING PREPARED

**Adaptability from the institutional perspective is a complex endeavor. Response by design means being prepared. Pre-established institutional arrangements are the backbone of preparedness.**

The basic institutional underpinnings of ASP are three. First, establish a clear role for ASP in a country's DRM framework. Second, develop ASP-specific guidelines and policies. Third, establish clear links to financing mechanisms through laws, regulations, decrees, or guidelines. Formalizing the role of social protection in the country's social protection framework adds social protection policies and delivery systems to the available response menu, provides legal certainty in the use of programs and resources in shock response, and allows for a virtuous cycle of continuous improvement between the social protection and DRM sectors. The availability of pre-established policy options to guide the decision-making process fosters controlled, predictable responses. Formalizing ASP guidelines turns institutional forbearance into guiding legal boundaries to contain the potential misuse of social protection programs. Guidelines should be flexible but controlled. Financial resources are not the only resources. It is important to consider people, material resources, and contracts, given that a substantial share of shock response resides in the capacity to mobilize people, material resources, and outsourced capacity.

- **Most countries have established mechanisms for shock response.** These normally consist of three main entities: a DRM policy authority, a management authority, and an incident command system. Understanding how the ASP implementing unit interacts with all three is essential.

- **Vertical coordination is a function of a country's level of decentralization.** Federal countries must undertake additional effort to coordinate with subnational governments. Both centralized and decentralized models require well-defined roles and responsibilities among regional and local units.
- **The role of humanitarian actors varies from country to country.** In Afghanistan, humanitarian agencies are at the helm, led by the United Nations, while, in Bangladesh, India, and Pakistan, humanitarian agencies play a complementary role in coordination with national governments.
- **The institutionalization of ASP may encounter roadblocks.** Focusing on the use of social protection during the relief and recovery phases may be easier to grasp for politicians and policy makers. Segmenting government constituencies and understanding their perspectives are crucial to developing a fruitful engagement.

### 2.6.2 PATHWAYS: BUDGET COMMITMENT, MANDATES, AND BUY-IN

**The institutionalized participation in social protection within a country's disaster management framework, with clear roles and responsibilities, guidelines, and administrative arrangements,** requires political vision and support. The following are elements that policy makers, program administrators, and development practitioners might consider in embarking on this process.

#### POTENTIAL ROADBLOCKS:

- **First,** ASP may absorb a significant share of the funds for disaster response. In practice, this may translate

into taking funds from other areas or repurposing in favor of the ministry implementing the ASP programs.

- **Second**, expanding the mandate for ASP may be met with resistance by the disaster management authority and the social protection implementing agency. Expanding the mandate of a line ministry to take up some responsibilities for disaster management may represent an encroachment on the core work of the management authority. For the social protection implementing agency, this may represent an expansion of unwarranted responsibilities, outside their normal sphere of work.
- **Third**, there are preconceived notions among policy makers that social protection is about handouts to physically or culturally disadvantaged people, mostly identified categorically (older people, people with disabilities, widows, indigenous minorities, and so on).

### GARNERING BUY-IN:

- **Entry point:** An efficient way of fostering buy-in for the institutionalization of ASP is to focus on the easy-to-grasp contributions of social protection to shock response, that is, as a tool for the response and recovery phase. The use of social protection as a mechanism to provide post disaster relief to affected households is easy to understand and tangible for politicians, policy makers, and program administrators. Raising awareness around the contributions of social protection to the precheck side of the disaster management cycle (preparation and mitigation) may diffuse focus because it is more difficult to understand. Similar to the evolution of DRM policies in the past two decades, once government constituencies are convinced of the need to formalize social protection as part of a country's shock response strategies, a more integrated approach that encompasses all phases of the cycle can be actively pursued.

- **Segment counterparts and engage government by constituencies:** Governments are not monolithic systems. Arguments used in discussions with politicians should be differentiated from those used with high-level civil servants and program administrators. Program administrators are concerned about their growing burden of responsibilities and their stagnant salaries, but they are also worried about their fiduciary burden in mobilizing programs and resources outside existing regulations. Institutionalizing ASP protects them in this sense. Politicians are worried about the use of taxpayer money as handouts, but they are also concerned about being seen as unresponsive to the needs of the affected households. ASP provides a direct method of demonstrating responsiveness at the household level. High-ranking bureaucrats worry about overcommitting to actions beyond their mandates and encroaching on another ministry's authority. Establishing the basic institutional underpinnings of ASP allows for the definition of clear roles and responsibilities that will set the boundaries for action.

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**Adaptability from the institutional perspective is a complex endeavor. Responsive by design means being prepared. Pre-established institutional arrangements are the backbone of preparedness.**



# CHAPTER 3

## FINANCING

**AUTHORS:** Samantha Cook and Cristina Stefan

### 3.1 Overview

**When sovereign disaster risk financing and insurance are limited or absent, governments act as the insurer of last resort and thereby carry much of the financial burden of natural disasters.** In the event of a disaster, governments tend to rely on increased borrowing, greater taxation, or—most likely—budget reallocations whereby budgeted lines of public spending are reduced to release resources for the additional finance needed for adaptive social protection (ASP), which is often unbudgeted. There is a growing body of literature on the need for prearranged finance to help manage these unforeseen expenditures, but there is a sizable gap in information on how to quantify the amount of finance required to scale ASP programs after a shock.

**Financing ASP involves understanding how much finance is required for events of different magnitudes, identifying preplanned financial instruments that release finance when needed, and either establishing distribution mechanisms or linking to existing ones (Bowen et al. 2020) (figure 3.12).** If one of these three components is missing, then providing support to the affected population may be impeded, but may also become more costly.

**FIGURE 3.1**

Financing  
ASP



**Early action, facilitated by prearranged finance, can save lives, cut the cost of response in half, and reduce long-term impacts.** For example, Wiseman and Hess (2007) find that, for every US\$1.00 spent on planning (including ex-ante financing based on triggers, preparedness plans, and systems), US\$5.00 can be saved. More certainty about the support that will be provided and when it will be provided can enable households to invest more in productive activities and build resilience. Otherwise, households may revert to adverse coping mechanisms to shocks, such as selling assets, migrating, removing children from school, forgoing health care, marrying early, and so on that put household human and productive capital at risk and harm long-term well-being. As disasters become more frequent and intense, the social protection system needs to develop the ability

to adjust dynamically and respond in a timely manner to prevent irreversible losses among those affected.

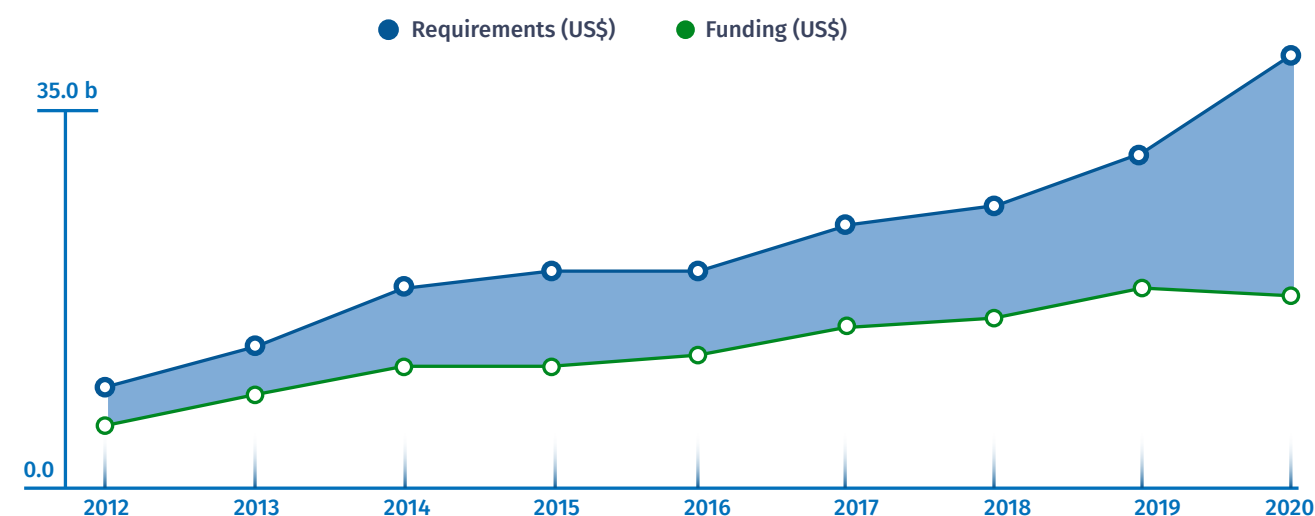
**Governments in South Asia must often deal with the compound impacts of shocks given the variety of hazards the region experiences, from flooding across the Ganges to earthquake events where the Eurasian and Indian plates are colliding, with many cross-border impacts.** This chapter introduces the principles of disaster risk finance and the ways this can help develop timely and effective ASP. It demonstrates the need to move from a reactive approach toward financing the cost of the next shock towards a proactive approach, and the progress that has been made in the countries across the region in shifting quickly toward comprehensive support for those most in need.







**FIGURE 3.2** The Gap between Actual and Required Humanitarian Funding, 2012–20



Source: OCHA 2020.

### 3.1.1 THE SHIFT FROM REACTIVE TO PROACTIVE FINANCE

**Given the rising amount of finance needed to respond to compound shocks, response is often constrained, while governments reallocate budgets or fundraise from the international community.** This can lead to significant delays. It highlights that governments have finite resources, which constrain expenditures. Often politically unfavorable, reallocations may occur at the expense of longer-term development projects,

thereby delaying future economic gains. This means that countries may have to rely on global humanitarian agencies and development partners to provide financial support, which further exacerbates delays and creates recurring funding gaps relative to needs on the ground. In such cases, funding may be received late and be insufficient (Clarke and Dercon 2016). The delays disproportionately affect the poorest members of society and demonstrate the need for government-owned ASP programs (box 3.1).

## BOX 3.1: SOCIAL PROTECTION PROGRAM MATURITY IN LATIN AMERICA AND THE CARIBBEAN

The countries in the Latin America and Caribbean region have been pioneers in the design and use of social protection benefits, services, and delivery systems to help poor and vulnerable households and individuals manage risk. This is manifested in the government responsibility and leadership in social protection delivery and the comparatively high social protection spending, coverage, and demonstrated outcomes in poverty reduction and human capital development. An important distinguishing characteristic of most social protection systems in the region is the clear sectoral leadership of governments. Most social protection benefits and services in the region are financed through recurrent budgets and implemented by robust institutional arrangements at various administrative levels, including ministries, executive agencies, or administrative departments with executive oversight. However, these systems have not yet been transformed into fully operational ASP. Many miss key components, such as social registries.

Social protection programs in the region cover a broader segment of the poor and the total population relative to other regions. Social protection programs in the region cover 60 percent of the total population, while 76 percent of the poorest quintile participate

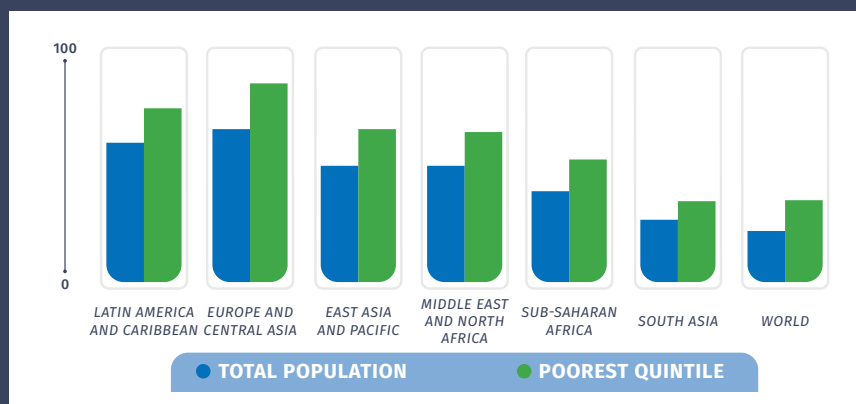
in at least one social protection benefit system or program (second only to the Eastern Europe and Central Asia region) (figure B3.1.1). The level of the social protection benefits in the region is also greater relative to other regions, at 35 percent. Social protection programs in the region have been evaluated for impact, with demonstrated results in reducing poverty and inequality and boosting human capital. For instance, social protection and labor programs have led to a 43.3 percent reduction in the poverty gap affecting the poorest quintile and a reduction in the poverty headcount ratio by 28.4 percent.

While social and beneficiary registries are common in most countries in the region, their use, coverage, and level of integration vary. Brazil, Chile, and Mexico are pioneers among their regional neighbors, with flagship programs and comprehensive social protection delivery systems that have often been replicated across the region and throughout the world (figure B3.1.2). In Chile, for example, the national household social registry (Registry Social de Hogares) is linked with the basic emergency factsheet (ficha básica de emergencia) to capture household socioeconomic and disaster damage data to support decision-making on the deployment of assistance to affected populations.

FIGURE B3.1.1

Social  
Protection  
Coverage,  
by Region

Source: World Bank 2018.



## BOX 2: SP PROGRAMS MATURITY IN LATIN AMERICA AND THE CARIBBEAN (LAC)

Meanwhile, Caribbean countries, except the Dominican Republic and Jamaica, do not currently have established social registries to store data on all program applicants for poverty-targeted benefits and services. Instead, they rely on simple electronic databases of program beneficiaries that perform the function of social registries.

Despite the firm commitment to social protection support, the trend in the region has been geared more toward the ad hoc use of social protection to address disaster risks rather than ASP. This has usually been manifested in countries making one-off decisions to scale up or deploy social protection programs and services after disasters or to adjust one or multiple delivery processes (intake, payment, benefit amount) following a disaster event. Financing for post-disaster social protection needs has often been based on emergency budgetary reallocations, rather than relying on predictable sources of contingency financing. In the absence of established emergency budget procedures, ensuring resource needs for social protection scale-up is tenuous and unpredictable in the region.

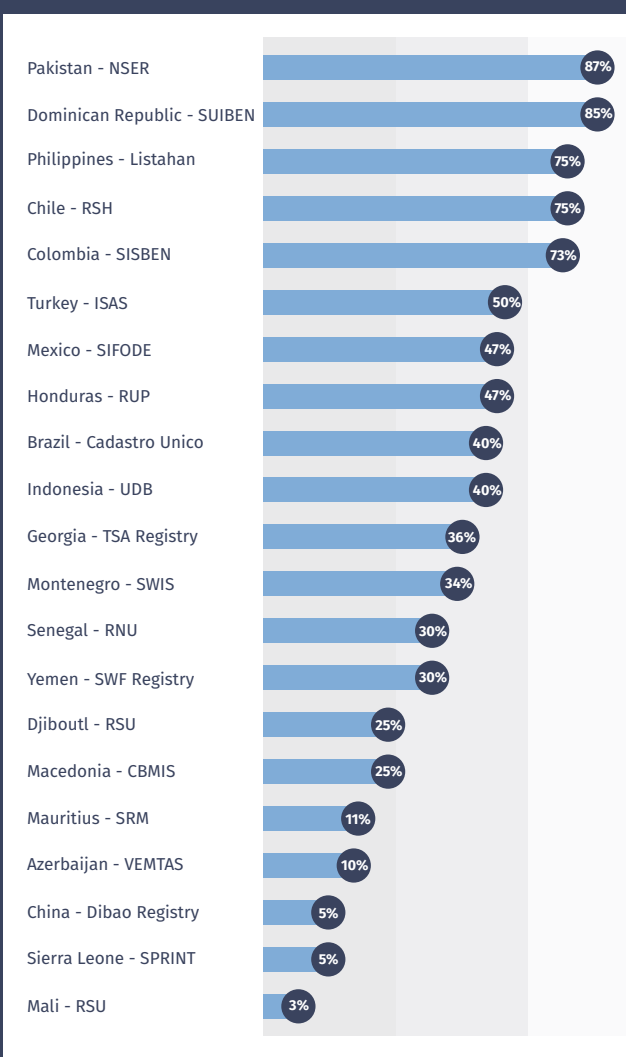
Nonetheless, Chile and Mexico have been at the forefront in developing ASP. In Mexico, all cash transfer programs (including the social pension for the elderly, the disability pension, and others) are, according to formal operational rules, associated with an option to be expanded vertically in emergency situations through the payment of up to one additional month of benefits to cover priority needs caused by the natural events. In the Dominican Republic, a vulnerability to climate hazards index has been developed and combined with data on housing, geographic location,

and socioeconomic characteristics in the Single Beneficiary System to estimate the probability that a household will become vulnerable to hurricanes, storms, or flooding.

**FIGURE B3.1.2**

### Population Share of Coverage by Social Registries

Source: Leite et al. 2017.





**Arranging aid before a disaster or shock to have finance available for emergencies, rather than relying on ex-post financing, such as through international aid or budget reallocations, not only facilitates more timely and cost-effective responses, but also allows governments to have greater ownership of risk and greater predictability over what resources will be available, when, and from whom.** Figure 3.3 outlines the range of instruments used in financing disaster

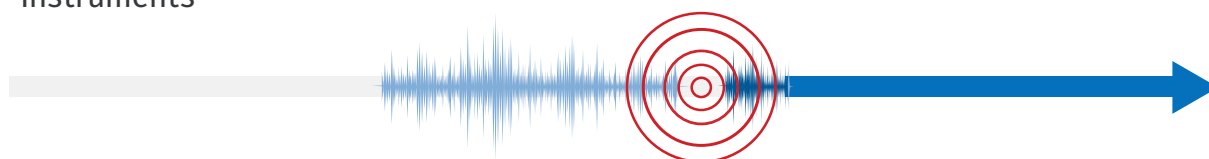
response by governments. Examples of prearranged (or ex-ante) finance include contingency budgets, dedicated disaster reserve funds, contingent credit, and risk transfers, including sovereign insurance. The usage of traditional ex-post financing instruments tends to take longer because of the need to mobilize funding, can be unpredictable, and incurs higher overall costs. For example, budget reallocations can divert funds away from productive investments in schools or roads.

**FIGURE 3.3**

**There are multiple financing instruments that allow governments to finance the cost of disasters.**

Overview of  
Disaster Risk  
Financing  
Instruments

These instruments can be categorized as those arranged before a disaster (ex ante) versus those mobilized after a disaster (ex post). The list below offers examples of financial instruments that have been used to finance post-disaster activities.



#### EX-ANTE FINANCING INSTRUMENTS

- 1 DISASTER RESERVE FUND**  
A dedicated disaster response fund, where undisbursed funds can be rolled over.
- 2 CONTINGENCY BUDGET**  
A separate budget line that is drawn down in the event of a disaster shock.
- 3 CONTINGENT CREDIT**  
A loan arranged in advance that provides immediate liquidity once a predetermined trigger is met.
- 4 (SOVEREIGN) RISK TRANSFER INSTRUMENTS**  
Instruments such as insurance and catastrophe bonds that allow governments to transfer disaster risks to the markets and rapidly access payouts in the event of a major disaster.

#### EX-POST FINANCING INSTRUMENTS

- 1 BUDGET REALLOCATION**  
Redistribution of funds from other programs to cover emergency response and recovery needs
- 2 BORROWING**  
Raising of funds by issuing bonds or contracting loans from recovery and reconstruction.
- 3 TAX INCREASE**  
Temporary or permanent tax increases as a last resort to finance post-disaster activities
- 4 INTERNATIONAL AID**  
External development partners' assistance, which is often unpredictable.

Source: World Bank 2019.

**Relying on international aid can be slow and unpredictable and can lead to a loss of ownership by the government.** This represents a strong case for channeling funds through effective ASP systems. The political environment for sourcing funds can be challenging, and, while donor funds will always be required by some countries, there is an element of uncertainty surrounding how much will be provided, what will be provided, and when this will arrive in the country. Consequently, overdependency on international aid as a source of post disaster financing

can create delays in the provision of initial relief and can inhibit ex-ante contingency planning. Establishing a robust and transparent social protection system that can be adapted to address the increase in needs caused by a shock can encourage donors to channel much needed post-disaster funds through these government systems. For example, in Malawi, donors channeled funds through the COVID-19 Urban Cash Initiative, which was established to facilitate much needed support to households during the COVID-19 pandemic (box 3.2).

### BOX 3.2: THE COVID-19 URBAN CASH INITIATIVE, MALAWI

In 2020, as part of its National COVID-19 Preparedness and Response Plan, Malawi initiated the COVID-19 Urban Cash Initiative to mitigate the adverse impacts of the pandemic on livelihoods, human capital accumulation, and basic consumption among the poor in the cities of Blantyre, Lilongwe, and Zomba. The intervention targeted 35 percent of each city's population and was implemented in the poorest hotspots, enrolling over 199,000 households. The monthly transfer level was equivalent to the minimum wage at the time—MK 35,000—for a total of three months. The design and implementation of the initiative were led by the government with the support of development partners, including the Delegation of the European Union in Malawi, the German Agency for International Cooperation, the International Labor Organization, KFW, the United Nations Children's Fund, the World Food Programme, and the World Bank.

The initiative is the country's first major shock-responsive cash transfer program focusing on urban areas. It provides a conducive and fertile learning environment for shaping future policies and programs. A review of the initiative found that implementation was satisfactory and that key lessons had been learned across the delivery chain. In particular, survey data indicate that most beneficiaries perceived the hotspot identification and household registration processes to be transparent, inclusive, and properly conducted, with little political influence from community leaders. Furthermore, despite payment delays, beneficiaries also felt that payments were delivered in a timely manner—at a time when their livelihoods were most impacted—and that they had received the full amount to which they were entitled.

### 3.1.2 FINANCING INSTRUMENTS

**Not all financing instruments serve the same purpose.** By combining instruments with different characteristics, governments can ensure that finance is delivered cost-efficiently and at the appropriate time and scale. Budgetary instruments, such as contingency funds and reserves, provide rapid, flexible finance for smaller, more regular shock events relative to market-based risk transfer instruments (including sovereign insurance and catastrophe bonds), which are best suited to less frequent major emergency financing needs. Market-based risk transfer instruments can be expensive if they are used for recurrent financing needs, but they can also be cost-effective for delivering rapid and predictable finance at scale. For middle layers of risk, contingent financing, such as the International Development Association's Catastrophe Deferred Drawdown Option or its IDA19 Crisis Response Window–Early Response Allocations, are reliable and cost-effective.

**Transferring risk to the financial markets through reinsurance and capital market transactions can provide a cost-effective way to manage the risk associated with the most severe, yet infrequent events.**

Sovereign risk transfer, such as through insurance and catastrophe bonds, work in a similar way to traditional insurance, but are purchased by governments, usually the ministry of finance. Risk transfer instruments can rapidly deliver finance at scale to help manage the exposure to large, sudden, and unexpected events. Parametric insurance policies pay out based on an objective trigger, for example, rainfall below an agreed measurement threshold. An advantage is the speed and predictability of the process, while the main disadvantage is that the insurance does not pay out in times of need because the objective trigger may

not exactly match the losses. This disadvantage can be reduced and managed by using instruments with hard triggers, such as parametric insurance, along with instruments with softer triggers, such as contingency funds or contingent credit, for instance, the World Bank's Catastrophe Deferred Draw Down Option. The price of insurance is directly related to the size of the risk to be covered (for example, the average annual losses), although the cost may be higher if the risk is uncertain (for instance, because of a lack of data). With insurance, you get what you pay for, and a lower price may reflect exclusions and poor claims management.

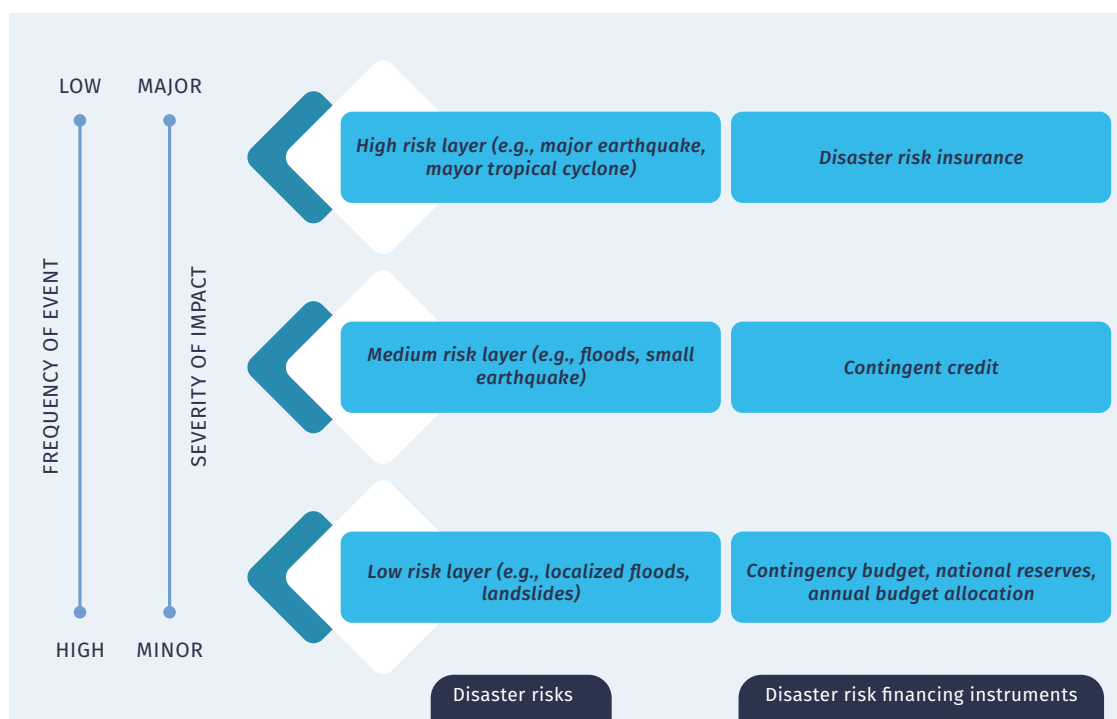
**Timely access to prearranged funding after disasters improves the speed and quality of a government's public financial management of natural disasters, and it hastens the human and economic recovery.**

Without prearranged risk financing solutions, the use of public funds can be inefficient, while response and recovery can be unnecessarily slow. The World Bank disaster risk finance framework considers a three-tiered approach for the development of a disaster risk financing strategy to cover the residual disaster risk that cannot be reduced through measures such as flood protection, seismic strengthening of buildings, and so on. These layers align with the basic principles of sound public financial management, including the efficient allocation of resources, access to sufficient resources, and macroeconomic stabilization. The first layer—retention—relates to a country's development of an internal layer of protection against disasters to prevent the diversion of funds (figure 3.4), such as a reserve fund that is financed annually in a government budget. The second layer considers access to rapid and predictable contingent financing (for example, Nepal's Catastrophe Deferred Drawdown Option). The third layer involves transferring risk to the market through insurance, catastrophe bonds, and so on. The approach highlights the need to combine financial instruments



FIGURE 3.4

### Disaster Risks and Disaster Risk Financing Instruments



Source: Ghesquiere and Mahul, 2010.

to develop cost-effective financial protection, for example, by leveraging contingency funds and national reserves as a first layer and combining these with more expensive and perhaps more complex instruments to manage more severe yet less frequent risks more effectively.

## 3.2 Disaster Risk Financing Arrangements in South Asia

**Countries in South Asia are heavily dependent on a mix of dedicated reserves, contingency funds, budget reallocations, and external aid to finance responses to disasters and other crises.** Over half the countries (63 percent) have established dedicated reserve funds for disasters that can be complemented by general contingency funds. This means that the majority of

countries have access to immediate liquidity in the aftermath of a disaster. However, no evidence was found that these funds are linked to social protection systems. The amount of finance for ASP is therefore unknown. Careful consideration should also be given to the introduction of financial allocations for the purposes of ASP. Reserving funds rather than investing them in key development projects carries an opportunity cost, and the introduction of risk transfer instruments should thus be considered. All of the countries in South Asia leverage ex-post instruments, which, while an effective way to secure funds, can lead to delays in shock response. See annex 3A for a summary of the current disaster risk financing instruments in South Asia. The discussion below provides examples of the financial instruments used in the region.

**In recent years, many countries in South Asia have made progress in establishing preplanned financial**

**instruments to enable swift emergency response, but the development of a risk financing strategy to ensure access to sufficient funds as needed is absent in most countries.** Only Nepal has a national disaster risk financing strategy. The strategy was approved by the Executive Committee (the executive committee is the decision-making body which is equivalent to but not the same as cabinet approval. It differs in that it recognizes not all depts needed for decisions on certain topics.) for DRM in July 2020. This provides formal support for the assessment of the benefits of various financial instruments to meet the needs of emergency response. The strategy has not yet been linked directly to ASP.

### 3.2.1 BUDGET REALLOCATIONS

**Budget reallocations can be a useful source of finance, but can also be slow, and the opportunity costs of reallocating funds should be carefully considered.**

Bevan and Adam (2016) find that budget reallocations may be costly, especially if they involve using an operations and maintenance budget, which is inadequate in many countries. If limited amounts of cash are set aside to mitigate the effects of shock events and reduce the need for budget reallocations, the negative impact of budget reallocations on economic development can be substantially mitigated. However, establishing a dedicated budget line remains politically challenging in many countries, and the need for budget reallocations as a source of post shock finance persists.

**Maldives currently manages disasters through reallocations across budgeted lines of expenditure, dedicated budget lines, a project-related trust fund, and use of the Ministry of Finance's special budget (a contingency budget).** Budgeted lines of public spending are often reduced to release resources for unbudgeted

post disaster categories that need to be increased. In some instances, international assistance is also being used to fund or reduce contingent liabilities.

**During the COVID -19 pandemic, the government of Pakistan was able to reallocate approximately PRs 203 billion (US\$1.23 billion) to support the provision of much needed social support.** However, while funds for programs, such as the Benazir Income Support Programme, have been mobilized quickly in the aftermath of crisis, there are no formal mechanisms for the mobilization of emergency funds. Ex-post emergency response social protection programs have relied primarily on reallocations of funds rather than separate funds set aside for emergencies.

**The experience of the Philippines following Typhoon Halyon (Yolanda) showed that using budget reallocations can secure significant funds, but, at the same time, causes delays and low utilization rates and lacks accountability.** Following the typhoon, the Department of Social Welfare and Development used budget reallocations, realignments, or the modification of allotments to secure 489.5 million (US\$9.6 million) to purchase supplies for Yolanda relief operations, while waiting for the allocations from the National Disaster Risk Reduction and Management Fund. The Department of Health reallocated fiscal year 2013 appropriations for other programs for a total of 254.8 million (US\$5 million) for emergency purchases. However, the Office of Civil Defense utilized only 17 percent of its total quick release funds to support operational requirements after Yolanda, but not to deploy assistance to victims through nonfood relief supplies. Government auditors attributed the gaps to inadequate planning, shortfalls in allocations, and fund restrictions. There has been no comprehensive report on the implementation status of funds for the Yolanda Comprehensive Rehabilitation and Recovery Plan for fiscal year 2014–16.

**In South Africa, the government financed 47 percent of the COVID-19 Strategic Response Plan through budget reallocations, complemented by loans.** A small funding gap remained: the equivalent of R 91.6 billion in budget reprioritizations or dedicated (but limited) disaster funds. Depending on the speed of reprioritizations and the disbursement of dedicated disaster funds, this could have created temporary liquidity constraints on the government. Much of the finance was needed within the first three months of the Programme.

**While it is undoubtedly necessary to undertake budget reallocations at times, the above discussion presents the case that budget reallocations should not be the only option for financing shock response.** Rather, dedicated budget lines should be available for relief interventions and to mobilize funds quickly for dedicated ASP budgeting. Such budget lines should be embedded in legislation to protect the funds from political interference.

### 3.2.2 DEDICATED CONTINGENCY FUNDS

**Some countries in the region have established dedicated disaster contingency funds at the state and federal levels, and these have proven useful in emergency financing during the COVID-19 pandemic, as shown in India, Nepal, and Pakistan.** For example, India's

Disaster Management Act 2005 provides for a national disaster response fund, a state disaster response fund in each state, and, within the states, a district disaster response fund in each district. Similarly, the act envisages a national disaster mitigation fund, state disaster mitigation funds, and district disaster mitigation funds for disaster mitigation. However, the launch of the national disaster mitigation fund has not yet been notified by the government (NDMA 2016). When the pandemic was officially declared a disaster, the states were allowed to use up to 50 percent of the state disaster reserve funds to provide a wide range of relief initiatives, including enhancing health infrastructure, vaccinations, emergency care and quarantines, and offering support to the vulnerable, the displaced, and the millions who had lost their jobs as a result of the pandemic containment measures.

**In Pakistan, the National Disaster Management Act of 2010 created a National Disaster Risk Management Fund managed by the federal government, and provincial governments and district administrations were mandated to establish their own disaster risk funds (UNDRR 2019).** District and provincial disaster management authorities have varying financial capacity and have faced budget constraints on disaster risk management (DRM) activities. Given the country's exposure to recurring flooding events and other natural disasters, international agencies have played a significant role in strengthening the financial resources for DRM. To support the fund, the Asian Development





**TABLE 3.1** Contingencies Fund, Afghanistan, 2020

<b>Year established</b>	<ul style="list-style-type: none"> <li>Established with the Disaster Fund Act of 1996</li> </ul>
<b>Mandate and legal structure</b>	<ul style="list-style-type: none"> <li>Article 32 of the law states that the government's revenue and expenditure plan should include an appropriation not exceeding 3 percent of total expenditures for contingencies.</li> <li>The regulation spells out that contingency reserves should be limited to contingency (emergency) and policy expenditure.<sup>a</sup> Article 22 of the regulation sets out the process for making allotments from reserves for emergency and policy expenditures.</li> </ul>
<b>Governance arrangements</b>	<ul style="list-style-type: none"> <li>The fund is managed by the Ministry of Finance. A Presidential Decree is required to release the funds in most instances.</li> </ul>
<b>Financial arrangements</b>	<ul style="list-style-type: none"> <li>In 2020, up to 25 percent is earmarked under emergency allocations and can be released for disaster response upon approval by the minister of finance.</li> </ul>
<b>Linked to social protection</b>	<ul style="list-style-type: none"> <li>The country lacks a social protection system to link financial arrangements.</li> </ul>

a. The reference to emergency is specified in the title of the budget subcode (90002).

Bank approved a US\$200 million loan, while other partners, such as the World Bank and the governments of Australia and Norway, have contributed up to US\$525 million (NDRMF 2020).

**Prior to the shift in power in Afghanistan in August 2021, the country did not benefit from an overarching policy linking disaster risk financing to social protection systems.** However, the government's contingency fund allocation had been revised to commit and earmark up to 25 percent of any available funds to disaster responses, (table 3.1). This development helped lay the foundations for stronger links between disaster risk financing and social protection.

**A stand-alone, comprehensive disaster risk financing mechanism covering the entire cycle of disaster management—disaster preparedness, response, recovery, and mitigation) has not yet been established in Bangladesh.** The National Disaster Management

Plan 2021–2025 identifies the main sources of funds for implementing activities, but these are not layered by risk and could lead to the use of several instruments to provide finance for the same activities (MODMR 2020). Ex-ante instruments are limited to annual budgetary allocations to finance disaster-related expenditures, the bulk of which are allocated to existing social safety net programs that manage covariate risks. Several contingency funds exist, but they remain modest in relation to the country's needs. These include the Disaster Management Fund, the Fund for Unforeseen Incidents, and the Climate Resilience Fund managed by the Palli Karma-Sahayak Foundation (Ozaki 2016). In the case of a domestic funding gap following a disaster, typically the foreign financing mechanism is initiated on an ex-post basis. The Ministry of Finance mobilizes foreign financing through multilateral and bilateral development partners. Designing a dedicated disaster relief and response financing policy was identified as an important priority under the 7th Five-Year Plan,



a commitment that has not been renewed under the 8th Five-Year Plan, although the latter recognizes the identification, mobilization, and utilization of resources as a critical challenge.

**The Disaster Management Act 2013 in Bhutan cites four types of financial arrangements for disaster management, namely, (1) response and relief expenditure, (2) the budget for national disaster management activities, (3) the budget of the Department of Disaster Management, and (4) the recovery and reconstruction budget.** Response and relief expenditure is drawn from public funds on a needs basis and is recommended for release to the Minister of Finance by the National Disaster Management Authority. The dzongkhag (district) disaster management committees also try to cover response and relief expenditures from annual district budgets. The budget for national disaster management activities is utilized for the priority restoration of essential public infrastructure and service centers. The budget for the Department of Disaster Management is used for capacity building, the establishment and maintenance of a critical disaster management facility, and to strengthen the preparedness of the country relative to potential future disasters. The recovery and reconstruction budget are used to conduct damage assessments of public assets and infrastructure and finalize cost estimates, which can be successively

submitted to the national Disaster Management Authority for Recovery and Reconstruction.

**Dedicated disaster response funds need to be carefully monitored and managed given their high opportunity cost. So, the need should be carefully managed, as in Bangladesh.** The Chars Livelihoods Program in Bangladesh included an annual contingency budget in the project design for disaster response, but the need for this contingency fund declined because of the program's specific focus on reducing vulnerabilities and supporting the adaptation of poor households residing in the riverine sand and silt landmasses (chars) to recurring flooding events (ADB 2018).

### 3.2.3 RISK TRANSFER

**A few countries in South Asia have piloted risk transfer schemes at the sectoral level, particularly in agriculture.** However, no country has yet purchased sovereign risk transfers. Thus, in Nepal, the government of Karnali Province launched the Natural Disaster Risk Group Insurance Program, which covers around 1.7 million people with an insurance limit of Nr 200,000 (US\$1,672). The Infrastructure Security Insurance Program was launched in an area of large physical infrastructure and

## BOX 3.2: NATIONAL NATURAL DISASTER INSURANCE SCHEME, SRI LANKA

Established in 2006, the National Insurance Trust Fund is an insurance and reinsurance institution fully owned by the government of Sri Lanka through the Ministry of National Policies and Economic Affairs. The fund is envisioned as a safety net and protection service for all needy sectors. In April 2016, the fund launched the National Natural Disaster Insurance Scheme (NNDIS). The scheme aims to protect vulnerable uninsured households, small and medium enterprises, and fisherfolk from the financial impacts of natural disasters by providing financial support in the event of property damage or accidental death. The NNDIS operates as an insurance scheme. The premium is paid by the government on behalf of the beneficiaries in return for financial protection. The fund cedes a large share of the risk to the international reinsurance market.

Since its launch, the NNDIS has provided financial protection to the population against the impacts of natural disasters. During the course of its first two years, the scheme provided over 160,000 disaster-hit households with payouts amounting to over SL 4.5 billion (US\$22.7 million).

The NNDIS faced many operational challenges relating to its financial stability, effectiveness, and value for money. For example, the annual government contribution to the NNDIS was generally lower than the reinsurance premium, expenses, and cost of paying claims; the understanding of insured exposure is insufficient for the purposes of effective pricing, reserving, and claims management; and the claims management and loss adjustment process is slow and unclear, threatening the scheme's trust and credibility. While such challenges were not insurmountable, the scheme ceased operations in April 2021.

The lessons learned from the NNDIS provide a good starting point for the development and introduction of an ASP program. Developing informed vulnerability and hazard maps and clearly targeting the poorest members of society would help address the challenges encountered by the NNDIS. Such information could be used to inform financial markets on the expected amounts of finance required and how often it would be necessary to introduce risk-informed pricing.

hydropower projects as a means to insure the projects during the construction phase. Despite such efforts, a consolidated and comprehensive policy document focusing solely on disaster risk financing and any formal links with ASP has yet to be developed.

**In Sri Lanka, the government established the National Natural Disaster Insurance Scheme (NNDIS) in 2016 to provide insurance coverage for uninsured households, small and medium enterprises, and fisherfolk from the financial impacts of natural disasters.<sup>13</sup>** However, the

<sup>13</sup> The NNDIS provides financial support in the event of property damage or accidental death (see box 3.2).



scheme ended in April 2021 because of general discontent over the lack of transparency (box 3.2).<sup>2</sup> Beyond the NNDIS, the government has only limited ex-ante financing arrangements for post-disaster response, which periodically creates significant demands on public resources. Assistance and coordination support is sought from development partners to address financing gaps. In 2014, a US\$102 million financing agreement with the World Bank through a credit line, the Catastrophe Deferred Drawdown Option, was established to provide immediate access to quick liquidity if the country officially declares a state of disaster. This instrument had a soft disbursement trigger based on the declaration of a state of disaster and was drawn down in full by Sri Lanka in August 2016 in the aftermath of the May 2016 floods and landslides and the proclamation of a state of disaster by the president according to Article 11 of the 2005 Disaster Management Act. This form of financing assistance is also available from the Asian Development Bank.

**In 2020, Bangladesh participated in a pilot program on anticipatory action led by the United Nations Office for the Coordination of Humanitarian Affairs, which enabled US\$12.2 million to be provided to approximately 651,000 people, one-third of which had been distributed prior to crisis floodwaters reaching life-threatening levels.<sup>14</sup>** The pilot program, which includes the mobilization of prearranged finance for certain types of crises or disasters (monsoon floods in Bangladesh) based on analytics (as opposed to responding to shocks as they occur) builds on the growing evidence that acting prior to the onset of a predictable shock is significantly more rapid and more (cost-)effective than acting after an event has already occurred. The pilot program helped generate evidence

on the feasibility and effectiveness of collective anticipatory action at scale. Thus, the 2020 floods demonstrated how the pilot was able to reach more people, earlier, more quickly, and at half the cost of a comparable rapid response.

### 3.3 Application of a Crisis and Disaster Risk Finance Approach

**Resilience to crises and disasters, including financial resilience, is among the priorities of many governments in South Asia.** The governments recognize that a country's financial preparedness to meet unexpected disaster-related costs is part of a comprehensive approach to resilience. In the absence of prearranged financing, governments must often rely on ex-post financing, such as donor assistance, budget reallocations, and borrowing, to meet disaster-related needs. These ex-post sources of finance can be slow, have an opportunity cost, and provide uncertain amounts of funding. Lack of timely and predictable finance augments the impact of disasters on an economy, and the impacts are disproportionate among the most vulnerable in society (Hill, Skoufias, and Maher 2019). Prearranged disaster risk financing instruments are designed to release finance after a disaster as a means of making disaster response and recovery timelier and more cost-effective. Disaster risk financing instruments that are based on predefined rules can also enhance the predictability of transfers, especially by reducing the uncertainty about the amounts to be received.

**Financial resilience helps promote inclusive and sustainable growth in a changing world, including**

<sup>14</sup> "Anticipatory Action: OCHA Facilitates Collective Anticipatory Action," United Nations Office for the Coordination of Humanitarian Affairs, Geneva, <https://www.unocha.org/our-work/humanitarian-financing/anticipatory-action>.

**through market-based financial solutions.** If public resources are scarce, stable financial markets help share risks among public and private stakeholders and mobilize additional funding. The private sector also enables efficient and transparent fund mobilization and execution. For example, the insurance industry, financial markets, and technology companies can play an important role in the development and supply of risk financing instruments.

### 3.3.1 THE CASE FOR APPLYING A CRISIS AND DISASTER RISK FINANCE STRATEGY TO ASP

**In the absence of ASP systems, governments are faced with a consumption problem: they must decide how to allocate a finite pool of resources to help prevent the poorest members of society from falling further into poverty.** In recent years, methods to assess risks and measure household vulnerability and poverty have greatly improved. Vulnerability analysis tools, combined with satellite data, can be used to identify who and how many will be in need during a crisis and, based on this information, assess whether vulnerable individuals and households have access to safety nets and how much will be needed to develop such systems. This subsection outlines how governments and stakeholders can quantify their contingent liabilities from natural disasters and, more specifically, how they can estimate the future needs to scale the social protection system to events of varying magnitude, that is, how they can better prepare for tomorrow.

**Disaster risk financing entails developing finance and plans prior to an event as a means of ensuring that support for vulnerable households can be delivered more quickly and more cost-efficiently in an emergency.**

The ability of governments to access finance reliably at the right time and in a cost-effective manner can be a critical factor in determining the scale of an event and how long it will take to recover.

**The development of an ASP system can be enhanced by applying the principles of disaster risk finance to ensure that prearranged finance is available to release finance to beneficiaries after a shock.** This can serve to increase the resilience of households by shortening the recovery time from a disaster, or more broadly, a shock event. For example, an impact evaluation of Ethiopia's Productive Safety Net Program suggests that anticipatory transfers allow households to mitigate the impact of drought on food security and recover more rapidly to the predrought situation (Knippenberg and Hoddinott 2017) (box 3.3).

**Complementing social protection or safety nets through activities that support household preparedness and longer-term adaptation to build longer-term resilience can lead to a significant reduction in response costs.** Long-term investments in preparedness and adaptation could help reduce future household needs and, by extension, lower response costs, but more evidence is needed. Findings from a study in Ethiopia show that a scenario that seeks to develop people's resilience to drought through a mixture of activities that build income and assets is significantly more cost-effective than continuing to provide ad hoc emergency response (Venton 2018). An early humanitarian response could save an estimated US\$81 million a year, while integrating safety net and resilience components would increase savings to US\$150 million a year.

**Understanding the impacts of disasters on poverty and welfare is key to building an understanding of how much financial support is required by households to recover after a shock.** Walsh and Hallegatte (2019)

### BOX 3.3: ETHIOPIA'S PRODUCTIVE SAFETY NET PROGRAM

The Productive Safety Net Program was launched in 2005 with the intention of addressing rural food insecurity, build resilience, and reduce the need for humanitarian appeals. The program is now at its fifth 3-year iteration, with an overall program budget (excluding scaling up to respond to shocks) of US\$2.3 billion to be financed by the government, alongside development partners, including the World Bank.

The program was conceived as a multiyear endeavor to provide recipients with predictable and reliable transfers to protect household assets and prevent the adoption of negative coping mechanisms. Over the years, the program has been expanded gradually to cover up to 8 million direct beneficiaries (equal to approximately 2.5 million rural households) across 40 percent of the country's districts (woredas).

The core program component relies on a combination of geographic and community-based targeting to identify beneficiaries. Approximately 80 percent of participants are involved in six months of employment, consisting of labor-intensive public works subprojects, which aim at reversing environmental degradation, enhancing water management and control, and improving road access. Households that cannot participate in productive activities—for example, the elderly or people living with disability—receive unconditional transfers.

Payments are made in both food and cash, but the implementation of safety nets is highly decentralized. Service delivery is the

responsibility of local (kebele), district (woreda), and regional governments that have variable levels of capacity. Although the safety nets are designed as federal programs, of which the implementation is delegated to subnational governments, the establishment and enforcement of implementation standards and rules remain a balancing act.

The adaptive rural safety net component of the program seeks to improve the well-being of extremely poor and vulnerable households in drought-prone communities in case of an eligible early response financing event. When the program was launched in 2005, the expectation was that it would have gradually reduced the need for humanitarian responses. Recent years have seen increased efforts to coordinate core program operations and the program capacity to scale up in response to shocks through contingency budgets, complemented by the broader humanitarian and nongovernmental food response. However, large-scale humanitarian emergency interventions have continued to operate in parallel.

Overlapping roles and responsibilities among the government agencies mandated to coordinate the program and the humanitarian interventions have continued to reduce the efficiency of the response and have contributed to higher levels of fragmentation and slow decision-making. The current combination of humanitarian actions, program contingency budget support, and core program transfers can be considered a scalable safety net, but not a shock responsive one.

Source: IDA 2020.



estimate that flooding from increased precipitation causes Sri Lankan households to bear yearly asset and well-being losses of, respectively, US\$78 million and US\$119 million. The average annual impact of flooding on well-being in Sri Lanka is thus 53 percent greater than is represented by asset losses alone. To estimate socioeconomic resilience, the study divides asset losses by well-being impacts to indicate a socioeconomic ratio of 66 percent. This ratio can be used to inform policy by considering the relative wealth of disaster-affected communities. For example, well-being losses can and should be used as inputs in DRM budgeting, prioritization, and investment decisions.

**In 2017, a pilot scheme implemented by the Bangladesh Red Crescent Society in Bogura District provided households with financial support three to four days prior to the relocations caused by imminent floods.**

An initial assessment of the scheme has highlighted positive results, finding that households that did not receive early assistance were four times more likely than households that received assistance to borrow from banks and three times more likely to have skipped meals (Tanner et al. 2019). A similar anticipatory action was implemented in 2020 in response to monsoon floods in northwestern Bangladesh by a consortium of United Nations agencies, such as the Food and Agriculture Organization of the United Nations, the United Nations Population Fund, and the World Food Programme, as well as the Bangladesh Red Crescent Society, to address the impacts of monsoon floods. The anticipatory action involved a range of interventions, including cash assistance, agricultural assistance, and hygiene kits (FAO 2021). This approach has been formalized through a recent memorandum of understanding for the exchange of knowledge and forecasts in real time (Shahjahan 2021).

### 3.3.2. QUANTIFYING CONTINGENT LIABILITIES FROM NATURAL DISASTERS

**Disasters and crises are a significant source of contingent liabilities that can affect government revenues and expenditures.** Governments tend to shoulder a large share of the response, recovery, and reconstruction costs in the aftermath of rapid-onset shocks or as a result of long-term stresses. Such costs can certainly include the provision of finance for social protection systems. These liabilities may be explicit, that is, arising because of a prearranged explicit commitment made, for example, in contracts, policies, or through law. They may also be implicit, that is, arising because of a moral obligation without any prior commitment, public expectations, or political pressure on the government. Financing an ASP system would be classed as an explicit contingent liability. Following a disaster, each government has specific explicit contingent liabilities defined by law that it is legally mandated to settle. Such explicit liabilities include the cost of repairing and reconstructing damaged public assets and infrastructure, such as roads, bridges, hospitals, schools, and power and water infrastructure. Other contractual obligations activated by a disaster can include social protection payments linked to disasters or payments linked to public backing of catastrophe insurance schemes and institutions (World Bank and ADB 2017).

**Implicit liabilities are gauged on top of explicit liabilities and represent a moral obligation or expected burden based on public expectations and political pressure.** In the context of disasters, they may include (1) search and rescue services, (2) humanitarian relief, (3) support among poorer households to rebuild or replace assets, (4) compensations for death or injury, (5) support for private sector recovery through

for example, tax breaks, and (6) bailouts of private sector institutions.

**The majority of the governments in South Asia do not have an explicit allocation in national disaster reserves for post-disaster social protection support.**

In some cases, such a national disaster fund exists and is operationalized. For instance, in Bangladesh, Tk 3 billion, approximately US\$32 million at 2019 values, is held by the Ministry of Disaster Management and Relief (MODMR). However, there is no specific allocation for social protection scale-up following a disaster.<sup>15</sup> At the same time, given the low amounts usually held in such reserves and the high opportunity costs of ring-fencing already limited national resources, more analysis might be needed to identify the optimal allocation of social protection funds dedicated to disaster response and the proper channels for disbursing such funds. For example, if there is no functional ASP system or delivery through which such funds could be channeled, then disbursement might be inefficient and not be used to target the relevant vulnerable groups.

**If an ASP system exists and is operational and well financed, a dedicated allocation for a disaster-related scale-up could be envisaged, provided intersectoral coordination is robust.** Bangladesh is the only country in the region that has social protection budgets with a separate humanitarian program category for disaster response (covariate risks), amounting to Tk 69 billion (approximately US\$81 million), managed by MODMR. The reason for the disaster risk finance allocation in social protection programming is that, historically, the social protection system in Bangladesh emerged from disaster response programs. However, given the

substantial fragmentation and weak policy coherence, the institutional responsibility for managing disaster funds is less clear. Indeed, the allocating ministry is not the implementing ministry. While the programs resemble emergency programs in design and delivery, they are social protection programs.

**To help demonstrate the financial impacts of natural disasters, two methods can be used to estimate the value of explicit and implicit liabilities from natural disasters:**

(1) direct estimation and (2) probabilistic modeling (Gamper et al. 2017). Direct estimation requires an analysis of historical data on direct government expenditures in response to past disasters. This provides an estimate of the probability of future loss and the expected size of future fiscal costs. The second method, probabilistic modeling, can be used in the absence of historical data on disaster expenditure or if the available data are insufficient to estimate the probable occurrence and related fiscal costs of a disaster.

**Applying the direct estimation to the case of the government of Sri Lanka, disaster-related liabilities were, on average, SL 11 billion a year (US\$70 million).**

However, using probabilistic modeling, the annual average explicit contingent liability attributable to the government from natural disasters might reach up to SL 20.5 billion. Analysis of historical expenditure data indicates that the government spent SL 68 billion (US\$425 million) in response to natural disasters between 2012 and 2017. In 2017, the government's contingent liability amounted to SL 23.8 billion (US\$149 million) or approximately 1 percent of total government expenditure. The majority of this cost was found to be

<sup>15</sup> Ongoing restructuring of Pakistan's National Disaster Management Fund might include funds to address three areas of post-disaster financing needs: (a) a cash component to support the affected population, (b) a component to meet the financial needs of response and recovery, and (c) a component to manage the reconstruction of key infrastructure.

attributable to the reconstruction and rehabilitation of infrastructure and public assets, while relief payments and the resettlement of affected communities were of a much smaller magnitude.

**The disaster-related liabilities of the government of Maldives are estimated, on average, at Rf 8.6 million (US\$556,850) a year.** Analysis of historical expenditure data indicates that the government spent Rf 459 million (US\$29.8 million) between 2008 and 2017 in response to natural disasters. This equates, on average, to 0.4 percent of total government expenditure over the 10-year period. Cash transfers and the purchase and distribution of relief supplies and water to affected communities are a major source of disaster-related liabilities for the government. Other areas of liability (of smaller magnitude) are relief efforts carried out by the Maldives National Defense Force and the police, premiums for disaster-linked insurance schemes, and the rehabilitation and reconstruction of damaged public infrastructure and assets.

### 3.3.3 ASP NEEDS FROM NATURAL DISASTERS

**Financial protection for the poor following disasters is normally delivered through existing social protection programs.** This implies a potential for scaling up these programs either vertically, to supply more funding for current beneficiaries, or horizontally, to distribute more funding to additional beneficiaries, for example, individuals and households at greater risk of falling into poverty) (figure 3.5).

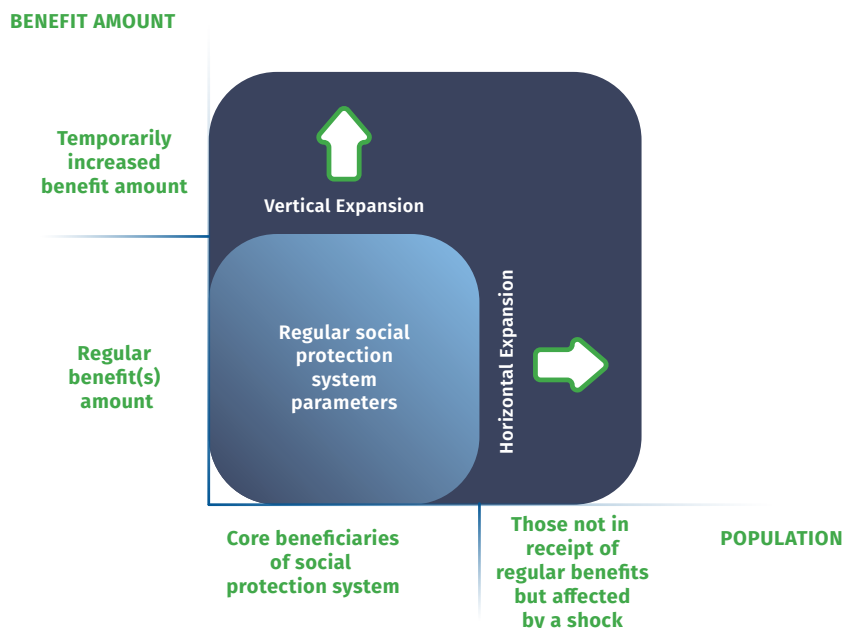
**The social protection cost is rarely quantified because it is difficult to estimate this cost in terms of the amount and duration of support.** Usually, the financing needs for emergency response following a disaster are expressed as a value of the assets lost and an extra buffer for emergency response costs, such as debris clearance, evacuation, and the provision of temporary shelter.

**The social protection scale-up estimates in this report do not account for the cost of establishing**

**FIGURE 3.5**

#### Social Protection Program Expansion

Source: World Bank, 2020





**TABLE 3.2** The Evolution of Elements of ASP Systems, South Asia, Since 2010

	Social or civil registry	Identification	Digital payments delivery systems	New SP programs launched	Disaster/ Humanitarian relief	Institutional frameworks
<b>Afghanistan</b>					✓	
<b>Bangladesh</b>	✓				✓	
<b>Bhutan</b>						
<b>India</b>	✓	✓	✓			✓
<b>Maldives</b>	✓	✓	✓	✓		
<b>Nepal</b>	✓		✓	✓	✓	✓
<b>Pakistan</b>	✓	✓	✓	✓	✓	✓
<b>Sri Lanka</b>	✓					

Source: Based on country ASP stress test results.

an ASP system in countries where such a system does not currently exist (for instance, in Afghanistan, Bhutan, or Sri Lanka) (table 3.2). In other countries, some elements can more easily support the scaling-up of social protection after a disaster, such as the social registry system that allows the targeting of the supplementary beneficiaries who may become vulnerable following a disaster (such as Bangladesh). While the existence of digital payment systems is an important asset post shock (such as in India and Pakistan), it is important to ensure that the benefit delivery system can adapt to the operating environment and the potential access limitations following a disaster. The integration of institutions that can act in a coordinated manner if a scale-up needs to be implemented is another strength on which social protection scale-ups can be based, although this is not yet the situation in most of the countries in South Asia.

While the cost and time investment to establish a scalable social protection system are important, the efficiency of post-disaster social protection allocations will depend on them, and their absence would threaten the livelihoods of vulnerable populations, even if funding might be available in budgets (as is the case in Bangladesh). The ASP needs following disasters might be underestimated as a share of the total required investment (upfront and on an annual basis) if the cost of establishing and maintaining an effective shock-responsive social protection program is not accurately considered.

### 3.3.4 THE COST OF SHOCK-RESPONSIVE SOCIAL PROTECTION BANGLADESH AND PAKISTAN

A shock-responsive social protection system could be used as an effective mechanism to direct part of disaster response financing to the households that are

**most in need of assistance.** The COVID-19 pandemic has demonstrated that governments can calculate such costs and innovate delivery mechanisms for financial support for the poor. For example, in Bangladesh and Pakistan, ASP needs have been quantified, and the relevant funding has been prearranged. The ratio of these costs to government contingent liabilities as a sum of explicit and implicit liabilities is not negligible.

**A preliminary analysis focuses on rapid-onset disasters (for example, floods), but future technical work should also consider social protection needs for slow-onset disasters (for instance, droughts).** Rapid-onset disasters remain the most frequent and costly types of disasters impacting the region, but the slow-onset disasters show compounding effects, with longer-term impacts on food insecurity. An example of existing initiatives carried out by development partners to tackle such impacts through innovative ways to scale up social protection support is described in box 3.4.

**Further analysis will be required to refine the cost estimates below, which should be based on detailed information on risk and the vulnerable populations and on policy decisions on the nature of scale-up.** The possible variations in the indicative cost of a shock-responsive social protection scheme are significant and depend on (1) the choice of the monthly stipend provided to households, (2) the choice of the event severity that triggers a payout, and (3) the extent of the reach to beneficiaries who are not currently covered by other social protection schemes. For details on the methodology and assumptions used to attempt the quantification of ASP needs and on the model limitations, see annex 3B.

**The data needed for an in-depth analysis refer to the geolocation of vulnerable populations, their levels and sources of income, and their mobility (temporary displacement) following shocks.** The coverage of vulnerable populations by social protection systems is another important factor that can guide the eventual scale-up needed to avoid duplication of aid or suboptimal resource deployment in affected areas.



### BOX 3.4: THE AFRICAN RISK CAPACITY REPLICA

**African Risk Capacity is a pioneering initiative involving African governments in an effort to transform climate risk management across Sub-Saharan Africa.** The initiative sets standards for disaster risk management (DRM) by providing early warning systems, contingency planning, and climate finance across the continent. It aims to improve the predictability and speed at which responses to natural disasters are implemented, through proactive risk management. Participating African governments pay premiums to receive payouts for early responses defined through agreed contingency plans.

**In 2017, the Start Network and the World Food Programme sought to expand this product through the African Risk Capacity Replica Program, an approach to enabling timely, coordinated drought action between government and civil society.** The program seeks to complement the government response and work effectively in enabling vulnerable communities to maintain their food supplies in difficult conditions.

**The replica policy is a parametric (index) insurance contract that proportionally mirrors the terms and conditions of the policy in the replicated country up to the amount of coverage**

**taken out in the country.** Matching policies use the same Africa Risk View thresholds and triggers as the government's African Risk Capacity insurance policy, developed and customized by national technical working groups. The Start Network initially implemented African Risk Capacity Replica in Senegal, where it made a US\$10.6 million payout in 2019. The payout has been used for monthly unconditional cash transfers and nutritional activities, including the distribution of fortified flour to households and awareness-raising activities around nutrition.

**Replica underscores the existence of innovative finance models that can significantly increase the number of people covered by climate risk insurance, providing a new approach for delivering targeted humanitarian assistance.** This initiative has been supported by KfW, the German state-owned investment and development bank, on behalf of the German Federal Ministry of Economic Cooperation and Development, for an initial two-year pilot phase (2018–20) that has been extended because of the success and take-up of the initiative.

Source: "ARC Replica," African Risk Capacity Group, African Union, Johannesburg, South Africa, <https://www.arc.int/arc-replica>; "ARC Replica," Start Network, London, <https://startnetwork.org/arc-replica>.



### 3.3.5 CASE STUDIES ON IDENTIFYING ASP FINANCIAL NEEDS

Two case studies, one on Bangladesh and one on Pakistan, are presented below to demonstrate different approaches to calculate the scale-up needed following rapid-onset disaster of various severities. Both approaches are anchored in existing social protection systems and similar average benefits delivered to vulnerable populations.

**The vertical (existing poor) and horizontal (new poor) scale-ups are analyzed together because they will make up the total need following a disaster.** In both Bangladesh and Pakistan, the vertical scale-up will be the more significant burden for small to medium events (return periods of once in every 10 years). The medium severe events will be associated with more people in the transient category falling under the poverty line and becoming new poor. Hence, the horizontal scale-up needed to include more people will become the costly element.

**Relative to existing disaster contingent liabilities that estimate the direct-indirect impacts derived from asset loss, the social protection scale-up in Pakistan can add up to 7 percent to the liabilities, a significant amount that currently remains uncoun- ted in the estimates of disaster financing needs.** Bangladesh can sustain the scale-up need linked to medium events (1–10 years), but, beyond that, funds will be completely exhausted by compounding events requiring budgetary reserves or by floods of a larger magnitude.

## PAKISTAN

The social protection scheme in Pakistan has an embedded nonparametric scale-up mechanism, and this could be augmented by the introduction of a trigger that can activate and disburse funds shortly after the onset of a disaster. The experience of the COVID-19 Emergency Cash pillar of the Benazir Income Support Programme and international best practice in designing and scaling up pre-established shock-responsive social protection schemes can be fruitful.

**To respond to the consequences of the COVID-19 outbreak, the government of Pakistan allocated PRs 203 billion (~US\$1.23 billion) through the Benazir Income Support Programme to deliver emergency cash assistance to 16.9 million families (over 100 million people) at risk of extreme poverty, representing the most extensive social protection intervention in the history of the country.** This exercise demonstrates the power of scaling-up social protection following disasters and shocks.

**By applying the scale-up mechanism from the COVID-19 response to flood events, it is possible to indicate the additional cost of providing scaled up social protection, which, in this instance, can vary from PRs 5 billion to over PRs 30 billion, depending on the severity of the flood event.** Such estimates could cover a vertical scale-up; that is, increasing payments to the existing poor, as well as a horizontal scale-up providing payments to additional households at risk of falling into poverty after a shock (the new

**Consistent increases in allocations to social protection over the past decade contributed to successes in poverty reduction.**



poor). These costs will vary based on the design of the scale-up rules and are intended to be indicative. (For details on the calculations and assumptions, see annex 3B).

Additional scenarios can be added to the estimates to test the impact of varying support and identify the events the severity of which could be covered (for example, only events with a severity above 1–10 years) or if the new poor (transient poor) receive a different stipend than the chronic poor.

**Statistical analysis based on government data and National Disaster Management Authority estimates of cost per person impacted calculates an average annual cost of natural disasters at PRs 136 billion, which could be significantly higher in severe years (table 3.4).** The flood-related modeled loss is used in the analysis, which transforms it into government contingent liabilities by assuming that the government will cover the reconstruction costs of public assets and uninsured residential assets. With a <5 percent penetration rate of catastrophic insurance in Pakistan, this effectively translates into a high proportion (60 percent) of the total asset loss being transformed into contingent liabilities of the government.

**TABLE 3.3**

Estimates of Social Protection Scale-Up Needs in a Flood Event, Pakistan

Total SP cost (PKR, billions)	Long Term Average	1 in 5 Year	1 in 10 Year	1 in 50 Year	1 in 200 Year
Scale SP horizontally ("new poor ")	1	1	3	13	22
Scale SP vertically ("existing poor")	4	4	4	9	9
Total SP modeled cost	5	6	7	22	30


**TABLE 3.4** Losses from Natural Disasters at a Cost of PRs 50,000 per Person, Pakistan

Total SP cost (PKR, billions)	Long Term Average	1 in 2 Year	1 in 5 Year	1 in 10 Year	1 in 50 Year	1 in 200 Year
Flood – total loss	136	29	209	405	973	1,553
Flood – GoP contingent liabilities	20	0	18	60	207	342

**TABLE 3.5** The Share of the Cost of Scale-Up in Government Contingent Liabilities, Pakistan

Total SP cost (PKR, billions)	Long Term Average	1 in 5 Year	1 in 10 Year	1 in 50 Year	1 in 200 Year
Flood – total loss	5	6	7	22	30
Flood – GoP contingent liabilities	33	36	45	139	189
% of contingent liabilities	7%	5%	3%	4%	3%

To provide a more accurate analysis, more data are needed on local and provincial disaster risk profiles and their interdependence and on the wealth, location, and vulnerability of households in Pakistan.<sup>16</sup> However, there is a need to disassociate the provincial and federal mandates relative to social protection in general and, more specifically, during a shock response to avoid duplication and maximize coverage (see chapter 5).

The results above have been calculated based on modeled exceedance probability curves at the national level. In the absence of more granular subnational data, it is possible that there will be events that, at the provincial level, will demonstrate a severity sufficiently high to trigger a shock-responsive social protection payout, but that do not trigger a payout at the national level and so have not been accounted for in this simulation.

<sup>16</sup> Chapter 5 describes in greater detail the type of data needed for strong social protection systems that can scale if a disaster strikes. Best practices from lower- and middle-income countries are also presented to guide understanding of opportunity to increase data quality and availability, which allow optimal social protection targeting.



## BANGLADESH

**Bangladesh spent about Tk 1,500 billion (US\$18.7 billion) on social protection from 2013/14 to 2017/18, Tk 38 billion (US\$448 million) or 24 percent of which was spent on disaster-related social protection programs.**

Consistent increases in allocations to social protection over the past decade have contributed to successes in poverty reduction. A comparison of expenditures on social assistance (excluding social insurance and labor market programs) in the South Asia and the Asia and Pacific regions shows that Bangladesh spends more than Bhutan, Cambodia, China, Indonesia, Malaysia, Pakistan, the Philippines, Sri Lanka, and others as a share of gross domestic product (GDP), but less than India, Nepal, Maldives, and Vietnam (World Bank 2021a) (figure 3.6).

**Although there is some discussion of ASP in national social protection strategies, the overall alignment between the social protection and DRM frameworks is weak.** In the National Social Security Strategy Action Plan, the mandate for ASP is quite fragmented. Post-disaster assistance is conceptualized as a food

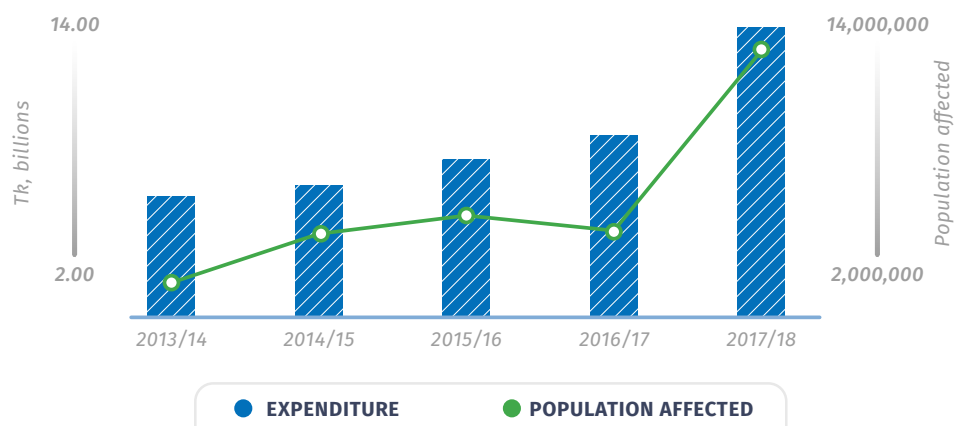


security issue to be led by the Ministry of Food, whereas livelihood interventions to build resilience are left within the remit of MODMR. The scalability of routine social protection in response to shocks is not discussed.

**Unlike many countries in which social protection and disaster response are conceived as distinctive policy issues, social protection provisioning in Bangladesh explicitly accounts for covariate risks related to natural hazards, seasonal unemployment because of agricultural seasonality, and the attendant food price inflation.**

**FIGURE 3.6**

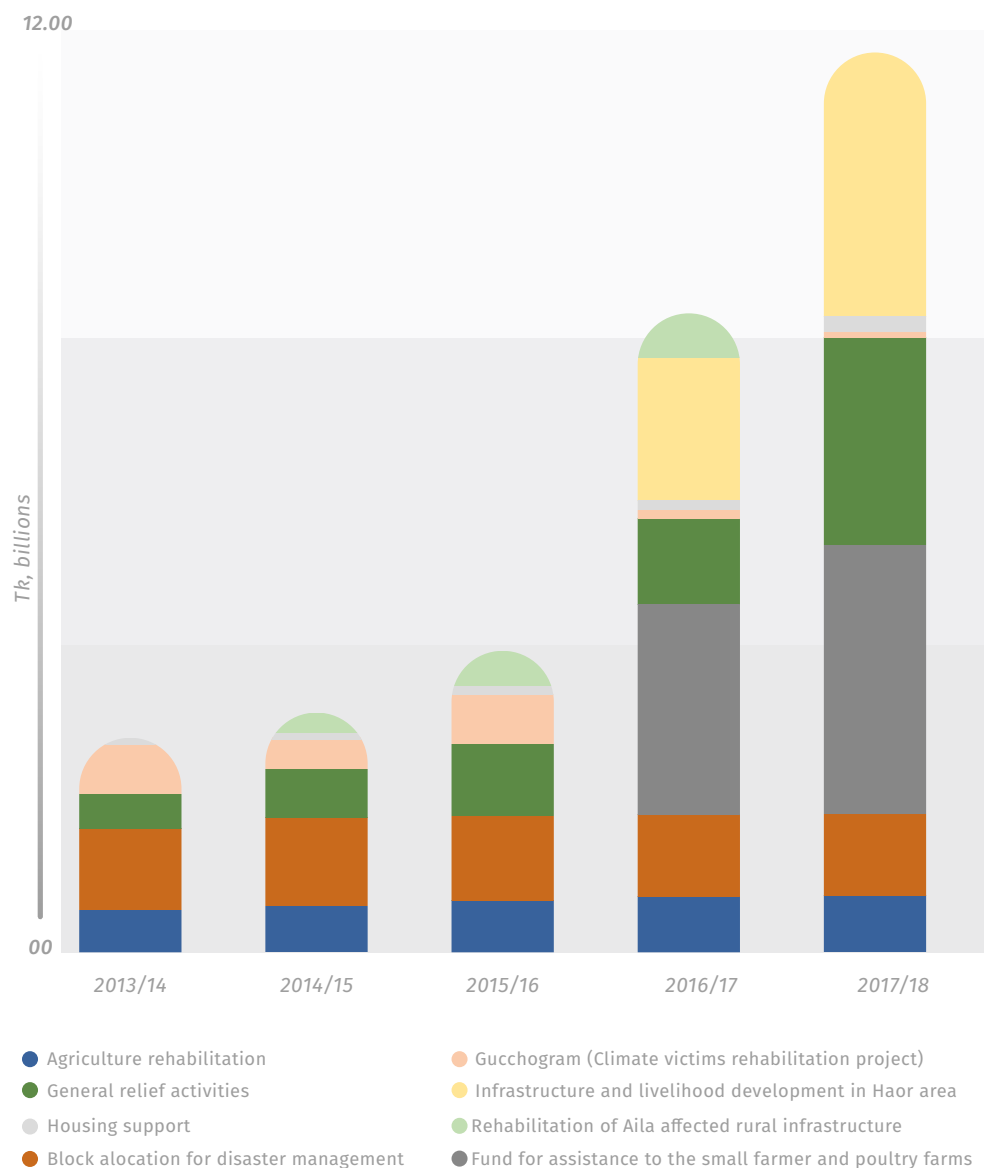
Disaster Expenditure and Affected Population, Bangladesh, 2013/14–2017/18



**FIGURE 3.7**

Disaster-Related  
Social Protection  
Expenditure,  
by Program,  
2013/14–2017/18

Source: World Bank 2021b.



**Social protection is a key sector in addressing the impacts of climate change and disasters, representing 41 percent of the climate-relevant budget allocation in 2020–21.** There are a considerable number of social safety net programs to respond to covariate shocks both seasonally and during emergencies (table 3.6). A subset of these programs is explicitly humanitarian assistance programs because these are activated during disasters. This encompasses the Gratuitous Relief Program, Vulnerable Group Feeding, and a range of public works programs. Some observers indicate

that “instead of being of temporary nature and for providing temporary income, shelter, or nutrition support for the poor and vulnerable impacted by natural disasters, these programs have become almost permanent in nature” (Mansur and Khondker 2017, 134).

**A recent review of social protection programs indicates that improvements could be made with respect to how resources are deployed (World Bank 2021b).** Programs that are more well designed and executed could have greater overall impact. First, resources must

**TABLE 3.6** Disaster-Related Social Safety Net Programs, Bangladesh

SSNP	Expected number of beneficiaries (million)	Allocated budget (BDT million)	Ministry	Fund allocation based on Upazila poverty rate	Categorically targeted	Poverty-targeted	Transfer value	Delivery mechanism	Delivery frequency	Rural/urban
<b>COVARIATE RISKS – HUMANITARIAN PROGRAMS FOR DISASTER RESPONSE</b>										
VGF	8.34	19,569.10	MoDMR	✓	✗	✓	10–30kg of rice	In-person	Monthly	Rural
Test Relief Cash	2.1	15,300.00	MoDMR	✓	✗	✓	8 kg of rice for 7 hours of work	In-person	Daily/Weekly	Rural
Food for Work (FFW)	1.71	12,040.80	MoDMR	✓	✗	✓	8kg for 7 hours of work	In-person	Normally twice yearly	Rural
OMS	8.94	9,495.20	Ministry of Food	✗			10–20 Kg of rice	In-person	Weekly/Monthly	Urban
Work for Money	1.58	7,500.00	MoDMR	✓	✗	✓	BDT 200 per day	In-person	Weekly	Rural
GR	5.68	5,435.90	MoDMR	✓	✗	✓	Ad hoc	In-person	One-off	Rural

be allocated in a manner that focuses on the issues they are meant to address. Improved geographic—for example, urban—and socioeconomic targeting of the programs could boost impacts. Second, disaster-related social protection programs must be reviewed to ensure they are reaching the intended beneficiaries in a manner that is commensurate with needs.

**Hence, the analysis checked whether the Gratuitous Relief Program, which is the only program offering cash support, is sufficient to cover the expected scale-up needed following a flood and, if so, how much it can be extended to meet various levels of disaster severity.** The program currently has an allocated budget of Tk 5.4 billion (US\$63 million) and is supposed to cover up to 5.6 million beneficiaries (both chronic poor and transient poor). If the same methodology is applied as in the case of Pakistan, the average

number of people affected by floods or more severe events in Bangladesh must be estimated, as well as the number of the chronic poor and transient poor that will be affected by floods. The likely support needed by households in the case of floods also needs to be assessed, along with the duration of such support.

**Bangladesh is exposed to a wide range of disasters and can expect seven disaster events in an average year.**

Tropical cyclones are the most frequent event (three storms per year), followed by flooding (almost twice a year on average). Flooding especially affects the most people, an average of 4.7 million people a year (table 3.7). Almost 8.0 million people are affected once every five years by flooding. The average number of people affected by tropical cyclones per year 1.2 million.



**TABLE 3.7** People Projected to Be Affected by Flooding, Bangladesh, 1,000s

Long-Term Average	Once every 2 years	Once every 5 years	Once every 10 years	Once every 50 years	Once every 200 years
4,700	1,477	7,731	15,047	29,132	37,444

**Given the number of the poor supported by social protection programs and the estimates of the number of the transient poor, the expected need is up to Tk 4 billion in any given year, rising to Tk 20 billion (between US\$45 million–US\$230 million) for severe flood events (table 3.8).** If the Gratuitous Relief Program is taken as a reference, the approximate value of the

financial support needed by poor households can be calculated at Tk 1,000 (US\$12). Unlike the case of the Gratuitous Relief Program, a one-time payment will not be assumed. The payment will be assumed to last at least three months for medium flood events and up to six months for severe flood events.

**TABLE 3.8** Estimates of Social Protection Scale-Up in Case of a Flood Event, Bangladesh

Total SP scale-up cost	Long-Term Average	Once in 5 years	Once in 10 years	Once in 50 years	Once in 200 years
Scale social protection horizontally (new poor)	1	1	3	11	14
Scale social protection vertically (existing poor)	3	3	3	6	6
Total social protection modeled cost, Tk, billions	4	5	6	17	20
Total social protection modeled cost, US, millions	47	54	71	205	243

**The current allocation for the Gratuitous Relief Program can cover small and medium events (up to once in 10 years) but would be exhausted by compounding events or floods of greater magnitude.**

This is why effort is required to ensure that disaster risk finance follows poverty patterns, and that support is provided to people who may become poor after a

shock. In the case of disaster-related social protection programs, financing on the basis of weather forecasts and simulations can improve the predictability of post-disaster spending, reduce the cost of finance by combining instruments, and lessen inefficiencies arising from the underutilization of allocations.

## 3.4 Summary and Recommendations

### 3.4.1 SUMMARY

**South Asia has made progress in developing both social protection and risk financing, and there is a clear opportunity to take initiatives a step further by developing ASP systems linked to financial instruments.** Given the number of instruments—that is, each country has some form of dedicated reserve—that have been established in the region and the increasing recognition of the benefits of pre-established established instruments, there is a clear opportunity to link these instruments and potentially introduce new ones to social protection schemes as a means to reduce recovery times.

**The majority of countries in South Asia have not quantified the financial need associated with future disasters and should do so with urgency.** As the region deals with the complexity of compound risks, this

could help inform the selection of pre-established instruments that release finance as needed. All the countries in South Asia leverage ex-post instruments, which, while effective in securing funds, can also lead to delays in response. In quantifying the financial need for ASP, governments should complement their ex-post instruments with ex-ante instruments to help protect key development projects and reduce any time lag in providing funds to beneficiaries.

**The development of crisis and disaster risk financing strategies that include ASP measures will be crucial in ensuring a well-coordinated multisector response to future shocks.** Such strategies help clearly communicate the responsibilities of the government and their explicit liabilities from disasters and can enable the private sector to play a role in the provision of risk transfers for some of the implicit contingent liabilities (for example, the reconstruction of homes).



### 3.4.2 RECOMMENDATIONS

**Multiple instruments can be used to ensure that finance is available as needed for an efficient shock response.** However, the instruments should be analyzed collectively to optimize the amount of finance available and keep the cost of any single instrument to a minimum. Four recommendations have been identified in the analysis for financing ASP.

- **Develop a crisis and disaster risk financing strategy for ASP built on a comprehensive risk layering approach.** The first step would include determining national priorities in strengthening social protection systems and linking them to disaster risk finance, such as prioritizing the financial protection of government allocations for social protection, households, or the vulnerable (women, the poorest, refugees), aiming to rely on stronger disaster data and analytics for financial decision-making.
- **Review funds for ASP to understand the finance sources currently available.** This could include reviewing the purpose and use of reserve funds, coordination between these funds, and the potential overlaps. This could eventually lead to exploring complementary sources of funds for ASP, for example, contingent credit with development or private institutions that can supplement reserve

funds, ex-post public finance (such as borrowing), and so on.

- **Consider market-based instruments to provide additional finance to raise ASP to scale ASP following a shock.** Financial instruments, such as sovereign risk transfers, can provide additional financial capacity for social protection schemes, thereby allowing them to expand coverage to include people who are now experiencing poverty as a result of the shock (horizontal expansion) and to provide adequate support to beneficiaries (vertical expansion).
- **Improve the understanding of the finance needed to scale up the ASP system after shocks of varying frequency and magnitude.** At the start, this could involve enabling the tracking of post-disaster expenditure for all events and defining rules for identifying eligible post-disaster expenditures. A strengthened public financial management system would allow the government to make more well informed decisions, and disaster risk can be better managed with a cost-effective crisis and disaster risk finance strategy. This can then be complemented by risk modeling that uses data from past events to understand possible future events, who they could impact, and where and provide an indication of the costs to scale ASP.





## Annex 3A. Summary of Disaster Risk Finance in South Asia

**TABLE 3A.1** Disaster Risk Finance, South Asia

	Afghanistan	Bangladesh	Bhutan	India	Maldives	Nepal	Pakistan	Sri Lanka
<b>Status</b>	Nascent	Emerging	Nascent	Emerging	Nascent	Emerging	Emerging	Nascent
<b>Contingent Liabilities</b>		1% Budget	-	-	0.4% Budget	1-2.5% Budget		1% Budget
<b>Estimates of Average Annual Loss US\$</b>	Flood: 54m Drought: 280m Earthquake: 80m	Flood: 1,100m Drought Earthquake				Flood: 80m Drought	Flood: 800m Drought: 315m Earthquake: 120m	-
<b>DRF Strategy</b>	No	No	No	No	No	Yes	No	No
<b>Funds linked to SP</b>	No	Yes	No – to check	to check	No	No	No	to check
<b>Ex Ante Instruments</b>								
<b>Dedicated Reserve Fund</b>	No	Yes	Yes	Yes	No	Yes*	Yes, but as an off-budget mechanism**	No
<b>General Contingencies Fund</b>	Yes with 25% reserved for disaster response	Yes	Yes		Yes	Yes	Yes	Yes
<b>Contingent Credit</b>	No	No	No	No	Historically yes, currently no.	Historically yes, currently no.	No	Historically yes, currently no.
<b>Disaster Risk Insurance</b>	No	Various pilot schemes	No	Yes	No	Yes	No	Yes, via NNDIS
<b>Ex Post Instruments</b>								
<b>Budget Reallocation</b>	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
<b>External aid</b>	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
<b>Flash Appeal</b>	Yes	Yes	Yes	Unknown	Yes	Yes	Yes	Yes

\* Some disaster funding is earmarked but is fully dependent upon budget reallocation and external aid and not specifically for ASP response. The government has different types of emergency fund/ disaster management fund at all three tiers of the government, including the Prime Minister's Disaster Relief Fund (founded in 2006). Local governments have Disaster Management Fund as mandated by the Disaster Relief and Response Management Act (2017) of up to NR 1,000,000 (US\$8,400 equivalent) which is mostly used in disaster response. If a shock requires response of greater capital than allocated, support is sought from district, provincial and federal funds, which take time.

\*\* The current National Disaster Management Fund is off-budget. So, it is able to accrue over years. It is financed through occasional budget transfers and can be funded through donor aid and investment income from bank accounts but is restricted to other types of investments. It is currently established as a bank account managed by the National Disaster Management Authority, which holds decision-making power on allocations from the fund. The fund can finance all activities across DRM, including risk reduction. For more details, see World Bank (2021c).

## Annex 3B. Funding Shock-Responsive Social Protection, Pakistan

This annex quantifies options for scaling up the experience of social protection schemes in Pakistan, such as the **Benazir Income Support Programme**, to prepare ahead and disburse rapidly funds to protect the poor and vulnerable from the risk of floods, drought, and earthquakes.

A successful and inclusive shock responsive social safety net could scale up both vertically (cover the livelihoods of existing poor) as well as horizontally (cover the livelihoods of new vulnerable populations) in the impacted regions in the aftermath of a disaster.

### METHODOLOGY

This annex focuses on the scale-up of social protection schemes following floods, but the same methodology can be applied to other disasters as well. Three components were used to estimate the scale of the amount to be made available in a shock responsive social protection scheme: (1) number of people affected by disasters, (2) amount of payment to eligible and affected households, and (3) rules to determine when to make payouts and to whom.

**People affected by disasters:** The World Bank estimates of people affected by different levels of severity of the major natural disasters, based on historical disaster response data from government of Pakistan were used (table 3B.1). The long-term average was also double checked with the results of widely available catastrophe models.

**TABLE 3B.1** Estimated Number of People Affected by Flood Disasters, Pakistan

Long Term Average	1 in 5 Year	1 in 10 Year	1 in 50 Year	1 in 200 Year
2720	4180	8100	19460	31060

**Payment per eligible, affected household and the scale-up rules:** The cost of a shock-responsive social protection program was gauged assuming a scheme informed by the government response to previous disasters (the 2010 floods, COVID-19) and the coverage of the **Benazir Income Support Programme** (table 3B.2).



**TABLE 3B.2** Event Severity and Program Scale-Up

INDICATOR	EVENT SEVERITY	
	SEVERE EVENTS	EXTREME EVENTS
<b>Months covered with the cash transfer*</b>	3 months	6 months
<b>Total amount per month/household</b>	PKR3,000	PKR3,000
<b>Vertical scaleup</b> (i.e., amount delivered to existing beneficiaries of <i>Benazir Income Support Programme**</i> )	Extra PKR1,000/month	Extra PKR1,000/month
<b>Horizontal scaleup</b> (i.e., amount delivered to new beneficiaries)	PKR3,000/month	PKR3,000/month
<b>Targeting of beneficiaries</b>	Geographical: once an area is declared calamity hit by the respective provincial, regional governments. health profiling data analysis similar to that used in the COVID-19 Emergency Cash pillar of the <i>Benazir Income Support Programme</i>	

Source: BISP administrative data

\* The decision to disburse the whole amount for a household for basic needs in one or several tranches is decided during the implementation of the social protection scheme.

\*\* Under the *Benazir Income Support Programme*, 5 million women representing the poorest households in Pakistan receive a monthly cash transfer of PRs 2,000.

## SUPPLEMENTARY ASSUMPTIONS USED IN THE CALCULATION

- Number of people per household: 6.5
- The share of new poor identified following the COVID-19 outbreak = 25 percent of the total impacted population (used in this note for the calculation of the total amount needed to scale up horizontally a social protection scheme) (BISP administrative data).
- Event severity cutoff points for scale-up: severe event = modeled losses of PRs 100–PRs 1,000 billion; extreme event = modeled loss above PRs 1,000 billion (similar to a once in 50 year flood). Derived from the table of estimated total losses from natural disasters in Pakistan.

**TABLE 3B.3** Total Social Protection Cost, PRs, billion

Indicator	Long-Term Average	Once in 5 years	Once in 10 years	Once in 50 years	Once in 200 years
Scale social protection horizontally (new poor)	1	1	3	13	22
Scale social protection vertically (existing poor)	4	4	4	9	9
Total social protection modeled cost, PRs, billion	5	6	7	22	30
% of government contingent liabilities	7	5	3	4	3

## LIMITATIONS OF THE MODEL

The results above were calculated based on modeled exceedance probability curves at the national level. In the absence of more granular subnational data, events may occur at the provincial level that are sufficiently severe to trigger shock-responsive social protection payouts, but that do not trigger one at the national level and, so, have not been countering the simulation. To provide more accurate analysis, more data are needed on provincial and local disaster risk profiles and their interdependence and on household wealth, location, and vulnerability in Pakistan.

## ALTERNATIVE DESIGN OPTIONS

The indicative costs above vary depending on the chosen scheme's setup and the scale-up rules determined by government. Government Tables 3B.4 and 3B.5 present alternative scenarios that illustrate how costs can vary with different scheme design.

**TABLE 3B.4**

Three Cost Scenarios

<b>Sensitivity Scenario 1</b>	The loss threshold for the definition of “extreme” events is lowered from PRs 1,000 billion to PRs 250 billion (approximately a once in 10 years event)
<b>Sensitivity Scenario 2</b>	Only the new poor are covered, the existing poor remain covered only under the Benazir Income Support Programme
<b>Sensitivity Scenario 3</b>	Only new poor are covered in severe events; everyone is covered in extreme events as in the base scenario

**TABLE 3B.5**

Scenario Comparison, PRs, billions

SCENARIOS COMPARISON (PKR, BILLIONS)	1 IN 5 YEAR	1 IN 10 YEAR	1 IN 50 YEAR	1 IN 200 YEAR
Base scenario	6	7	22	30
Sensitivity Scenario 1	-	14	22	30
Sensitivity Scenario 2	1	3	13	22
Sensitivity Scenario 3	1	3	22	30

## Annex 3C. Glossary of Key Financing Terms

**Adaptation:** Adjustments or changes in economic, social, or environmental approaches in response to the effect of present or future climate change.

**Average annual loss (AAL):** The average amount of expected (or potential) loss over a period of many years; calculated as the sum of all modelled or simulated losses that are expected over a period of time, divided by the number of years in that period.

**Contingent liability:** A potential payment obligation (or future expenditure) that may be incurred, depending on the outcome of a future event; in the case of disaster risk for governments, the expenditure may be to pay for emergency response or reconstruction in the event of a natural hazard impact. Contingent liabilities can be explicit (underpinned by some form of legal obligation) or implicit (when there is a social expectation that the government will step in as an insurer of last resort).

**Disaster risk finance/financial resilience (preparedness/protection) to disasters:** Financial protection that is planned ahead to better manage the cost of disasters, ensure predictable and timely access to much needed resources, and ultimately mitigate long-term fiscal impacts.

**Disaster risk management (DRM):** Processes for designing, implementing, and evaluating strategies, policies, and measures to improve the understanding of disaster risk, foster disaster risk reduction and transfer, and promote continuous improvement in disaster preparedness, response, and recovery practices, with the explicit purpose of increasing human security, well-being, quality of life, and sustainable development. DRM investments are understood as investments in risk identification (risk assessments, and so on), risk reduction (prevention), early warning, emergency and response preparedness, public awareness, financial resilience (various instruments), and resilient recovery.

**Disaster risk:** The combination of the probability of an event and its negative consequences—that is, the likelihood over a specified time period of severe alterations in the normal functioning of a community or a society due to hazardous physical events interacting with vulnerable social conditions, leading to widespread adverse human, material, economic, or environmental effects that require immediate emergency response to satisfy critical human needs and that may require external support for recovery.

**Ex-ante/prearranged risk financing instruments (solutions, mechanisms):** In the context of disaster events, instruments (solutions, mechanisms) arranged before the event. Ex-ante decisions are decisions made before the event.



**Ex-post risk financing instruments (solutions, mechanisms):** In the context of disaster events, instruments (solutions, mechanisms) arranged after the event. Ex-post decisions are decisions made after the event.

**Exposure:** The situation of people, infrastructure, housing, production capacities, and other tangible human assets located in hazard-prone areas. Exposure includes the number of people or types of assets in an area. These can be combined with the specific vulnerability and capacity of the exposed elements to any particular hazard to estimate the quantitative risks associated with that hazard in the area of interest.

**Funding gap:** The difference between the available government budget and the probable loss for a given event size (or return period).

**Hazard:** The potential occurrence of a natural or human-induced physical event that may cause loss of life, injury, or other health impacts, as well as damage and loss to property, infrastructure, livelihoods, service provision, and environmental resources.

**Losses:** Quantifiable damages of disasters that can be translated into monetary terms. A distinction can be made between direct disaster losses, which refer to directly quantifiable losses (number of people killed; damages to buildings, infrastructure, or natural resources) and indirect losses, which refer to indirectly quantifiable losses (declines in output or revenue, impact on well-being, disruptions to flow of goods and services in an economy).

**Reserve fund (contingency fund):** an amount of money set aside to finance - usually - unexpected future needs. May be used interchangeably with contingency fund, however, the latter usually refers to general funds set aside to meet all type of unexpected spending, while reserve funds might be targeted (for example, dedicated to disasters).

**Resilience:** The ability of a system and its component parts to anticipate, absorb, accommodate, or recover from the effects of a hazardous event in a timely and efficient manner, including through ensuring the preservation, restoration, or improvement of its essential basic structures and functions.

**Return period:** The estimated time between losses of a certain size occurring. For example, a 1-in-10-year return period refers to losses that are expected to be exceeded once per 10 years—that is, in any given year there is a 10 percent probability of such losses at least as great as this. The estimates do not mean these disasters will occur only once every 10 (or 20 or 50) years.

**Vulnerability:** The characteristics and circumstances of the built environment and communities that make them susceptible to damaging impacts (or human vulnerability). Vulnerability factors include building construction type, socioeconomic context, and so on.

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Early action, facilitated by prearranged finance, can save lives, cut the cost of response in half, and reduce long-term impacts....for every US\$1.00 spent on planning... US\$5.00 can be saved.





# ■ CHAPTER 4

## PROGRAMS

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**AUTHOR:** Aline Coudouel

Programs are one of the key building blocks of an adaptive social protection (ASP) system. In South Asia, where shocks are frequent, it is critical to ensure that existing programs continue to carry out their normal functions, especially the large-scale programs focused on the poorest and most vulnerable, and that countries are prepared to deploy responses to cover additional needs.

In anticipation of shocks, countries can establish a toolbox that can be used to respond. This will help ensure a timely and efficient response. Specifically, the toolbox should include elements that can help choose programs for a particular response, define the population groups that should be served by the response, design benefits to maximize the positive impacts, and define or adjust delivery processes to reflect complex delivery conditions.

## 4.1 Mobilizing a Combination of Programs in Response to Shocks

**Social protection programs can play a critical role in addressing the impacts of different types of shocks and providing tailored assistance to multiple groups in the shock-affected populations throughout the phases of the shocks.**

### 4.1.1 DIFFERENT SHOCKS AND GROUPS

**Because of their specific nature and transmission mechanisms, shocks are likely to have different impacts.** South Asia is particularly prone to increasingly frequent and severe weather events, sea level rise, and less predictable rainfall and agricultural output. Some shocks will be acute and short-lived, while others will likely persist. For instance, among the wide range of hazards to which Bangladesh is exposed, floods affect the largest number of households, and the impacts are the longest lasting.<sup>17</sup>

**The various population groups affected by shocks are likely to be affected in different ways, resulting in different needs.** The prior levels of well-being of shock-affected households largely dictate their capacity to respond to shocks. For the purpose of selection programs, it is often useful to distinguish among four groups of households: those that experience chronic extreme poverty; those that have particular vulnerabilities; those that do not experience extreme poverty, but that are vulnerable to specific shocks; and those that are not poor and are able to cope

with most (but not all) shocks. Figure 4.1 illustrates graphically some of these concepts.

### CHRONICALLY POOR HOUSEHOLDS

Chronically poor households (figure 4.1, panel a). Such households are often the main target of social safety net programs and tend to be disproportionately affected by shocks because of their living conditions (for example, residing in shock-prone areas), even though not all of them will be affected by all shocks.<sup>18</sup> These households have limited assets and are usually ill-equipped to face a shock. Their limited absorptive capacity results in their adoption of coping strategies that harm their already limited capital, such as selling off productive assets, borrowing at unsustainable rates, taking children out of school, or delaying critical health care. If these households are affected by shocks, the consequences can jeopardize their longer-term resilience and contribute to the creation of intergenerational poverty traps.

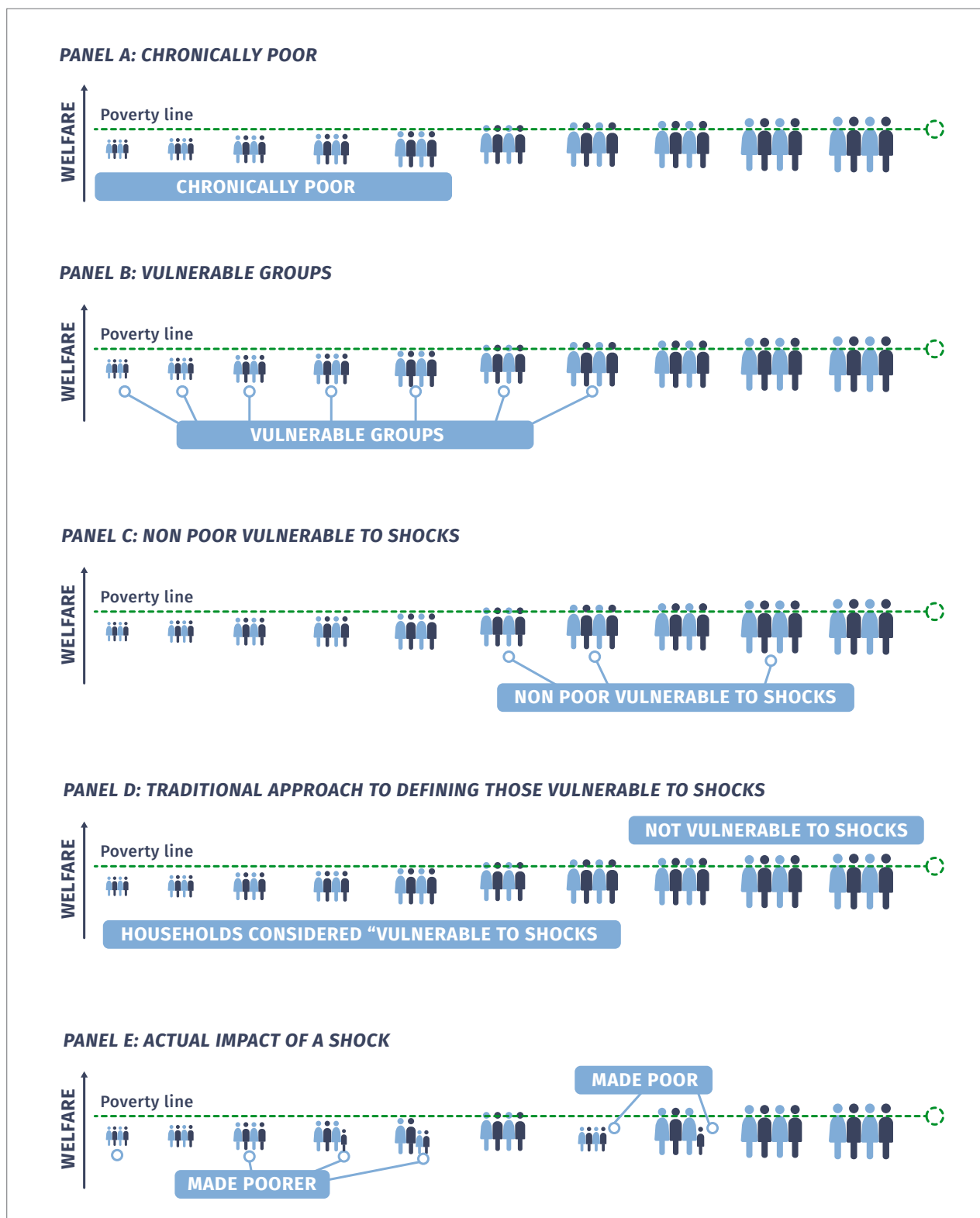
### VULNERABLE GROUPS

Vulnerable groups (figure 4.1, panel b). Vulnerable groups are central to many social protection programs in South Asia (see chapter 1). A significant share of social protection programs in the region focusses on vulnerable groups affected by biological vulnerabilities (for instance, children or the elderly) and groups that have limited access to assets, livelihoods, or services because of a socioeconomic characteristic (for example, a particular ethnic group, those living with a disability, single parents, or a social minority).

<sup>17</sup> In 2016, 24.4 percent of households were affected by floods, 15.1 percent by cyclones, 10.6 percent by thunderstorms, 10.5 percent by drought, 9.8 percent by waterlogging, 8.4 percent by hailstorms, and 6.1 percent by storm or tidal surges. Those affected by flood showed the highest number of nonworking days (17.6), followed by those affected by river or coastal erosion (16.9) (BBS 2016).

<sup>18</sup> In Bangladesh's coastal areas, for instance, a larger share of the population lives in poverty relative to other areas. Exposure to cyclones affected 25 percent of the poor households, but only 14 percent of the nonpoor. Only 6 percent of the poor, but 15 percent of the nonpoor, attended cyclone preparedness training in Shyamnagar Subdistrict (Akter and Mallick 2013; Hallegatte et al. 2017; World Bank 2019).



**FIGURE 4.1** Household Categories

Source: Elaborated based on World Bank 2021a.

Thus, in Maldives, most social cash transfer programs are targeted narrowly on a few vulnerable groups: people with disabilities, single and foster parents, and the elderly. Preexisting vulnerabilities might be exacerbated by shocks, resulting in groups, such as the elderly or the disabled, who have limited capacity to cope with shocks even if they are not living in extreme poverty. As in the case of the chronically poor, these groups tend to be more exposed to shocks and are more likely to be excluded from formal responses to shocks.<sup>19</sup>

### THE NON-POOR WHO ARE VULNERABLE TO SHOCKS

The nonpoor who are vulnerable to shocks (figure 4.1, panel c). These households are vulnerable to falling into poverty as the result of most shocks, even if they do not live in chronic poverty in normal times. This is particularly the case among households with livelihoods that are not resilient to shocks, for example, households in disaster-prone areas or with livelihoods that are not diversified. While such households may rely on informal networks to cope with modest idiosyncratic shocks, including the support of family or community, they typically do not have sufficient resources to cope with covariate shocks, which may also affect their informal support network. Households in this category tend to be more numerous among households close to the poverty line. However, for specific large-scale covariate shocks, the category can also include better off households with higher incomes. For instance, the recent COVID-19 emergency highlighted how informal urban workers are particularly vulnerable to economic

shocks because of their living conditions and volatile income sources (box 4.1). They do not fit well in the simplistic conventional approach, which assumes that the nonpoor who are vulnerable to shocks are contiguous to the poor (figure 4.1, panel d). Overall, figure 4.1, panel e, illustrates the impacts that a shock might have across the entire population.

### THE NON-POOR, NON-VULNERABLE TO SHOCKS

The nonpoor, nonvulnerable to most shocks. These households typically have the capacity to cope with most shocks, whether covariant or idiosyncratic in nature. In such cases, while public interventions might focus on helping them better prepare for potential shocks (before shocks occur, by helping them save, for instance), they will usually not need direct support. Typically, some households within this group are already covered by social insurance measures, which protect them against both idiosyncratic shocks (for example, old-age pensions) and covariate shocks (for example, unemployment insurance). These households are represented on the right-hand side of figure 4.1, panels a–e, with stable living conditions and welfare levels.

**Gender is often a critical determinant of the impacts of shocks, and reaching women is essential if programs are to maximize the associated effects.** This is because of the vast array of factors. These factors range from the disproportionate incidence of women among the poorest segments of the population to the restricted access of women to mechanisms to cope with shocks in a manner that does not jeopardize future welfare and to social norms that dictate the way men and women

<sup>19</sup> A series of factors may contribute to the increased vulnerability of the elderly in times of shocks, including the limited capacity to participate in response planning and implementation, mobility constraints that constrain the ability to leave home, difficulties in accessing program registration or the delivery of support, susceptibility to ill health or injury (HelpAge International 2012).

#### BOX 4.1: URBAN WOMEN AND YOUTH HAVE BEEN MOST AFFECTED BY THE COVID-19 PANDEMIC

Shortly after COVID-19 was officially declared a pandemic, many countries issued various levels of travel restrictions and stay-at-home or quarantine orders, which generally resulted in a reduction in economic activity. Such measures affected diverse groups and individuals within these groups differently. Those who were already disadvantaged in labor markets were the most likely to lose their jobs as a result of the pandemic. Women were 9 percentage points more likely than men to have lost their jobs in the pandemic's immediate aftermath, while low-skilled workers (primary education or lower) were also 9 percentage points more likely than workers with tertiary education to stop working. Both young and old workers bore the brunt of the pandemic's impact on jobs. The pre-pandemic sector of employment of workers played a large role in subsequent job losses among the workers. Workers in manufacturing, commerce, and other services were, respectively, 20, 16, and 17 percentage points more likely than workers employed in agriculture to have stopped working. While, in many crises, the informal sector acts as a shock absorber, the COVID-19 crisis resulted in a significantly larger contraction in informal employment than in formal employment.

The widespread and sweeping losses caused by the pandemic underscored the need for programs to deploy responses that reach population groups living above the poverty line or eligibility thresholds that typically favor the chronically poor. They also highlighted how the crisis had impacts that were quite different from those induced by climatic shocks, which typically disproportionately affect rural areas and people engaged in the agricultural sector. To a certain extent, the COVID-19 crisis led to a general change in the perception of the concept of vulnerability. For instance, in Bangladesh, there is now a higher level of awareness of how vulnerable informal sector workers are to poverty as a result of shocks even if their average earnings are significantly above the poverty line (Rahman, Hashemi, and Wazed 2021). There is thus a clear need to mobilize and deploy different programs based on the type and location of the shocks as a means to ensure effective support to the affected populations.

Sources: Adapted from Bundervoet, Dávalos, and Garcia 2021; Kugler et al. 2021.



### BOX 4.2: PROVIDING SUPPORT TO WOMEN WHO ARE VULNERABLE TO CLIMATE CHANGE

**Women's vulnerability to climate change stems from a combination of social, economic, and cultural factors.** Overall, women tend to be overrepresented among the poor and to have fewer assets, resulting in a lower capacity to manage risks. Women and men also have different roles and responsibilities within the household economy, thereby exposing them to shocks in different ways. For instance, if men leave shock-affected areas in search of work, women are more likely to be affected by local conditions. Waterlogging, for instance, has given rise to differentiated health effects in women and men residing in coastal Bangladesh (Neelormi, Adri, and Ahmed 2009).

**Norms can also affect women's levels of vulnerability.** For example, women and girls may be particularly vulnerable because of differences in socialization whereby girls are not equipped with the same skills as their brothers (for example, swimming) or because of restrictions on female mobility (Demetriades and Esplen 2010). Violence may also be exacerbated in the aftermath of disasters. Evidence indicates that women and girls

are more likely to become victims of domestic and sexual violence, especially in cases in which families have been displaced and are residing in overcrowded emergency housing (Bartlett 2008). The limited participation of women in decision-making processes can also marginalize them in the context of recovery interventions, while their more limited access to information can affect their capacity to respond effectively to climate-induced shocks (Ariyabandu 2006).

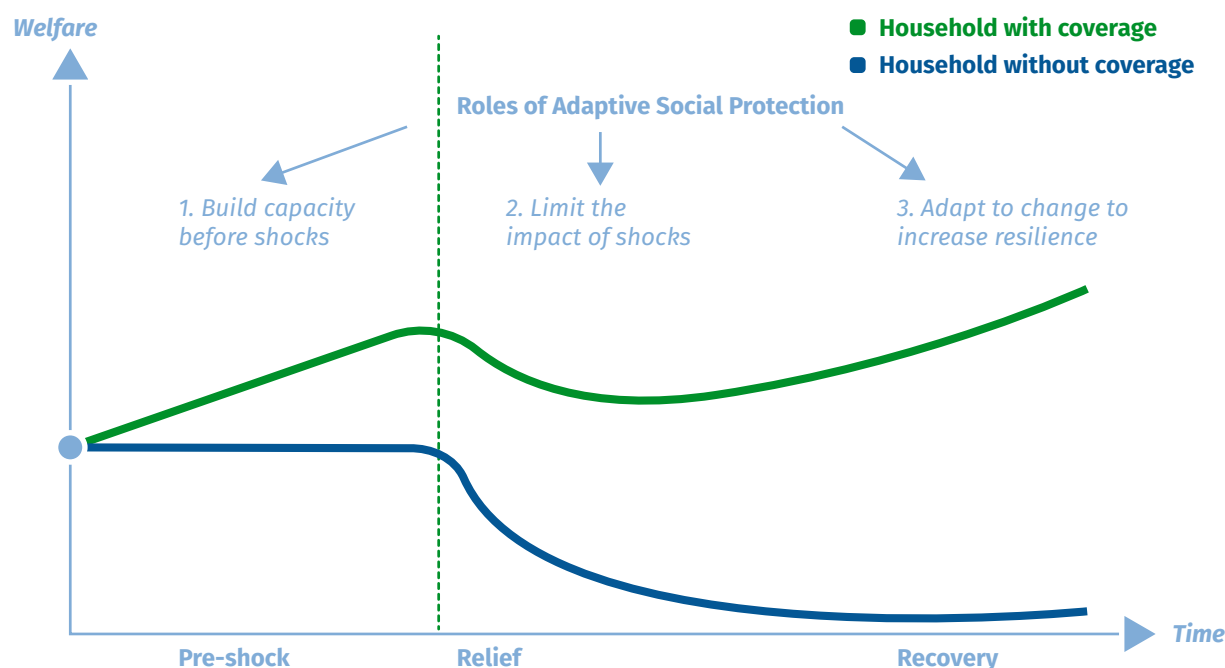
**Overall, climate change and shocks are likely to exacerbate gender differences in health risks.** Globally, natural disasters kill more women than men and tend to kill women at a younger age. Climate-sensitive health impacts such as undernutrition and malaria underscore significant differences between the sexes (WHO 2014).

**As a result, to maximize the effectiveness of programs, it is critical to address the particular constraints faced by women to allow them to realize their full potential and thrive in the post-shock period.**

Sources: Demetriades and Esplen 2010; UNDRR, UNDP, and IUCN 2009.

respond to shocks (box 4.2). More generally, the impacts of some shocks may vary across individuals within the same household, for example, by age, gender, labor market status, level of mobility, and so on. Recognizing this heterogeneity is critical to ensuring that programs reach women, thereby significantly increasing the potential impacts.

**Shocks may affect many groups, including individuals and households that are not typically considered poor or vulnerable.** Some shocks jeopardize the livelihoods and human capital of nonpoor households, which do not typically benefit from social assistance programs. In addition to interventions that focus on the poor and vulnerable during normal times, there is thus

**FIGURE 4.2** The Role of Adaptive Social Protection during the Three Phases of Shocks

a clear need that government-led shock responses identify any other individuals or households also severely affected by shocks and unable to cope with the consequences. This is in line with the overall objective of ASP: to provide assistance to those who need it when they need it, by deploying temporary support among selected groups of households that might not normally need support.

#### 4.1.2 DIFFERENT NEEDS BEFORE, DURING AND AFTER SHOCKS

**The needs of shock-affected households vary according to the shock and the population group and over time.** It is possible to consider three phases during which households (1) build their capacity to

prepare before shocks occur, (2) cope once shocks occur, and (3) adopt strategies to adapt to future shocks.<sup>20</sup> Addressing these different phases entails initiatives beyond social safety net programs, including the deployment of a broad range of economic and financial inclusion interventions.

**Prior to shocks, safety net programs can build the capacity of households to prepare for shocks (figure 4.2).** Social protection programs, by their nature, help households cope with many of the risks and shocks they face. By providing regular support, they mitigate the negative impacts of small idiosyncratic shocks on households. By improving overall household welfare during periods of stability by, for instance, building human and productive capital, they also assist households in preparing for potential future shocks

<sup>20</sup> In practice, these are cyclical, and the categories may blur over time.

(O'Brien 2020). According to various recent evaluations summarized by Bowen et al. (2020), many safety net programs improve the preparedness of households by promoting savings and financial inclusion, thus demonstrating the significant positive effects that such measures have on creditworthiness and debt relief.

**Safety net programs may also play a key role in information sharing.** They typically rely on networks that have the ability to reach the poorest communities, including social workers and local leaders. In some contexts, such programs are among the few government interventions that involve regular contact

### BOX 4.3: BEHAVIORAL CHANGE COMMUNICATION: A TOOL TO SUPPORT ASP OBJECTIVES

**Social safety net programs are increasingly relying on behavioral change communication as a key component.** Behavioral change initiatives include training on parenting, gender equality, financial inclusion, saving, and disaster preparedness. In conditional cash transfer programs in El Salvador, Mexico, the Philippines, and Tonga, such initiatives are undertaken as either hard or soft conditions linked to transfer payments.

**In Mexico, the former conditional cash transfer program Prospera (presently discontinued; known earlier as Progresas and then Oportunidades) and civil protection measures together provided disaster preparedness training to social protection beneficiaries.** The cash transfers offered through the program were conditional on a set of co-responsibilities, including participation in educational communication health self-care workshops (*autocuidado de la salud*) in which one theme was basic actions in case of disasters. Jamaica uses general communication materials to improve awareness of processes and available social protection support after disasters and to enhance disaster preparedness and the

protection of livelihoods that is tailored to poor households.

**South Asia's experience in behavioral change communication is limited.** In Nepal, where construction and post-earthquake reconstruction projects are delivered largely by the informal construction sector, construction workers have been trained to rebuild damaged structures according to more disaster-resilient designs and with stronger materials. In some cases, the training has proved effective in creating more earthquake-resilient buildings (Rose and Chmutina 2021).

**As countries design more adaptive, scalable, and sustainable social protection programs, behavioral change communication is increasingly viewed as an effective means of delivering targeted messaging on disaster preparedness, resilience, and adaptation.** There is significant scope to develop behavioral change communication initiatives in the South Asia region, with the objective of increasing preparedness and building resilience.

Sources: Bowen et al. 2020; Dixon et al. 2017; Rose and Chmutina 2021.





with the poorest and most vulnerable households and communities. Safety net programs can leverage these networks and the various interactions with beneficiaries (for example, information or behavioral change sessions) to share risk-related information within at-risk communities to inform strategies and actions to enhance household preparedness, coping capacity, and adaptation (box 4.3). For example, in the Philippines, the family development sessions of the national conditional cash transfer program (the Pantawid Pamilya Pilipino Program) are used to disseminate relevant disaster preparedness information to beneficiaries, thereby underscoring the potential of social protection programs to inform communities about forthcoming shocks and provide guidance on the recommended immediate actions to be taken (for instance, early evacuation).

**During shocks, vulnerable households that are being affected typically need immediate support to protect lives and livelihoods and safeguard investments in human capital.** In many countries, governments rely on disaster management agencies to implement interventions, including the temporary displacement of people from affected areas, repairing critical infrastructure, and providing immediate relief

through food or shelter. Deploying social safety net programs as part of a broader government response is, however, a critical complement to the actions of disaster management agencies, given their reach (the programs already interact with the most vulnerable), their potential to identify effectively the poor and vulnerable (if there are social registries or broader lists of poor households; see chapter 5), and their delivery mechanisms (such as information and payment systems that rely on robust ID provisions, but also networks of local actors). By assigning the responsibility for cash transfers to safety net programs, disaster management agencies can focus their capacity and resources on other disaster recovery initiatives that are part of their mandates (chapter 2). Evidence abounds on the role that safety net programs play in mitigating the short- and long-term impacts of covariate shocks. Thus, in Ethiopia, the Productive Safety Net Program reduced the initial impact of a drought on program beneficiaries by 57 percent, thereby eliminating the adverse impact on food security within two years (Hidrobo et al. 2018). Similarly, households that received transfers soon after a cyclone in Fiji recovered more quickly than others (Ivaschenko et al. 2020; Mansur, Doyle, and Ivaschenko 2017).



**In the aftermath of a shock, some affected households may also require longer-term support to enhance their adaptability relative to potential future risks and shocks (figure 4.2).**

Social protection programs can play a crucial role in adaptation through various mechanisms, including support for human capital accumulation. Human capital is a critical element of resilience and the adaptation to shocks because it helps households increase earnings, diversify income sources, and adopt less harmful strategies. Many safety net programs promote greater investments in human capital, especially among children, through information sessions, behavior change training, incentives, or conditionalities. Evidence worldwide highlights the impact social protection programs have on human capital accumulation and development. Social protection programs can also promote resilient livelihoods. They can foster livelihood diversification, resulting in more diversified assets and more resilient

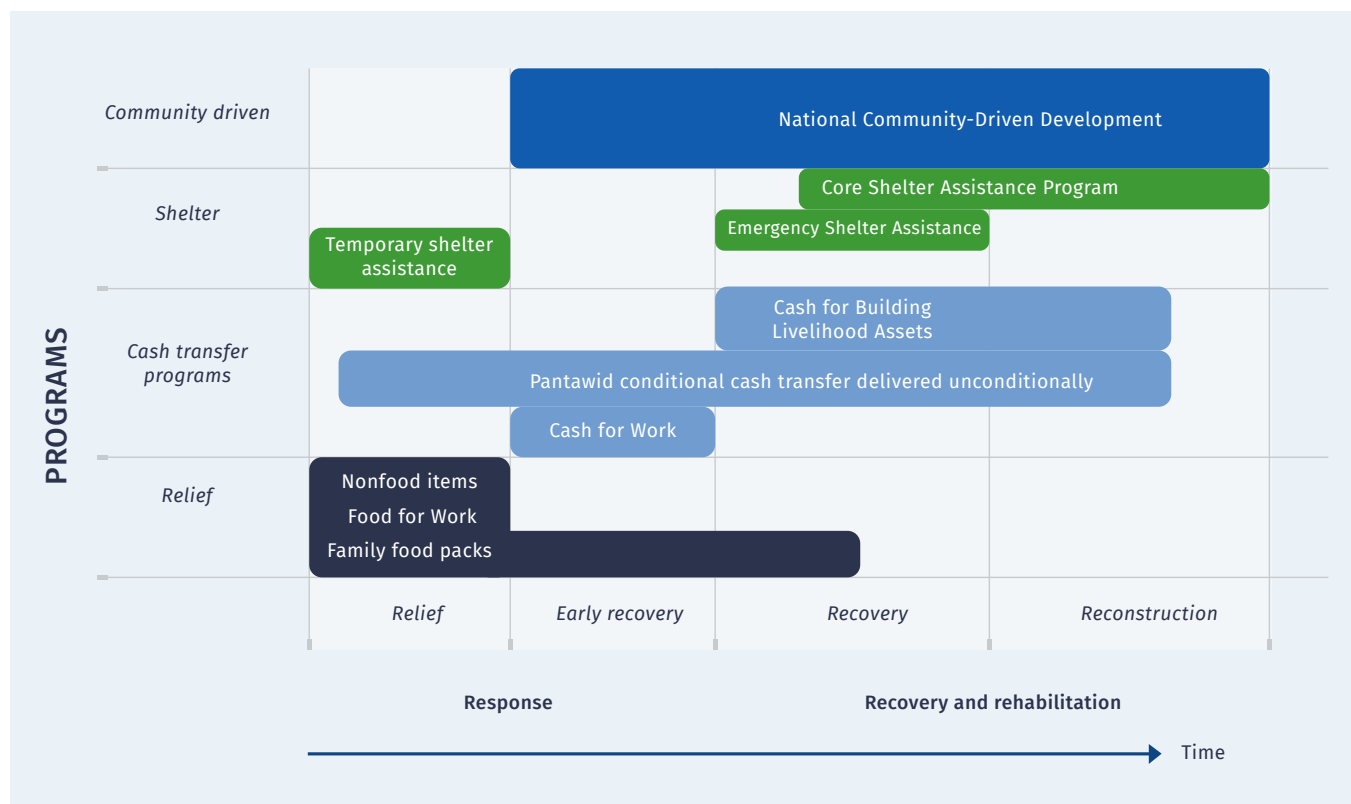
livelihoods, by linking cash transfer beneficiaries to economic or productive inclusion programs, which are emerging as powerful instruments in support of the transition toward more productive and resilient livelihoods. Some safety net programs also support building resilient community assets that address sources of vulnerability within a community. For example, governments and stakeholders in South Asia have developed climate-sensitive public works programs linked to the rehabilitation or creation of assets that address structural vulnerabilities identified within communities. For instance, in India, the Mahatma Gandhi National Rural Employment Guarantee Scheme has been instrumental in building resilience to a wide range of climate shocks through the provision of integrated natural resource management and soil conservation infrastructure, agriculture-based investments, and other local infrastructure.<sup>21</sup>

<sup>21</sup> Public works programs can effectively promote climate-smart agriculture and integrated natural resource management practices within communities, including a focus on waste management, reforestation, rainwater harvesting, soil and water conservation, and drought-resistant horticulture. See Esteves et al. (2013); Porras and Kaur (2018). See chapter 3 for more details.

**Safety net programs thus have the potential to assist many types of households affected by many types of shocks at different times.** No single program can cover all these roles, among all people, and for all types of shocks. Each program typically encompasses a narrower set of functions that serve a narrower set of people, as demonstrated by the Philippines example (figure 4.3). Post-shock programs in the Philippines range from cash transfers (both public works and the Pantawid Pamilya Pilipino Program) to programs focused on shelter and immediate food distribution. This is in addition to regular safety net programs and economic inclusion programs during normal times.

**Social protection programs can be critical in addressing the needs of households in preparing for shocks before they occur, coping with shocks once they occur, and adapting to shocks in the future.** Social protection programs may also complement each other by focusing on various aspects of shocks. Thus, most governments deploy several social protection programs to address the various specific needs of individuals and households and the separate phases of shocks. Programs are therefore often layered, that is, based on different eligibility criteria or different thresholds of needs and providing different benefits or services.

**FIGURE 4.3** Selected Post-shock Programs Focused on Household Needs, the Philippines







### 4.1.3 SOCIAL SAFETY NETS AND BEYOND

#### CASH TRANSFER PROGRAMS CAN BE USED IN MULTIPLE (AND CREATIVE) WAYS

**Safety nets are at the heart of shock responses and can be leveraged in various ways.** The poor and vulnerable are typically more exposed to disasters and climate change and disproportionately affected by underlying diseases and health issues that shocks tend to magnify (Hallegatte et al. 2017; IPCC 2015). Given its ability to assist and extend coverage rapidly among the poorest and most vulnerable households, social protection is a particularly effective tool for deploying shock responses. Based on the experience in numerous countries, there are five potential ways

that social protection programs can be leveraged to respond to covariate shock (box 4.4), in addition to routine emergency safety nets deployed in some countries of the Caribbean or in Indonesia.

**There are many examples of the vertical expansion of social safety nets during a crisis (Beazley, Solórzano, and Sossouvi 2016).** For instance, in the Latin America and Caribbean region, several governments have relied on existing programs because of the administrative capacity of these programs. In Argentina, in response to the 2015 flooding, the government provided additional benefits to the beneficiaries of the Asignación Universal por Hijo child grant and the social pension. In areas of Guatemala in which the government has declared a state of emergency, recipients of the Bono Seguro

## BOX 4.4: FIVE WAYS SAFETY NETS ADDRESS SHOCKS

O'Brien, Holmes, and Scott (2018) propose a typology that includes three options that rely on national systems (the first three options listed below) and two options that are outside national systems, but that coordinate closely with these systems (the last two options listed below). In practice, the response might also include a sixth approach (typically used by nongovernmental actors), which entails the implementation of stand-alone programs rather than channeling assistance through national social protection systems. Some countries have routine emergency programs, which are permanent, activated to address specific shocks, and are beyond the scope of the expansion mechanisms described here.

**DESIGN TWEAKS** are small adjustments to a routine program. They may introduce flexibility to maintain the regular service for existing beneficiaries throughout a shock. They may also address vulnerabilities that are likely to increase in a crisis, through adjustments to program coverage, timeliness, or predictability (for example, by altering the payment schedule).

**VERTICAL EXPANSION** is the temporary increase of the value or duration of a social protection intervention to meet the additional needs of existing beneficiaries. For such vertical expansions to be relevant, the programs must already have adequate coverage in the disaster-affected areas and among the poorest households in these areas.

**HORIZONTAL EXPANSION** is the temporary inclusion of new beneficiaries by extending geographic coverage, enrolling more eligible households in existing areas, or altering the enrollment criteria. Horizontal expansion benefits from significant ex-ante investments in the processes and procedures used to deliver the programs.

**PIGGYBACKING** occurs if an emergency response capitalizes on the existence of an established system or program—beneficiary list, staff, national database, or payment mechanism—to deliver additional assistance. Some countries piggyback on certain elements of dedicated emergency programs that are affiliated to social safety nets, such as delivery systems. Emergency programs have dedicated response objectives and operate alongside an existing safety net program. Such programs can be located within or outside social protection ministries, departments, and agencies and may leverage underlying safety net delivery systems, such as social registries, payment systems, and front-line social protection staff.

**ALIGNMENT** refers to the design of an intervention with elements that resemble those of existing or planned interventions, but without integrating the two (for example, alignment of objectives, targeting methods, transfer values, or delivery mechanisms). Governments may align their systems with those of humanitarian actors or vice versa because an intervention does not have the operational capacity to address a crisis or because it may not yet exist.

Source: Builds on O'Brien, Holmes, and Scott 2018.

## BOX 4.5: THE PHILIPPINES: VERTICAL EXPANSION

**The experience of the Philippines illustrates the benefits of vertically expanding a cash transfer. Following Typhoon Haiyan, the World Food Programme wanted to provide large-scale support. It could not find nongovernmental organizations (NGOs) with the capacity to identify households and deliver support quickly across all affected areas. However, the Pantawid Program had well-established systems for communication, identification, and payment as well as extensive coverage, including some of the households that had been affected by the typhoon. The program thus offered a rapid means to reach a large number**

**of people and provide them with emergency support at a speed and scale that would have not been feasible through the use of traditional humanitarian channels. The time required to launch the vertical expansion of Pantawid (around a month) was also significantly shorter than the several months that were successively spent establishing service agreements with financial service providers for a recovery program. Using existing systems also translated into lower transaction costs compared with outsourcing to implementing partners.**

Sources: O'Brien, Holmes, and Scott 2018; Smith et al. 2017.

conditional cash transfer received an increase by up to 50 percent in the transfer. AA lump sum was paid to the beneficiaries of the Chile Solidario Program who were affected by the 2010 earthquake. The government of the Dominican Republic used the conditional cash transfer platform to integrate an unconditional program to respond to an economic shock through the automatic inclusion of all Solidaridad beneficiaries. Vertical expansion has also been used extensively in East and South Asia (Box 4.5).

**Examples of horizontal expansion likewise abound across the various regions.** For example, in addition to those already enrolled in the Solidaridad safety net program in the Dominican Republic, qualifying beneficiaries were also temporarily included in the Bonogas support transfer program. Horizontal program expansion is also frequent in countries exposed to recurrent slow-onset shocks. For instance,

the Productive Safety Net Program in Ethiopia and the Hunger Safety Net Program in Kenya are both designed to undertake horizontal expansions based on the household needs caused by drought and the related food insecurity in drought-prone parts of the countries. In Jamaica, following Hurricane Dean in 2007, the government combined horizontal and vertical expansion by providing a supplemental transfer to beneficiaries of the PATH Cash Transfer Program and the National Insurance Scheme and grants to additional households screened through a damage assessment process (Williams and Martinez 2020).

**Piggybacking and alignment are mechanisms to expand coverage without relying on existing programs.** Piggybacking builds on existing systems, but entails running separate programs. Thus, Pakistan's Citizen's Damage Compensation Program piggybacked on the core capacities of the civil registration authority and



the National Database and Registration Authority. However, it was a stand-alone program operating outside the social protection system and not applying regular social protection mechanisms to deliver the cash emergency response. The government of Mauritania, which is affected by recurring drought, has developed Elmaouna, a dedicated response program that piggybacks on the systems used by Tekavoul, a regular cash transfer program. For delivery, Elmaouna uses the Tekavoul payment platforms and the national social registry, which contains information on the poorest and most vulnerable households.<sup>22</sup> The national social registry was deliberately expanded to include households that are likely to be vulnerable to shocks, but that are not chronically poor, as an anticipatory measure for potential future shock responses. In the case of alignment, new programs are deployed that share features with existing programs and systems, but that are run separately.

## OTHER TYPES OF SAFETY NET PROGRAMS CAN ALSO BE HARNESSED

**Besides cash transfers, some governments also rely on school meal programs to respond to shocks.** They have built on in-built systems and infrastructure for the delivery of school meal programs to provide support to those affected by shocks through both vertical and horizontal expansion. In the Latin America and Caribbean region, Haiti, Honduras, and Nicaragua have expanded their school meal programs vertically, through additional food provision, the supply of meals during weekends and school holidays, and improved meal quality and nutritional content (Beazley, Solórzano, and Sossouvi 2016). To reach affected households that might not have school-age children, some programs have expanded horizontally

by offering take-home meals or by extending canteen access to other individuals and households. While the use of school meal programs is a valid option to be considered during shocks, the widespread disruptions and the complexity of the large-scale procurement, transport, and storage of foodstuffs can complicate this shock response.

**Public works programs are deployed extensively as a social assistance instrument to respond to crises.** Latin America and South Asia have strong traditions of using such programs to address shocks through both vertical and horizontal expansion. In Latin America and the Caribbean, for instance, Argentina, Chile, El Salvador, Mexico, Peru, and Uruguay have implemented such programs in response to covariate shocks (Beazley, Solórzano, and Sossouvi 2016). Work requirements have made these programs popular in many contexts in which the social contract does not necessarily include the poor as deserving of support. These programs can also contribute to the restorative portion of the disaster response by focusing on particular assets. The Employment Generation Program for the Poorest Plus, in Bangladesh, was modified during the pandemic to enable horizontal and vertical expansions and to ensure the program can function beyond the two lean seasons. Unconditional transfer modalities for specific cases and early warning systems linked to trigger parameters have also been established. However, effective public works programs are resource-intensive and implementation is complex. Work requirements may also not be appropriate during crisis or easily adaptable to the categories most in need of support, for example, if these people are time constrained or not able-bodied. Moreover, the majority of such programs are implemented in rural areas, and their adaptation to urban areas is difficult (McCord 2013).

<sup>22</sup> The service provision contract between Tekavoul and payment agencies includes a clause that anticipates the delivery of additional benefits from Elmaouna that can be triggered in case of need without requiring additional negotiation or procurement processes

**TABLE 4.1**

The Use of Social Insurance to Help People Affected by the COVID-19 Pandemic

Source: Gentilini et al. 2022.

SUB-COMPONENT	N. OF MEASURES	N. OF COUNTRIES
Paid sick support	149	87
Healthcare insurance support	68	51
Pension	96	63
Social Security contribution waiver/subsidy	261	115
Unemployment benefit	145	88
<b>Total</b>	<b>719</b>	<b>179</b>

### GOVERNMENTS CAN ALSO USE SOCIAL INSURANCE PROGRAMS FOR PARTICULAR GROUPS

**Social insurance programs, contributory in nature, have relatively limited coverage in South Asia.**

Typically, they also tend to serve population groups that are not among the chronically poor or vulnerable to shocks. Thus, social insurance programs may not be the most appropriate instrument to reach the poorest, who are typically served by social assistance or social safety net programs. However, during particular crises that affect nonpoor households in a devastating manner, social insurance programs may be the ideal vehicle for reaching beneficiaries.

**The use of social insurance programs to respond to shocks is more frequent in higher-income countries and for specific economic shocks.** In their response to the COVID-19 crisis, the governments of some countries have harnessed social insurance programs in creative ways. In India, the government used the employee provident fund in two ways: the government paid the

contributions of both employees and employers for three months in selected firms, and workers could access a nonrefundable advance from their accounts.<sup>23</sup> Overall, over 100 countries waived, deferred, or subsidized social security contributions to mitigate the economic burden among firms and workers temporarily (table 4.1). Among other governments, 88 have used unemployment benefits to support workers affected by a crisis, offering the contributors access to the unemployment benefits of the programs. A total of 87 governments have used sick leave as a coping mechanism, and 63 have used pension systems by, for instance, allowing participants to withdraw a share of their pensions in advance. Some governments have used payroll data from social insurance programs to identify affected workers.

### LABOR MARKET POLICIES AND PROGRAMS

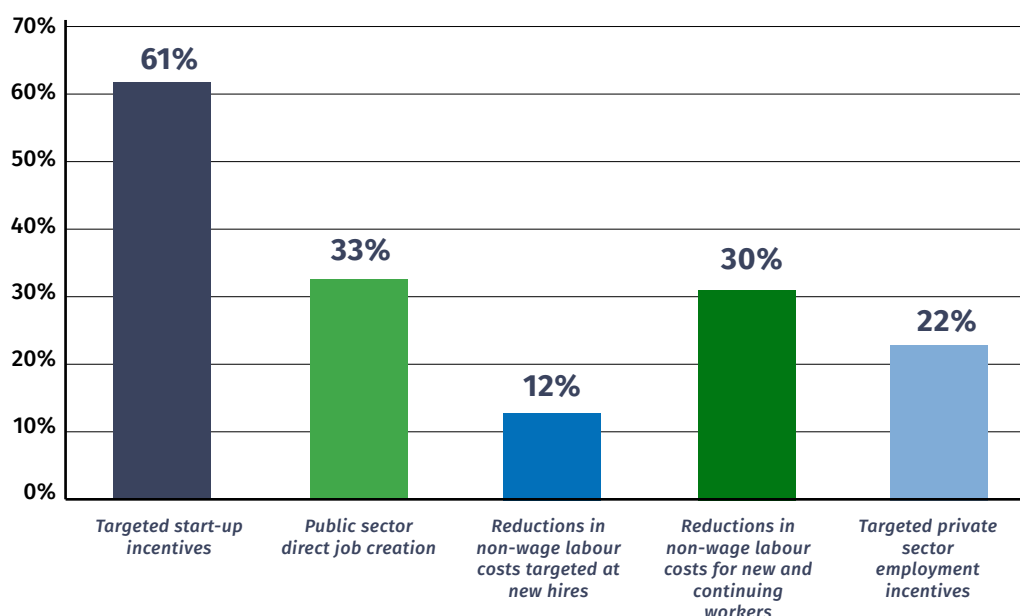
**Depending on the nature of the shock and on the affected groups, labor market programs can also play a role in responding to crises.** This includes support during the coping period and the recovery phase by

<sup>23</sup> The firms selected had up to 100 workers, among whom 90 percent earned less than Rs 15,000 a month. The worker advances could be for amounts up to the lower of 75 percent of a worker's savings or the wages for three months.

**FIGURE 4.4**

Share of OECD Countries That Have Adjusted Labor Market Interventions

Source: OECD 2021.



stimulating labor demand and promoting training programs. Such measures help support economic restructuring, the reallocation of workers, and the promotion of resilient livelihoods among the poor and vulnerable. As with social insurance programs, many labor market programs—wage subsidies, regulations, or formal training—tend to serve the richer segments of the population in low-income contexts. They are thus likely only relevant in response to those shocks that affect wealthier segments significantly.

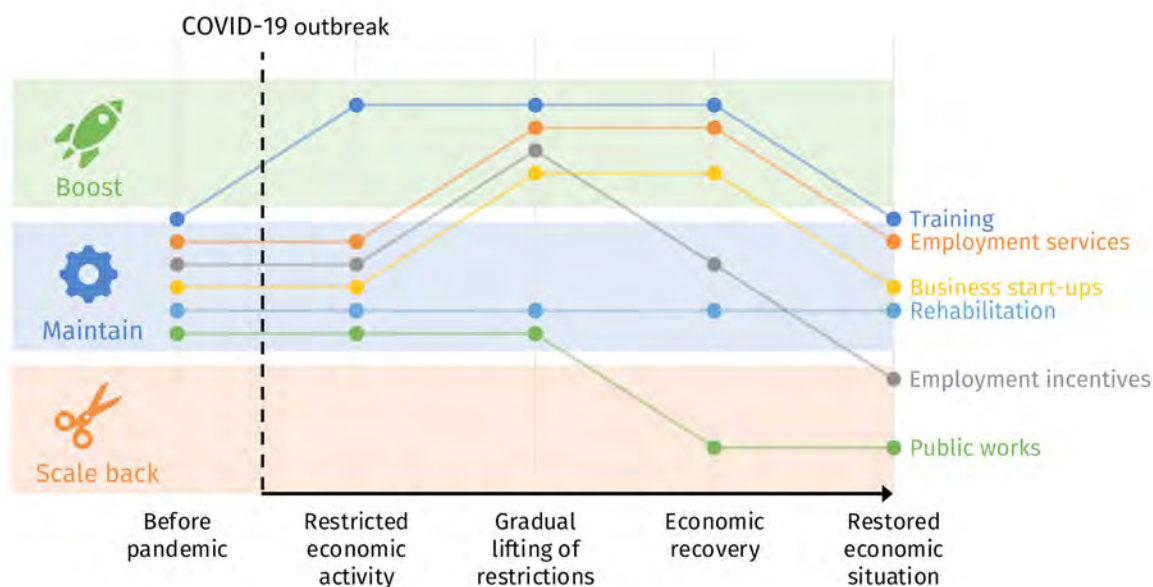
**The COVID-19 crisis provides a unique illustration of the use of labor market programs to buffer the impact of the crisis.** As of February 2022, the governments of 117 countries had launched some form of wage subsidy for workers in the formal sector, and the governments of 77 countries had undertaken training measures (Gentilini et al. 2022). Some governments have also relied on wage subsidies that allow firms to reduce work time or prohibit them from firing workers. Governments also adjusted their labor market

regulations by introducing changes to severance payment obligations, hiring flexibility, dismissal procedures, leave policies and remuneration, labor inspections, and shorter work time arrangements to retain employment relationships. Figures 4.4 and 4.5 present the recent experience in countries of the Organisation for Economic Co-operation and Development (OECD) and illustrate the interventions governments deployed and how they scaled down some programs once the economic situation had been restored.

**Most governments deploy social safety net programs to respond to shocks, given that these programs already assist the poorest and most vulnerable households.** Existing safety nets can be used in multiple ways, not necessarily by using the programs themselves, but by using some of the program systems or features. A combination of programs can also be used. For some types of shocks, insurance or labor market programs can play an important role.



**FIGURE 4.5** Scaling Up or Down Labor Market Programs during Shocks



Source: OECD 2021.



#### 4.1.4 SELECTING A MIX OF PROGRAMS FOR A SHOCK RESPONSE TOOLBOX

**The choice of programs for a toolbox that can be deployed in response to various future shocks depends on the nature and scale of the shocks.** Most countries in South Asia are vulnerable to multiple, frequent, and larger-scale climate-related shocks. Many countries in the region have also experienced large-scale internal or international displacements. To prepare for shocks that recur, systems and scaling-up mechanisms should be available and capable of repeated use. Even if significant initial resources are required to set up these elements, the savings in money and time are likely to be substantial and justify the investments. Governments should invest in the development of sustained response mechanisms and the integration of the responses to shocks into regular systems and programs. For shocks that are much smaller in scale and unlikely to recur often, such investments might not be warranted.

**The maturity of foundational systems is critical in terms of coverage and systems.** That the coverage of social protection systems in many South Asian countries is limited (even among the poor or vulnerable) constrains the options available to respond to crises. The scale, quality, and interoperability of social registries, ID systems, payment systems, and program management information systems vary greatly across the region. In the case of most shocks, the available delivery systems and processes for the administration of regular programs can be used during emergencies for a timely and efficient response.<sup>24</sup> The optimal

response will therefore depend on the capacity of the existing systems and programs. If the systems are robust, but the programs are weak or cumbersome to adjust, piggybacking might prove the best approach. If large programs are already established and cover the affected population, then vertical expansion may be best. If national systems are weak, harnessing external actors while progressively building the government's capacity to manage future shocks could be a valid alternative.

**While the state of safety net systems pre-shock will dictate the range of options available over time, technical considerations may guide the choice of the response for specific shocks.** These considerations include each program's ability to deliver the appropriate support to the appropriate people in a timely manner. The timeliness of the response is critical if households are to be supported to avoid depleting assets or engaging in negative coping strategies. Ideally, providing support in anticipation of shocks can yield even better results, such as in the case of Bangladesh, where households benefiting from early support experienced weaker impacts relative to households that had not received assistance.<sup>25</sup> Another consideration relates to coverage. Once the population likely to be affected by a shock has been identified, selecting an intervention that can reach most of the people in need (or a combination of options that helps achieve this objective) is important.<sup>26</sup>

**Political judgments also play a key role in the choice of response instruments to be added to the toolbox.** The choice of strategy—whether to rely on existing programs or institute new programs, for instance—

<sup>24</sup> This is not always so. For instance, floods might limit the availability of ATMs to retrieve bank-based payments.

<sup>25</sup> Small changes mattered: for example, receiving the cash even a day earlier resulted in a small, but marginally significant increase in welfare; see Pople et al. (2021).

<sup>26</sup> O'Brien, Holmes, and Scott (2018) propose a checklist of specific questions as an aid.



will also be informed by political concerns. In some contexts, a response will be more acceptable if run through regular programs, but, in others, it might be preferable to implement tailored interventions. In South Asia, two countries with relatively strong systems have adopted different approaches in their response to COVID: India has vertically and horizontally expanded existing large-scale programs, while Pakistan has favored the deployment of new programs (piggybacking on some existing systems). At times, programs and institutions can be chosen to avoid confusion or unrealistic expectations. Separate programs help people clearly distinguish response programs from ongoing programs. Separate programs help avoid the creation of expectations on the continuity of shock response programs beyond the duration of the crisis. This reportedly played a role in Pakistan's decision to set up separate response programs. Similarly, the Pantawid Program was not used directly in response to Typhoon Haiyan in the Philippines because of concerns about enrolling households that did not fit the usual eligibility criteria and thus potentially altering the focus of the Pantawid Program on improving human development (O'Brien, Holmes, and Scott 2018; Smith et al. 2017; Watson et al. 2017). Similarly, governments might choose a specific parameter based on concerns about expectations that are unsustainable.<sup>27</sup>

**It is critical that the government identify the programs and systems most suited to respond to a variety of shocks.** Then, in determining the responses for specific shocks, the government can draw from this toolbox, depending on the nature of the shock, the population to be supported, and relevant political and economic considerations. Having such a toolbox and deploying selected instruments in a flexible manner effectively allows the target groups to be reached in an efficient and timely way. The social protection provided becomes responsive by design. It possesses features that allow the government to respond appropriately to a broad range of shocks, rather than in an ad hoc manner each time.

**Social protection programs can play a critical role in addressing the impacts of different types of shocks and providing tailored assistance to multiple groups in the shock-affected populations throughout the different phases of shocks.** Given the diversity of needs that arise as a result of shocks, governments and stakeholders should have multiple programs in the toolbox on which they can rely and which they may mix and match to respond to particular shocks.

<sup>27</sup> Thus, in Nepal, the government has often required development agencies and organizations to provide assistance in kind to households because cash transfers would not be sustainable once the temporary programs withdraw.



## 4.2 Selecting Options to Reach Existing and New Beneficiaries

**One of the challenges facing policy makers is the definition of the category or categories of individuals and households to be supported and the methods to reach them.**

### 4.2.1 DETERMINING WHO SHOULD BE TARGETED IN SHOCK RESPONSE

**Deciding who should be given priority and benefit from assistance is not straightforward. There are numerous issues and trade-offs to be considered.**

Should programs focus on assisting those who are already poor and already benefiting from social protection programs prior to a shock or on those who do not benefit from other programs, but who have become poor as a result of the shock? Should programs focus on those who experienced modest losses, but fell into poverty or on those who suffered the largest losses irrespective of their wealth?

**The poorest and most vulnerable, including existing program beneficiaries, are often those who are the most severely affected by shocks.** These groups in the population are more likely to reside in areas that are more prone to flooding, landslides, or drought and to be employed in agriculture, which is affected by changing weather patterns, or the informal sector, with limited protection or insurance (Hallegatte et al. 2017). Such households tend to resort quickly to negative coping strategies and typically require timely, prioritized support both in normal times and during shocks. Many have limited coping capacity, including

the elderly or disabled who might have few options to mobilize assets, move, or engage in alternative income-generating activities. For existing programs and beneficiaries, it is possible to provide a top-up or additional transfer (such as to those who reside in particular geographic areas), while continuing to supply regular support to all other beneficiaries. In such cases, it will be necessary to identify these specific households among the existing beneficiaries. Among households not currently benefiting from regular social protection programs, the challenge is the identification of those that should be supported. Those likely to be vulnerable to any type of shock might be the households that are only slightly above the poverty line in normal times (see figure 4.1). But those vulnerable to a particular shock might also include specific groups that are not near the poverty line or vulnerability threshold but are greatly affected by a particular shock and do not have the resources or coping mechanisms to deal with the impacts.

**Not all those affected by shocks are in situations that warrant support.** Some households might not need support to handle a particular shock if they can deploy their own coping mechanisms using savings, relying on friend or family networks, diversifying incomes, and so on. Supporting all shock-affected households in a particular area, as in the case of many South Asian countries, might result in the channeling of significant resources to the nonpoor, who could have coped by drawing on their own resources. If the shock-affected areas are home to both vulnerable and nonvulnerable households, nuanced needs-based targeting might have to be adopted to exclude those able to cope on their own.<sup>28</sup>

<sup>28</sup> Measuring losses not in absolute terms, but as a share of household assets or income could help focus support on the poorest. Hallegatte et al. (2017) propose that the threshold share of losses may be about double among the poor relative to the nonpoor. Bottan, Hoffmann, and Vera Cossio (2020) find that COVID-19-related losses in employment were highest at the bottom of the income distribution.

**In identifying those who should benefit from support, one should also seek to capture the needs of households that have been affected indirectly by a shock.** Government programs tend to focus on those who face direct risks. For example, owners of agricultural land are typically the beneficiaries of agricultural insurance, and housing owners benefit from housing reconstruction programs. Programs often fail to identify those whose livelihoods are indirectly affected by shocks: day laborers who may lose their wages if crops are destroyed; small service providers (rickshaw drivers, canteen workers) who may lose their livelihoods during lockdowns; household employees in homes destroyed by floods who may be rendered jobless. Programs that focus on asset reconstruction—for example, rebuilding homes—might not capture the poorest households that have been indirectly affected, but, instead, favor wealthier households that own assets. For instance, in the Philippines, programs that compensate owners of destroyed housing may ignore the impact of floods on the earnings of other households (World Bank 2018).

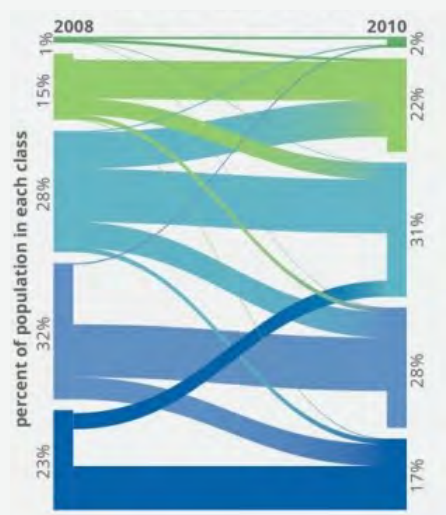
#### 4.2.2 FINDING WAYS TO REACH INTENDED BENEFICIARIES

**Identifying beneficiaries or updating rosters of beneficiaries is often a challenge in routine programs. Beneficiary identification can be a cumbersome process because of the challenges in adequately assessing the conditions and needs of households.**

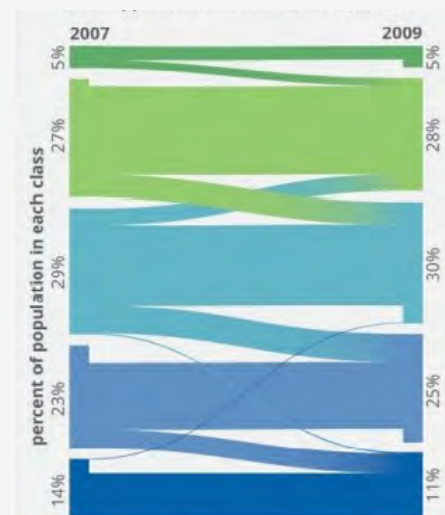
In addition, many households are mobile in terms of welfare, even in the absence of large covariate shocks. Their incomes and earnings fluctuate according to the seasons, with changes in employment status or health, and because of demographic shifts. Figure 4.6. illustrates this using data from Indonesia and the Philippines showing that a significant share of households is in transition across welfare groups. This is also reflected in routine social programs. The conditions of the groups that benefit from a program may fluctuate in terms of changes in income or poverty. The welfare status of some households may shift multiple times, repeatedly moving in and out of poverty (box 4.6).

**FIGURE 4.6**

Short-Run  
Mobility across  
Economic  
Status,  
Indonesia and  
the Philippines



A. Transition matrix,  
Indonesia, 2008–10



B. Transition matrix, the  
Philippines, 2007–09

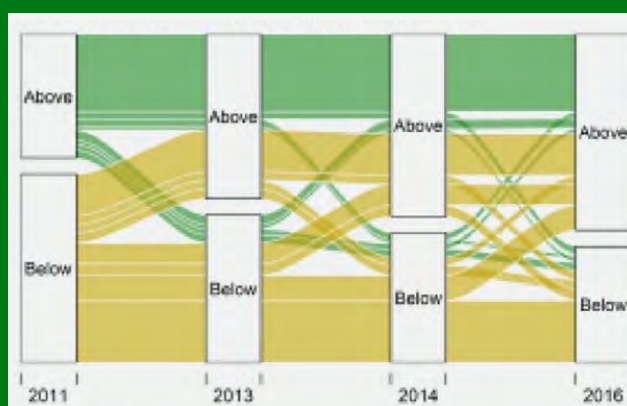
## BOX 6: MOBILITY OF PAKISTAN'S HOUSEHOLDS

The eligibility for the Kafaalat unconditional cash pillar of the Benazir Income Support Programme in Pakistan was determined using the national socio-economic registry established in 2011 based on a national census sweep. The process used a proxy means test-based poverty scorecard. At the time, there were no procedures to enroll households that had fallen under the threshold after the data collection process in 2011. Also, some beneficiaries had experienced improvements in welfare (figure B4.6.1). Later, in 2016, an administrator-driven registry update was undertaken, and, in 2019, on demand initiatives were incorporated. As of May 2021, the Benazir Income Support Program had completed

90 percent of the expected national caseload and enrollment based on the new data.

**FIGURE  
B4.6.1**

Welfare Transitions among Beneficiaries, Benazir Income Support



Source: Grosh et al. 2022.

**Identifying and reaching beneficiaries are more complex during a crisis, requiring trade-offs among precision, speed, and cost.** Shocks and crises are typically associated with urgency and, at times, the limited ability to assess household conditions. They can also be associated with population movement and displacement, which complicate identification, and with radical shifts in welfare. The trade-offs are unavoidable and setting expectations about the precision of targeting and the quality of the process is important. A range of options can be considered by policy makers.

**In selecting program beneficiary households eligible for additional support, some programs have opted**

**for a geographical approach, consisting in enrolling all existing beneficiaries living in the shock-affected or most highly shock-prone areas.** This approach is relevant if most households in an area are likely already to be poor and vulnerable, as was the case in the Philippines after Typhoon Haiyan. Another approach consists in providing a top-up to the benefits being received by enrolled households the vulnerability of which has been verified. This could be relevant if a crisis is less severe, and a top-up is only necessary among the most affected and vulnerable households, or if beneficiary households have experienced different impacts, for instance, based on different livelihoods. It may also be relevant if households have been enrolled in a program for a long time, and their welfare has not



been reassessed recently. A quick assessment could be carried out using simple proxies and building on lists of existing beneficiaries.

**To undertake horizontal expansions, options include expanding geographic coverage if some areas affected by shocks are not yet covered.** For instance, in some cases, largely rural programs have been expanded to peri-urban or urban areas during economic crises affecting urban households. Given that social protection programs in the region tend to have a rural bias, this may be relevant if crises are affecting urban areas. However, this typically entails establishing a capacity to operate in new areas, which may be time-consuming. Expanding into new areas may only be practical in cases in which the expansion was already envisaged in a national strategy or plan. The crisis may then be an opportunity to accelerate the expansion of a program. An example is Juntos, the National Program of Direct Support to the Poorest, in Peru, which was expanded in response to the 2007–09 global financial crisis. This permanent expansion involved establishing permanent systems and administrative structures.

**Horizontal expansion can also reach households already at the margin of programs.** An option is to onboard households that area on a waiting list for program enrollment because they were considered near-poor or because budget constraints limited inclusion despite eligibility. For example, in its response to COVID-19, the government of Sri Lanka first announced emergency cash assistance for those already receiving assistance or in pending databases or on waiting lists. It is also possible to consider temporarily readmitting beneficiaries among whom assistance was recently discontinued. Another option is to support those who had been temporarily

suspended from a program because they had failed to comply with requirements.

To achieve vertical or horizontal expansion, program criteria may be temporarily lifted. For instance, access to school feeding programs could be extended to siblings of beneficiaries or to other children or households. Programs can expand eligibility criteria by revising age limits or including men in women-only programs. In Pakistan, gender eligibility criterion of the Kafaalat unconditional cash pillar of the Benazir Income Support Programme was relaxed during the COVID-19 crisis to include men.

**Horizontal expansion can also draw on dynamic social registries or involve new registration processes.** Households that have updated their records to reflect significant losses and have thereby become eligible could be on boarded onto on demand social registration systems (see chapter 5). In some contexts, a government might decide to deploy a new, separate registration process to identify recently affected households. This could build on existing systems by, for instance, using available social registries, other databases, existing processes, or networks of front-line providers. In Mexico, Prospera staff were deployed to assess the damage caused by a drought covered by another program. In Sri Lanka, the voter ID database was used to target beneficiaries during shock response efforts.<sup>29</sup> The use of existing registries is most relevant if the registries cover a sufficiently large share of the population—as in Mauritania or Senegal, where social registries were designed to include a significant number of vulnerable households beyond those that benefit from the regular cash transfer programs—or if the information on households is relatively up to date. Problems arise if the information is outdated.

<sup>29</sup> This database is updated annually and covers more than 95 percent of the adult population and all disaster-prone areas, though the parameters of the data gathered are inadequate for the purpose of targeting a shock response.



**Post-disaster household assessments can provide a basis for the identification of beneficiaries.** Following the occurrence of a disaster, countries deploy a range of instruments to assess damage, losses, overall impacts, and immediate and long-term recovery needs. In addition to instruments focused on macrolevel and sectoral impacts, some focus on household or community assessments, including Chile's basic emergency factsheet (*ficha básica de emergencia*), Jamaica's Household Disaster Impact and Needs Assessment, or Afghanistan's Household Emergency Assessment Tool used as part of the Emergency Response Mechanism, a rapid response facility funded by the Directorate-General for European Union Civil Protection and Humanitarian Aid Operations in 2021. Household assessments are usually applied through a survey sweep of affected areas. They capture household damage, losses, impacts on livelihoods and well-being, and needs and can form the basis for enrollment in shock response initiatives.<sup>30</sup>

**In cases of displacement, using regular registries as a starting point or linking eligibility to place of residence can lead to significant exclusion.** If households are displaced by a disaster or a political or economic shock, they typically lack an official residence for a time. They also do not appear in any registry under their new locality and therefore are not considered in decisions on program expansions based on a social registry or an ID database. Even if voter or ID registries are dynamic, the updating process typically takes time. And, in some contexts, the quality of ID or voter registries remains an issue or lacks mechanisms for biometric recognition. For instance, in Sri Lanka, the system relies on local officials who are aware of population movements and can update records (chapter 5). Temporary residence also has implications if programs link eligibility to residence and people can only access programs in their official area of residence. In such cases, the portability of benefits is necessary whereby households can access benefits in localities other than their places of residence.

<sup>30</sup> See Williams (2020) for a detailed description of the approaches and instruments.

### BOX 4.7: REFINING TARGETING CRITERIA AND REDUCING BENEFITS AS A CRISIS UNFOLDS, BHUTAN

In response to the COVID-19 pandemic, the government of Bhutan launched Druk Gyalpo's Relief Kidu. The objective was to provide support to shock-affected households, including employees and self-employed laborers in the tourism and tourism-dependent sectors, other affected sectors, and returnee migrants.

The program supplied direct cash transfers to individuals and loan interest support to employers. It was implemented in three-month phases to offer flexibility to applicants and the government in the face of the shifting impacts of the pandemic on economic opportunities across sectors.

From April to June 2020 (phase I), the list of eligible sectors was regularly revised as the crisis unfolded. Eligible applicants received benefits starting in the month of the application and within each three-month phase. On average, over 75 percent of the applicants during each phase reapplied during a subsequent phase. A surge in new applications occurred between August and December 2020 when the country entered full lockdown. However, the number of reapplicants declined. For example, 67 percent of phase I applicants reapplied during phase II, but only 53 percent of phase I applicants reapplied during phase III. This was a result of the country's economic recovery and the fact that not all sectors were eligible during all phases.

Source: Grosh et al. 2022.

**Another option, if there are time constraints, is to unfold the enrollment process in multiple phases.** For instance, the government of Pakistan's response to the 2010 flood, which covered a fifth of the country and affected 20 million people, through the Citizen's Damage Compensation Program was implemented in two phases. During phase I, the program reached 1.6 million households that had been selected based on geographic targeting. Village residents qualified if more than 50 percent of the village housing stock had been damaged. While this led to errors of inclusion and exclusion, it was critical to ensuring a rapid response. This was important because additional assessments were rendered impossible by the high floodwaters in many areas. During phase II, a simple housing assessment was conducted for each household. Filters

were used to exclude higher-income groups, and this lengthier process led to more precise targeting (World Bank 2013). Another example is a multiphase approach adopted by the government of Bhutan to revise targeting criteria and adjust benefits (box 4.7).

**Specific shocks might require special targeting methods (annex 4A). The methods most well suited to permanent programs may not be appropriate across all shocks.** Given the diversity of shocks and the differing impacts across population groups, no single targeting methodology can be used successfully. Similarly, relying on existing social protection programs for shock response has implications for the choice of targeting methodology (O'Brien, Holmes, and Scott 2018). Focusing on existing beneficiaries



implies relying on the same targeting method as the underlying program, although new criteria may be included. By using existing databases to identify new beneficiaries, one is also relying on elements of the original methodology, such as a limitation to a particular area, and on the data collected for the initial purpose, which may not fully match the current needs.

### 4.2.3 USING TAILORED APPROACHES IN LINE WITH A LONGER-TERM VISION OF ASPASP

**As in the determination of an appropriate package of programs, policy makers must adopt a range of approaches in supporting selected beneficiaries or extending coverage beyond current recipients of social protection.** Each approach is associated with unique opportunities and challenges.

**At a technical level, the choice depends heavily on the programs available in advance of a shock.** The main factor in the scalability of a particular program is the extent of the initial coverage of the poor. If a program fails to reach the chronically poor and vulnerable, it is difficult to envisage a horizontal expansion to other groups or even a vertical expansion to those already covered. The option in such a case might be to focus on the eligible who are not yet covered.

**If the decision is to use existing programs, the weaknesses in the underlying systems will be reflected in the shock response.** One of the risks in expanding coverage or eligibility is that existing discrimination or under coverage patterns could be reproduced. Programs might thus continue to

exclude those who fail to show proper citizenship or residency documentation (for example, refugees), groups that fail to meet social norms (such as single mothers in some contexts), or members of particular demographic or marginalized groups (ethnic, religious, or otherwise). For instance, when the government in Kerala State, India, provided targeted relief to some industries, including the fishing industry, many women workers failed to qualify on the grounds that they were considered subsidiary workers who were supporting their husbands, rather than primary workers (Holmes and Hunt 2021). Therefore, flaws in national systems should be addressed before they are adopted as part of a shock response.

**Governments need to address trade-offs in deciding on beneficiaries.** One of the main tensions in this effort is between assisting those who were already poor prior to a shock, including those benefiting from social protection programs, and focusing on the newly poor. Government stakeholders might be pressured to expand coverage and present the number of newly enrolled beneficiaries as a demonstration of swift, decisive action. Yet, an exclusive focus on discovering new beneficiaries might lead to neglect of the critical needs of those who are already covered, even if their needs are greater. Program actors sometimes even systematically declare that existing beneficiaries are ineligible rein, although they are typically more vulnerable and more affected by shocks. Generally, while the noncompletion of benefits might make sense if two programs have the same objective, for instance, two student scholarship programs, this principle should not apply if complementary programs concentrate on separate objectives. Thus, disability grants or human capital investment programs focused on chronic poverty or vulnerability should not exclude beneficiaries who are affected by shocks from shock response initiatives.



**To respond to more routine shocks, governments should invest in mechanisms that can be included in the adaptive toolbox.** If governments deploy a particular strategy to address specific shocks that recur at a certain frequency, they should develop robust systems and mechanisms that can be relied on during such shocks after a minimum of adjustments if necessary. Each response is a learning opportunity to build or adapt mechanisms that may be readopted later, while seeking to ensure that the design of the mechanisms become more responsive.

**To respond to shocks effectively, policy makers should define the categories of households that are to be supported and the best way to reach them.** These will likely include households that were in need prior to the shock, that is, the chronically poor or the vulnerable, and newly affected households that need support to cope with the shock. Another challenge involves ensuring that regular programs and services are still being provided to current beneficiaries despite the disruptions that shocks may generate. Multiple methods are available to reach out to those who were already in need of support prior to the shock and to newly affected households. The decision over the best approach will depend on the initial conditions, the political economy, and the long-term vision of social protection system and the adaptive toolbox.

### 4.3 Appropriate Benefits Can Maximize the Impact of a Shock Response

**The adequacy of the support provided to households affected by a shock is an important factor in the measure of the success of a s response.** This includes the value, duration, and frequency of transfers and other program components.

#### 4.3.1 ESTABLISHING THE VALUE, DURATION, AND FREQUENCY OF CASH TRANSFERS

**Setting the value, duration, and frequency of transfers is a complex requirement of any social assistance program.** The design of transfers depends on a myriad of factors, including program objectives, available resources, the political context, the social contract, and the benefits associated with other interventions. The benefits offered by many programs evolve, including if a program is expanded to a new area with different conditions, such as expansion from rural to urban areas, if development issues change, such as changes in the profile of poverty, or if a country's level of development improves, allowing more resources

to be devoted to social protection. Defining benefits requires consideration of practical, technical, political, and social issues.

**In shock response, most governments opt for relatively simple benefit structures.** While a more tailored approach might provide more effective support to various groups, this would require more time and capacity. Ideally, support might be linked to the extent of losses or needs, but precisely quantifying losses and needs requires detailed household assessments, which are unlikely to be feasible in the context of natural disasters. In the Philippines, a program that required field office staff—social workers—to undertake assessments of the physical damage to houses and other buildings proved difficult to implement (World Bank 2018). A simple formula, besides ensuring timely response, also allows for greater transparency and accountability.

**Depending on the group that is targeted by the shock response, establishing benefits might mean adjusting the value of regular transfers.** For example, if a shock has affected prices and the government seeks a permanent adjustment, or setting the value, duration, and frequency of a temporary support, for instance, a top-up for individuals or households already benefiting from a program or support for new beneficiaries through an existing program or a separate program.

**Governments might envisage multiple program phases characterized by different types of support.** Standard benefits might be provided in the immediate aftermath of a shock, and more tailored support might be made

available during a recovery phase. This would allow a swift response to prevent negative coping strategies and irreversible losses of life or capital, and more well targeted support once the more destructive initial phase of the shock has passed. For instance, programs implemented by humanitarian actors in Pakistan and the Philippines to address rapid-onset shocks, such as an earthquake or cyclone, prioritized an early response focused on basic food and nonfood needs through regular, recurrent, standardized transfers before factoring in more complex needs during the recovery phase (O'Brien, Holmes, and Scott 2018).

**The trade-off between the immediate need to ensure adequate coverage and the subsequent need to fine-tune support is often particularly acute during a crisis.** Thus, in the context of the COVID-19 crisis, some governments were able to achieve high initial coverage rates in their response but provided transfers that offset only a small share of consumption needs. For instance, transfers in Bangladesh under the prime minister's cash support scheme or the Emergency Cash pillar of the Benazir Income Support Programme in Pakistan represented 1 percent–3 percent of the annual national poverty line.<sup>31</sup> Shocks and crises often affect the prices of, for instance, food or energy, and it is therefore important for governments to ensure that the value of routine social protection transfers is maintained by temporarily increasing the transfer amounts or adding a one-off top-up.

**Adjusting transfers can also be achieved by adjusting the number of days a person can work on public works.** Some programs might provide a top-up to daily wages; others might raise benefits by simply

31 Similarly, in Sri Lanka, the value of the two emergency cash transfers (SL Rs 5,000 or about US\$27) was less than 8 percent of average monthly household consumption. If programs provide a flat benefit, the deficiency can be acute among larger households because the value is fixed regardless of household size (Lowe, McCord, and Beazley 2021).





adjusting the parameters on the maximum number of days a person can work and still receive benefits. For instance, India's Mahatma Gandhi National Rural Employment Guarantee Scheme includes a provision for an additional 50 days of unskilled manual labor in case of drought or other natural calamities in rural areas, along with a provision for the payment of unemployment benefits if the demand for work cannot be met, while state governments may also allow additional days or higher wage rates on benefits associated with their own funds. The number of persons working within the scheme per day was 52 percent higher in May 2021, during the COVID crisis, than during the same period in 2019 (increasing from 12.2 million to 18.5 million persons per day).

**In some contexts, adjustments in the schedule of transfers or payments may be sufficient.** While transfers of additional resources might be critical for the poor and vulnerable, nonpoor households might be able to cope with shocks and safeguard their long-

term welfare without additional resources, but with adjustments in the timing of transfers or expenditures. For example, households might need to be able to withdraw some of their savings earlier than planned or defer certain payments while a crisis is under way. For these households, governments might decide to reschedule some payments or transfers to help smooth consumption. During the initial phase of the COVID crisis, the governments of Argentina, Barbados, Bolivia, Brazil, and Sri Lanka provided grace periods or restricted penalties on the late payment of utility bills or loans. Other options include disbursing transfers earlier to address a temporary need or allowing households to withdraw earlier from programmed savings plans. Some governments allowed firms and workers to put off the payment of social security contributions or taxes or to use pensions earlier. During the COVID crisis, the governments of Brazil, Colombia, Jamaica, Mexico, Paraguay, and Peru offered advance payments of regular cash benefits (Gentilini, Almenfi, and Dale 2020).

### BOX 4.8: RECONCILING HUMANITARIAN AND SOCIAL PROTECTION GOALS IN DETERMINING BENEFITS

The distinction between humanitarian and social protection programs has diminished. Three steps can help guarantee harmony and coordination across programs, as follows:

#### DEFINE BENEFITS

Many humanitarian actors anchor the determination of benefits on the needs the response aims to meet, such as food security, rent stability, livelihoods recovery, and so on. This may translate into uncoordinated benefit structures, including government benefits. Similarly, different objectives may lead various actors to propose significantly different transfer values, while social protection programs typically provide lower benefits.

#### HARMONIZE ACROSS ACTORS

Humanitarian actors regularly establish mechanisms to harmonize interventions, avoid confusion, and promote equity. Such interventions should be aligned as much as possible with government policies and programs. To prevent

confusion, Lesotho and the Philippines developed transfer guidelines for the public sector and aid agencies. Such a step might call for humanitarian agencies to provide less support they would have supplied based on internal objectives.

#### HARMONIZE ACROSS BENEFICIARY GROUPS

Harmonization should also be ensured across groups to avoid unnecessary opposition or inequity. This issue often arises in addressing the large needs of refugees or displaced groups. This support could trigger tensions especially if host communities also live in relatively poor conditions. Aligning programs for refugees with programs among the communities hosting refugees may thus be essential. For instance, the benefits of the United Nations High Commissioner for Refugees emergency cash program for refugees in Pakistan are aligned with the benefit's local government schemes. Similarly, in Bangladesh, the support supplied to the Rohingya population and the host communities in Cox's Bazar were set to minimize social tensions.

Sources: Jorgensen and Ceretti 2022; O'Brien, Holmes, and Scott 2018.

**During shocks, benefits should be harmonized across interventions.** Coherence among programs is a key element of routine social policy, and most governments have adopted national strategies and coordination mechanisms to ensure that benefits offered by various programs are consistent with the goal of the efficient use of public resources and avoiding unnecessary competition among programs or objectives. This is also

the case in the response to shocks wherein various actors—development partners, nongovernmental organizations (NGOs), and so on—might decide to complement relevant government initiatives. Each actor may have different motives and goals and might establish separate benefits. Governments should play a central role in ensuring harmonization to promote equity and efficiency (box 4.8).

## BOX 4.9: LESSONS FROM ENERGY SUBSIDY REFORMS

**A few lessons can be learned from the temporary cash transfer programs established to support energy reforms.** In terms of the duration of energy compensatory transfer programs, many governments have opted for one-off or temporary measures (such as in Indonesia, Jordan, or Malaysia), while others have opted to scale back programs after a crisis rather than eliminate them. However, experience demonstrates that curtailing or terminating compensatory programs can generate substantial popular opposition. Thus, in Iran, for example, protests greeted the government's decision to reduce the amount and coverage of an energy compensatory program.

**Establishing and communicating the design and duration of a program are critical to limiting misunderstanding and unrest.** In Jordan, the government announced clearly at the outset that

the relevant program would be time-bound. This meant that, when the program was terminated in 2014 once international energy prices had fallen below a publicly communicated threshold, the transition was smooth. The transparency was helpful in justifying both the required rise in fuel prices and the need to roll back the mitigation measures without major popular unrest.

**Similarly, in 2008, the government of the Dominican Republic decided to remove universal gas subsidies.** It implemented the Bonogas targeted subsidies to lessen the impact on the poor and vulnerable. The program included temporary benefits—a fuel price subsidy at the pump—for taxicab drivers who served as a public transport system during the energy crisis. This approach protected the poor and created the policy space to continue and deepen energy reforms.

Source: Mukherjee et al. 2022.

**The duration or rules for termination of shock response programs should be clearly set.** The establishment of temporary programs with the inclusion of new beneficiaries or an increase in the benefits of current beneficiaries may lead to expectations that the transfers represent long-term entitlements. Removing newly included beneficiaries or reducing transfers after a crisis has passed can be difficult (box 4.9). If the coverage of regular programs is inadequate and some of the newly included beneficiaries should be eligible in any case or if the regular benefits are too small to achieve stated objectives, scaling back might not even be desirable. A shock response might thus

provide a springboard to improving regular programs. However, program or benefit expansions should be temporary if they mitigate only a transitory loss. The key is to set the timeline or the criteria for determining the end point up front and to communicate this aspect of the program clearly. Otherwise, as experience demonstrates, phasing out support may lead to social unrest.

**The choice between benefits in kind or in cash is important.** Global evidence shows that, if markets are functioning, cash transfers are associated with greater positive effects on various dimensions of



welfare. Administratively and logistically, the costs of implementation tend to be lower for cash transfer programs than for programs in kind, such as the delivery of food or other goods.<sup>32</sup> Most governments and many humanitarian actors have progressively switched from assistance in kind to cash. Where other considerations have led to the maintenance of programs in kind (for instance, if food distribution as a shock response is also a means to manage national food stocks, as in Bangladesh, or if the agency responsible for program implementation is also the food management agency), efficiency gains can be realized with a progressive switch to cash and the separation of social protection programs from the food stock management function.

**While the advantages and disadvantages of each approach will likely vary among different shocks, the availability of a toolbox that includes a choice of previously prepared programs, predefined benefits, and rules and options for identifying target populations can save time and avoid tensions (chapter 2c).**

#### 4.3.2 OTHER COMPONENTS TO INCREASE THE IMPACT OF SHOCK-RESPONSIVE PROGRAMS

**Social safety net programs are among the few government programs that reach the poorest and most vulnerable on a regular basis, such as through basic health care and education initiatives.** Most safety net programs are supported by networks of front-line workers—social workers, local government officials, community leaders—who are central to program delivery. The regular interactions with the most

vulnerable could also be harnessed to communicate information on impending shocks to the poor, who are often disconnected from regular communication channels, particularly in rural areas. Safety nets might then become the intermediary between early warning systems and local communities. Social protection information systems and registries (if well populated) might also help governments understand vulnerable groups and use the information to design more well adapted emergency response plans.

**Many governments use social protection programs to deliver messages to encourage families to practice effective behaviors in health care, nutrition, parenting, and safety.** Programs in areas where particular shocks are frequent could impart information or behavioral change focused on preparedness. Thus, in the Philippines, family development sessions, an integral component of the Pantawid Program, are used as a vehicle and venue to deliver information and best practice on disaster risk management (DRM) to beneficiaries, including what to pack and where to go in an emergency (Bowen 2015).

**Insights from behavioral science have in recent years helped programs provide better guidance on the efficient use of transfers to encourage households to direct the resources to immediate needs and investments for recovery.** By supplying households with the related information and tools, programs can increase their impact. This requires clear messaging about the purpose of the program, planning before receiving the transfers, and tools and rules for allocating the resources according to the plans (Rawlings, Jean-Francois, and MacLeod 2020).

32 It is also often more difficult to quantify the cost of interventions in kind because the prices of the goods fluctuate, especially during shocks.



**Shock response programs can establish links to complementary programs that build productive inclusion, resilience, and human capital.** These complementary programs can contribute to the shock response and help build resilience against future shocks. They typically have a longer timeline and separate implementation mechanisms relative to the shock response. They may encompass economic inclusion programs that aim at sustainably increasing the income, assets, and economic resilience of the poor and vulnerable. Economic inclusion programs often provide a combination of transfers in cash or in kind, skills training, coaching, access to finance, and links to market support. Evidence is emerging that productive inclusion programs can be powerful instruments for supporting a transition into more productive and resilient livelihoods and that one of the principals means by which governments scale up economic inclusion is through social safety nets, which represent an opportunity to build on cash transfers (Andrews et al. 2021). Shock response programs can

become a venue to promote investments in human capital among those affected by shocks. They can link beneficiaries to other programs that focus on promoting such investments, such as cash transfer programs that encourage or require the enrollment in, attendance at, or use of particular services that directly support the application of benefits (fee waivers, scholarships, and so on).

**Public works programs can contribute to resilience building.** In addition to acting as a mechanism to provide transfers to beneficiaries, climate-sensitive public works programs enable beneficiaries to build assets that address structural vulnerabilities within their communities. They can engage communities in climate-smart agriculture and integrated natural resource management, including waste management, reforestation, rainwater harvesting, soil and water conservation, and drought-resistant horticulture. India's Mahatma Gandhi National Rural Employment Guarantee Scheme helped build resilience to climate shocks by

**BOX 4.10. COVID-19 EMERGENCY INCOME SUPPORT ALLOWANCE, MALDIVES**

Maldives was able to utilize already established aspects of its social protection delivery system (including online presence, IDs, system interoperability, and electronic payments) to introduce a new emergency income support allowance program for displaced workers in only a few weeks. Through the program, the government developed its capacity to locate and communicate with potential beneficiaries, link to other government databases to screen out fraudulent applications and evaluate progress with just-in-time SMS-based beneficiary feedback surveys.

The new program was set up to provide a temporary monthly allowance of up to Rf 5,000 (approximately US\$320) to people who had lost their employment or incomes because of the pandemic. Maldivians who were currently

unemployed, on unpaid leave, or had had their salaries or wages reduced or eliminated because of issues related to COVID-19 were eligible for payments.

The pandemic has disproportionately affected women's health and incomes. Around 68 percent of respondents to a survey by UN Women reported that their mental and emotional health had been affected because of increased economic stress and gender-based violence. Through targeted actions such as awareness initiatives, support services, and flexible requirements, emphasis was given to helping women and self-employed individuals, who often lack formal contracts and are involved in the informal sector. Among the program beneficiaries, 8,798 were women.

providing integrated natural resource management and soil conservation infrastructure, agriculture-based investments, and other local infrastructure (Esteves et al. 2013; Porras and Kaur 2018).

**There are several key lessons on ensuring the adequacy of support.** A main technical point is to keep the design of transfers simple and ensure coordination and harmonization between social protection programs and humanitarian actors. Decision on the trade-off between scale (coverage) and generosity (adequacy) are driven by funding limitations as well as philosophical and political considerations. Those already covered by a program—typically the poorest

are among the most likely to be adversely affected by shocks—may benefit from top-ups, rather than being excluded from additional benefits. Social protection programs can be harnessed for climate preparedness and improved information on shocks. Links should be maintained with complementary programs that build productive inclusion, resilience, and human capital. The mechanisms and criteria that are used to set benefits should be clearly established and communicated as part of a country's shock response toolbox. With such a toolbox, decisions on benefits can be made for each shock in a timely and transparent manner, preventing lengthy and costly debates or tensions (box 4.10).



## 4.4 Leveraging Delivery Systems and Easing Processes to Serve People

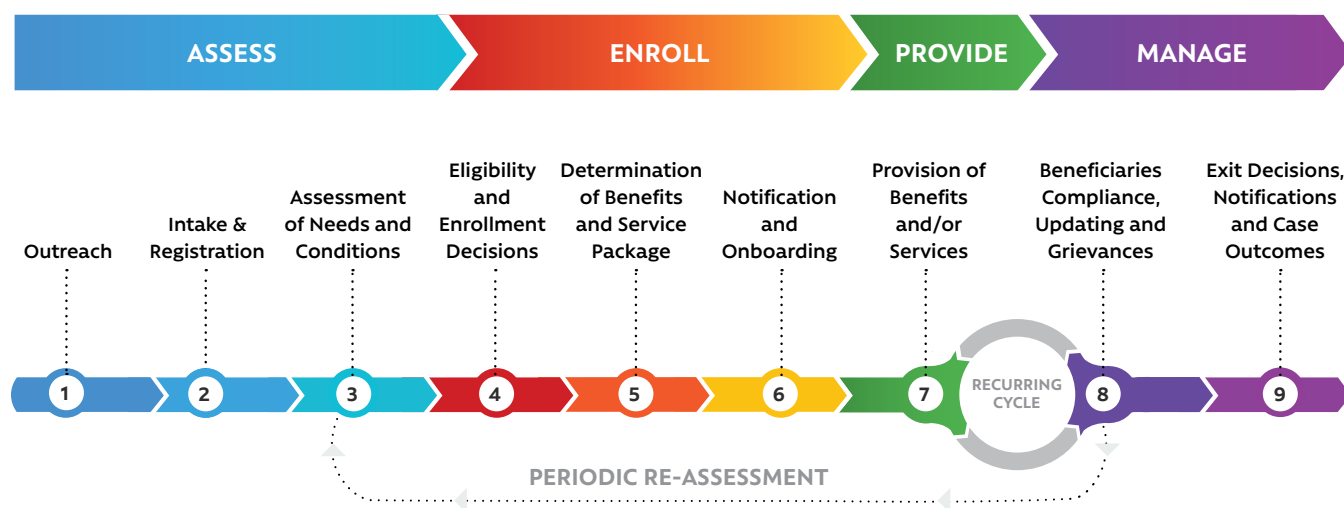
**Implementation challenges during a crisis may require adjustments in delivery systems for regular and shock response programs.** Design features may be adopted for new programs or adjusted for current programs to facilitate enrollments among those in need and ensure that the benefits are adequate. Ensuring that regular services, including regular social protection programs, continue to reach beneficiaries with quality benefits and services is essential. Shocks can jeopardize the continuity of social protection programs because staff

become too busy with other crisis activities, effects on payment infrastructure, damage to communication infrastructure, and so on.

**This section addresses issues around implementation.** It highlights that core systems and processes are critical to a shock response, and adjustments may have to be made to regular procedures to facilitate timely delivery and ensure that regular programs continue to function. Systems and processes are important at all steps of the delivery chain from the initial phases of assessment and enrollment to the later phases of benefit provision and the management of beneficiaries (figure 4.7). The options in facilitating implementation at various stages are reviewed in this section.

**FIGURE 4.7** The social protection delivery chain

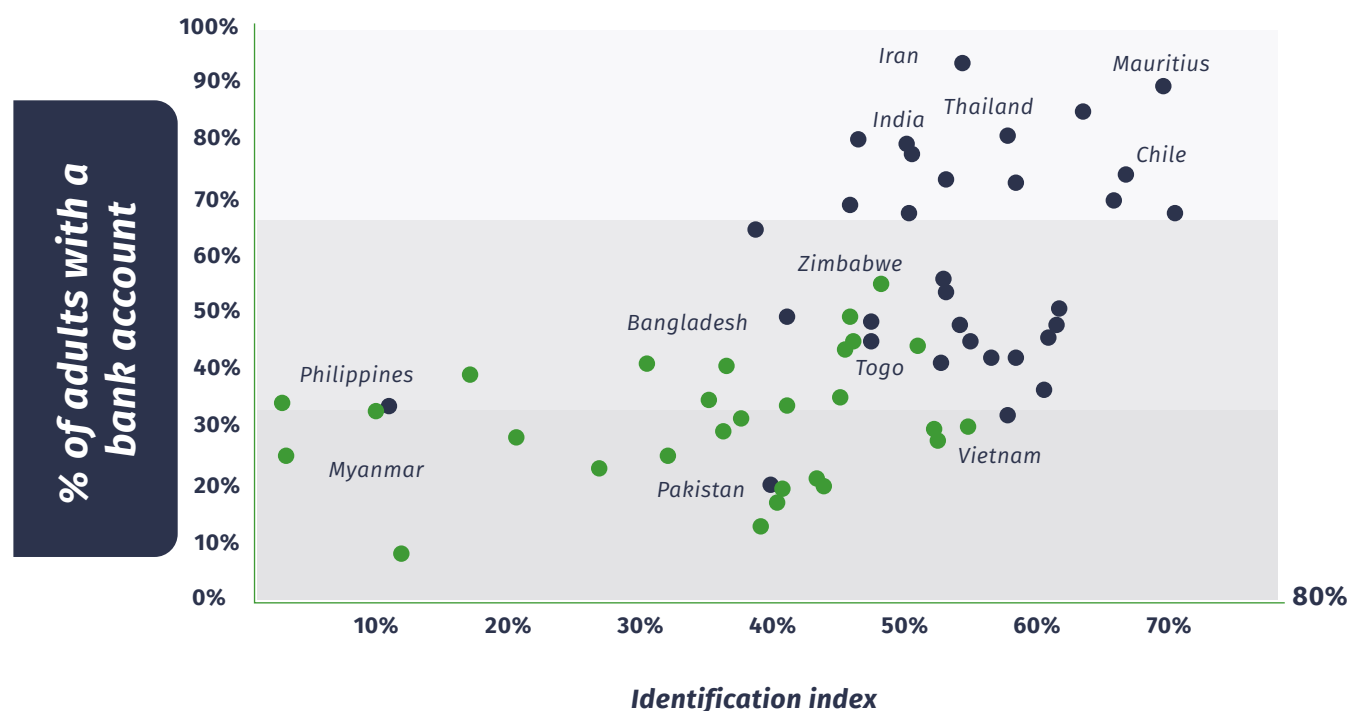
Source: Lindert et al. 2020.



**Investments to ensure that social protection systems are shock responsive help improve social protection delivery more generally.** There are typically no trade-offs between investing in systems that can support shock response and investing in systems that support long-term social protection objectives. For example, expanding the coverage of the poor through regular programs provides the structure for vertical and horizontal expansion. Similarly, strengthening identification and payment systems is important in regular protection and shock response. The level of development of core social protection systems is the

main determinant of the ability of governments and stakeholders to provide efficient and timely responses to shocks. This is illustrated by the fact that countries with higher rates of foundational ID, financial inclusion, mobile penetration, and interoperable government databases or social registries were able to respond more quickly to the COVID-19 crisis (Grosh et al. 2022). Countries with more well-developed foundational identification and bank accounts were able to make payments to new beneficiaries much more rapidly (figure 4.8).

**FIGURE 4.8** The Initial Conditions and the Implementation of Shock Response Programs



Source: World Bank 2020.

Note: Countries indicated in yellow delivered or were close to delivering a first round of payments by June 2020, while payments in countries in blue were delivered later.

#### 4.4.1 PROMOTE PARTICIPATION BY ENHANCING ASSESSMENT AND ENROLLMENT PROCESSES

**Focusing on the first steps of the delivery chain can help promote participation by those effectively targeted by programs.** Most countries in the region have limited systems for the quick identification and enrollment of households affected by shocks. A series of options may be considered, including (1) broadening processes, (2) relaxing requirements, and (3) piggybacking on systems outside regular social protection.

**Multiplying outreach pathways can counteract some of the constraints imposed by disasters.** To offset the lack of feasibility in the use of some methods typically adopted in disaster response, for example, if internet connections are affected by shocks or if physical mobility is reduced among the target populations, current and new programs can mobilize high- and low-technology options, from community radios to mobile apps or SMSs. They can also develop new partnerships to share information by relying on the networks of other sectors and programs, community leaders, village committees, local organizations, and so on. In Bhutan, the government uses a combination of channels, from local community leaders to television and radio, social media, mobile phones, bulk SMSs, and social media.<sup>33</sup> In Pakistan, the use of mass media (television, print, and social media) meant that 72 percent of adults were aware of the government cash transfer scheme deployed to respond to the COVID-19 crisis (DRI 2020). The outreach and communication channels of safety net programs are also used to inform local groups about impending threats and other

interventions. Social protection programs sometimes harness the volunteer networks and strong field presence of disaster management programs, such as the cyclone preparedness program in Bangladesh.

**Broadening enrollment can help ensure that programs reach intended target groups in a timely manner.**

This could involve adding new entries in registries before, during, or aftershocks, thereby complementing periodic broad data collection efforts through census sweeps that are used in many countries to open social registries to new entries or allow new entries into programs directly if social registries are not used. This may require expanding enrollment methods or simplifying some of the processes. For instance, the Income Support Allowance Program in Maldives opened an online application process to those who had lost jobs during the pandemic. In Pakistan, an emergency cash application portal was set up for the **Emergency Cash pillar of the Benazir Income Support Programme** to provide for enrollment through mobile phones, the internet, or in person. Households might, for instance, send a message with their ID number to verify the validity of the ID and eligibility for the national socio-economic registry. In the spring of 2020, Thailand approved approximately 23 million online applications from informal sector workers and farmers. In Sri Lanka, as a response to the COVID-19 crisis, individuals not included in databases, such as daily wage earners not previously receiving social assistance, could apply directly to village committees, resulting in a significant temporary expansion of coverage (Lowe, McCord, and Beazley 2021). The experiences of various countries point to good practices across a broad spectrum, from harnessing technology to using more traditional networks or mechanisms.

<sup>33</sup> The government also developed an application, the Druk Trace App, to trace contacts during the pandemic.



**Another option for broadening registration is to preregister the most vulnerable.** Some governments preregister households that are the most highly exposed to anticipated shocks, for instance, people living close to a river about to flood or in congested areas prone to fires. Preregistration can help prepare for rapid horizontal expansion during emergencies. In Kenya, the Hunger Safety Net Program preregistered almost all households in counties that are especially vulnerable to drought and collected information on the financial accounts of the households or opened new accounts where needed. This effort built on relatively well-established systems, and the program now typically reaches around 25 percent of the population in areas where it operates. Since 2015, this has allowed the program to provide households with timely transfers if eligibility is temporarily expanded on the basis of predefined triggers (O'Brien, Holmes, and Scott 2018).

**Governments may decide to simplify eligibility requirements during a crisis.** This might include relaxing or removing requirements or facilitating access to IDs. For example, in Pakistan, the National Database and Registration Authority facilitated the provision of around 400,000 new national ID cards to ease the deployment of the Emergency Cash pillar of the Benazir Income Support Programme. Because many households may be displaced by a shock, some governments have relaxed program requirements on legal residency or to allow beneficiaries to collect benefits anywhere in the country. For instance, during the COVID pandemic in India, the one country-one ration card was introduced to enhance benefit mobility through the public distribution system. The card allows beneficiaries to receive benefit rations from any fair price shop. Governments might decide to simplify eligibility verification procedures. This could entail, as in Sri Lanka, relying on community members to validate.

the eligibility of new temporary beneficiaries or postponing the verification process until after the first payment to avoid delaying the provision of timely support.

**Several governments have creatively exploited other administrative information systems to capture new beneficiaries for emergency transfers.** For instance, Bangladesh used payroll lists in sectors particularly affected by the lockdowns during the COVID-19 crisis to provide support directly to affected workers. Programs launched to address the crisis in energy prices have combined existing and new databases. The Indian government consolidated information from state-owned LPG distribution companies to create a unified database that was used to extend the coverage of a program while improving data quality (Mukherjee et al. 2022). Indonesia's 2008 and 2013 programs leveraged other social protection beneficiary databases. In the Dominican Republic and Ukraine, programs have used the respective energy company's billing information systems to identify and select beneficiaries and provide program subsidies. Togo used its voter database, which covers 95 percent of adults and includes information on occupation, to target informal sector workers. As technology evolves, programs could begin relying on big data to identify relevant program areas through, for example, data on phone use, electricity consumption, and banking.

**In most cases, making such adjustments permanent could enhance the efficiency of regular social protection programs.** More open and broader enrollment processes would help ensure that the information contained in social registries is up-to-date and help programs reach their regular beneficiaries with greater precision. Simplifying requirements might improve targeting because many of the difficulties in meeting requirements during shocks also emerge at other times. The regular requirements for application

and registration may be a hurdle for some, such as the requirement to supply a birth certificate or a citizenship card, which is reportedly an issue, for instance, among Dalit children (the lowest stratum caste) in India or ethnic groups at risk in Nepal (FWLD 2018); difficulties in obtaining disability certificates; lack of proof of legal residence among people with no formal residence or recently displaced people; difficulties among the elderly in demonstrating age; and the lack of a divorce or death certificate for single women or widows (HI 2021). These are areas in which improvements implemented to address the urgency of a shock response may strengthen the broader system in normal times. Using interoperable information systems available across the public sector could also broaden the information available to identify eligible households, simplify the tasks involved in the application process, and facilitate the verification of eligibility.

#### 4.4.2 ADJUSTING THE DELIVERY APPROACH AND FACILITATING PARTICIPATION

**The potential difficulties in providing benefits and services through a shock response usually also exist in normal times.** Implementation-related challenges include payment delays, difficulties in organizing information sessions or other activities on a regular basis, data management issues, the delayed updating of information, weak internet connections, and limited capacity. For instance, in Nepal, limited staff capacity and knowledge, high staff turnover, delayed updating of beneficiary information, unreliable internet connections, the limited capacity or coverage of banks in some areas, and the recent shift to digital information systems are all challenges that have been

faced by routine programs in normal times and that are exacerbated during shocks (Sengupta et al. 2021).

#### **Other challenges might also arise. Besides potential damage to physical program assets, shocks can generate a wide range of constraints and obstacles.**

Thus, a pandemic creates difficulties because of social distancing; population displacement can destabilize payment processes; and flooding or mudslides can affect powerlines, communication networks, and mobility. Staff who are responsible for the regular delivery of programs are often mobilized to perform additional tasks. For instance, the social workers of the former Prospera Program in Mexico were mobilized to assess needs and provide support during droughts and floods, besides their regular workload. Local front-line staff are often also among those affected by shocks, particularly during shock events that affect a particular geographic area. Thus, shocks can also affect the ability of governments to deliver regular programs. Contingency arrangements should therefore be prepared.

**Countries in South Asia have used a variety of strategies to ensure that payments are efficiently delivered to beneficiaries of both regular and shock response programs.** These strategies include identifying additional channels for the payment of transfers by increasing the number of payment centers or expanding the periods for withdrawal from payment points. They also include efforts to tackle disruptions to communication or powerlines by purchasing relevant equipment (for example, internet hot spot devices and power generators) to be used in the event of an outage. As a response to the COVID-19 crisis, many governments modified regular procedures to facilitate social distancing. To enroll new beneficiaries in the context of crises, some have opted to simplify



or remove temporarily some of the requirements typically in place for opening accounts (as part of know your customer regulations). Another option is to maintain requirements but provide households with additional time to supply the information (after the opening of the wallet or account), such as with other steps in enrollment or registration. This can promote the rapid use of mobile or e-wallets, although caution is required to ensure that such changes are temporary.

**Governments typically deploy multiple strategies to prevent disruptions.** For instance, the government of the Philippines adopted multiple relevant approaches in 2013, following Typhoon Haiyan. It allowed holders of electronic payment accounts to receive cash over the counter; it relaxed conditions for payment to accounts given that many households had lost their identification cards; and it added mobile ATMs to the payment network. Table 4.2 outlines the implications of the typhoon for the delivery system to restore the functioning of the routine Pantawid Program and

to provide emergency top-ups (vertical expansion) to selected households. However, given that most governments contract financial intermediaries only once a shock has occurred or the response has been agreed, this often results in delays in implementation. Others have tried to anticipate this need and agree on service provision with core providers so fees or methods do not have to be negotiated during a crisis. In Mauritania, the service contract that has been signed for the main program Tekavoul with payment agencies for regular transfers contains a clause that predefines contractual conditions for paying transfers for the shock response program Elmaouna. The clause can be triggered in case of need without requiring additional negotiation or procurement processes.

**Complex elements of some programs might benefit from modifications to address shock-related constraints and free up staff time.** Some components of regular programs, such as community meetings, information sessions, and participation in particular



**TABLE 4.2** Adapting the Payment Method after a Typhoon, the Philippines

ELEMENT	MAINTAINING ROUTINE SERVICE DELIVERY	INCORPORATING EMERGENCY RESPONSE
<b>Appropriateness</b>	<ul style="list-style-type: none"> <li>Power outages prevented the use of e-payment channels for several weeks. Households who usually received payments electronically were allowed to collect them over the counter instead while awaiting a replacement cash card (which took up to several months, despite quick revalidation efforts)</li> <li>Three mobile ATMs were introduced to help disburse cash card payments, although this was delayed so only partially effective</li> </ul>	
<b>Reliability</b>		<ul style="list-style-type: none"> <li>Rather than waiting for the next bi-monthly payment, the top-ups were issued separately</li> <li>Additional commission was agreed with payment providers to deliver the extra rounds of transfer</li> <li>Obtaining additional physical cash was a challenge in remote areas</li> </ul>
<b>Governance</b>	<ul style="list-style-type: none"> <li>Government drafted in staff from non-affected regions to help social welfare officers conduct a rapid validation exercise, locating beneficiaries and cross-checking answers to questions against the beneficiary roster, then issuing temporary ID cards</li> </ul>	<ul style="list-style-type: none"> <li>Cash top-ups to beneficiaries added to the workload of service providers.</li> <li>The unexpected increase in the number of payments (monthly rather than bi-monthly transfers) strained capacity, in some case leading to missed routine payment dates.</li> </ul>
<b>Security</b>	<ul style="list-style-type: none"> <li>Many Pantawid beneficiaries lost their ID and ATM cards The Central Bank relaxed national financial regulations, such as 'know-your-customer' requirements, acknowledging that many households had lost their identity cards</li> </ul>	<ul style="list-style-type: none"> <li>Overall, lack of clarity on financial reporting procedures (e.g. from government to supporting organisations)</li> </ul>

Source: Smith et al. 2017.

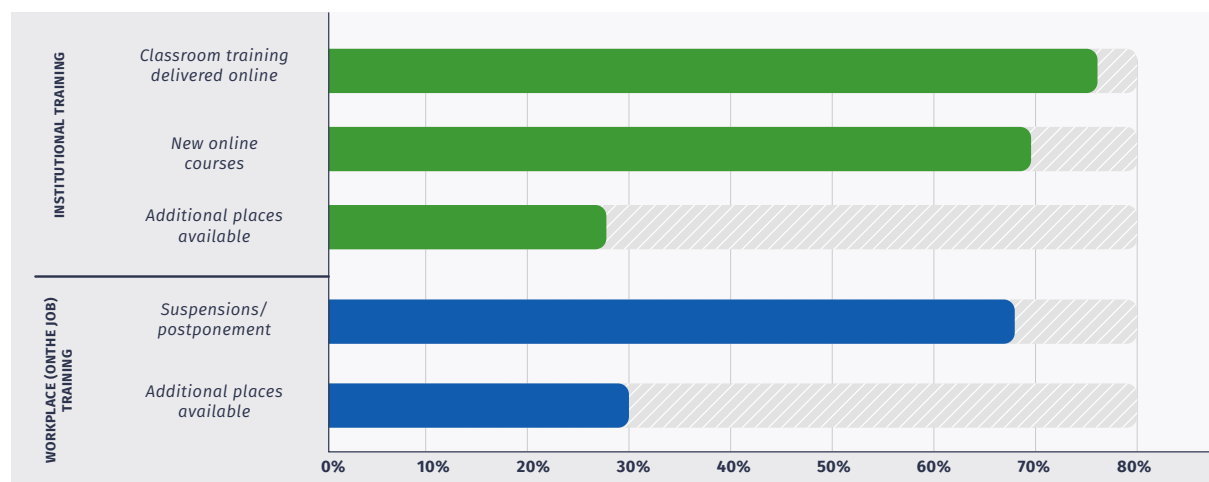
activities, might be made more difficult by a shock. This is either because of changes in infrastructure, communication, or material goods or because households are not available for these activities while they cope with the shock. Some may even have been displaced. In addition, many front-line service delivery staff are called upon to take on new tasks in addition to their regular work. For instance, in Nepal, during shocks and other emergencies, the same local staff are also responsible for coordinating relief efforts, distributing rations, and organizing food-for-work programs, in addition to their regular functions in programs (Sengupta et al. 2021). Simplifying regular program processes can provide these staff with more time to perform their new tasks.

**Many safety net programs impose conditions that households must meet before receiving transfers.**

These range from participating in certain program activities to utilizing external services or adopting particular behaviors. During a crisis, governments may decide to waive these obligations temporarily in recognition that access to services is affected by

the crisis, for example, if floods prevent children from attending school, households have to relocate and are far from the activities in which they are supposed to participate, programs might not be able to organize the activities, or program staff might have to carry out other functions and are not able to focus on the implementation of regular activities. Such program tweaks were observed during the COVID-19 crisis. Thus, the government of Bangladesh waived the condition requiring participation in information sessions for the Income Support for the Poorest Program. Public works programs have sometimes waived work requirements if the works of the programs could not be organized, effectively converting the program into an unconditional transfer scheme of limited duration. In the OECD, the offer of training was adapted to the COVID situation. Among OECD and European Union countries, 76 percent shifted to online training, and 70 percent introduced new online courses, while workplace training often had to be suspended or postponed (28 percent also funded additional places in institutional training to promote skills acquisition among the temporarily unemployed) (figure 4.9).

**FIGURE 4.9** Share of Countries Adjusting Training Programs, OCED and European Union



Source: OECD 2021.



#### BOX 4.11: TEMPORARILY LIFTING CONDITIONALITIES, THE PANTAWID AND PROSPERA PROGRAMS

In 2013, before Typhoon Haiyan affected the country, the Department for Social Welfare and Development in the Philippines passed a resolution affirming that conditions imposed on households for the receipt of cash transfers in the Pantawid Program would be waived if a state of emergency were declared. The rule specifies that the conditions would be waived for a predefined period of three months to avoid affecting long-term program objectives. The clause meant that transfers automatically became unconditional following Typhoon Haiyan. This facilitated the planning and implementation of an unconditional top-up for program beneficiaries (vertical expansion). Similarly, in the wake of the typhoon, the Central Bank relaxed national financial regulations related to know your customer requirements, in acknowledgement that many households had lost their ID cards. This contributed to the relatively rapid implementation of the emergency cash transfers.

In Mexico, the former Prospera program included ASP features in operational procedures. Changes in operational processes that would be triggered automatically during declared emergencies were identified up front (Williams and Gonzalez 2020). These included the payment of transfers without the need to verify coresponsibilities for emergencies in which the delivery of education and health services were impeded, pauses in recertification among households in affected areas, and the deployment of program personnel to such areas. For instance, after the September 2017 earthquakes, the government of Mexico vertically and horizontally expanded the Prospera Program by temporarily raising the benefits for 3.2 million beneficiary households and temporarily enrolling an additional 154,654 households. Conditional cash transfer coresponsibilities and recertification among beneficiary families were suspended.





**Changes to the regulatory environment can enhance shock-responsive social protection, particularly if they are made before the shock occurs.**

In Mexico and the Philippines, the operational manuals and legislation regulating core safety net programs include a procedure whereby, in case of emergencies, conditionalities are waived (box 4.11). Embedding the lifting of some conditionalities in the operational manuals allows all program staff and beneficiaries to know in advance about this potential modification and avoid delays in transfer payments. (Information systems allow for the payment process to proceed without verification of compliance.)

**Addressing the implementation challenges raised by shocks is crucial both for the continued functioning of regular programs and for the deployment of shock responses.** Investment in ensuring that social

protection systems are shock responsive also helps improve social protection delivery more generally; so, there are few trade-offs. To promote participation by those effectively targeted by programs, new processes might be instituted; routine processes might be broadened; requirements might be relaxed; and new initiatives might be piggybacked on systems outside regular social protection. To guarantee the effective delivery of benefits, payment processes, other complex components, and conditions can be modified. This could address constraints and free up staff. For shocks that are likely to be frequent, the government should define these adjustments as part of its toolbox before the shocks occur and the adjustments can be undertaken as needed. This helps make programs responsive by design, ensuring business continuity for existing programs and smooth implementation for new ones.

## 4.5 Conclusions and pathways

### 4.5.1 SUMMARY

**Social's protection systems and shock-responsive programming can reinforce each other.** A key lesson in recent years is that country responses to shocks depend heavily on the systems, processes, and infrastructure available in advance of a shock. Countries that have regular programs with high coverage of the poor and the vulnerable and robust foundational systems will be more likely to respond quickly and efficiently (chapter 5). Using social protection for shock response can also help build consensus for strong routine social protection. Deploying shock-responsive social protection programs among affected nonpoor on households that have limited coping capacity can positively change the perception of the role of social protection in society and help people realize that it is not only for the poorest but is a key tool for supporting anyone in need. Shocks can also provide a platform to expand the coverage of regular programs. For example, the horizontal expansion of cash transfers in the Latin America and Caribbean region in response to the 2007–09 global financial crisis led to permanent increases in social protection coverage. The 1997 East Asia crisis helped build consensus on the importance of social assistance in the region and beyond. Responding to shocks can also open the door for improvements in routine operations. It can trigger the updating of targeting criteria, the opening of registration processes, the use of technology and big data, and the overall simplification of processes. However, policy makers should be aware that emergency social protection measures, if not properly designed, may also represent a challenge for the broader well-being of the social protection system. Thus, focusing on new

groups or new needs could reduce political support for regular programs, and temporary interventions could cause confusion or undermine the implementation of more comprehensive, longer-term programs.

**Shocks affect groups differently including individuals and households that are not usually considered poor or vulnerable.** Some shocks jeopardize the livelihoods or human capital of nonpoor on households, which do not typically benefit from social assistance programs. Multiple programs are therefore necessary to address needs. In addition to interventions that focus on the poor and vulnerable during normal times, government-led shock responses should seek to identify all households that are severely affected and unable to cope with the consequences of the shocks. To reach these broader groups, governments can rely on a range of social protection programs, including labor market interventions, pensions, and social insurance. In some countries, governments have instituted permanent emergency programs that are then activated to address specific shocks. Additional approaches include (1) making small design tweaks to maintain regular service for existing beneficiaries or adjust program coverage,, (2) expanding vertically by temporarily increasing the value of transfers to existing beneficiaries,, (3) expanding horizontally by temporarily including new beneficiaries,, (4) piggybacking on existing systems to deliver additional assistance (beneficiary lists, staff, national databases, or payment mechanisms), and (5) aligning temporary interventions with the characteristics of existing interventions, even if they are not integrated, such as many of the programs of humanitarian actors.





**Social protection programs can help cope with immediate shocks, and they also help build resilience to future shocks.**

In addition to providing transfers to those affected by shocks, social protection programs can be harnessed to promote climate preparedness by communicating with the poor and vulnerable good practices and about impending shocks. They can raise household resilience through complementary programs that build productive inclusion and human capital. These encompass economic inclusion programs that aim at sustainably boosting the income, assets, and economic resilience of the poor and vulnerable. Public works programs can contribute to resilience by building assets that address structural vulnerability within communities. Such assets might involve climate-smart agriculture and natural resource management.

**During crisis, there are trade-offs among precision, speed, and costs.**

Responding to shocks and crises typically requires urgency. It is sometimes associated with a limited ability to assess the condition of households. Shocks may involve population movements and displacement, which can complicate identification. They may also involve radical shifts in welfare. A range of options can be considered by policy makers to expand programs under such circumstances. The options may be concentrated on geographic areas, call for a focus on households already at the margin of programs, or oblige a temporary lifting of eligibility criteria. For instance, school feeding programs might be extended to allow access to siblings of beneficiaries or to other children or households in the community. Horizontal expansion can draw on dynamic social

registries or on new registration processes (including through post-disaster household assessments). To facilitate a speedy response, some governments have opted to break down the enrollment process into several steps in line with the phases of the response.

**The adequacy of the support supplied is key to the impact of shock responses on household recovery.**

This includes the value, duration, and frequency of transfers and other program components that can promote resilience. Determining benefit levels involves a combination of practical, technical, political, and social considerations. Most governments opt for relatively simple benefit structures. While a more tailored approach could offer more appropriate support to various groups, creating such a system requires more time and capacity. Some governments have opted to provide simple benefits in the immediate aftermath of a shock and more tailored support during the recovery phase. The approach ultimately reflects a trade-off between coverage (reaching a greater number of individuals or households) and adequacy (providing more meaningful support). The choice of benefits in kind or in cash is also crucial. Global evidence shows that, if markets are functioning, cash transfers are associated with more positive effects on various dimensions of welfare, partly because delivering cash is administratively and logistically easier than delivering food. Most governments and many humanitarian actors have progressively switched from transfers in kind to transfers in cash unless markets are not functioning.



### 4.5.2 RECOMMENDATIONS

Following are five recommendations to set countries on a virtuous path to harnessing robust social protection initiatives to achieve efficient shock responses.

**First, build strong social protection programs and systems during normal times to create a solid foundation for shock response.** The ability of a social protection system to respond to shocks depends on the strength of the underlying programs. Investing in social protection programs that are shock responsive also helps improve social protection delivery generally. There are typically few trade-offs between investing in systems that can support shock response and investing in systems that support long-term social protection objectives.

- **Systems and procedures:** Strengthen the basic delivery mechanisms of regular social protection programs, such as outreach, assessment, payment, and monitoring. This includes establishing strong procedures and systems for core programs and large data systems (chapter 5). Improvements in regular programs will pay off in the ability to support emergency response. Likewise, adjustments needed for shock response can enhance the efficiency of regular programs. Thus, open and more broad enrollment processes can help keep the information in social registries up-to-date and help programs reach beneficiaries with greater precision.
- **Capacity:** Invest in the government's administrative capacity to design and implement social assistance (chapter 2).
- **Coverage:** Ensure that regular programs attain optimal scale and effectively reach all extreme poor or vulnerable households, including in urban areas. This will provide the basis for expansion as

part of a national shock response and will ensure that the poorest receive the additional support they might need.

**Second, develop adaptive toolboxes with tools to be deployed across different groups in separate crises.**

For shocks that are relatively regular, governments should invest in building an adaptive toolbox with tools that can be used to respond. Having multiple tools recognizes that shocks can be different and may affect groups differently. It also recognizes that shock-affected households have needs that vary, from building the capacity to prepare before shocks occur to coping with shocks once they occur and adopting strategies to adapt to future shocks.

- **Governments need to include both social safety net programs and broader social protection and economic inclusion interventions in the toolbox.** Most toolboxes will include provision for regular programs that can be scaled up. They might also include temporary social safety net programs that can be activated. Governments should also identify ways to harness labor market programs or social insurance programs. They should include economic inclusion programs to help lift shock-affected households out of poverty so they are less likely to need support in the future. Because these various programs are typically targeted at distinct groups, governments can layer a combination of programs depending on the shock and the population group.
- **Additional transfers will be required for some households, while, for others, adjustments to the schedule of transfers may be sufficient.** Transfers of additional resources may be critical for the poor and vulnerable, but nonpoor households might be able to cope with shocks and safeguard their long-term welfare without additional resources,



but with adjustments in the timing of transfers and other expenditures. For example, households might need to withdraw some of their savings earlier than planned or defer the payment of certain obligations while a crisis is under way. For these households, governments might decide to reschedule some transfers to help smooth consumption.

- **The toolbox should evolve.** For shocks that are likely to be frequent, governments should identify adjustments in the toolbox before the shocks occur. This helps make programs responsive by design, ensuring continuity among existing programs and the smooth implementation of new tools. Each response can also become a learning opportunity to build or adapt the tools and ensure the system becomes more responsive by design. Governments can also add new tools as needed.

**Third, ensure that all core social protection programs are responsive by design by establishing response mechanisms before shocks occur.**

- **As governments develop regular flagship safety net programs, they should make sure they can also temporarily expand them as needed.** This entails setting rules for decision-making on who is covered, the nature and duration of benefits, any

eligibility conditions that can be lifted, the identity of other actors and their roles, any regular program functions that will be suspended to make way for these adjustments, and so on. For emergency programs that are only to be used during a crisis, governments could define all procedures and rules for decision making so the programs can be implemented as needed without creating new procedures and rules.

- **Ensuring that regular programs continue during a crisis is important.** This calls for drafting continuity plans specifying any necessary modifications, for example, removing conditionalities, waiving requirements, or allowing cash withdrawals in other than normal locations, to ensure the programs continue to reach regular beneficiaries despite disruptions.
- **Mechanisms should be established for setting benefits as part of the country's shock response toolbox.** Then, decisions on benefits can be made for a new shock in a timely and transparent manner, preventing lengthy and costly debates and tensions. All changes should be reflected in operational manuals and in the legal framework for the benefits. Any new social protection program should be designed to be scalable.

**Fourth, carefully design responses to shocks to reach appropriate beneficiaries with simple, harmonized support.**

- **In identifying beneficiaries, governments should address any trade-offs, including tensions between focusing on the newly poor and assisting those who were already poor or benefiting from social protection programs prior to a shock.** While pressure might be exerted on governments to expand coverage (meaning that the number of new beneficiaries can be used to demonstrate swift action), the needs of the poorest and most vulnerable who might already be covered by regular programs must not be neglected. Likewise, among households affected by shocks, programs need to prioritize those who need support and avoid including those that are able to deploy their own coping mechanisms using savings, relying on relatives, diversifying earnings, and so on. Many programs focus on those who have suffered a direct impact from a shock, such as agricultural landowners who benefit from farm insurance or homeowners who benefit from housing reconstruction programs. However, the needs of households that have been affected indirectly by shocks should also be captured, such as day laborers who lose their wages when crops are destroyed by flood or fire, small service providers who lose their livelihoods during lockdowns, household employees who lose their jobs when the homes of their employers are destroyed by fire or flood, and so on.
- **The design of transfers should be simple. For shock response interventions, most governments opt for straightforward benefit structures.** While a more highly tailored approach could provide more

appropriate support to various groups, such a system would require more time and capacity to establish. Simple benefit structures also result in fewer grievances and greater accountability. Because shocks often affect prices, governments should ensure that the value of routine transfers is maintained by temporarily raising values or adding a one-off top-up.

- **Harmonize benefits across interventions.** Coherence across programs is an important element of social policy in normal times, and most governments have national strategies and coordination mechanisms to ensure that benefits offered by different programs are consistent for an efficient use of public resources and to avoid competition between programs or objectives. This is also the case in the responses to shocks, where various actors—development partners, NGOs, and so on—might decide to complement government responses. Each actor typically has separate motives and objectives and might set different benefit structures. Governments should ensure a degree of harmonization to promote equity and efficiency.

**Fifth, ensure shock responses do not undermine the regular social protection system. While these can reinforce each other, emergency measures can also be a challenge for the broader well-being of social protection.** Focusing on new groups or new needs could reduce the political support for regular programs for the chronically poor. Shock response through social protection mechanisms could also weaken the social protection system by causing confusion or setting unrealistic expectations. Development partners might also weaken government capacity by focusing on responses outside government systems.



Shock responses can complicate the implementation of more comprehensive, longer-term programs. To avoid these pitfalls, undertake the following:

- **Ensure that regular programs continue to deliver key benefits throughout the crisis.** This may help prevent the withdrawal of government resources from regular programs focused on those at the bottom of the income distribution.
- **Encourage development partners to use national systems in their support during a crisis.** For instance, ensure all shock responses use social registries or payment platforms to support longer-term efforts to establish efficient national systems and avoid fragmentation.

- **Communicate clearly about program duration.**

This helps avoid unrealistic entitlements or expectations. Governments may decide to create separate programs or give a program expansion a new name to facilitate the eventual termination of the extended program.



## Annex 4A. Targeting During a Shock

**Choosing a targeting method requires matching different methods to a program's objectives, particularly with respect to whether beneficiaries will come from an entire category of households or selected from a welfare ranking of households.** There are a number of practical considerations that will also influence the choice of methods during a shock response. The quality of data and information systems (which includes data availability, uniqueness of IDs, and the capacity of public agencies for interoperability and cross-verification), budget availability, country context, and experience with targeted programs and the magnitude and type of shock influence method selection.

**Because shocks are quite diverse and have different impacts on different populations, there is no unique targeting method that can be used against all shocks.** The speed of response is a key. Programs that address chronic poverty or redistribution can build capacity or more easily take time to gather household-specific data. Geographical targeting has become a central method in preparing for and responding to covariate shocks such as natural disasters and climate change. Early warning systems, disaster risk management (DRM), and risk profiling analysis are helping countries to identify, ex-ante, the areas that are more likely to be affected. This facilitates policies to help improve the resilience of communities and people. Better interoperability with early warning systems, DRM systems, and big data (for example, from satellite imagery or early warning systems) can facilitate preparedness and response to shocks, improving the quality of geographic targeting as a first layer for targeting in such a context. For example, PULA Advisors, a Kenya-based agriculture insurance scheme, uses rainfall data collected by satellite to estimate the amount of precipitation for relatively small areas. It matches this information with farms to provide individual farmers with insurance rather than drafting insurance policies according to geographic location. The scheme provides tailored protection against adverse growing conditions and thus protects the farmers more effectively from income shocks.

**In Togo, to circumvent a lack of historical hydrometeorological data that prevents actionable forecasting at the Nangbeto hydroelectric dam, the FUNES flood-risk prediction model was developed based on a self-learning algorithm (Ijjasz-Vasquez, Jongman, and Suarez 2017).** The model enables flood-risk predictions for communities downstream of the dam to be extended out from two to three hours to two to three days. This allows time for the release of humanitarian funding, triggered by a pre-established forecast threshold, to ensure the rapid mobilization of preplanned activities to reduce risks, enhance preparedness, and improve response.

**The big data made available through satellites and early warning systems are powerful tools in identifying droughts and agricultural shocks and predicting tornados, cyclones, and floods.** Geographical targeting is suitable as part of preplanning or response planning for a large share of natural disasters because these are normally geographically delimited, although they may encompass the whole country in the case of small island states or small landlocked countries. In contrast, geographical targeting is not particularly useful for widespread economic shocks, nor for individual health or employment shocks.

**For individuals or households affected by economic, health, or employment shocks, other targeting methods, such as demographic and categorical targeting, community-based targeting, and welfare metric targeting (means testing, hybrid means testing, and proxy means testing), are more appropriate.** This is because they allow the identification of the individuals or households directly affected. Demographic targeting may sometimes be useful in the response to shocks despite the potentially weak correlation between age and shock because age does not change in response to a shock; natural disasters do not strike only those of a certain age; and economic disasters generally affect workers and individuals of working age more directly, but their dependents only indirectly. Nonetheless top-up benefits for beneficiaries of demographically targeted programs may be a way to get money out quickly, especially if the coverage of such programs is high. For example, as part of its COVID response, the government of Mongolia increased the payments of the nearly universal child allowance, which covers about 85 percent of the children in the country, by a factor of four (World Bank 2021b). Bottan, Hoffmann, and Vera Cossio (2020) find that the government of Bolivia doubled the benefits of the Universal Social Pension Program, Renta Dignidad, which covered about 91 percent of individuals ages 60+ and 28 percent of households. Merttens et al. (2017) detail that the government of Nepal, with the support of the United Nations Children’s Fund, created an emergency cash transfer of Nr 3,000 (approximately US\$30) for social security allowance beneficiaries already on the program roster in the 19 districts affected by the 2015 earthquake, reaching 93 percent of regular social protection beneficiaries in the selected districts in the aftermath of the earthquake. Other targeting characteristics, such as people living with disabilities or who are facing unemployment, can also be used to determine categories of individuals who may deserve support against economic shocks.

**COVID-19 highlighted the need to support informal sector workers, small business owners, and people laid off because of business closures and lockdowns.** However, because these populations are not necessarily among the poor or among groups that are already receiving government support, many governments struggled to reach these new beneficiaries of the COVID-19 emergency transfers, who were mostly invisible in social or beneficiary registries and in large, well-established administrative systems. To reach these groups, new methods were needed. In general, the size and quality of data and information systems prior to the COVID-19 pandemic were crucial to the speed and quality of the services provided.

**Among the methods that rank people by welfare, means testing and hybrid means testing are both suitable for shock response if changes in well-being can be readily captured by information systems.** Changes in formal income may be reported at short intervals through social security contributions records, for example, but only annually and with a delay in full income tax records. Asset ownership thresholds or imputations based on assets may have to be adjusted for natural disaster response because land and property registers are unlikely to be updated quickly to reflect damage or the likely loss of earnings from weather-related disasters. In general, because these methods depend heavily on good data integration, most shock responses relying on them can be rapid given that people only need to use existing application processes to trigger benefits.





**Proxy means testing, which predicts long-run welfare, is too static to be as effective in responding to shocks, at least without adjustments.** This includes both broader economic shocks and idiosyncratic shocks. The latter do not involve substantial changes in household assets and housing and demographic characteristics if sickness or job loss occur. Proxy means-testing models are usually not accurate at predicting vulnerability to poverty from shocks although chronic poor are often more vulnerable to falling into poverty because of shocks, frequently live in more hazardous places, such as along railway tracks or locations more vulnerable to climate change, and typically work in more dangerous occupations. However, given that the chronic poor in programs are quite vulnerable to shocks, piggybacking on large programs targeted using means testing can succeed as an initial strategy if a shock occurs, even if it is not yet clear who has been most affected. Means testing to identify and target households affected by shocks is based on proxies that are fixed or that change only slowly, such as housing quality and demographics. If a household suffers a idiosyncratic or covariate shock, its means test score may not change or change only a little. For example, the household composition will likely stay the same or likely changes, such as sending a child to live with relatives, will raise the score. Assets accumulated during better times will remain in the household unless sold to cope with the shock. Housing quality will not change unless the household moves to cheaper housing to cope with the shock. As more data become available and interoperability becomes possible, means-testing models can be adjusted to be used during shocks. With the addition of ancillary data or big data from satellite or early warning systems, one may obtain a good idea of the importance of certain kinds of local conditions, local infrastructure, and vulnerability to shocks as covariates to explain welfare, thereby adjusting proxy means testing.

**Means-testing models can also be adjusted to account for poverty-induced or risk-induced vulnerability.** Poverty-induced vulnerability occurs if the predicted household consumption falls below the poverty line even without shocks because of a lack of physical and human capital assets, and risk-induced vulnerability occurs if predicted household consumption would be above the poverty line if not for a shock (Skoufias, Vinha, and Beyene 2021). A means-testing model that takes into account ex-ante vulnerability can also account for the amount of the exposure to shocks because climate-related shocks and other shocks lead to different potential conditions. Historical

data on localized natural disasters and drought, combined with realized household poverty outcomes, can be used to predict the households that will be at risk in the future (Báez, Kshirsagar, and Skoufias 2019; Skoufias et al. 2019). Such models can be applied to prioritize the poor or vulnerable for covariate risk-mitigating social protection programs or public insurance schemes, thereby helping program administrators manage covariate shocks, given that most programs are designed to address idiosyncratic risks.

**To address vulnerability more effectively, the proxy means-testing plus model presented by del Ninno and Mills (2015) and Leite (2014) incorporates ancillary data at the lowest administrative level possible into a traditional means-testing model measuring shocks or vulnerability to adjust for the impact of the shocks.**<sup>34</sup> Proxy means-testing plus is thus a variant of proxy means testing that incorporates the impact that a major shock (a drought, flood, incapacitation, or the death of an adult family member) may have on households. Panel data—observations of the same household over multiple time periods—are a first-best option for this type of measurement. However, because panel data are not generally available, proxy means-testing plus is a technique appropriate for cross-sectional (single observation at one point in time) datasets. This is sometimes termed the simulation approach.<sup>35</sup>

**The effectiveness of community-based targeting in the aftermath of a shock depends on how quickly communities can reassess the changed needs of community members.** Because committees must meet to identify cases, response times will be in the range of other post-disaster assessment methods. Communities are also known to consider individual household circumstances during targeting in normal times, such as whether someone had recently suffered an illness or accident or had lost a job. Such local knowledge can help overcome the lack of formal data on idiosyncratic shocks in less-developed contexts.

**The literature is not definitive on the choice of methods.** Moreover, the context will always matter. Context includes more technical factors such as the goals of the program, the shape of poverty and inequality, the degree of formality, and administrative capacity. It also includes the less tangible, such as institutional history and political economy. No single method dominates across contexts and all evaluation criteria. Table 4A.1 summarizes the main methods, the appropriate applications of each, the minimum conditions for use, and the pros and cons involved in use in diagnosing shocks. However, the appropriate mix of methods or the selection for each country depends on specific historic and political factors, and thus decisions on targeting methods will remain the source of discussion in social assistance policy.

34 Proxy means-testing plus is an extended model with fixed effect variables that represents the impact on a local area exposed to a shock. Household data on shocks, geo-referenced climate data, and community data can all be used to identify exposure. Del Ninno and Mills (2015) show that aggregate climatic shocks can be estimated using widely available and detailed geo-referenced information on historic rainfall from the POWER Project (Prediction of Worldwide Energy Resources), Langley Research Center, National Aeronautics and Space Administration, Hampton, VA, <https://power.larc.nasa.gov/>. Variations in rainfall from historic trends can be employed to obtain more nuanced estimates of climatic impacts on means-testing scores. The advantages of this approach are that data on aggregate shocks are often readily available and the estimation methods are the same as those used in the proxy means test. The disadvantage is that the use of aggregate information on covariate shocks is a form of geographic targeting, but the same impact is imputed to each household. Microclimates, geography, soil conditions, and farm practices may expose to drought or flooding only a portion of households in the same aggregate climatic conditions; yet all households in that location will be modeled as affected.

35 The challenge is that cross-sectional data do not show household welfare before and after a shock. Instead, the impact of a shock on changes in consumption is inferred from differences in consumption among otherwise observationally equivalent households.

**TABLE 4A.1** Targeting Methods

Method	Geographic Targeting	Demographic Targeting	Means Testing	Hybrid Means Testing	Proxy Means Testing	Community-based Targeting	Self-Targeting	Lottery
<b>What is it?</b>	<p>Location determines potential eligibility for benefits</p> <p>When working in isolation, all the population living in the area of intervention are considered eligible</p> <p>However, it is commonly used as a first phase in targeting, to allocate caseload, with some other method used to further reduce the pool of the eligible</p>	<p>Uses age or other demographic characteristic to determine eligibility for benefits</p> <p>Can be applied in isolation or as an additional criterion in mixed methods</p> <p>When used alone, sometimes referred to as universal child grants or social pensions</p>	<p>Compares a measure of the income, consumption, and/or wealth of the social assistance unit (family, household) with eligibility thresholds</p> <p>Often, but not always, verifies a substantial portion of the information with independent sources</p>	<p>Measures and verifies some of income, consumption and assets, as in a means testing</p> <p>Imputes the value of other flows where they are not verifiable</p> <p>Imputations often fairly simple - for example, marginal productivity per hectare in agriculture or unit of livestock, or assumption of a few days a month of low wage employment for day laborers - although more sophisticated estimations may be used</p>	<p>Uses easy-to-verify characteristics or proxies (for example, composition of the social assistance unit, size, quality or location of its dwelling, its assets) to predict money-metric well-being</p> <p>Weights derived from statistics/econometric models of various degrees of sophistication</p>	<p>Uses organized local-level groups composed by local leaders, civil society, and government officials; group members are from and are very active in the community, and they decide who in the community should benefit</p>	<p>Anyone may participate, but some element of the program makes it unattractive to the less needy</p> <p>For example, a low wage may be offered to in exchange for work on community infrastructure or service projects</p> <p>Nutritious but less preferred foods (broken rice, coarse flours, less attractive packaging)</p>	<p>A random process to ration program resources or slots for enrollment among individuals, households, or communities that are all eligible</p>
<b>When is it appropriate?</b>	<p>When differences in poverty, vulnerability, or implementation capacity have a sharp geospatial gradient</p> <p>May work best when people don't move too often or easily between the delineated areas</p>	<p>To address right base approach</p> <p>When the program is focused on biological or social vulnerabilities of children or elderly</p> <p>When age or family structure are highly correlated with poverty or vulnerability to poverty</p>	<p>When income, consumption, or wealth are relatively easy to verify - for example, through data matching with other government-held records</p> <p>When labor markets are highly formal</p>	<p>When a moderately high share - but not all of incomes - can be verified</p> <p>When labor markets have moderate informality</p>	<p>When informality is too high to make means testing or hybrid means testing viable, but household-specific rankings are still desired</p>	<p>To address program administrator's myopia and lack of knowledge about community</p> <p>To promote community engagement and improve accuracy at lowest level</p>	<p>When the program design is conducive</p>	<p>To address the fact that program's budget is not enough for covering the total number of eligible claimants</p> <p>When it is difficult to rank among many similar claimants, or when such rankings would not be socially accepted</p>



**TABLE 4A.1** Targeting Methods

Method	Geographic Targeting	Demographic Targeting	Means Testing	Hybrid Means Testing	Proxy Means Testing	Community-based Targeting	Self-Targeting	Lottery
<b>Minimum conditions</b>	Data to build geospatial analysis on indicators such as well-being, poverty, social development, access to services, infrastructure, climate, soil, and so forth including big data	Good coverage of identification documents to verify age  For poverty reduction, monetary poverty or vulnerability must be highly correlated with the predefined category	High levels of literacy and documentation that can be used as proof of declared information; high capacity levels of staff to properly collect the information required and to digitize  the self-declared information  Has effective verification process, including home visits and/or interoperability of government databases	High levels of literacy and documentation that can be used as proof of declared information  High capacity levels of staff to properly collect the information required and to digitize the self-declared information  Have effective verification process, including home visits and/or interoperability of government databases  Plausible models can be built to impute income from household assets or informal labor	Administrative capacity to interview on demand potentially eligible applicants and/or to conduct survey sweeps in high-poverty areas	Requires a strong, small, and cohesive community structure (hard to use for larger groups where knowledge of one- another is limited)  Requires effective outreach and capacitation to local actors that will be running the process and supporting program implementation	Subsidies: clear dichotomy in place so that the selected goods are not attractive to the nonintended population but available to the intended population  Temporary employment; type of work or benefit amount or goods is not attractive to the nonintended population	Have a transparent process to randomly select the beneficiaries
<b>Pros</b>	Simple to apply and does not create social tensions among close neighbors, though it may across jurisdictions  Errors of exclusion are transparent to the political process	Corresponds with notions of deservingness in most places  Unlikely to be stigmatizing  Relatively simple to implement and for people to understand	Accurate metric for well-being when its development follows basic standards and minimum conditions  It is sensitive to quick changes in well-being, either idiosyncratic or covariate	Reliable metric for predicting full well-being when its development follows basic standards and minimum conditions  It is somewhat sensitive to quick changes in well-being; the formulae for imputations for informal incomes may need to be adjusted in response to covariate shocks	A statistically plausible and replicable method to rank households when informality is high	Benefits from the locals and their knowledge of the community to identify the population of interest  Generates local level buy-in because the locals feel they are part of the process; improves acceptability of the program	Little administrative effort given to eligibility (other aspects of running public works programs are demanding, as are the logistics of food distribution)	Transparency Fast and inexpensive; replicable in any environment, both rural and urban.  Requires minimal administrative capacity

**TABLE 4A.1** Targeting Methods

Method	Geographic Targeting	Demographic Targeting	Means Testing	Hybrid Means Testing	Proxy Means Testing	Community-based Targeting	Self-Targeting	Lottery
<b>Cons</b>	<p>There are likely to be clear errors of exclusion as poverty, vulnerability or other forms of need will exist in excluded territories</p> <p>Can encourage migration to the program treated areas</p>	<p>May be only mildly correlated with money-metric measures of welfare</p>	<p>High requirements for data available for verification</p> <p>Relies on qualified administrative staff</p>	<p>Relies on quality of data available for verification</p> <p>Relies on qualified administrative staff</p> <p>Contains some statistical error from the imputations</p>	<p>Contains statistical error, formulae may be more or less precise depending on context and statistical methods</p> <p>Difficult for people to understand; lack of transparency</p> <p>Insensitive to quick changes in well-being</p>	<p>Local actors can have own preferences and consequently bias the process towards certain groups</p> <p>Different communities may implement guidelines differently</p> <p>May reinforce existing power structures and replicate patterns of exclusion.</p> <p>Social tensions within the population and local actors can arise</p>	<p>May not reduce the number of people desiring to participate enough to meet a budget or implementation capacity, additional layers or filters or other eligibility criteria may be needed</p>	<p>Not to be used when population is heterogeneous enough so that the difference between two eligible people does matter and there are reasonable means to rank more finely</p>
<b>Shock Responsiveness</b>	<p>Often used to respond to natural disasters.</p> <p>May be used to select areas for resilience building activities in disaster-prone areas, or in association with early warning system</p>	<p>Not shock responsive by nature, but if high coverage programs exist, benefits can be topped up quickly</p>	<p>It is sensitive to quick changes in well-being, either idiosyncratic or covariate</p>	<p>The moderately sensitive to quick changes in well-being</p>	<p>Insensitive to quick changes in well-being, and consequently not suitable for addressing shocks and for shock response without adaptations</p>	<p>It seems that communities often incorporate local knowledge of which households are suffering idiosyncratic shocks such as illness, accident or unemployment.</p> <p>For covariate shocks like natural disaster, may involve a new 'assessment exercise' to update information</p>	<p>People may change their calculus about self-targeting as their need increases or decreases - e.g. a family that prospers may no longer report for public works, one that loses its preceding job or faces a downturn may seek additional days of public works</p>	<p>Can be used for some shock responsive programs by ensuring that those that feel affected apply for would have equal chance of entering in the program</p>

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**The adequacy of the support supplied is key to the impact of shock responses on household recovery.**



# ■ CHAPTER 5

## DATA AND INFORMATION

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### 5.1 Introduction

**Various population groups are likely to be affected by shocks in different ways, resulting in different needs and responses, based on their prior levels of well-being and the impact of shocks.** Therefore, for the purposes of preventing or mitigating shock impacts with ex-ante measures and to define and implement different packages of ex-post interventions, a good understanding of the population characteristics (to profile populations and their vulnerabilities), available data systems to support planning and response, and information about potential the intensity and likelihood of the event is crucial to supporting the adaptive social protection (ASP) agenda. Data are thus essential to inform the design of ASP programs and the associated systems.

**Vulnerabilities associated with both monetary poverty (welfare) and idiosyncratic and covariate shocks are to be considered in defining the social programs and policies to be used ex-ante and ex-post in response to shocks.** Income variability is observed for different livelihoods, ranging from farmers and agriculture workers whose income depends on weather patterns, to informal workers whose livelihoods depend on market demand. The same applies to idiosyncratic shocks, whereby illnesses and changes in household structure (for example, death of the breadwinner) can translate into job losses, inevitably affecting household income. In Nepal, Walker, Kawasoe, and Shrestha (2019) show that almost 90 percent of households reported that they



had experienced at least one shock during 2014–18, some with severe impacts on the well-being of the affected households.<sup>36</sup> Each year, households lost an average of 1.5 percent of their assets to shocks, and the average loss among households experiencing a shock was 6.5 percent of assets. All households are at risk of shocks. Negative coping strategies, such as cutting food consumption and selling assets, were observed and were more common among the poorer quintiles. Understanding the potential impacts of different shocks on different populations thus allows for improved planning and policies.

**ASP can help assist a wide range of population groups, including households experiencing extreme chronic poverty; households with specific vulnerabilities; households that are not in extreme poverty, but that are vulnerable to specific shocks; and households that are not poor and are able to cope with most (but not all) shocks.** For such reasons, a thorough understanding of country and individual/household vulnerabilities and of poverty dynamics, is extremely important for policy makers and governments in designing shock-responsive programs. For example, in Chile, the disaster response and social protection systems have increased integration. Nowadays, the Ministry of Social Development has a strategy based on past experience and used to predict areas with a greater chance of suffering from a disaster. It has defined four types of cash transfer interventions and two types of temporary support for displaced people that may be instituted for rapid deployment in case of a shock.

**Along with programs, finance, and institutional arrangements, data are at the center of ASP.** In contrast with the belief that data only refer to available databases (for example, household surveys

or national ID, satellite, or weather information data), data also refer to information systems and the software applications that are used to systemize and transform information. ASP needs to function as a whole, whereby data stored in databases are accessible and can be transformed into information through software applications, interoperability, and business processes. Data or data systems thus encompass the collection, organization, storage, processing, transformation, creation, and distribution of information in support of policy makers. As far as shocks, data do in fact help policy makers better understand the associated risks, as well as helping mitigate the associated impacts and informing appropriate shock responses. In a shock response perspective, it is recognized how reliable knowledge and information can help formulate appropriate strategies, while guaranteeing the timely deployment of assistance.

**Data are then at the core of ASP for monitoring, managing, and delivering social protection benefits and services to poor and vulnerable populations, as well as for better risk identification of the potentially affected and to support resilience building and building adaptive capacity.** Data that contain information on persons, including individual identification numbers, data on socioeconomic and sociodemographic characteristics, and data on other aspects of vulnerability, such as disability, gender, employment status, and so on, help policy makers in planning social programs to build the resilience of those most vulnerable and in making quick decisions in post-disaster contexts, often in data-constrained environments. Improving data is thus invaluable.

**To develop the needed data, a multisectoral approach to the collection, sharing, and analysis of data is**

<sup>36</sup> The shocks reported were the 2015 earthquake, the riots and blockades of late 2015 and early 2016, droughts and localized floods and landslides, and agricultural shocks.

**required.** Bowen et al. (2020) show that, as coordination on data collection improves, data can contribute to an enhanced understanding of the spatial probabilities of certain shocks based on historical hazard incidence and the exposure and vulnerability of assets and people. In addition, by integrating these analyses with standard data on household-level poverty and vulnerability to be consistently undertaken either by national statistical offices or by social protection program administrators, it is possible to achieve a more exhaustive depiction of the household-level vulnerability to shocks. For example, in the Dominican Republic, the vulnerability to climate hazards index (Índice de Vulnerabilidad ante Choques Climáticos) generates household-level information that supports the assessment of vulnerability to shocks and climate change, which can provide estimations of post-shock needs and help in the design of a more rapid response program. In Uganda, satellite data and a normalized difference vegetation index anomaly have provided the basis for triggering earlier cash-for-work payments well before any late-onset indicators (for example, livestock mortality and malnutrition rates) reach emergency levels in response to drought.

**Data help governments in planning appropriate mitigation and response measures for specific groups or geographic areas and in the allocation of contingency budgets for shock response through the use of the five ways for safety nets to address shocks (O'Brien, Holmes, and Scott 2018).** All five options—design tweaks, vertical expansion, horizontal expansion, piggybacking, and alignment—rely on data elements, such as national identification systems, social registries, beneficiary registries, big data, vulnerability maps, payment systems, and so on. Therefore, as data are developed, policy makers and governments can translate expected needs into budget planning, while ensuring that contingency funds are available if the agreed targets and triggers are met or activated.



## 5.2 Types of Data

**ASP can help improve resilience to shocks as policy makers gain more access to information, knowledge, and the capacity to understand how people prepare, cope, and adapt to shocks to protect their well-being (Bowen et al. 2020).** ASP must capitalize on available information (for example, access trends, program efficiency, and risks) to allow governments and households to act accordingly and minimize the immediate impact of shocks on their well-being, while assisting shock-affected households in rebounding to the pre-shock welfare level as quickly as possible.

**Data can help adapt and reduce exposure to shocks in a systematic manner through the identification of the current challenges hindering people from investing in the longer-term opportunities that allow them to diversify their livelihoods and focus on income sources that are less vulnerable to the impacts of shocks.** To possess an approach that helps prepare, cope, and adapt to shocks, it is crucial to utilize the available data, while investing in more data production (especially in fragile contexts affected by widespread poverty, where data are not readily available), as a means to acquire the knowledge necessary to design adequate programs, policies, and action plans.

**There are different types of data within the data that can help inform the design of programs, policies, and action plans.**

## THE DIFFERENT SOURCES OF INFORMATION INCLUDE:

- **National Identification Systems** (civil registration, digital and biometric, or voter ID) that uniquely identify the population. Examples in the region range from the Bhutanese citizenship identity card to the computerized national identity card in Pakistan, the Indian Aadhaar individual identification number, and the national ID card in Bangladesh. Moreover, the Nepal integrated civil registration and national ID process has encompassed the assignment of a unique national ID number to newborns since 2021 or after 16 years of age through the national ID system platform.
- **Household Survey Data** to support risk and vulnerability assessments collected before or after a shock (which may include geo-referenced household location data), such as the Indian National Survey of Household Income and Expenditure, the Bhutanese labor force surveys, the Pakistani Household Integrated Economic Survey, the Maldivian Household Income and Expenditure Survey, the Afghanistan Demographic and Health Survey, the Nepali Household Risk and Vulnerability Panel Survey, and the Sri Lanka Household Income and Expenditures Survey.
- **Integrated Social Protection Delivery Systems**, including both social registries, such as the national socio-economic registry in Pakistan, and beneficiary registries, such as the Maldivian social protection information system, the Nepali social security allowance system, and Sri Lanka's Samurdhi registry (figure 5.1).<sup>37</sup>

<sup>37</sup> Social registries are information systems that support outreach, intake, registration, and the determination of potential eligibility for inclusion in one or more social programs. While many technical considerations are involved in designing and implementing social registries, their role in social policy is simple: provide a gateway for potential inclusion of intended populations into social programs (Leite et al. 2017) and contain information on social protection beneficiaries and nonbeneficiaries. Beneficiary registries are information systems that allow monitoring and implementation of one or more social programs. Their role in social policy is simple: provide administrators with a system for measuring the implementation of the program and for understanding the current supply of programs among the population. It only contains information on social protection beneficiaries.



**FIGURE 5.1** Social Protection: The Integrated Social Registry and Data System

## A. THE IMPORTANCE OF SOCIAL REGISTRIES



- **Early warning systems and geographic and vulnerability map data** collected through weather stations and satellite images, such as the Vulnerability Atlas of India, the Nepal Disaster Risk Reduction Portal, and the Bangladesh Digital Risk Information Platform.<sup>38</sup>
- **Registries of disaster-affected households** collected mainly by disaster management agencies to inform a range of disaster response actions that build on

post-disaster household assessments.<sup>39</sup>

- **Payment systems**, such as the systems in Bhutan and Maldives, that allow for direct payments to beneficiaries through bank accounts with the Bank of Bhutan, Bhutan National Bank, and the Bank of Maldives. Other examples are the Aadhaar-enabled payments in India and the limited mandate accounts in Pakistan.

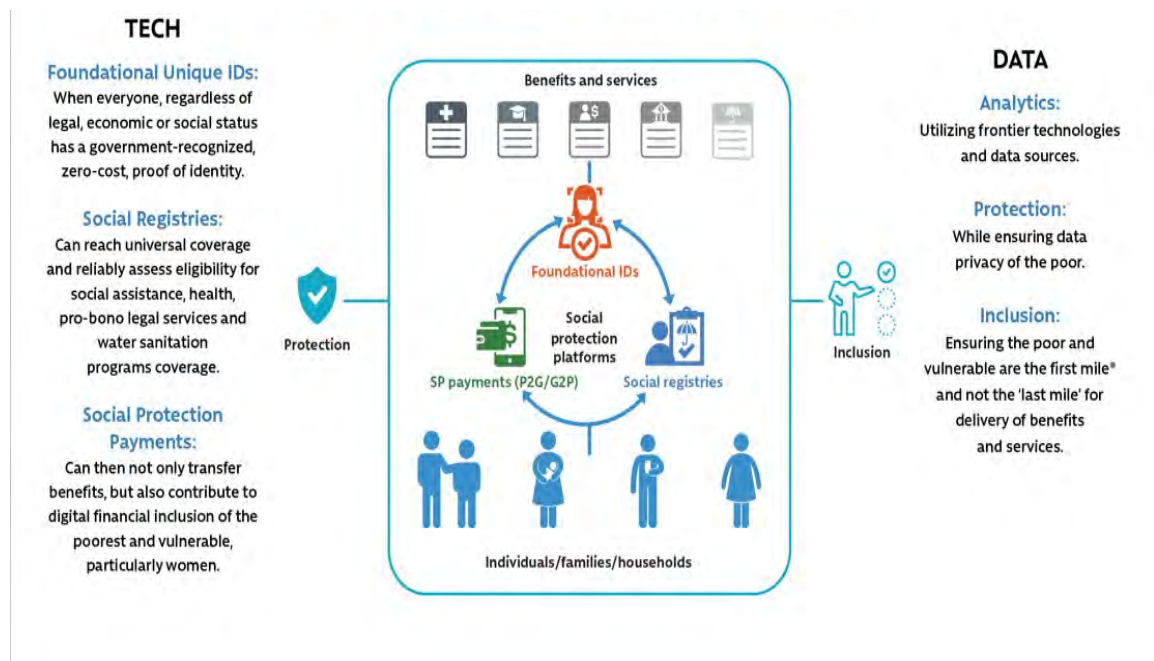
<sup>38</sup> See BMPTC (2019); DRR Portal (Nepal Disaster Risk Reduction Portal), Ministry of Home Affairs, Prime Minister's Office, and National Planning Commission, Kathmandu, Nepal, <http://drrportal.gov.np/>.

<sup>39</sup> For example, Colombia's consolidated disaster victims registry (registro único de damnificados) is managed by the national unit for disaster risk management (DRM). Each household in the system is given a unique system-generated identifier. The system is a web-based platform available for use by various sectoral stakeholders.

FIGURE 5.1

## Social Protection: The Integrated Social Registry and Data System

## B. FOUNDATIONAL TECHNOLOGY AND DATA PLATFORMS



With such data, it is possible to measure risk exposure, estimate resilience capacity, support budget planning, identify triggers for different shocks, and determine eligibility for assistance. All these data sources require constant updating. It is thus important to understand the contribution of each type of data to the ASP system as a means to promote individual and household resilience-building. For example, to measure and enhance the resilience of households against shocks, it is crucial to understand both the pre-shock status and vulnerabilities of the households and how widespread the shocks are.

Household survey data support risk and vulnerability assessments, while integrated or consolidated social protection delivery systems and early warning systems and geographic and vulnerability maps allow for the design and deployment of disaster vulnerability assessments, which are important for the design and implementation of ASP programs.<sup>40</sup> Such assessments require access to household- and community-level information as a means to develop an adequate economic and social profile and to understand the disaster risk exposure of particular areas.

40 Examples include EM-DAT (International Disaster Database), Centre for Research on the Epidemiology of Disasters, Université Catholique de Louvain, Brussels, <https://www.emdat.be/index.php>; Munich Re's Natural Hazards Edition (dashboard), Munich Re, Munich, <https://www.munichre.com/en/solutions/for-industry-clients/location-risk-intelligence/natural-hazards-edition.html>; ThinkHazard! (dashboard), Global Facility for Disaster Reduction and Recovery, World Bank, Washington, DC. <https://thinkhazard.org/en/>.

## BOX 1: INTEGRATED PAYMENT SYSTEM

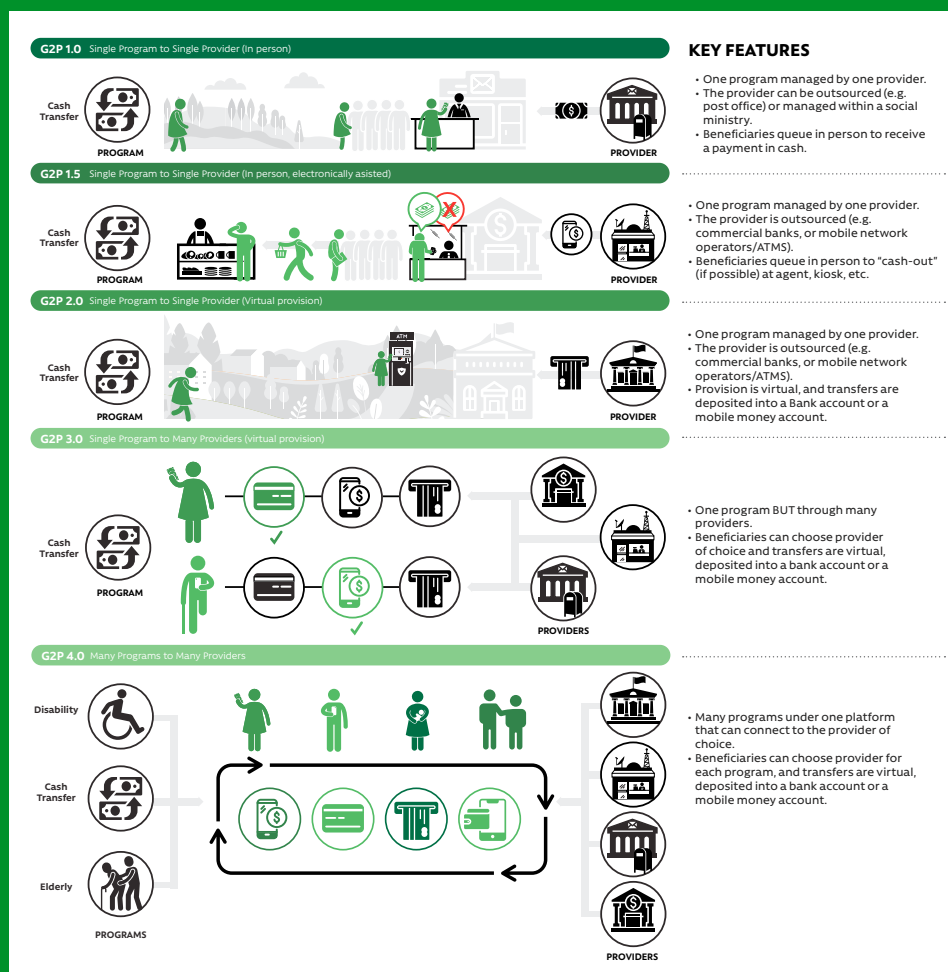
Changes in technology, urbanization, financial infrastructure, and shocks such as the COVID-19 crisis are introducing a new array of instruments and actors in the development and delivery of cash transfers, focusing squarely on the people receiving those transfers. Efficient e-payment system presents an opportunity for improving financial inclusion and economic empowerment. Access to transaction accounts or electronic instruments also help governments to respond faster to shocks. There is a range of digitization

in use in social protection program payments, and countries experience is not linear and many programs and countries have coexisting modalities. In any case, it is important to invest on e-payments that improve recipients' experiences by allowing them to choose providers and accounts to receive funds, lower delivery costs for governments, reduce leakage through integrated payment systems, and introduce incentives for payment service Providers.

FIGURE 2

E-payment system:  
Multiple platforms  
for different programs

Source: Lindert et al (2021)



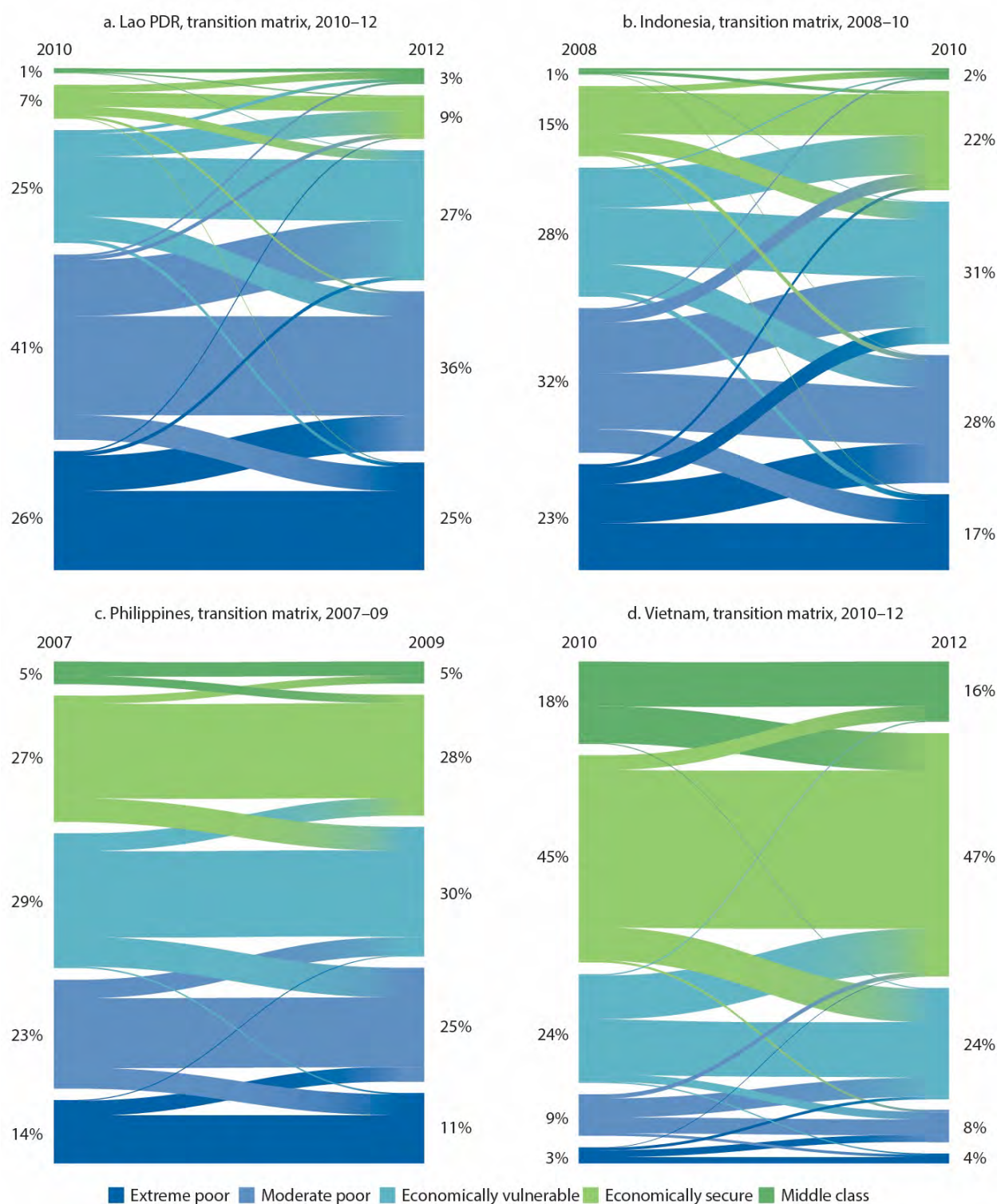




**The questions to inform pertinent vulnerability assessments include the following:**

- What kinds of hazards do individuals, households, and the country face?
- How frequently?
- Where?
- What are the most commonly adopted coping mechanisms?
- What is the profile of the group most exposed to these past events?
- Are there any geographical trends?
- Is there any specific group or location that is recurrently affected?
- What distinguishes individuals or households in the same geographical area with respect to the impact of the shock and associated mitigation measures?
- What type of data or indicators can be used as triggers for a shock-responsive approach?

**For example, using household survey data, one can estimate the dynamics of welfare and poverty, while using big data information to target programs to address a shock.** Figure 5.2 illustrates the welfare dynamics in selected East Asian countries in two-year panels. It shows the significant degree of movement across various consumption groups (Grosh et al. 2022; World Bank 2018). The dynamics of welfare explain why vulnerability to poverty and the dynamics of social protection such important topics are. Map 5.1 highlights how big data may be used to estimate the poorest geographic areas in Togo that would be eligible for emergency cash support designed to mitigate the economic impacts of COVID-19.

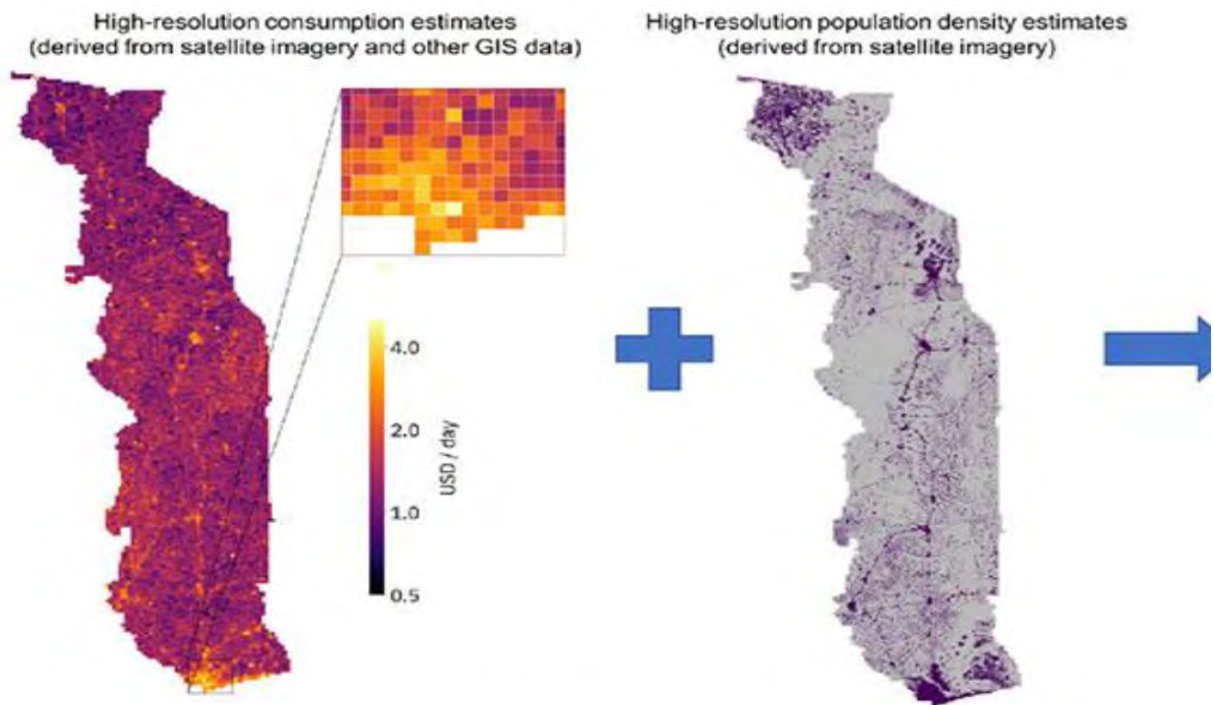
**FIGURE 5.2** Short-Run Mobility across Economic Classes, Selected Countries, East Asia

Source: 2018 data of SUSENAS (Survey Sosial Ekonomi Nasional, National Socio-Economic Survey) (database), Badan Pusat Statistik (Statistics Indonesia), Jakarta, <https://mikrodata.bps.go.id/mikrodata/index.php/catalog/SUSENAS>.



MAP 5.1

## Big Data Estimates: Geographic Targeting in Response to Shocks, Togo



Source: World Bank (2021b) as provided by J. Blumenstock

**Moreover, such assessments allow for predictions of the potential impact of a shock, enabling governments to define triggers, allocate contingency budgets, and plan response strategies.** They also help strengthen regular programs in these areas to mitigate the shocks ex-ante and adequately prepare for post-shock responses.<sup>41</sup>

**National identification, integrated social protection delivery, and payment systems help policy makers piggyback ASP responses on existing delivery systems as a means to reach and assist affected populations more rapidly.** Assessing the capacity of these systems to operate in hard-to-reach or shock-prone areas and

their resilience relative to shocks is necessary in the framework of ASP planning. What is the local capacity in human and physical infrastructure? Which payment mechanisms and respective contact points can be capitalized upon? What available information can allow governments to issue payments in response to shocks, with or without any additional needs assessment? For instance, in 2015, the government of Chile reviewed the country's disaster risk management (DRM) system, improved data to ensure proper coordination across 19 agencies, defined their roles and responsibilities in the operational phases, that is, alertness to covariate shocks, response, and rehabilitation. The Ministry of Social Development coordinated the application of

<sup>41</sup> In Bangladesh, the Chars Livelihoods Program includes an annual contingency budget built into the project design for disaster response. If not spent within the year, the budget must be redistributed among regular program activities.



an ex-post household-specific needs assessment, the basic emergency factsheet (ficha básica de emergencia), which is linked to the Chilean national household social registry (figure 5.3). Based on past experience, four types of cash transfer interventions were predefined, as follows: (1) direct cash transfers to buy goods of immediate need, (2) subsidy to pay household rent or lease, (3) subsidy to pay basic services (utilities), and (4) an extra cash transfer if required. In addition, two types of temporary support for displaced persons were instituted, as follows: (1) emergency housing and (2) placement in municipal hostels. In each region of the country and based on data, the ministry allocated a contingency budget and defined the triggers for timely response to the shock. As a result, post-shock assessment times were reduced substantially, and the government has been able to respond more quickly to shocks since then.

**Early warning systems and reliable geographic data on the risks and vulnerabilities of communities to shocks and disasters allow governments to maintain a monitoring information system for response and to trigger early actions, especially in a context of growing climate-related risks that can be predicted more easily.** For example, knowing that droughts recur in certain areas allows necessary actions to be taken earlier to ensure that food security is not affected. Some systems that use probabilistic forecast information typically draw on products of national, regional, and international forecasting centers to inform populations about potential risks and plan appropriate responses.<sup>42</sup> For instance, hydrological and meteorological services can generate information about potential floods, hurricanes, and tornados given that hydrological and meteorological

**FIGURE 5.3**

The FIBE App for Post-shock Assessment

Note: FIBE = ficha básica de emergencia. The app page shows a basic emergency factsheet to be filled out.

variations are robust indicators of shocks. Such early warning information with index-based triggers for response are thus particularly important for slow-onset shocks, as follows:

- **In Uganda**, the Northern Uganda Social Action Fund included a cash-for-work program in Karamoja Subregion to respond to drought by relying on an objective and automatic satellite indicator as the trigger to scale up the number of households

<sup>42</sup> See Climate Center (2017); “Togo,” Forecast-Based Financing, FbF Coordination, German Red Cross, Berlin, <https://www.forecast-based-financing.org/projects/togo/>; “Togo: Early-Warning System for Climatic Disasters,” German Red Cross, Berlin, <https://www.drk.de/en/aid-worldwide/where-we-work/grc-international-aid-in-africa/togo-early-warning-system-for-climatic-disasters/>.



accessing the program (Cabot Venton et al. 2012; OPM 2021). The normalized difference vegetation index was created based on the satellite images set on a periodic 14-day observation schedule. An average score is assigned for each district in Karamoja and calculated for each calendar month to determine when to respond. The index is used to trigger cash-for-work payments well before any late-onset indicators, such as livestock mortality and malnutrition rates, reach emergency levels. The index is not used to declare a drought emergency, however.

- **In Ethiopia**, the number of people covered by the rural Productive Safety Net Program and the number of months of benefits per year have been adjusted regularly in response to drought. The trigger has been the semiannual Humanitarian Requirements Document (IDA 2020).
- **In Kenya**, a census of households in the districts covered by the Hunger Safety Net Program has been run, and the information is being used to issue payments directly to the accounts of eligible households once predefined triggers have been reached. The triggers are based on the vegetation

condition index. Depending on the level of the index, the number of beneficiary households, the level of the benefits, or the frequency of payments can be expanded (Álvarez and van Nieuwenhuyzen 2016).

**In addition, it is important to ensure that data are linked to other systems in grievance and redress systems and to big data, if possible.** Grievance and redress systems allow policy makers to understand some of the implementation challenges of programs and some of the constraints faced by people in accessing the system. For instance, is the payment mechanism delivering payments regularly? Do people have difficulty in registering in the system? Such a system fosters a link between the general public and program administrators, allowing people to submit their views and feedback with respect to any of the aspects of the welfare system to program officers and administrators. If properly implemented, the system provides a relevant source of information for regular improvements to strengthen the system, thereby contributing to the ASP agenda. Robust grievance and redress systems are available within the framework of the e-Samurdhi platform in Sri Lanka and within the Case Management System in Pakistan. The Pakistani







Case Management System allows the government to measure the quality of welfare programs through detailed reports, as highlighted by the spot checks and beneficiary feedback of the National Cash Transfer Program-Pakistan, which assessed the efficacy of the Benazir Income Support Program's in-built grievance and redress system (Mott MacDonald Limited 2014).

**New technologies are increasing the availability of big data, which can support risk and vulnerability assessments, the identification of affected populations, and post-disaster assessments.** These data, which are often maintained by other agencies, are frequently updated. Consequently, big data can help make ASP dynamic. For example, in 2021, as a response to COVID, the Solidarité par Transferts Economiques contre la Pauvreté à Kinshasa Programme—the STEP-KIN Program—provided unconditional cash transfers in, the capital of the Democratic Republic of Congo, on the basis of telephone call record details to identify beneficiary individuals and areas of the temporary support program.

**There is, however, a clear division between the big data collected by governments, such as administrative data, and the big data owned by commercial firms, which are usually associated with extra costs and data privacy and data protection issues.** This is the case, for example, of data collected by mobile operators and the remote sensing data collected by private satellites. Administrative data include tax collection data (information on wages, real estate, vehicles, businesses, and so on) and service delivery data (covering the receipt of any government-provided social protection programs, contributions to social or health insurance schemes, information on border crossings, and information on the kilowatt hours of energy supplied to households by state-run power companies). Remote sensing data

are collected remotely from the household or the surrounding area, typically by satellites, aircraft, or drones, including GPS data on the access to or distance from particular locations or facilities. The data collected by commercial firms include mobile phone data (call record details) that measure the frequency of texts, the length of calls, and the frequency or size of top-ups to data plans; phone-based location data that register the distance, destination, and duration of trips; and social media data. The main challenge of big data revolves around ownership and the purpose of use. Data ownership and data privacy are key concerns for policy makers. Because big data and government administrative data are not necessarily collected for ASP-related purposes, a regulatory reform of greater or lesser weight may be needed. Normally, individuals must give consent as part of the process before an agency can access or use data from other functions or agencies (social security contributions, property tax registers, and so on) for verification or for the needs of ASP.

**Combining all this information into a data system can promote better planning and policy monitoring.** For example, in Mexico, the Secretariat for Agrarian, Land, and Urban Development (Secretaría de Desarrollo Agrario, Territorial y Urbano, SEDATU) uses maps obtained from various interoperable data sources to create an inclusive rights approach in joint socio-urban interventions. The goal is to establish an integral policy to address, reduce, and prevent urban poverty that is based on an inclusive approach to social rights and a comprehensive territorial approach (map 5.2). In this way, SEDATU is seeking to create a policy that is adequate to deal with multifactorial and dynamic urban environments and able to develop solutions that are neither sectoral nor static. Through data, SEDATU diagnostics allows for targeted actions in big cities that support articulation across various strategies to reduce poverty.

## MAP 5.2

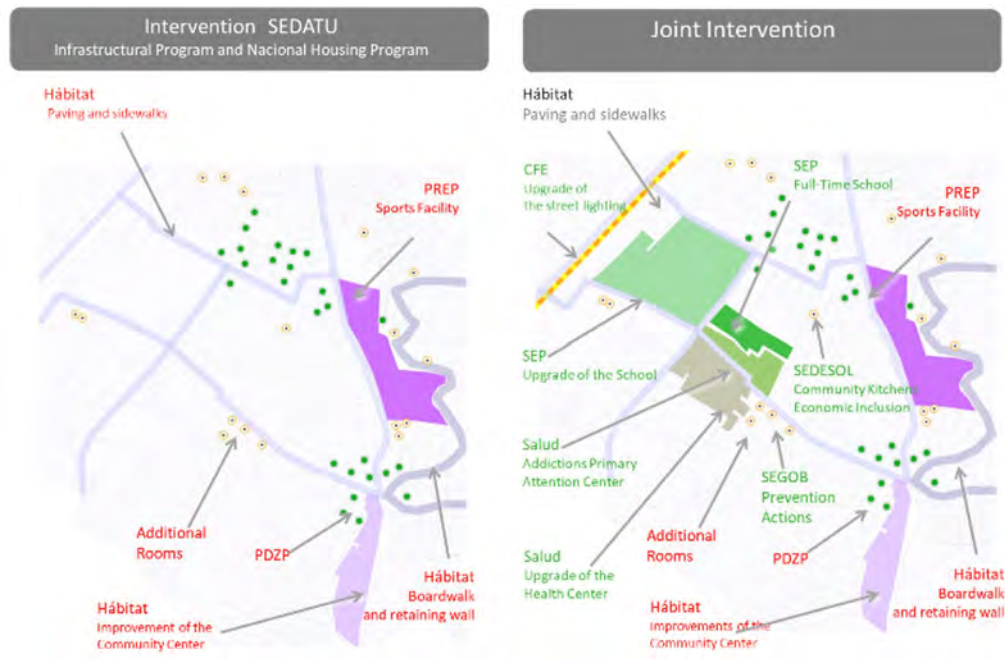
### SEDATU Maps Based on a Comprehensive Data System, Mexico

Source: SEDATU 2015.

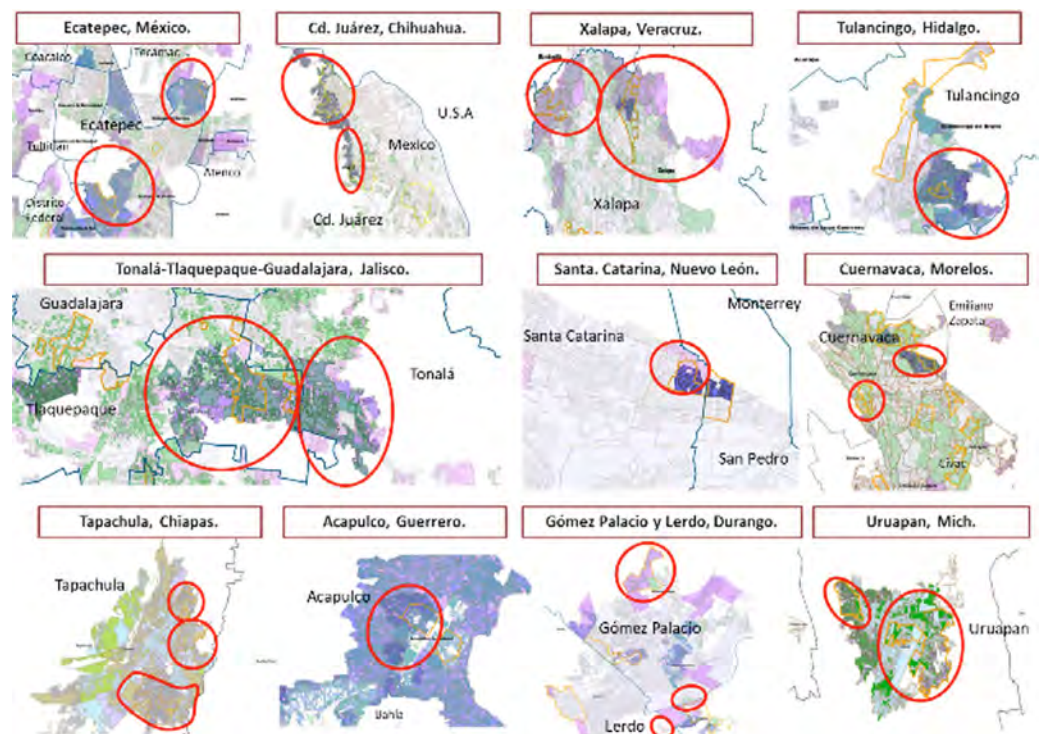
#### Stage in Selection of Socio-Urban Intervention Sectors



### Intervention Proposal of the Secretary of Agriculture, Territorial and Urban Development (SEDATU) and the Joint Socio-Urban Intervention



#### 145 Urab Localities with Georeferences Information



## BOX 5.1: TYPES OF DATA

**National identification systems** (civil registration, digital, and biometric systems, or voter ID systems): Such systems play a key role in identification, interoperability, eligibility, and payments of benefits. The World Bank (2020) shows that countries with robust identification systems (including civil registration, digital, and biometric systems, or voting IDs) that are digitalized and have large coverage are well-positioned to respond to shocks. For example, the uniqueness of the ID helps in reducing duplications, given that the same individual cannot apply for more than one benefit, and the interoperability of the systems allows for such cross-verification. Interoperability also prevents the unintended duplication of benefits if various agencies are running programs among the affected populations. In addition, the systems allow for the identification and prevention of errors of inclusion by promptly excluding ghost applicants from programs. Even in cases where the coverage of national ID systems is not significant, the availability of a unique ID across social programs allows for a higher level of interoperability among beneficiary systems. The creation of integrated social assistance systems built around integrated social registries and integrated beneficiary registries significantly improves service delivery. It is thus possible to observe how national identification systems permit a higher level of program efficiency both prior to and in the aftermath of a shock. Moreover, other registries, such as registries of disaster-affected households, that contain information about affected people can be used to help.

**Household survey data:** Traditional data are gathered to measure the level of welfare and the

characteristics of households and individuals. Such surveys are always limited as far as sampling, periodicity, and the questionnaire, given that they may not necessarily comprise shock-related information or mitigation measures that could be adopted to support vulnerability and risk analysis. Estimates of local-level statistics are not granular because of sampling or because they do not geotag households. Traditional data also include community-level surveys, household panel surveys, and post-shock needs assessments, which are typically gathered by enumerators present at the field level or through phone surveys.

**Integrated social protection delivery systems:** These contain information on current applicants (potential beneficiaries) and the existing beneficiaries of social programs. Depending on the size of the registries, countries can piggyback on such systems to plan and deploy rapid shock responses. Bowen et al. (2020) show that social registries can also be expanded and updated in high-risk areas to facilitate a potential scale-up if a shock occurs. For example, in Mauritania, the government developed a methodology to determine the ideal number of households in the social registry in each commune to ensure that the registry would become an effective tool to inform appropriate responses to recurring drought. The analysis recommended including an additional 50,000 households that were expected to become food insecure as a result of the drought. In the Dominican Republic, the vulnerability to climate hazards index quantifies the likelihood of a household becoming vulnerable to hurricanes, storms, and floods. The index uses data from the country's national social registry, the Sistema Unico



de Beneficiarios, which covered approximately 85.5 percent of the population in 2015.

**Early warning systems and geographic and vulnerability map data:** The geographic data collected from weather stations or satellites through remote sensing are used by early warning systems to support governments in planning and preparing ahead of a shock. Data are collected on a daily basis using weather stations for hydrological and meteorological information that helps identify the areas that are at risk of being affected by shocks and to define triggers to reduce the impact of such extreme events on people. Such data also help ensure higher levels of coordination among disaster risk reduction actors. It is important to ensure the interoperability of such data, secure investments in data-sharing platforms, and define protocols among agencies (DRM, nongovernmental partners, and social protection agencies) as a means to enable the smooth exchange of data and ultimately contribute to more adequate shock responses.

**Registries of disaster-affected households:** Some governments collect data on the impacts on and needs of individuals and households after disaster events through post-disaster household assessments. In some countries in Latin America and the Caribbean, these systems are known as victim registries (*registros de damnificados* in Spanish). Although social protection ministries and agencies play a major role in some post-disaster household assessment processes, the registries of disaster-affected households associated with these instruments are often mapped and run by disaster agencies.

**Payment systems:** Bowen et al. (2020) emphasize the importance of relying on robust payment mechanisms that can channel the funding made available after a shock and deliver it to households. Building on the payment conduits used for safety net programs, the requisite rules and capacity among payment service providers should be established ex-ante. Doing so only after a shock has occurred often results in significant delays in payment disbursement and delivery. Bowen et al. (2020) describe different approaches for delivering payments, including manual systems, electronic transfers to bank accounts, or new technologies, such as mobile phone payments. However, scaling up manual systems translates into higher costs, in line with the size of the beneficiary caseload, and it can prove cumbersome in the aftermath of high-impact disasters, where damage to roads and other key infrastructure can hinder the physical distribution of cash. E-payment systems are emerging as the preferred option to deliver aid because of their speed, accuracy in targeting, and flexibility, also in challenging environments. However, such a transfer modality requires functional payment points that can also be damaged by a shock. Moreover, such a modality presupposes the existence of functioning markets, where goods can be purchased through physical money or electronic transactions. In many cases, the lack of functioning markets or the absence of mobile networks as the result of a high-impact disaster can challenge the effectiveness of such transfer modalities. The unreliability of technology in the aftermath of a shock, combined with issues related to agents and vendors (for example, their financial liquidity or their limited coverage), can result in extra costs among beneficiaries to redeem payment system entitlements.

### 5.3 Common Data Gaps and Challenges

**The first challenge to overcome in countries across South Asia is related to the quality and frequency of surveys that can be used to run risk and vulnerability assessments.** The most commonly obtained data are collected through income and expenditure surveys undertaken by national statistical institutes and fielded differently according to the country. In most countries across the region, cross-sectional surveys are carried out approximately every five years. The government of Bhutan performs them more frequently. Even in countries with a high prevalence of shocks, income and expenditure surveys do not necessarily include shock modules, and this affects the capacity to run appropriate assessments. Moreover, governments tend not to design panel surveys, which may be more adept in assessing risks and vulnerabilities because they allow people to be tracked over time. For example, in Nepal, to study risk and vulnerability after the 2015 earthquake, the Nepali Household Risk and Vulnerability Panel Survey was fielded between 2016 and 2018 to provide the government with empirical evidence on the patterns of exposure to shocks at the household level and on the vulnerability of household welfare to shocks.<sup>43</sup> It covers 6,000 households and 400 communities in nonmetropolitan areas of Nepal.

**For interoperability with other data, such as the data in early warning systems and geographic and vulnerability map data, the access to household survey microdata with small area enumeration codes (enumeration area or geospatial, latitude, or longitude codes) to**

**merge data is not straightforward, but requires in-depth discussion, collaboration, or coordination with the national statistical institute.** For example, Williams and Moreira (2020) highlight that Chile's early warning system center (the Centro Nacional de Alerta Temprana) continuously assesses the country's risk of emergency events by relying on a system that combines data from relevant agencies, such as the National Seismological Center, the Navy Hydrographic and Oceanographic Service, the National Service of Geology and Mining, and technical bodies under the National Civil Protection System. Regional monitoring centers have been instituted in 15 regions in the country, facilitating an updated, integrated, and adequate flow of information, including regular assessments of basic services and infrastructure conditions. In the event of a threat, the system is activated immediately and security procedures are carried out, such as tsunami alerts, evacuation, and so on. The system allows for an emergency declaration that triggers a disaster response—pre-disaster in the case of weather-related events and post-disaster in the case of earthquakes—and post-disaster updates.

**The second challenge in South Asia is the incompleteness, low coverage, or lack of dynamism in integrated social protection delivery system registries—social registries and beneficiary registries—in areas that are likely to be affected by shocks, which affects the speed and scope of shock responses.** In many countries, the coverage of social assistance even among the chronically poor in normal times results in an incomplete registry of the population in need of assistance, given that programs are small or cover only a portion of the vulnerable population. For

<sup>43</sup> The survey was designed to address the following research questions: (a) What significant adverse events (both anticipated and unanticipated) are faced by households during a given year? (b) What strategies do households employ, and what systems of informal support do they rely on (ex-ante and ex-post) to cope with these events? (c) How is short- and medium-term household welfare affected by these events? and (d) What formal government assistance do households receive? Is it sufficient to help them cope?

example, the largest system in Nepal, the social security allowance system, despite its national coverage, only comprises information on about 3 million individuals within the five program categories: seniors citizens ages 70 or more, people ages 60 or more in Karnali Province and in Dalit communities (the lowest stratum caste), helpless widows and single women, persons with disabilities, and people in endangered communities and children in select communities. In Sri Lanka, the Samurdhi system only contains information on Samurdhi program beneficiaries. Afghanistan lacks a comprehensive database. About 85 percent of the population in Pakistan is registered in the national socio-economic registry, and that main challenge lies in ensuring that the data are up-to-date and dynamic and the registry is always open for new entries and integrated with other administrative systems.<sup>44</sup>

**COVID-19 underscored the need to support informal sector workers, small business owners, and those who have lost their jobs as a result of business closures and lockdowns.** However, as these people are not necessarily the poorest or among groups that typically receive government support or attention, many countries struggled to reach these new beneficiaries of the COVID-19 emergency transfers as they were mostly invisible in social or beneficiary registries and in large and well-established administrative systems (Gentilini et al. 2020). Such groups are among the missing middle and reaching them has required request for new assistance applications, while the availability and quality of pre-pandemic data and information systems were crucial in determining the speed and quality of the

services provided (IPC-IG 2021). In Pakistan, where there is the national socio-economic registry, a large system covering over 27 million households across the country, was updated prior to COVID, newly affected households could apply for Covid-19 emergency financial assistance by sending an SMS with relevant national ID information to a designated number. Eligibility was verified through the interoperability of the registry with the National Database and Registration Authority.

**The third challenge is related to post-shock needs assessments for which data collection was not previously planned and budgeted.** This may cause delays and undesirable duplication efforts. In post-shock assessments, the trade-off between a timely versus an accurate shock response must be balanced because of the cost of running surveys and the need to process data rapidly. Ideally, a post-shock needs assessment should focus only on the damage caused by the shock, and pre-shock information should be available from other data and information systems. Carrying out a rapid damage and needs assessment in the aftermath of a shock requires a system that can quickly deploy surveyors to the field. New technologies can be used to benefit from electronic data collection tools and to gain access to old information about applicants as result of emergencies, disasters, and catastrophes. For example, a damage and needs assessment questionnaire can be directly linked to the main data and information system, thereby reducing the number of questions, given that some of the basic individual or household information is prepopulated, such as in the basic emergency factsheet (ficha básica

<sup>44</sup> The dynamism of these registries and administrative data systems are at the core of ASP. Because shocks can push people into poverty or into a need for temporary support, the registries and systems must be updated regularly and be dynamic to accommodate migration and transient (seasonal) workers who may be on or off a registry depending on the season and the occurrence of shocks. However, because shocks cause sudden changes in incomes, the variability may not be captured in the registries or administrative databases. Nonetheless, shocks can disrupt the access to systems even if there is dynamism. Thus, during natural disasters, there are interruptions in power, internet, and transport, and there may be displacement among populations and the destruction of social assistance offices.



de emergencia) in Chile. In those countries in which the governments do not plan to invest in such systems beforehand, challenges related to duplication, delays in response, and weak and slow cross-verification of information will be encountered. Not investing in such systems hinders the deployment of appropriate and coherent responses.

**The fourth challenge is related to identification of the people to be assisted during or after a crisis.** Grosh et al. (2022) show that expanding existing programs to new program beneficiaries can be one of the easiest solutions even if a wider response is required, for example, if the shock affects the entire population in a specific location. The goal is to help the poor avoid resorting to negative coping mechanisms. Piggybacking on an existing system might involve adding new beneficiaries and issuing an emergency top-up payment to people who are already benefiting from social assistance programs. Thus, to address COVID-19 impacts, the government of Brazil established the Emergency Assistance Cash Transfer Program, which piggybacked on the Cadastro Unico data system and the larger cash transfer program of the country, the Auxílio Brasil (the former Bolsa Família) to reach 68 million people quickly in the aftermath of the first lockdowns. The government of Bhutan launched Druk Gyalpo's Relief Kidu, which, across separate three-month phases, provided cash transfer to affected groups. During each cycle, the population had to apply online and have information validated by a data system that relied on a national ID system.

**Given that data systems are evolving and that social registries include an historical list of individuals who have claimed benefits in the past, modifying eligibility criteria to raise the cutoff point of welfare programs or choosing specific vulnerability criteria can be easily implemented.** However, because many of the affected individuals are not necessarily enrolled in registries, the system must be able to support the influx of new applications. Damage assessments can be used as a tool to help enroll new beneficiaries into a registry, while generally contributing to the shock response. Managing new applications with or without post damage assessments is a core function in rapid crisis response. However, such initiatives require a certain amount of pre-shock planning.

## 5.4 Data Protection and Privacy

**ASP systems must rely on good-quality data and information systems, and, as in the case of information collected for social programs, government administration, and even by the private sector (for example, big data sources), significant issues related to data privacy and data protection are encountered.**<sup>45</sup>

Because all social protection systems collect, process, store, use, and disclose the personal data of applicants and program beneficiaries, the data must be protected (Grosh et al. 2022).<sup>46</sup>

<sup>45</sup> Data privacy concerns the proper collection, handling, storage, and use of data to maintain compliance with privacy laws, agreements, and consent. Data protection refers to rules on who may access the data and protecting the data from unauthorized users through encryption, key management, and authentication.

<sup>46</sup> The United Nations High-Level Committee on Management (HLCM 2018) highlights the importance of processing data in a fair and legitimate manner, in consideration of the consent and best interests of the individual who is the data subject, and processed and retained consistently with the purposes that have been specified. In addition, it highlights the importance of keeping data accurate and up-to-date to fulfill the specified purposes and the need to process the data with due regard to confidentiality and secured by appropriate safeguards (organizational, administrative, physical, and technical) to protect the security of personal data.

**Why is this important? There are several reasons, as follows (GIZ 2020):**

- If personal data are not adequately protected, the right to privacy of data subjects may be violated, and individuals may suffer material, physical, or symbolic harm.
- Data protection is essential to create trust among social protection authorities, their staff, and clients. The lack of trust may restrain the access of vulnerable populations to social protection services and benefits, fearing that sharing their personal information will lead to harm, discrimination, stigmatization, surveillance, and other risks.
- For social protection practitioners, compliance with organizational or legal data protection and privacy frameworks is important to avoid penalties.
- Social protection and privacy are both human rights and, therefore, interdependent. This means that one needs the other to be fulfilled. Both are equally important.

**The main concerns involved in data protection and privacy are related to personal data management (any information relating to an identified or identifiable individual), other personally identifiable information (information that permits the identity of an individual to be directly or indirectly inferred), and sensitive data (sexual orientation, membership in an ethnic, minority group, trade union, and so on).<sup>47</sup> Moreover, because social programs deal with socioeconomic data and data that are sourced from multiple government systems (through interoperability and data integration protocols), the social protection sector must ensure that processes for protecting personal data are in place.**

**However, data-sharing platforms and protocols are absent in most countries that do not have robust and integrated systems.** The countries that do have protocols may also face difficulties during a crisis, when significant breaches of standard protocols for the secure collection, transfer, and storage of information, such as the nonencrypted sharing of personal information via email), are often experienced. This is specifically pertinent for those countries that do not adhere to international data transfer and information privacy protocols. In addition, some large registries can create other barriers for data sharing with external agencies, especially as they tend to be quite protective of their data. For instance, in the Philippines, Bowen et al. (2020) show how a new privacy law created barriers for sharing personal data in the national social registry, Listahanan, with external agencies.<sup>48</sup> It is thus important to adhere to international data transfer and information privacy protocols and ensure that policies facilitate rather than obstruct data exchange.

**Two pertinent regional examples of data protection and privacy policies are found in India and Pakistan.** In India, the National Data Sharing and Accessibility Policy, 2012–24 facilitates access to shareable government-owned data and information in human-readable and machine-readable forms through a network covering the country. The policy is carried out proactively and is periodically updatable within the framework of various related policies, acts, and rules of the government, thereby allowing a wider level of accessibility and use of public data and information in national planning and development. In Pakistan, because the national socio-economic registry and main programs are carried out in collaboration with the National Database and

<sup>47</sup> The main concerns in data protection are related to the legislation and institutions that are needed protect the use of personal information against risks, such as exposure of personal data, data and identity theft, discrimination or persecution, exclusion, unjust treatment, and surveillance. Protecting personal data is a critical aspect of the design of systems enabling a relationship of trust (Ohlenburg 2020; Sepúlveda Carmona 2018; United Nations 2019).

<sup>48</sup> Listahanan is the Philippine information management system that identifies who and where the poor are nationwide. See Listahanan (dashboard), National Household Targeting Office, Department of Social Welfare and Development, Quezon City, the Philippines, <https://listahanan.dswd.gov.ph/>.

Registration Authority, data-sharing platforms and protocols can be improved to enhance the communication and synergy between federal- and provincial-level initiatives. The lack of coordination with the Benazir Income Support Programme can lead to duplication in coverage in federal and provincial social protection initiatives. There is thus a need to understand the federal and provincial mandates clearly relative to social protection and, more specifically, during a shock response as a means to avoid duplication and maximize program coverage. This includes identifying roles and responsibilities with respect to the population served by programs, the coordination mechanisms leveraging provincial social protection systems, and regular exchanges of data and information. The data-sharing protocols also need to be established with key social protection providers, especially at the provincial level. The multi-entry, localized, automated system that is currently being developed for on-demand national socio-economic registry data updates should supply data feedback mechanisms to provincial social protection service providers. Establishing such structures for routine service provision will facilitate a more coherent and comprehensive shock response.

## 5.5 Priorities in Data and Investment

**The goal of enhancing the shock responsiveness of normal social protection programs significantly overlaps with the goal of intensifying investments in data that can improve social protection in normal times and during shocks (table 5.1).** A better understanding of the population's needs allows administrators to define packages of services for different population needs and characteristics. Enhanced data and information systems help improve the coverage and dynamism of social protection systems, thus making delivery systems more flexible.

**Grosh et al. (2022) show<sup>2</sup> that shock responsiveness puts a premium on flexible programs and agile delivery systems, but mainly on real-time information.**

*"In particular, greater access to more information and big data underpins much of this," Grosh et al. (2022, 187) point out. "A greater capacity to manage various large administrative databases can lead to better delivery and targeting of programs. How this is done in times of shocks depends on the nature of the shock but helps drive dynamic assessment."*

**Investing in data, especially in the availability and interoperability of data, can help improve the efficiency of ASP systems. Some priority areas for investment have been identified, including digital technologies.** While investing in this area is undoubtedly important, such technologies will not solve all data-related problems, especially the exclusion of certain population groups. For instance, in environments with a high degree of technological digitalization and integration, people who are digitally illiterate or who do not have access to digital systems run the risk of being excluded. Investments in local capacity and human interactions remain important, especially within the framework of shock responses, where shock-affected people do not solely seek economic support, but also a certain degree of comfort and empathy.



**TABLE 5.1** Data priorities and investments

Data	Needs/Functions	Sources
<b>National Identification System (Civil Registration, digital and biometric or voter ID)</b>	Investing in scaling up coverage of these systems allows interoperability of different information system for determining eligibility, cross-checking, profiling and identity verification across different systems. Moreover, it ensures that payments are not paid to the same person.	<ul style="list-style-type: none"> <li>National identification systems.</li> <li>Immigration records for refugees and migrants.<sup>a</sup></li> </ul>
<b>Household risk and vulnerability assessments</b>	Integrating poverty and vulnerability data with disaster risk assessments for a spatial understanding of household vulnerability to shocks	<ul style="list-style-type: none"> <li>Quantitative surveys, such as standard household income and expenditure surveys, panel household surveys (to gather information about household and individual characteristics, exposure to shocks and mitigation measures), and community surveys (to gather information on shocks in communities and to collect market price data)</li> <li>Qualitative surveys obtained through in-depth interviews, focus groups, and case studies (to understand perceptions, observations, and social interactions)</li> <li>Geographic surveys (to gather information about shock exposures and trends in temperature, rainfall, windspeed, and water speed); remote sensing data (to gather information about households and communities)</li> </ul>
<b>Integrated social protection delivery system</b>	Expanding social registry coverage in high-risk areas, enabling more frequent updating and ensuring that registry data are useful in the assessment of household vulnerability to shocks; piggybacking on beneficiary registries to achieve vertical expansion	<ul style="list-style-type: none"> <li>Household- and individual-level data of applicants for social protection programs (to gather information for profiling and determining benefit eligibility)</li> </ul>
<b>Early warning systems, geographic and vulnerability maps<sup>b</sup></b>	Linking to early warning systems to predict needs and promote timely action based on predefined triggers and thresholds for action	<ul style="list-style-type: none"> <li>Geographic data using weather stations to gather climate-related data, such as data on temperature, rainfall, windspeed, and water speed</li> </ul>
<b>Post-shock needs assessment<sup>c</sup></b>	Investing in the capacity to conduct post-shock assessments or linking to assessments in other sectors to ensure an up-to-date understanding of household needs, especially after less predictable, destructive shocks	<ul style="list-style-type: none"> <li>Quantitative surveys such as household surveys (to gather information about household and individual characteristics, exposure to shocks, and mitigation measures); community surveys (to gather information on shocks at the community level and to collect market price data).</li> <li>Qualitative surveys obtained through in-depth interviews, focus groups, and case studies (to understand perceptions, observations, and social interactions)</li> <li>Geographic surveys (to gather information about shock exposure and trends)</li> </ul>
<b>Data sharing platforms and protocols</b>	Facilitating data exchanges data between social protection and relevant line ministries, including DRM, as well as nongovernment partners	Administrative data on households and individuals, such as tax collection (on wages, land, vehicles, businesses), civil registration (registration of birth, marriage, divorce, death, residency, voter registration, military service), social or health insurance contributions, border crossings, kilowatt hours of energy used if power companies are state run, and so on (to gather information on individuals and households)
<b>Payment system</b>	Investing in the national capacity to execute digital payments allows scalability of services provided by increasing benefit levels, coverage. or both pre- and post-shock	Program payment mechanism systems integrated with other data systems, such as social registries and national identification systems

Source: Bowen et al. 2020.

a. For example, systems created by the United Nations High Commissioner for Refugees or other registries created by countries that receive refugees and provide ID cards with ID numbers for refugees.

b. The United Nations Office for Disaster Risk Reduction defines early warning system as “an integrated system of hazard monitoring, forecasting and prediction, disaster risk assessment, communication, and preparedness activities systems and processes that enables individuals, communities, governments, businesses, and others to take timely action to reduce disaster risks in advance of hazardous events.” See Early Warning System, Terminology, United Nations Office for Disaster Risk Reduction, Geneva, <https://www.undrr.org/terminology/early-warning-system>.

c. Post-shock data collection can play a key role in reflecting socioeconomic and damage conditions among potential beneficiaries, especially after fast-onset, less-predictable, and more destructive disasters. Post-disaster household assessments are often employed to collect information on the damage to and needs of affected households after natural disasters and conflicts. The social protection information system is a valuable resource that can help inform such assessments. It also can be leveraged by these assessments to update household information (Bowen et al. 2020).

## 5.6 Country ASP Data Experiences

**Data requirements for ASP typically involve a wide range of stakeholders.** The relevant data requirements encompass accessing multiple administrative data and information systems, which requires the definition of a multisectoral strategy and consensus among stakeholders on their respective roles and responsibilities. The main information comes from a combination of survey data, functional systems (for example, social registries, beneficiary registries, and early warning systems), and foundational systems (for example, civil registration and national ID systems). The quality data and systems therefore determine the typology and maturity of the ASP data and information systems (Bowen et al. 2020).

**Maturity in a system implies a certain level of cost-effectiveness given that a mature system translates into improved targeting accuracy in a shock response, a reduced duplication of efforts among stakeholders, and potentially lower costs, such as in savings on post-shock data collection or on management costs as new initiatives are piggybacked onto existing Inq programs, and so on.** For example, O'Brien, Holmes, and Scott (2018) show that, in Mali, the investment by development partners in the establishment of a data and information system for the Jigisemejiri Program in Mali, resulted in a reduction in data collection costs, while improving coordination across governmental and nongovernmental programs in responding to food security shocks caused by drought.<sup>49</sup> Williams and Gonzalez (2020) present a good summary of experiences in the Latin America and Caribbean region. In Chile, the government links

the national social household registry (Registro Social de Hogares) with the basic emergency be factsheet to capture household socioeconomics and disaster damage data to support decision-making on assistance to affected populations in the aftermath of a shock, thereby reducing data collection efforts and increasing the speed of the response. In the Dominican Republic, the vulnerability to climate hazards index produces better risk identification estimates on the probability that a household is vulnerable to hurricanes, storms, and flooding. It accomplishes this by combining hazard risk data with data in the social registry on housing, geographic location, and socioeconomic characteristics. The results enable the government to plan more accurate responses and mitigation measures.

**As information systems become more relevant for ASP, mechanisms will have to evolve to allow for greater data quality and improved verification and validation processes.** The importance of data availability and interoperability imply the need for longer-term investments and strategies, including securing funding, which can often be challenging.

**Best Global practices in data and information systems, including in South Asia, vary from country to country according to the phases of the delivery chain.** This section highlights some of the best practices on assessing the needs of a population before and after a shock. Some outreach initiatives that ensure that affected populations are identified and are aware of the available services, benefits, and processes are outlined below. These initiatives imply the existence of access to information on individuals and households to develop communication campaigns that include public messaging through electronic and print media, local information

<sup>49</sup> See Jigisemejiri Program (Programme de filets sociaux au Mali) (dashboard), National Steering Committee and Technical Unit for Social Net Management, Bamako, Mali, [https://jigisemejiri.org/en/home\\_english/#](https://jigisemejiri.org/en/home_english/#).

sessions through community structures, word of mouth, visual information campaigns, staff outreach, and digital communication (for example, social media).

**Because shocks may disrupt communication channels and undermine outreach activities, communication strategies must be flexible to accommodate for change, such as resorting to word-of-mouth or staff outreach campaigns in cases where digital communication is interrupted.** Print or media communication materials should be offered in the language of the population of interest.<sup>50</sup> Using current outreach structures, the information to be provided to affected populations must be comprehensive to inform potential beneficiaries of the objectives of the program, who may apply, how to apply, what kind of assistance may be expected and when, and so on (Smith 2018).

- **In Brazil**, after the mudslide in Brumadinho, the beneficiaries of Bolsa Família and the families registered in the Cadastro Unico were informed by radio, print media, and social workers that they would receive an emergency cash transfer as an automated deposit in their accounts.
- **In Bhutan**, in response to the COVID-19 pandemic, the government launched Druk Gyalpo's Relief Kidu, which required that affected populations enroll in an automated platform.<sup>51</sup> The program administrators used all available media to reach the affected population, encouraging them to enroll. The quality of the information was guaranteed by the government's ability to verify the information provided and to combine various data systems. This process was aided by the uniqueness of the ID keycodes.

- **In Turkey**, the Emergency Social Safety Net Program included Syrian refugees by adopting an innovative outreach process aimed at refugees who might be eligible for program support. This included a tailored strategy encompassing the distribution of communication materials in Arabic, Farsi, Pashto, Turkish, and English, as well as a Facebook page (WFP 2017). Capitalizing on social media as part of the outreach strategy proved effective given that the targeted Syrian refugee population was highly technologically literate and was already using social media to maintain contact with friends and family.

**If countries have large or interoperable registries (for example, Chile, Dominican Republic, Maldives, Pakistan) or a stable and reliable system, regardless of size (for example, Brazil, the Republic of Congo, Djibouti, Georgia, Mali, Turkey), the system can be quickly deployed to collect extra information after a shock and to assess the eligibility of shock-affected households for social protection programs.** Offering the option of self-targeting to potential beneficiaries or opting for the collection of household data through field surveys are both viable possibilities. Depending on the size of registries and the degree of interoperability of systems, governments can determine their respective post-shock approaches.

- **In Chile**, the Ministry of Social Development uses the basic emergency factsheet, which is linked to the Chilean national household social registry and is used to conduct post damage assessments. This interoperability reduces data collection substantially because most of the basic information is prepopulated in the basic emergency factsheet information system.<sup>52</sup>

<sup>50</sup> For example, in many Sub-Saharan African countries, materials are produced in English or French and in other locally spoken languages, while, in Turkey, materials are presented in Arabic and other languages spoken by the refugee population.

<sup>51</sup> See DGRK (Druk Gyalpo's Relief Kidu) (dashboard), Ministry of Health, Thimphu, Bhutan, <https://royalkidu.bt/>.

<sup>52</sup> As a metric of efficiency, data collection in the response to the Coquimbo Earthquake in 2015 took 27 days using the new basic emergency factsheet, in contrast with the response to the Tarapacá Earthquake in 2014, which required 115 days (Beazley, Solórzano, and Barca 2019).



- **In Jamaica**, the household disaster impact and needs assessment enables quick decision-making because of its integration among the multiple agencies engaged in disaster response in the country.
- **In Mali**, the combination of data from humanitarian agents and the Jigisemejiri Program allowed the quick deployment of cash support in drought-affected areas during the 2018/19 drought season in coordination with the Commissariat à la Sécurité Alimentaire.
- **In Turkey**, the Integrated Social Assistance System allowed quick enrollment of Syrian refugees, while providing IDs. Under the social assistance regulations for refugees, applicants had to be formally registered with the Presidency of Migration Management and issued with temporary protection IDs. The Integrated Social Assistance System and the Presidency of Migration Management refugee registry have been integrated. Social assistance foundation staff can thus rely on the system to screen automatically for proof of registration.
- **In Pakistan**, the national socio-economic registry allowed the newly shock-affected population the possibility of registering to benefit from the emergency response to the Covid-19 pandemic through their mobile phones by sending a SMS along with their computerized national ID card information to a designated number to verify their eligibility thanks to the registry's interoperability with the National Database and Registration Authority.
- **In Maldives**, the National Social Protection Agency,

which houses a digitalized beneficiary registry system, the Social Protection Information System, provided access to the Emergency Income Support Project to workers who had suffered a loss of income or jobs because of the COVID-19 pandemic.

- **In Bhutan**, Druk Gyalpo's Relief Kidu quickly registered people who, because of the pandemic, had lost their jobs or whose incomes had decreased and people working overseas who had to return to Bhutan because of the pandemic.<sup>53</sup> Individual information was cross-verified with other systems through the use of the citizenship ID number.

**Social registries in South Asia are still being developed to become fully functional information systems.** Except Afghanistan and Bhutan, all countries have some type of registry that may be used to support shock responsiveness. However, all social registries in the region are still not fully interoperable with other data and information systems, such as early warning systems, and do not yet have sufficient dynamism to address shocks.

**Expanding social registry coverage within high-risk areas, enabling more frequent updating, and ensuring that the data contained in registries are useful in carrying out assessments of household vulnerability to shocks, which complement the traditional poverty and vulnerability assessments (in classic household surveys), are objectives.** The country that benefits from the most advanced and well-established registry is Pakistan, where the registry is integrated with the National Identification System and the National Database and Registration Authority. Maldives has a small but sound system under the National Social Protection

<sup>53</sup> As of April 2021, about 55,380 individuals, including about 9,614 children, were beneficiaries of the Druk Gyalpo's Relief Kidu monthly income support. Under the program's interest payment support, eligible loan borrowers had also received total interest waivers for three months, followed by a 50 percent interest waiver. The two support programs were extended until June 2022.

Agency, which is integrated with the larger national identification system, which could be developed into a fully integrated social registry. In recent years, Bangladesh has been developing a large, albeit static registry, which is not well integrated and interoperable with other systems and which cannot yet support program implementation. Nepal and Sri Lanka have large, program-specific beneficiary registries, but they are seeking to build comprehensive social registries. Afghanistan is struggling because of its fragmented programs and data systems, which, combined with the fragile environment, hinder the establishment of a robust system. Bhutan and India do not have integrated registries, but have advanced national identification systems, which allow for swift back-office cross-verifications across systems and rapid shock responses

**The definition of target populations is a result of eligibility criteria.** To inform the determination of eligibility for benefits and the composition of benefits and services packages, a deep dive into data systems allows countries to adjust criteria depending on the nature of a shock. Some programs can be offered to affected populations, but they would be based on pre-shock income or consumption, poverty status, or social vulnerability (such as by age, sex, or disability), geographical location, or a combination of such criteria. The post-disaster impacts and needs of affected households are likely to inform eligibility determination. But other features of data systems must be accounted for. In some cases, people preidentified in a registry can be deemed eligible by simply changing the cutoff point or eligibility category, thereby making programs quickly available for affected populations. Depending on the nature of the shock, post-shock damage to a household can also be used as a proxy for eligibility.

- **In Brazil**, emergency programs typically increase cutoff points, and the population registered within

the Cadastro Unico data system can become eligible for temporary assistance.

- **In Kenya**, the Hunger Safety Net Program was launched to provide a predictable alternative response to seasonal shocks among chronically vulnerable households. Since 2013, the program has been able to expand assistance temporarily during droughts to include additional households in drought-affected areas.
- **In Turkey**, the government has developed separate criteria for Syrian refugees because some refugees have different housing arrangements, and the Emergency Social Safety Net Program criteria could not be directly used.
- **In Pakistan**, because the national socio-economic registry is linked to the National Database and Registration Authority, potential beneficiaries could request to participate in the emergency program through their cell phones by sending an SMS with their computerized national ID card information to a designated number to verify their eligibility. This was followed by a verification of the number and, subsequently, their eligibility against the emergency program's proxy means test threshold. For new applicants not in the national socio-economic registry, the National Database and Registration Authority ran a back-office cross-verification algorithm using an affluence test approach (utilizing exclusion filters related to foreign travel and expenditure on mobile phone usage, and so on). After passing through all parametric checks, successfully enrolled beneficiaries received an SMS message informing them of nearby payment points where they could collect benefits or where to contact district administrations for further details.

**In most of the countries, links between early warning systems and large registries have not yet been built, and there is still fragmentation, or early warning systems are not yet fully functional or integrated into social protection systems.** The main challenges are associated with fragmentation, lack of interoperability because the various actors use inconsistent or unharmonized tools and methods of data collection, lack of robust information-sharing mechanisms, limited coverage, insufficiently trained human resources, limited engagement of community members, incomplete ownership by local governments, low investment, and low effort in communicating complex forecasting through simplified bulletins. Some of the positive experiences are as follows:

- **In the Philippines,** because of the country's vulnerability to shocks, the Disaster Response Management Bureau uses an early warning system, in coordination with the Listahanan social registry, to estimate the number of households that may be affected by a disaster (Bowen 2015).
- **In Uganda,** the use of satellite data and a normalized difference vegetation index anomaly provides the basis for triggering earlier response to drought.
- **In South Asia,** there is not yet an integrated early warning system for social protection or good examples of such integration. However, Bangladesh, Maldives, and Sri Lanka have ambitious plans for early warning systems and have made progress in the social protection dialogue. In other South Asian countries, there is room for improvement, specifically with respect to creating interoperability with the social protection sector. And most importantly to create links between social protection and other systems to scale up social protection in times of shock to support shock mitigation measures.

Given the well-established nature of systems in Maldives and Sri Lanka and given Bangladesh's investments around social protection, a few details on the three countries are provided as follows:

- **In Maldives,** the National Disaster Management Center has an early warning system that covers several shocks, including earthquakes, tsunamis, and floods. The Maldives Meteorological Service is responsible for the seismological and meteorological services, and 20 automated weather stations and 3 tide gauges installed across the country that provide real-time data to the service. However, the National Tsunami Warning Center established under the service to monitor earthquake activity in the Indian Ocean has some deficiencies, and there is a lack of skilled personnel to work in the field of meteorology. A community-based disaster risk reduction framework has helped islands strengthen their resilience against natural disasters. However, the application of community-based disaster risk reduction approaches at the local level is associated with challenges, such as a lack of full participation by local communities in related community-based activities, a lack of budget, and a lack of support by island councils and local governments for the integration of community-based disaster risk reduction values in development plans.
- **In Sri Lanka,** the early warning system is well established to deal with the most frequent shock, seasonal floods. For other shocks, systems exist, but are weak or not fully functional. The national early warning system is capable of being used sometimes to warn of one or more hazards. It has adequate monitoring and warning capability for the hazards and shocks that are most relevant to the country, though there are issues with accuracy and with the limited ability to monitor other, less relevant or



more rare shocks. The Disaster Management Center has established guidelines to help people deal with disaster, but the center does not have a dedicated communication network or plan to disseminate early disaster warning messages. Nonetheless, the national emergency operation plan provides for coordination among line agencies to issue early disaster warnings effectively through the Multi-Hazard Early Warning Dissemination System. In this system, the dissemination of warnings occurs at four layers, namely, national, district, divisional, and Grama Niladari divisions (village officer divisions). If the Disaster Management Center is alerted of an impending disaster, the technical agency responsible for that type of hazard determines the scale of the disaster, and the decision is conveyed to the Ministry of Disaster Management and the Emergency Operation Center of the Disaster Management Center.

- **In Bangladesh**, a wide range of actors are engaged in data collection. Yet, there are no agreed standards for data collection, processing, analysis, and dissemination, resulting in issues of data availability, accessibility, quality, and interoperability. Disaster information management is undermined by irregular data updates, lack of common operational datasets and fundamental operational datasets that are translatable and sharable across different actors, inconsistent or unharmonized tools and methods of data collection, and lack of robust information-sharing mechanisms. A few ongoing initiatives aim to tackle these complex challenges. The 2019 standing orders on disaster call for the formulation and implementation of the guidelines for disaster information and communication management. They also call for strengthening the national disaster response coordination center to exchange disaster-related information and coordinate disaster-related

activities. The United Nations Humanitarian Cluster System has recently activated the Information Management Working Group, which will be co-led by the Bangladesh Bureau of Statistics and the United Nations Resident Coordinator's Office to strengthen the quality of information for evidence-based and effective humanitarian, disaster relief and response, and development action. Under the National Resilience Program funded by the Foreign, Commonwealth, and Development Office of the United Kingdom and the Swedish International Development Cooperation Agency, a digital risk information platform is being built to share information on housing and climatic hazard data and to develop tools to estimate disaster impacts, which can then be integrated into planning public investments and social protection mitigation and response programs.

**Utilizing digital solutions can help accelerate the deployment of shock responses.** Gelb and Mukherjee (2020) show that multimedia campaigns encouraging requests for support can mobilize people and generate awareness on aftershocks. The governments of Brazil, the Republic of Congo, Namibia, Pakistan, South Africa, and Togo have encouraged digital requests for emergency relief assistance to be lodged through mobile phones, WhatsApp, or websites. Large volumes of requests for assistance were received within a short time, often overwhelming the platforms, which are often the same ones used for digital payments. New emergency support programs aimed at assisting the missing middle have been launched by authorities in Brazil, the Republic of Congo, Pakistan, South Africa, Togo, and West Bank and Gaza. These programs have sometimes been able to rely on integrated social registries that have been expanded beyond people already receiving benefits or that have piggybacked on systems used to cross-verify information. They have thus been able to avoid fraud and

targeting errors. This is the case of Pakistan's **Benazir Income Support Programme** and an emergency aid program in Brazil. In South Africa, the government was not able to draw on such information and had to generate new beneficiary lists from scratch, but managed to run cross-verifications for uniqueness, tax, formal employment status, and participation in social benefit programs.

**Cross-verification is only possible because of the wide coverage of national ID systems, which is key to supporting interoperability.** The importance of a robust national ID system derives from its usefulness as a tool of interoperability across various information systems in determining eligibility, cross-checking, profiling, and identity verification. Such a system ensures that payments are not disbursed repeatedly to the same individual or household. The COVID-19 response experience in South Asia has underscored the importance of benefiting from modern national ID systems with large coverage, such as in Bhutan, India, Maldives, Pakistan, and Sri Lanka. While Nepal and Bangladesh are intensifying investments in this area, Afghanistan is lagging. Two experiences worth highlighting are Bhutan and India, which have not yet developed a broader social registry or an integrated beneficiary registry, but which can capitalize on their robust foundational national ID systems to create back-office interfaces to mitigate the impacts of the pandemic.

- **In Bhutan**, even for covariate shocks such as floods, affected individuals can enroll in the Kidu emergency program using the national ID system to gain access to rations, assorted vegetables, liquefied petroleum gas, other necessary items, and temporary shelter and cash support in case of crop loss. This hands-on approach is possible because of the small size of the country. It would be problematic on a large scale because of the ad hoc, unsystematic planning approach.

- **In India**, the Aadhaar system provides a unique ID for all the over one billion residents of the country. It is used as the main authentication service for most of the many programs and registries available at the state and national levels. In response to COVID-19, the government launched the Pradhan Mantri Garib Kalyan Yojana. It used large beneficiary registries, which are not regularly interoperable, such as the ones in the public distribution system, and the Aadhaar digital ID network to provide cash transfers to beneficiaries identified through the five largest cash transfer programs from the treasury.

Robust payment mechanisms are critical to enabling the disbursement of these risk financing instruments to households. Payment mechanisms should be established ex-ante. Establishing them after a shock may cause severe delays in disbursement and delivery (Bowen et al. 2020). Once established, a good payment system can provide a more rapid and much more efficient mechanism to disburse cash in both regular and emergency programs.

- **In Kenya**, the Hunger Safety Net Program is one of the best examples of establishing a payment mechanism well ahead of a disaster that allows the registered population access to program benefits in their bank accounts regardless of whether they are current beneficiaries of regular programs or beneficiaries of programs aimed at shock response. This approach increased the coverage of households with bank accounts in the four poorest counties from close to zero to over 90 percent.
- **In Ecuador**, the robust payment method of the social protection system allowed a timely response to the 2016 earthquake.
- **In South Asia**, payment mechanisms are relatively modernized in Bhutan, India, Maldives, and



Pakistan. The systems in Bangladesh and Nepal are in the process of being modernized, despite a number of challenges. The payment systems in Afghanistan and Sri Lanka are still too vulnerable to fraud and inefficient from an ASP standpoint. The transition to electronic payments increases efficiency and monitoring, as well as the speed of shock responses.

- **In Bhutan and Maldives**, all payments can be made directly to beneficiary bank accounts from key banks, such as the Bank of Bhutan, the Bhutan National Bank, and the Bank of Maldives. Beneficiaries can subsequently withdraw the money or use it via digital payment platforms as and when required. In Bhutan, for beneficiaries who do not have access to banking facilities or do not have bank accounts, payments are done in cash, while, in Maldives, a boat-based mobile ATM visits islands regularly to enable beneficiaries to withdraw funds.
- **In Pakistan**, electronic payments were possible after the establishment of limited mandate accounts and the provision of debit cards to beneficiaries, through which they could withdraw transfers from ATMs or from a franchise or retail agent of a partner bank through a point of sale machine. Under the **Benazir Income Support Programme**, a biometric verification system allows beneficiaries to collect instalments by simply presenting computerized national ID cards at a payment collection point. In recent experiences with emergency situations, it has been observed that the payment system can be easily scaled up by leveraging better digital infrastructure. Because most of the payments are made digitally through limited mandate accounts, the payment not only reaches beneficiaries quickly, but the accounts are also easy to open.
- **In India**, the emergency program leveraged the country's electronic payments platforms, such as the Aadhaar payment bridge and the Aadhaar-enabled payment system, to reinforce the social assistance provided in the form of cash transfers to the vulnerable and poor. However, the government now needs to leverage its successful and robust digital payment system that has been widely accepted.



## 5.7 Conclusions and Pathways

**Good data are at the core of the ASP agenda. In trying to protect the population from the consequences of shocks, prior knowledge and strategy, combined with speed of assistance, are important.** This requires investing in stronger systems to respond better to population needs, risk, and vulnerability to shocks. Data analytics helps define programs and policies that can mitigate shocks ex-ante and support the deployment of quick responses to affected populations in the aftermath of a shock, thereby reducing the burden on affected households and avoid the adoption of depletive coping mechanisms. Given that providing assistance is meant to prevent the adoption of negative coping tactics, it must be timely, as the negative impacts of such tactics are difficult to reverse, in some cases compromising the welfare of individuals and households permanently.

**Data are essential to monitoring, managing, and delivering social protection benefits and services to poor and vulnerable populations and in better understanding the risks that could affect the population so that better policies and programs can be designed to support resilience and adaptive capacity.** Data that contain information on persons, data on socioeconomic and sociodemographic characteristics, and data on other aspects of vulnerability, such as disability, sex, employment status, and so on help policy makers in planning social programs to build the resilience of the most vulnerable.

**To develop the ASP data and information system, a multisectoral approach to the collection, sharing, and analysis of data is needed.** South Asia is at beginning of the journey to create such a system. More investments are needed to improve data and information systems by focusing on the harmonization of data collection,

interoperability of systems, data availability, and the production of data-driven programs and policies.

**All five options of ASP—design tweaks, vertical expansion, horizontal expansion, piggybacking, and alignment—rely on data elements, such as national ID systems, social registries, beneficiary registries, big data, vulnerability maps, payment systems, and so on.** Therefore, as data are developed, policy makers and governments can translate expected needs into budget planning, while ensuring that contingency funds are available if the agreed targets and triggers are met and activated.

**Each government can examine their own context to decide on the best pathway to achieve main objectives.** The main points to consider while building the ASP system are as follows:

- Use social registry data for ex-ante shock response planning and impact mitigation.
  - Invest in interoperable social protection systems across government.
- Establish an ASP policy framework. Because ASP is multidimensional, many actors are involved and must be sure about their roles and responsibilities. Hence, it is important to establish a social protection policy framework that will ensure that core actors are identified with well-defined roles and responsibilities to improve coordination and harmonization of policies to build household resilience and more rapid shock responsiveness. Among different actors, the coordination of social protection and DRM and climate change units are essential to strengthening data for ASP. This includes the following:

- Establish robust institutional links between DRM and social protection to ensure that DRM regulations enable the design and implementation of special programs focused on post-disaster assistance.
- Develop adaptive financing mechanisms, including access to contingency budgeting, to ensure timely responses, enable the use of social protection systems (including social registry and payment systems), and deliver relief to individuals and households affected by shocks.
- Development of a broader data system strategy. An ASP data system relies on investing in data systems that contain information on the population pre- and post-shock, information that can uniquely identify an individual or a household, information on the likelihood and frequency of shocks and to improve data quality and systems interoperability to deliver social assistance and labor market programs more efficiently. This system helps identify the type of vulnerability and expected needs of people in case of shock, to better plan shock responses ex-ante, while promoting investments in household survey data by reducing large intervals and integrating poverty and vulnerability data with disaster risk assessments. This includes the following:
  - Invest in interoperable social protection systems encompassing interoperable and dynamic social registries and interoperable beneficiary registries.
  - Improved social registry registration processes and tools may need to be adapted to collect new data on disaster and vulnerability.
  - Define rules for horizontal and vertical expansion and establishing mechanisms to trigger scale-up, for example by creating links to early warning systems.
  - Develop post-disaster assessment tools in line with interoperable social protection systems.
- Boost social registries and national identification systems. The development of comprehensive social registries and strengthening ID systems enable government to reach the poor and vulnerable quickly, while the national ID system allows for rapid registration post-shock and for cross-verification and deduplication of information.
  - Keep social registry data dynamic and regularly updated and provide a mechanism to update the data again for shock-affected households.
  - Develop dynamic intake processes so that all who are affected can apply promptly after the shock.
  - Develop routine or ongoing recertification and exit processes to keep up with the dynamics of changes in household welfare.
- Prepare in advance for anticipated disasters and crises. Due to the frequency of shocks, it is important to prepare in advance for major crises, with triggers and emergency rules of operation laid out and supported by data analysis, such as poverty and vulnerability assessments based on surveys and early warning systems.
  - Ensure the uniqueness of individual and household numbers linked to national ID systems to avoid unintended duplication of benefits if different agencies run programs for the affected populations.
  - Establish collaborations and partnerships with statistical offices and academic poverty and vulnerability research entities to increase access to poverty and vulnerability assessments on a regular basis.

- Improve ex-ante and ex-post outreach and communication mechanisms for delivering key messaging to mitigate the impacts of shocks
- Add provisions in guidelines on social protection systems to allow for the temporary scale-up of programs to complement humanitarian responses based on interoperable social protection systems.
- Improve payment mechanisms. To prevent cash-based payments and to ensure that the banking system is not overburdened, a payment strategy should be conceived in advance. Shock response payments, which are temporary, can bypass the banking system through prepaid debit or credit cards and electronic vouchers. Payment systems should be prepared for disasters in terms of backup connectivity, budgeting, and so on.





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**The goal of enhancing the shock responsiveness of normal social protection programs significantly overlaps with the goal of intensifying investments in data that can improve social protection in normal times and during shocks.**



# ■ CONCLUSION



**South Asia's increasing exposure to climate and economic shocks threatens to set back its tremendous gains in poverty reduction and human development.**

The region is one of the world's most exposed to climate change, is home to half the world's remaining extreme poor, and depends on global stability and growth for economic success.

In light of the vulnerabilities, governments urgently need to reappraise social protection systems and prepare programs ahead of time to be able to assist citizens to cope in the event of negative shocks. This volume illustrates how adaptive social protection (ASP) systems can play this role, enabling households to prepare, cope, and adapt to a changing world, fostering resilience and improved socioeconomic well-being.

## 6.1 Key Elements of an ASP System

Four key elements compose an ASP system and serve as a framework for action to advance the ASP agenda in the region:

- **INSTITUTIONS:** The ensemble of existing policies, actors, and programs related to disaster risk management (DRM), climate change adaptation, and social protection systems. A thorough understanding of such elements helps streamline coordination through operational partnerships to be leveraged in times of shock.
- **FINANCING:** The agreed financing mobilization instruments and mechanisms in a specific context and their links with existing social protection systems. Such links are essential for the timely deployment of assistance in the event of a covariate shock.
- **PROGRAMS:** The type and duration of assistance to be provided based on the nature of the shock and the target groups to be assisted in shock responses. A good understanding of the required type of assistance can facilitate the decision as to which program or combination of programs are required to channel the shock response.
- **DATA AND INFORMATION SYSTEMS:** The ready availability of quality household-level data and robust delivery systems to be capitalized on in the event of a shock to deploy empirical, precise, and time-bound shock responses. High-quality data on shock-affected and shock-vulnerable households can allow for an anticipation of the impacts of potential future shocks, while modernized delivery systems can facilitate the deployment of rapid responses.

The preceding chapters of this volume highlight a number of key takeaways for the design and implementation of ASP systems.

**ASP presents an opportunity to reframe social protection in an innovative and more inclusive manner.**

In a world that is confronted with increasing levels of risk, it is important to recognize that all households might require support at some point. This calls for an approach to make safety nets more adaptive and able to cover anyone who needs assistance. Doing so is an opportunity to broaden the constituency of social protection programs (by widening their scope from poorly focused programs to programs protecting all people), to formalize institutional links with DRM functions, to improve financing mechanisms, and to strengthen delivery systems. The COVID-19 pandemic has underscored the importance and potential of social protection programs, which have greatly mitigated the economic impacts of the pandemic worldwide. Capitalizing on such a realization is the stepping-stone to further advance the ASP agenda in South Asia.

**Prepositioning social assistance programs and financing can increase the rapidity and cost-effectiveness of shock responses.**

Being prepared to respond rapidly to shocks is smart economics, given that it can protect human capital and generate a swifter economic recovery, as well as help reduce administrative costs for the government and facilitate access to more advantageous financing terms (for example, through reinsurance). Moreover, the ready availability of quality data can allow for more accurate and empirical targeting methodologies for shock responses. Being prepared ahead of time does not preclude the need for an assessment of a shock's impact and the suitable response as the shock occurs, but it enables governments to respond more quickly



and efficiently, which reflects well on the government in the eyes of citizens.

**Robust ASP systems can be considered responsive by design.** To transition from disaster relief efforts carried out in an ad hoc manner to systems that are inherently responsive, there is a need to explore how to make social protection systems more dynamic in their scaled-up and scaled-down profiles. Such a consideration does not necessarily imply anticipating and preparing for all specific events that might occur in a particular context, but, rather, creating a flexible and dynamic framework to respond effectively to shocks. It also means designing new social protection programs to be inherently scalable from the outset in terms of rules and administrative systems and to interlink with other government programs.

**ASP plays an important role throughout the shock cycle.** It does not solely refer to the deployment of disaster relief and response efforts. Social protection has a role as a means to enhance preparedness, promote resilience-building, and stimulate and support recovery and reintegration. An ASP system has the adequate institutional, financial, and programmatic configuration to play a role in protecting human capital throughout the entire shock cycle.

**ASP programs should constantly evolve through fine-tuning approaches.** Each shock response is a learning opportunity for governments to make the social protection system more adaptive based on a frank evaluation of the successes and shortcomings of the response. This implies developing a robust monitoring and evaluation system and ensuring that planners across government periodically revisit the relevant policies and institutional arrangements with the objective of progressively moving toward a more adaptive and inclusive social protection system.

## 6.2 Policy Directions and the Way Forward in South Asia

**While all South Asian countries have social protection (or social protection-affiliated) programs, the policy and institutional frameworks in which these are embedded all fall short of being adaptive.** While all eight countries in the region have achieved significant progress over the past decade in strengthening certain elements of their social protection systems, the assessment presented in this report indicates that most countries in the region are at the nascent or emerging stages of ASP system development.

**South Asia faces specific challenges in moving toward an ASP system.** First, unlike other regions of the world, antipoverty programs in South Asia have a long history, often more than 50 years, and are linked intrinsically to the bureaucratic system of governments that, in most cases, derive from the British colonial system. Social contracts in South Asia mainly derive from a patron-client system in which handouts from the state are provided as a reward for political support. This makes them highly sensitive and difficult to reform without upsetting political interests. Programs are often introduced or altered in the run-up to elections, and this reform often comes in a piecemeal fashion rather than as part of a broader reassessment of the social protection system. Social protection programs are therefore widespread and broadly accepted as a necessary function of the state, but are frequently fragmented and overlapping.

**Second, social protection is widely viewed as charity for the poor, rather than as an element of a redistributive social contract.** Many countries therefore retain a predominantly categorical approach to social protection, with benefits paid only to a

minority who cannot work. Fiscal constraints are generally severe as well, and South Asia has one of the lowest ratios of taxes to gross domestic product (GDP) in the world. This limits the base upon which a scalable system can be built.

**Because of these challenges, building an ASP system in South Asia requires a different approach relative to elsewhere.** Attention needs to be paid in many countries to establishing a broad-based safety net that can be scaled. To build such a program, one needs to obtain political support (that is, make the case that such a program is not additional charity or discouraging people from working) and find financial resources. One approach—adopted in Maldives, for example—involves developing employment-based social insurance programs relying on contributory financing, which can be introduced even in a constrained fiscal environment and could in theory be scalable. In addition, social protection programs often need to be depoliticized to ensure that temporary scale-ups can be reversed. Otherwise, the fiscal obligations of scaling up can become unmanageable. This often leads to long-term underfunding of program benefits, hurting the chronic poor. Finally, attention needs to be paid to strengthening employment programs, which are broadly weak in the region. Improving income-earning prospects is an essential part of getting people back on their feet after a shock.

**There are various areas where incremental improvements can be made, even in the absence of a political window for more substantive reform.** These incremental changes can be achieved through technical assistance and capacity building. They therefore present opportunities for policy makers and development partners to get started and improve the situation even if broader reform is not feasible. Some of the key areas are summarized in the matrix in table 6.1. These are not country-specific, but general guidance that applies to most countries in the region. Some of these steps may need to be adapted to the specific country context.



**TABLE 6.1** ASP Policy Reform Priorities

Key ASP Element	Areas for Improvement and Investment
<b>Institutions</b>	<ul style="list-style-type: none"> <li>• Social protection must be a central part of national disaster management legislation. The specific delivery systems and programs to be used to provide post-shock assistance to households should be incorporated explicitly into national disaster plans.</li> <li>• Social protection delivery systems need to be fully integrated with disaster management systems and procedures at an operational level, to enable a faster diagnostic of shock-affected households, their socioeconomic profiles, and to facilitate faster delivery of assistance.</li> <li>• Periodic ‘simulated shock response’ exercises should be undertaken to assess the joint capacity of the ASP and DRM systems and commit to addressing weaknesses found through these simulations.</li> <li>• Invest in human, material, and outsourcing capacity to have the capacity to carry out a shock response even under difficult conditions.</li> <li>• Promote vertical coordination to facilitate decentralization of shock responses between central, mid-level, and local units of government administration.</li> <li>• Clearly define the roles and responsibilities of nongovernmental and humanitarian actors relative to shock response, and foster collaboration with government programs to improve the effectiveness of the response.</li> </ul>
<b>Financing</b>	<ul style="list-style-type: none"> <li>• Invest in developing crisis and disaster risk financing strategies that clearly underpin the role of ASP systems, and which enable the private sector to play a role in risk transfer provision relative to implicit contingent liabilities.</li> <li>• Prepare annual contingency budgets to finance asset damage compensation and immediate relief costs (like food, temporary shelter and basic needs for shock-affected households), with supplementary financing through reinsurance arrangements as required.</li> <li>• Add a contingency line into social protection program budgets to cover the cost of predictable temporary expansion of coverage (for example, based on the expected number of households hit by recurrent shocks like floods each year).</li> <li>• Continue complementing existing ex-post financial instruments with ex-ante instruments as a means to reduce delays in disbursing funds for shock responses.</li> <li>• Strengthen national payments systems to facilitate faster transfer of resources to affected households. This includes both the regular banking system (government to person transfers) as well as transfer of resources vertically within government (government to government).</li> </ul>
<b>Programs</b>	<ul style="list-style-type: none"> <li>• Build strong regular social protection programs and systems during normal times to create strong foundations for shock response.</li> <li>• Develop adaptive toolboxes with multiple tools to be deployed for different groups and crises.</li> <li>• Make sure all core social protection programs are responsive by design by putting in place mechanisms for shock response before shocks actually occur.</li> <li>• Carefully design responses to shocks to reach the right beneficiaries with simple and harmonized support</li> <li>• Ensure shock response does not undermine the regular social protection system</li> </ul>
<b>Data and Information Systems</b>	<ul style="list-style-type: none"> <li>• Establishment of an ASP policy framework that considers that multisectoral nature of ASP improve coordination and harmonization of policies to build households resilience and for more rapid shock responsiveness. Among different actors, the coordination of social protection and both DRM and climate change units are essential to strengthen data for ASP.</li> <li>• Development of a broader data system strategy, which includes development of an interoperable social protection systems across government to more efficient deliver social assistance and labor market programs.</li> <li>• Boost social registries and national identification systems to enable government to mitigate impact of shocks while promoting rapid registration and cross-verification of information about shock-affected households.</li> <li>• Prepare in advance for expectable disasters and crises using available data (household surveys, social registries, national identification system, early warning systems, and so on) allows for ex-ante shock response planning and impact mitigation.</li> <li>• Improve payment mechanisms that should be prepared for disasters in terms of backup connectivity, budgeting, and so on.</li> </ul>



**Development partners have a key role in supporting governments across the region in advancing the respective ASP agendas.** From an institutional arrangements and program perspective, a common theme is the lack of a clear role for social protection programs in the national disaster response legislation, and lack of clear coordination mechanisms between the disaster management ministry and the ministries implementing social protection programs. It is also essential to foster partnerships between government and nongovernmental agencies, such that nongovernmental partners increasingly complement the government response rather than embarking on parallel, stand-alone, and ad hoc disaster relief interventions. To this effect, establishing clear mechanisms for interaction both within and beyond government ex-ante in the form of rules and guidelines can help effectively complement shock responses and avoid duplication of efforts. Such an approach is complementary to efforts to develop social protection delivery systems with strengthened in-house capacity and higher levels of self-reliance.

**From a financing perspective, development partners should channel, to the extent possible, their resources through on-budget, government-owned social protection systems ex-ante as a means to allow for higher levels of policy coherence and reduced shock response costs through adaptive financing mechanisms.** With greater clarity on the likely financial requirements and target groups for assistance, governments can better preposition their own fiscal resources and also access contingent financing and reinsurance on better terms. Where on-budget support is not feasible, development partners should work to align their programs, operating policies, and programs with the government programs to the extent possible, and effectively coordinate to ensure maximum efficiency and limit duplication.

As far as data and information systems are concerned, it is essential for development partners to support the government in establishing adaptive information systems for the identification of shock-vulnerable households, and in strengthening social and beneficiary registries as a means to promote integrated social protection systems. Closer collaboration is also needed with government, between the ministry responsible for disaster management and the ministries involved in social protection, to establish clear policies for the role of social protection data systems in identifying disaster-prone households in preparation for a shock, and in identifying households' needs post-shock.

**Investing in ASP systems will ensure that governments are equipped to provide appropriate and timely assistance to all citizens in need before, during, and aftershocks, and in a fiscally sustainable manner.** Making social protection systems more adaptive will also make them more dynamic - more responsive to individual circumstances and changes throughout people's life stages. The overarching goal of every government should be to have a social protection system that reduces poverty due to both chronic and acute causes (that is, shocks). Such a system is an important contribution toward a world without extreme poverty.

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# **RESPONSIVE** *by* **DESIGN**

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SOCIAL PROTECTION SYSTEMS  
IN SOUTH ASIA**