



# UNLEASHING ADAPTIVE POTENTIAL FOR SOCIAL PROTECTION

GOOD ADAPTIVE SOCIAL PROTECTION PRACTICES  
IN LATIN AMERICA AND THE CARIBBEAN

Francesco Tisei & Malin Ed



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## Abbreviations and Acronyms

|                  |  |
|------------------|--|
| ADESS            | Social Subsidy Administration  |
| AE               | Auxilio Emergencial  |
| AFAM-PE          | Asignaciones Familiares – Plan de Equidad                                |
| AI               | Artificial Intelligence  |
| ALMP             | Active Labor Market Programs   |
| ASA              | Advisory Services and Analytics  |
| ASP              | Adaptive Social Protection   |
| ASPIRE           | Atlas of Social Protection Indicators of Resilience and Equity           |
| ASPIRE (Program) | Actions to Strengthen Performance for Inclusive and Responsive Education |
| AUH              | Asignación Universal por Hijo  |
| BF               | Bolsa Familia  |
| BPC              | Benefício de Prestação Continuada  |
| CAT-DDO          | Catastrophe Deferred Drawdown Option                                     |
| CCDR             | Country Climate and Development Reports                                  |
| CCRIF            | Caribbean Catastrophe Risk Insurance Facility                            |
| CCT              | Conditional Cash Transfers   |
| CDEMA            | Caribbean Disaster Emergency Management Agency                           |
| CEMADEN          | National Center for Monitoring and Early Warning of Natural Disasters    |
| CMS              | Case Management System   |
| CNE              | Comisión Nacional de Emergencias   |
| COE              | Operational Emergency Committee  |
| COVID-19         | Coronavirus Infectious Disease   |
| CRAS             | Centro de Referência Especializado de Assistência Social                 |
| CSE              | Calificación Socio Económica   |
| DNI              | Documento Nacional de Identidad  |
| DPL-DDO          | Development Policy Loan with a Deferred Drawdown Option                  |
| DPS              | Departamento Para la Prosperidad Social                                  |
| DRF              | Disaster Risk Financing  |
| DRM              | Disaster Risk Management   |
| DRR              | Disaster Risk Reduction  |
| ECLAC            | Economic Commission for Latin America and the Caribbean                  |
| EM-DAT           | Emergency Event Database   |
| ENSO             | El Niño Southern Oscillation   |
| EVIN             | Evaluacion Inicial de Necesidades  |
| EWS              | Early Warning Systems  |
| FIBE             | Ficha Básica de Emergencia   |
| FIBE-H           | Ficha Básica de Emergencia Hídrica                                       |
| FONE             | Fondo Nacional de Emergencia   |
| FY               | Fiscal Year  |
| G2P              | Government to Person   |



|                |  |
|----------------|--|
| <b>GDP</b>     | Gross Domestic Product   |
| <b>GHG</b>     | Greenhouse Gas   |
| <b>GoA</b>     | Government of Argentina  |
| <b>GoB</b>     | Government of Brazil   |
| <b>GoC</b>     | Government of Chile  |
| <b>GoCO</b>    | Government of Colombia   |
| <b>GoCR</b>    | Government of Costa Rica                                       |
| <b>GoDR</b>    | Government of Dominican Republic                               |
| <b>GoE</b>     | Government of Ecuador  |
| <b>GoP</b>     | Government of Paraguay   |
| <b>GoPE</b>    | Government of Peru   |
| <b>GoU</b>     | Government of Uruguay  |
| <b>GP</b>      | Global Practice  |
| <b>GRM</b>     | Grievance Redress Mechanism                                    |
| <b>IFRC</b>    | International Federation of Red Cross                          |
| <b>IMAS</b>    | Instituto Mixto de Ayuda Social                                |
| <b>IMF</b>     | International Monetary Fund                                    |
| <b>IMN</b>     | Instituto Meteorológico Nacional de Costa Rica                 |
| <b>INSPIRE</b> | Integrated Social Protection, Inclusion and Resilience Project |
| <b>IPCC</b>    | Intergovernmental Panel on Climate Change                      |
| <b>IVACC</b>   | Índice de Vulnerabilidad ante Choques Climáticos               |
| <b>LAC</b>     | Latin American and Caribbean                                   |
| <b>M&amp;E</b> | Monitoring & Evaluation  |
| <b>MDSF</b>    | Ministerio De Desarrollo Social y Familia                      |
| <b>MEPYD</b>   | Ministry of Economy, Planning and Development                  |
| <b>MIES</b>    | Ministerio de Inclusión Económica y Social                     |
| <b>MIRA</b>    | Monitor Integral de Riesgos y Afectaciones                     |
| <b>MIS</b>     | Management Information Systems                                 |
| <b>MoC</b>     | Ministry of Citizenship  |
| <b>INDRH</b>   | National Institute of Hydraulic Resources                      |
| <b>NGO</b>     | Non-Governmental Organization                                  |
| <b>ONAMET</b>  | Oficina Nacional de Meteorología                               |
| <b>PET</b>     | Temporary Employment Program                                   |
| <b>PETi</b>    | Immediate Temporary Employment Program                         |
| <b>PPP</b>     | Public Private Partnership                                     |
| <b>ProSoli</b> | Progresando con Solidariedad                                   |
| <b>RENIEC</b>  | Registro Nacional de Identificación y Estado Civil             |
| <b>REWSC</b>   | Regional Early Warning Systems Consortium                      |
| <b>RIPS</b>    | Registro Interconectado de Programas Sociales                  |
| <b>RIS</b>     | Registro Información Social                                    |
| <b>RSH</b>     | Registro Social de Hogares                                     |
| <b>RUAD</b>    | Registro Unico de Afectados y Damnificados                     |
| <b>RUB</b>     | Registro Único de Beneficiarios                                |

|          |  |
|----------|--|
| SEED     | Support for Education Empowerment and Development          |
| SENAPRED | Servicio Nacional de Prevención y Respuesta ante Desastres |
| SIAS     | Sistema de Información Integrada del Área Social           |
| SIIS     | Integrated System for Social Information                   |
| SINIRUBE | Registro Único de Beneficiarios del Estado                 |
| SINPDEC  | National System for Protection and Civil Defense           |
| SISE     | System for Social Information in Emergencies               |
| SISFOH   | Sistema de Focalización de Hogares                         |
| SIUBEN   | Sistema Único de Beneficiarios                             |
| SNAS     | National Secretariat for Social Assistance                 |
| SNGRE    | Secretaría de Gestión de Riesgos                           |
| SoPs     | Standard Operating Procedures                              |
| SPIRO    | Social Protection for Increased Resilience and Opportunity |
| SP       | Social Protection  |
| SPJ      | Social Protection and Jobs                                 |
| SSPF     | Solidarity and Social Protection Fund                      |
| SUAS     | Unified Social Assistance System                           |
| TOR      | Terms of Reference   |
| TUS      | Tarjeta Uruguay Social                                     |
| UNDP     | United Nations Development Programme                       |
| UNDRR    | United Nations Office for Disaster Risk Reduction          |
| WFP      | World Food Programme                                       |

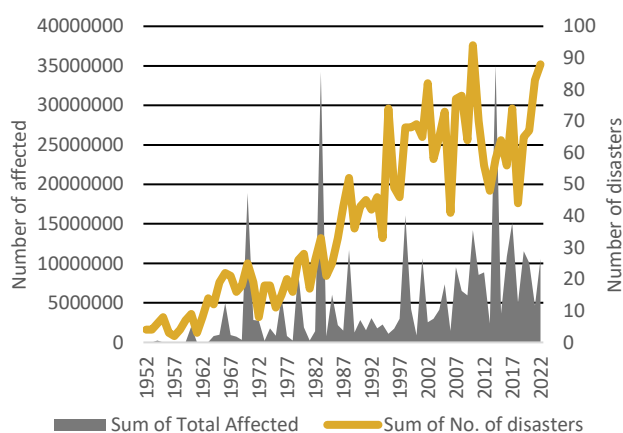


## Executive summary

The menacing specter of climate change looms large over the Latin America and Caribbean (LAC) region, impacting its rich biodiversity and extensive coastlines with extreme weather events, rising sea levels, and erratic weather patterns. Climate-induced hydrometeorological events and secondary disasters are increasing in frequency and severity, with nine LAC countries ranking among the top 20 globally at risk. Annual disasters increased by 200 percent between 1990 and 2022, resulting in a total of 2,078 recorded disasters during this period (Figure 1). Additionally, economic shocks, like recessions and global commodity price fluctuations deeply affect LAC economies, particularly due to reliance on key commodities in some countries.

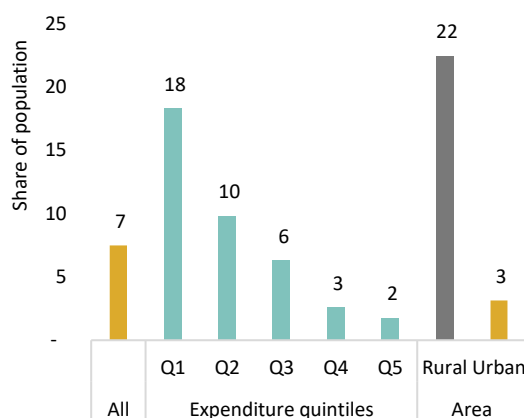
Poor and vulnerable households disproportionately bear the brunt of shocks as climate-related disasters become more frequent and intense in LAC. The increase in climate related disasters has clear repercussions on socio-economic welfare – especially among the most vulnerable segments of society and rural communities – who are more exposed to disasters (Figure 2). The negative impacts of climate change on poverty, human capital, and migration in the region threaten to jeopardize the region’s hard-won human development and poverty reduction gains of the past two decades. The region’s social protection systems face challenges in responding to such crises, hence highlighting the need for continued investment in Adaptive Social Protection (ASP).

Figure 1: Latin America and the Caribbean: Occurrence and number of affected, 1952-2022



Source: The Emergency Events Database (EM-DAT). (2023).

Figure 2: Peru - People exposed to covariant natural shocks by expenditure quintile and location (2021)



Source: World Bank (2023). Rising Strong: Peru Poverty and Equity Assessment. Washington, D.C.: The World Bank. Based on data from the National Household Survey

Advancing the ASP agenda can allow governments to deploy empirical and time-bound assistance to shock-affected households, hence enabling their speedy recovery, building their resilience, and ultimately protecting their human capital. The ASP framework is articulated around four key building blocks: Institutional Arrangements, Financing, Programs, and Data/Information Systems. It transitions from the conventional approach to social protection as a poverty-focused tool, towards the development of systems that are inclusive and flexible, and which can potentially expand assistance to a broader range of households that could fall into acute poverty as a result of a shock. This report draws upon a total of 14 country-level assessments conducted by the World Bank in the LAC region through the deployment of

its corporate Stress Test Tool. Its primary objectives are to provide a comprehensive overview of good practices related to the advancement of the ASP agenda in the LAC region. Moreover, drawing on the wealth of data generated through diagnostic efforts, the report aims to provide evidence-based recommendations and insights. The report aims to guide future policy dialogue and inform policymaking around this crucial agenda in the region.

**The Stress Tests carried out in LAC between 2021 and 2023 shed light on the varying levels of adaptiveness of the social protection systems (Figure 3).** The findings of the various Stress Test

*Figure 3: Overall Stress Test Assessment scores- Latin America and the Caribbean*



| Latent  | Nascent   | Emerging   | Established   | Advanced   |
|---|---|--|---|--|
| <ul style="list-style-type: none"> <li>Some SP programs and limited coverage, but these remain uncoordinated with limited capacity to build resilience</li> </ul> | <ul style="list-style-type: none"> <li>Some SP programs and limited coverage, but these remain uncoordinated and have limited capacity to build resilience</li> </ul> | <ul style="list-style-type: none"> <li>Relevant programs at the national level and some basic coverage which can promote resilience</li> </ul> | <ul style="list-style-type: none"> <li>Significant coverage through SP, through national safety net programs, and livelihood ones ensuring strong resilience of population</li> </ul> | <ul style="list-style-type: none"> <li>Strong coverage of programs providing interventions with complementarities and ensuring resilience to shocks</li> </ul> |

Source: Based on LAC STTs (14 countries)

assessments showcase both the emerging innovations and good practices around ASP, as well as shedding light on the identified overarching gaps that hinder the seamless deployment of assistance through existing social protection systems in times of crisis. The assessments have highlighted the varying levels of adaptiveness of social protection systems in the region, and a number of country examples have been selected to showcase good practices for each of the four building blocks of the ASP Framework.

**Countries in the LAC region are frequently regarded as champions in the field of social protection.** Significant progress has been made in devising robust social protection systems, with varying degrees of success across different countries and sub-regions. However, many countries in the LAC region are still struggling to shift from

the launch of *ad hoc* shock responses to a more predictive and risk-informed *modus operandi* of providing assistance to shock-affected populations in the aftermath of extreme events.



## Programs and Delivery Systems

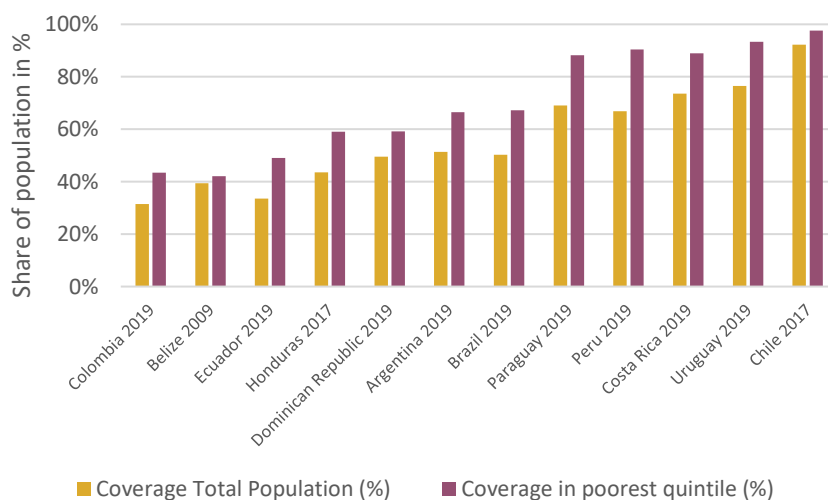
Within the LAC region, numerous social protection programs have proven to be highly effective, thus establishing standards on a global scale. Such government-led programs, characterized by their innovative approaches and positive impact on poverty reduction and socio-economic empowerment, have not only garnered attention within the region but have also served as benchmarks for social protection practitioners worldwide. Many social assistance programs in the region cover a majority of the poorest quintile, reflecting the commitment of governments to eradicate poverty (Figure 5). The country examples of Brazil, Uruguay, and Argentina have been highlighted to demonstrate the importance of investing in routine social protection programs with high levels of coverage, which, combined with the development of scalability protocols and guidelines, can guarantee the smooth expansion of assistance in times of shock. This subsection also highlights a number of overarching weaknesses, such as the fragmentation of the social protection sector, which in many LAC countries is renowned for affecting the performance of shock responses.

Figure 4: Overall score: Programs and Delivery Systems



Source: Based on LAC STTs (14 countries)

Figure 5: Coverage of social assistance (total population and poorest quintile) by select Latin America and Caribbean countries



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

Over the past years, many countries in the LAC region have demonstrated remarkable levels of innovation within their delivery and payment systems to sustain the expansion of social protection programs in times of heightened need. The good practices around delivery systems observed in both Colombia and Peru are presented in this sub-section. In the case of Colombia, the important role played by the social protection sector in devising innovative solutions for payment systems in support of large-scale shock responses is duly highlighted. The modernization of digital payments, coupled with financial inclusion efforts carried out by the Government of Peru is also showcased. Despite the integration of innovative solutions such as digital payments, there is room for improvement of delivery systems across the region. Many LAC countries lack robust Grievance and Redress Mechanisms (GRM) supported by case management systems, which can guarantee accountability to poor and shock-affected populations. In addition, most countries experience moderate to large delays in extending assistance to new beneficiaries through horizontal expansions.

**Data and Information Systems**

*Figure 6: Overall score: Data and Information*



Source: Based on LAC STTs (14 countries)

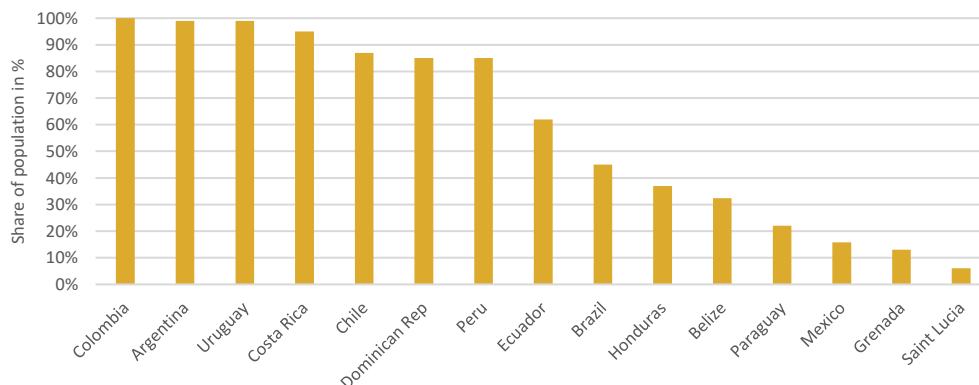
Considering the region’s exposure to a wide array of natural disasters, a number of LAC countries have taken progressive steps to strengthen their respective EWS. However, the level of adaptiveness of EWS in many of the assessed countries remains suboptimal due to a variety of factors. This subsection underscores the importance of pooling resources and expertise to foster cross-border collaboration for early warning systems (EWS), as shown in the example of the Regional Early Warning Systems Consortium (REWSC), established in the Caribbean region. Moreover, the maturity of the Dominican Republic and Costa Rica’s EWS is also described in detail. In the case of the Dominican Republic, the introduction of the Vulnerability to Climate Hazards Index (IVACC) helps assess the likelihood of a household being affected by natural disasters, while Costa Rica’s EWS is supported by a

strong monitoring and alerting capacity at national and sub-national levels for all known natural hazards. Identified weaknesses include the fragmentation of the EWS function observed in many LAC countries, and the lack of regular risk vulnerability assessments drawing on early warning data.

Many LAC countries have invested significant resources in building social registries with extensive coverage of their populations as highlighted by the results of the various country-level assessments (Figure 7). In several of the assessed countries, the motivation to further expand the coverage and technical capabilities of their registries has been in part prompted by the COVID-19 pandemic and the ongoing fuel and food crisis. The good practices of Chile and Ecuador are presented in detail in this subsection of the report. Chile relies on a robust social registry, which is complemented by effective post-

disaster household assessment tools to facilitate decision-making in the aftermath of a natural disaster. Moreover, Ecuador’s efforts to refine its social registry reflect a strong commitment to work towards integrated data systems for more data-driven approaches to social protection and shock response deployment. Social registries in the region still face challenges, including lack of data updating protocols and data quality assurance mechanisms. Moreover, some countries in the region have no registries in place. For these countries, it is important to consider investing in such tools for more accurate and rapid responses to covariate shocks.

**Figure 7:** Population Coverage of Social Registries in select Latin America and the Caribbean countries



Source: Based on Isik-Dikmelik (2022); Berner & Van Hemelryck (2021) and Part 2 of Stress Test assessments

## Finance

**With a few exceptions, Finance has been consistently rated as the least developed building block of the ASP agenda across LAC countries.** The case of the Caribbean Catastrophe Risk Insurance Facility (CCRIF), which is the world’s first transnational parametric financial risk pool, has been highlighted as a good practice. The CCRIF has a successful track record in providing post-disaster assistance to shock-affected populations and has made 58 payouts for a total of USD 260 million since its inception. Moreover, the past success story of Mexico’s Natural Disaster Fund (FONDEN) has been highlighted, given its innovative aspect of linking disaster risk financing (DRF) with social protection systems in a risk-informed manner. The deficiencies identified through the various country-level assessments include the lack of earmarked source of post disaster liquidity for shock-responsive social protection, the limited capacity of many countries to model and estimate the potential economic impact of shocks and the overreliance on post disaster resource mobilization through budgetary reallocations.

**Figure 8:** Overall score: Finance



Source: Based on LAC STTs (14 countries)

## Institutional Arrangements and Partnerships

**Figure 9:** Overall score: Institutional Arrangements and Partnerships



Source: Based on LAC STTs (14 countries)

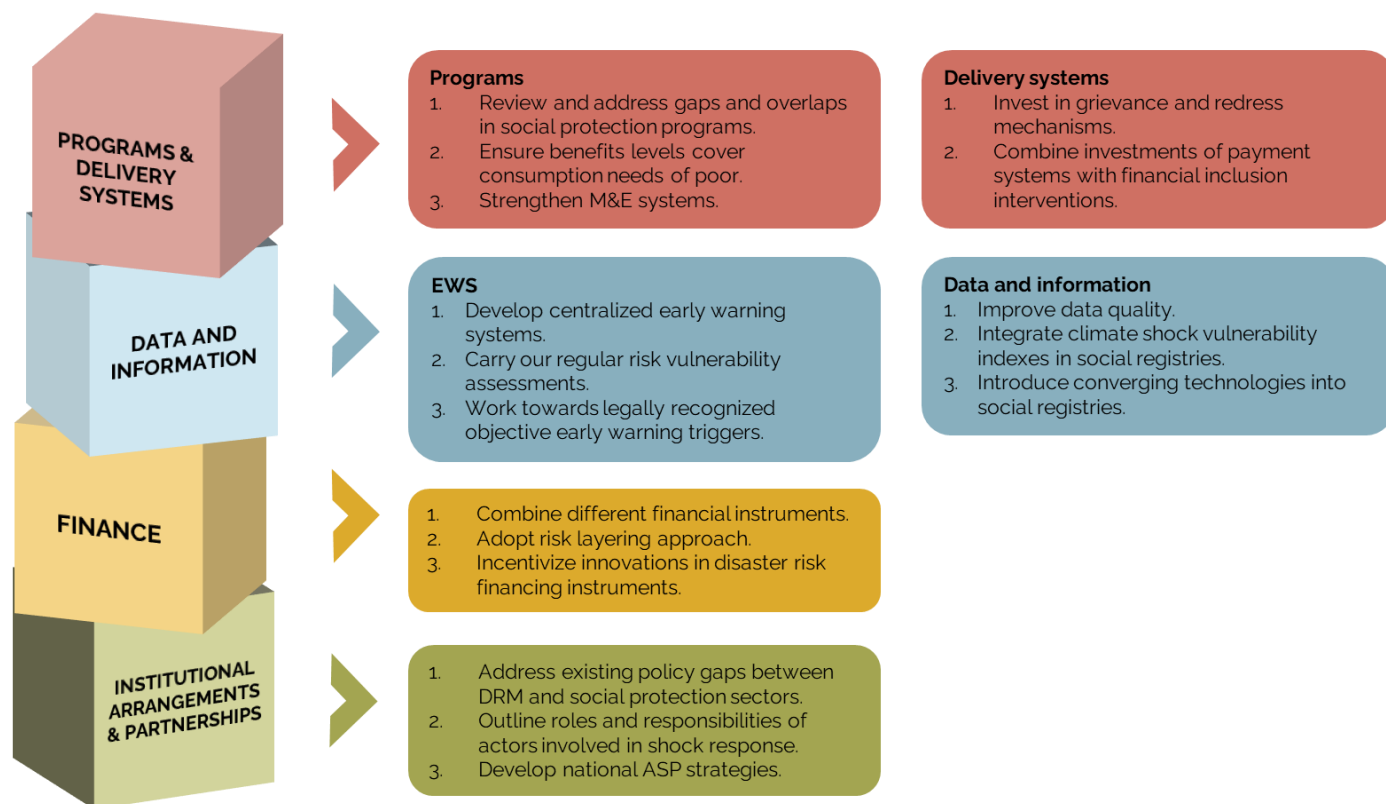
The importance of relying on *ex ante* institutional arrangements is key to the deployment of rapid and well-coordinated assistance in the aftermath of a shock. To this effect in the case of Brazil, the Government has established a set of comprehensive shock response plans for social assistance, supported by guidelines and protocols, offering a set of measures to be adopted before, during, and after shocks. Higher levels of protocolization are allowing for clearer roles between public entities across all levels of administration in Brazil. This section also highlights the Dominican Republic's active efforts to advance the ASP agenda in a structured and well-coordinated manner. In this regard, the Government of the Dominican Republic has introduced a national integrated ASP strategy, which emphasizes the importance of relying on *ex ante* institutional arrangements, especially between the Disaster Risk

Management (DRM) and social protection sectors. Some of the identified weaknesses include the lack of institutionalized linkages between these two crucial sectors, hence often resulting in *ad-hoc* and post-disaster coordination. Moreover, the lack of robust internal institutional arrangements within governments results in challenging external coordination with non-state actors – a fertile breeding ground for the risk of effort duplication. Finally, not all LAC countries rely on streamlined administrative structures for shock responses, often delaying the deployment of much-needed post-disaster assistance.

**Building on the findings of the diagnostic efforts, a set of transnational emerging recommendations geared towards advancing the ASP agenda in LAC has been developed.** For the Programs building block, it is important to review and address gaps and overlaps in existing social protection programs, ensure benefit levels cover the consumption needs of the poor and vulnerable, and strengthen monitoring and evaluation (M&E) systems. For Delivery and Payment Systems, investments should focus on grievance and redress mechanisms and the digitalization of payment systems combined with financial inclusion interventions. The priorities for the Data and Information building block focus on centralizing early warning systems and improving data quality in social registries as well as integrating climate shock vulnerability variables in social registries. For Finance, combining different financial instruments and adopting a risk layering approach help diversify sources of funding and ensure immediate relief after a disaster. Lastly, for the Institutional Arrangements and Partnerships building block, policy gaps should be

addressed, roles and responsibilities outlined, and bureaucratic procedures streamlined for efficient assistance delivery (Figure 10).

Figure 10: Emerging recommendations towards the advancement of the ASP agenda in LAC



The World Bank is committed to working closely with government counterparts in the LAC region to enhance the adaptiveness of their social protection systems. Building on internal and external consultations, the report emphasizes that most LAC countries are well-placed to advance the ASP agenda, especially in light of the high level of innovation they have shown in support of their social protection systems. However, there has been a slower pace of innovation in the Finance building block. The World Bank continues to convey the multisectoral inclusive nature of the ASP agenda to government counterparts as a means to ensure that investments are secured not only for the social protection systems' ability to respond to shocks rapidly and efficiently, but also on *ex ante* and *ex post* actions aiming at building the resilience and coping capacity of households vis-à-vis covariate shocks. Additionally, the report is expected to promote cross-learning within the LAC region by analyzing existing gaps and strengths across countries.

In advancing the ASP agenda, it is important to adopt a whole systems approach to address structural and emerging issues in the region. These challenges encompass the region's ageing population,



intraregional migration dynamics, and the significant share of the population employed in the informal labor sector. Drawing from the lessons learned from the pandemic, inflation, and other large-scale covariate shocks, this report reiterates governments efforts across the region in fortifying their national social protection systems and programs, especially considering the diverse spectrum of shocks to which their countries are exposed.



## Background

**The menacing specter of climate change looms large over the Latin America and Caribbean (LAC) region.** With its rich biodiversity and vast coastlines, the LAC region faces the growing hazards of extreme weather events, rising sea levels, and erratic weather patterns. Vulnerable communities, often residing in coastal areas and rural regions, bear the brunt of these impacts, facing displacement, loss of livelihoods, and reduced access to essential resources due to environmental degradation.

**Hydrometeorological events and secondary disasters like landslides are increasing in frequency and severity in the region due to climate change impacts.**<sup>1</sup> Nine countries in the region rank among the top 20 worldwide with the highest disaster risks, due to their geophysical location, geotectonic characteristics, and limited capacity to adapt to the impacts of climate change.<sup>2</sup> The main environmental sources of climate vulnerability in the region range from its sizable urban populations to its densely populated coastline, and lack of access to safely managed water and sanitation.<sup>3</sup>

**Macroeconomic shocks such as economic recessions, fluctuating commodity prices, and global financial crises continue to leave their marks on national economies, impacting trade, employment, and the fiscal space for social protection.** The interconnectedness of these economies, combined with external dependencies on key commodities like oil, minerals, and agricultural products, make the region susceptible to global economic fluctuations and exogenous demand shocks.<sup>4</sup> This has become particularly clear amidst the global surge in inflationary pressures stemming from Russia's invasion of Ukraine, whereby the economies of LAC countries have felt the impact deeply due to shocks in commodity and fertilizer markets, along with the steep rise in food and energy prices. As a result, this situation has worsened food insecurity, hitting especially hard those LAC nations that rely heavily on food imports, such as the countries in the Caribbean.<sup>5</sup>

**The challenges presented by covariate shocks and climate change have driven many LAC countries over the past decades to adopt innovative and multifaceted approaches to social protection as a means to enable the most vulnerable segments of society to better manage risk.** However, the recent responses in the region to curb the repercussions of the COVID-19 pandemic and the food and fuel crisis caused by the invasion of Ukraine have underscored some of the countries' social protection systems' flaws and limitations in adapting to the heightened needs caused by covariate shocks. The pandemic has brought to the forefront emerging socio-economic challenges in multiple Latin American and Caribbean (LAC) nations, notably with respect to the informal labor sector and migrant populations, both of which have disproportionately shouldered the extensive socio-economic impacts of COVID-19. The growing *corpus* of

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<sup>1</sup> Jafino, Bramka Arga, Brian Walsh, Julie Rozenberg, and Stephane Hallegatte. (2020). *Revised Estimates of the Impact of Climate Change on Extreme Poverty by 2030*. Policy Research Working Paper 9417. Washington, D.C.: World Bank Group.

<sup>2</sup> See more on Climate change and SPJ in LAC at:

[https://worldbankgroup.sharepoint.com/sites/ggh/Sitepages/Detail.aspx/Documents/mode=view?\\_id=139&SiteURL=/sites/ggh](https://worldbankgroup.sharepoint.com/sites/ggh/Sitepages/Detail.aspx/Documents/mode=view?_id=139&SiteURL=/sites/ggh)

<sup>3</sup> Williams, Asha M.; Gonzalez, Sarah Berger. (2020). *Towards Adaptive Social Protection Systems in Latin America and the Caribbean: A Synthesis Note on Using Social Protection to Mitigate and Respond to Disaster Risk*. Washington, D.C.: World Bank Group.

<sup>4</sup> Williams, Asha M.; Gonzalez, Sarah Berger. (2020).

<sup>5</sup> Gachet, Ivan; Olivieri, Sergio. (2023). *Overcoming multiple global crises: four key trends for policy action in Latin America and the Caribbean*. World Bank Blogs: Latin America and the Caribbean. Available at:

<https://blogs.worldbank.org/latinamerica/trends-policy-action-latin-america-and-caribbean> (accessed 9/19/2023)

evidence regarding such limitations and issues has been serving as an evidence base to build consensus on the need to continue investing in Adaptive Social Protection (ASP) in the LAC region.

### Conceptual Framework: ASP and the Stress Test Tool

**The World Bank has played a crucial role in assisting LAC countries in enhancing the adaptiveness of their social protection systems.** This support is achieved through a well-balanced combination of analytical endeavors and targeted lending operations. Notably, the World Bank's Advisory Services and Analytics (ASA) project, initiated in 2022 under the title "*Towards Shock Responsive Social Protection in the LAC Region*" and supported by the GFDRR, has been instrumental in generating invaluable evidence regarding the region's social protection systems' current levels of adaptiveness. Such diagnostic efforts have been facilitated through the utilization of the corporate Social Protection Stress Test Tool, making the ASA project a significant milestone in the pursuit of more shock-responsive and adaptive social protection systems in LAC.

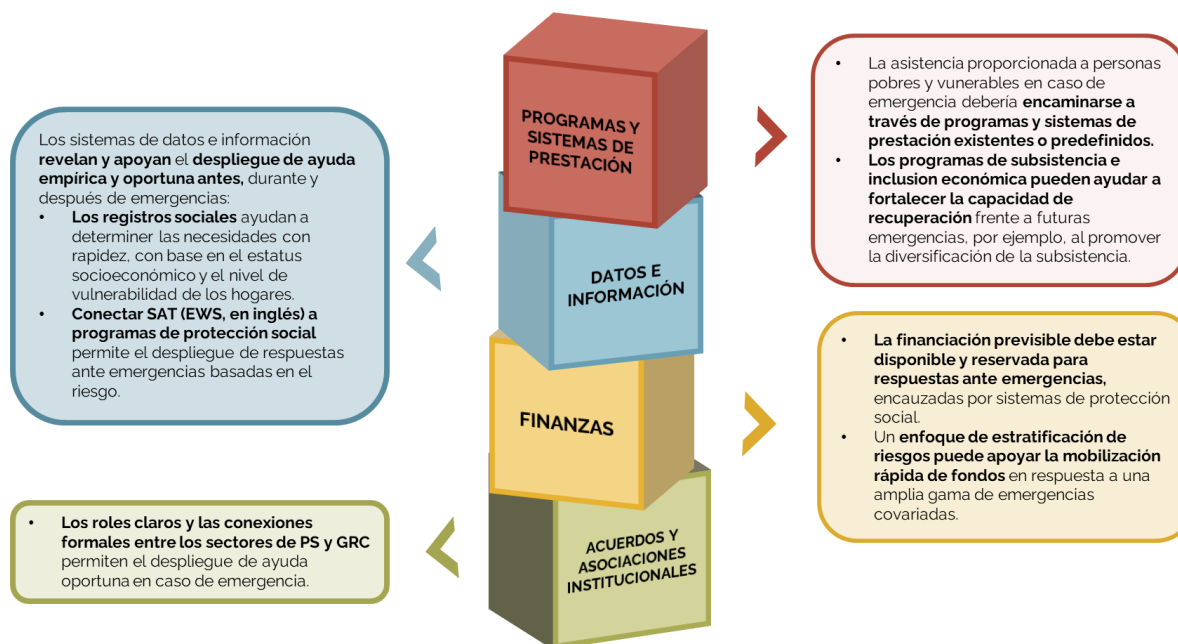
**The Social Protection Stress Test Tool is a country-level assessment that measures the level of adaptiveness of national social protection systems to scale-up and respond to the increased needs caused by the onset of covariate shocks.** The Stress Test Tool was rolled out by the World Bank as part of the broader Adaptive Social Protection (ASP) framework, which is described in depth in the flagship report *Adaptive Social Protection – Building Resilience to Shocks* published by the World Bank in 2020. The report defines ASP 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 to build the resilience of poor and vulnerable households—before, during, and after such shocks occur.*"<sup>6</sup>

**The ASP framework is articulated around four key building blocks: Institutional Arrangements, Financing, Programs, and Data/Information Systems (Figure 11).** It transitions from the conventional approach to social protection as a poverty-focused tool, towards the development of systems that are inclusive and flexible, and which can potentially expand assistance to a broader range of households that could fall into acute poverty as the result of a shock. To this effect, advancing the ASP agenda can allow governments to deploy empirical and time-bound assistance to shock-affected households, hence enabling their speedy recovery, building their resilience, and ultimately protecting their human capital.

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<sup>6</sup> Bowen, T.; del Ninno, C.; Andrews, C.; Coll-Black, S.; Gentilini, U.; Johnson, K.; Kawasoe, Y.; Kryeziu, A.; Maher, B.; & Williams, A. (2020). *Adaptive Social Protection: Building Resilience to Shocks. International Development in Focus*. Washington, D.C.: World Bank.

Figure 11: The four building blocks of Adaptive Social Protection



Source: Based on Bowen et al.(2020).

The Social Protection Stress Test Tool comprises two modules, which can be carried out either independently or concurrently:

- I. **Scenario building** – Simulates the potential impact of shocks on household welfare by drawing on available household survey data and historical shock trends.
- II. **Social Protection Systems’ scalability and adaptiveness** – Captures the capacity of existing social protection systems to scale up in times of shock through a quantitative and qualitative analysis.

**Module 1 of the stress test tool analyzes the main sources of risk that are likely to result in a large scale-up of social protection systems in a country, providing an estimate of the number of people in need of support in the aftermath of a shock.** Gaining a better understanding of the most probable scenarios in which a social protection system will need to be leveraged and scaled up is an essential step of this module the Stress Test Tool. There are three different approaches that can be used to execute such an assessment based on available data:

- I. The *Simulation Approach* relies on household-level data and the historical range of events to model the poverty impact of shocks.
- II. The *Scenario Approach* utilizes household-level data to formulate assumptions about which households will be affected, the level of socio-economic impact, and the extent to which prices will be impacted.
- III. The *Multilevel Approach* leverages an existing tool that determines the nature and level of vulnerability in a country, while also assessing the extent of such vulnerability attributable to covariate shocks.



**Module 2 of the Stress Test Tool assesses the capacity of social protection systems to scale up rapidly in times of shock, identifying potential constraints, and highlighting areas for future investment.** The questionnaire-style diagnostic assessment, comprised of four key sections and eight sub-sections, measures the robustness and level of development of all four key building blocks of the ASP framework and provides a scoring (1-5) and rating (Latent, Nascent, Emerging, Established, and Advanced) (Figure 12). The results of Module 2 of the Stress Test help depict the levels of preparedness of social protection systems *vis-à-vis* the recurrent covariate shocks to which they are exposed, hence providing practitioners and governments with a deeper understanding of what investments and measures need to be secured and adopted in order to cushion their citizens from the negative repercussions of covariate shocks.<sup>7</sup>

Figure 12: Stress Test Ratings as reported in the World Bank's official guidelines

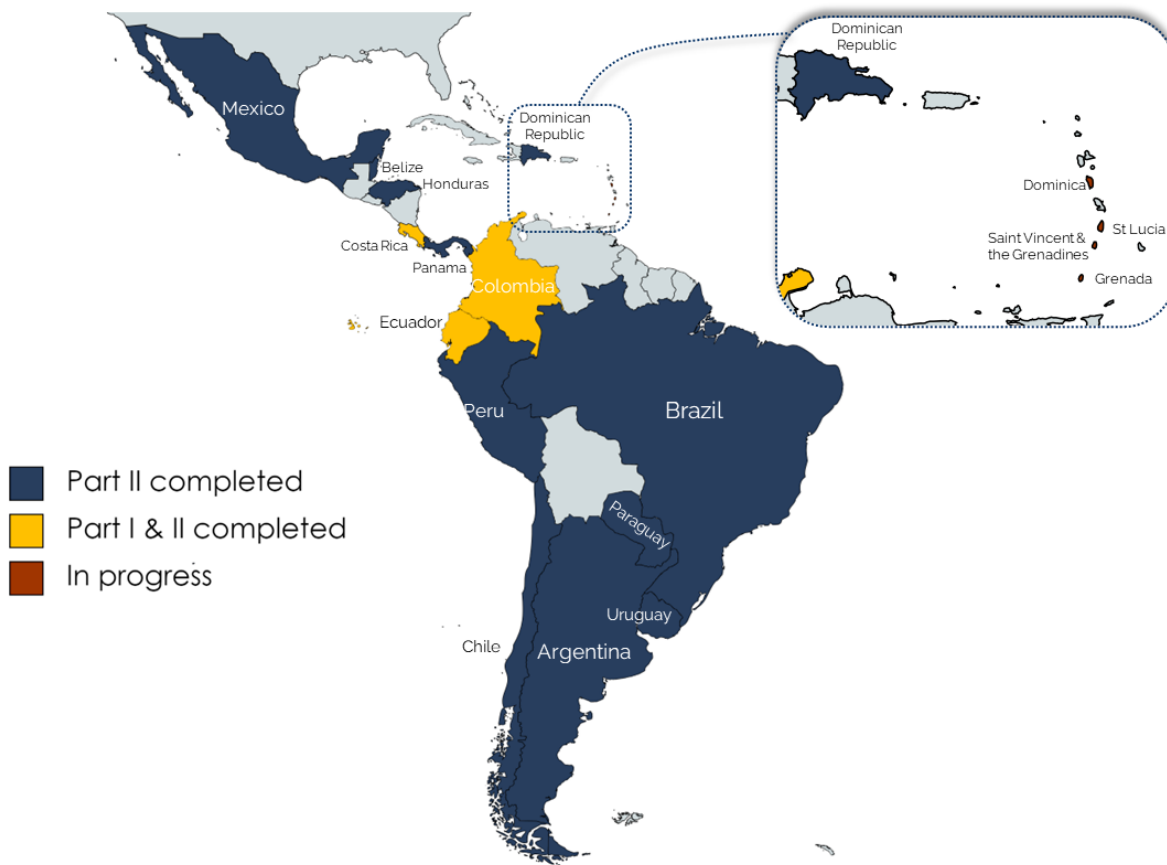
| Latent   | Nascent  | Emerging  | Established  | Advanced  |
|--|--|---|--|---|
| <ul style="list-style-type: none"> <li>•Some SP programs and limited coverage, but these remain uncoordinated with limited capacity to build resilience</li> </ul> | <ul style="list-style-type: none"> <li>•Some SP programs and limited coverage, but these remain uncoordinated and have limited capacity to build resilience</li> </ul> | <ul style="list-style-type: none"> <li>•Relevant programs at the national level and some basic coverage which can promote resilience</li> </ul> | <ul style="list-style-type: none"> <li>•Significant coverage through SP, through national safety net programs, and livelihood ones ensuring strong resilience of population</li> </ul> | <ul style="list-style-type: none"> <li>•Strong coverage of programs providing interventions with complementarities and ensuring resilience to shocks</li> </ul> |

Source: Johnson, K.; Tisei, F.; & Walker, T. (2022). *Responsive by Design: Building Adaptive Social Protection Systems in South Asia*. Washington, D.C.: World Bank.

**To date, the World Bank has deployed the Stress Test Tool in 18 countries in the LAC region, 12 of which were carried out within the framework of the “Towards Shock Responsive Social Protection in the LAC Region” ASA between September 2022 and September 2023.** Greater knowledge concerning the current levels of adaptiveness of social protection systems has enabled LAC governments, the World Bank, and other development partners to carry out more targeted efforts to effectively advance the ASP agenda. These efforts include the World Bank-developed Social Stress Test as well as technical assistance. With the exception of Colombia, Ecuador, and Costa Rica, only Module 2 of the Stress Test assessment was deployed in the selected countries (Figure 13). The assessments, which comprise four key building blocks and respective sub-components, were duly scored based on desk reviews and complemented by virtual and, in some cases, in-country face-to-face consultations with a wide range of relevant government and non-government stakeholders, and partners.

<sup>7</sup> World Bank. (2021c). *Stress Testing Social Protection: A Rapid Appraisal of the Adaptability of Social Protection Systems and Their Readiness to Scale-Up*.

**Figure 13:** Latin American and Caribbean countries covered by Stress Test assessments



*Note:* Summary of Stress Test Assessments for LAC country carried out as part of the ASA “Towards Shock Responsive Social Protection in the LAC Region” or independently between 2021 and 2023. Graphic is created using MapChart (<https://www.mapchart.net>).

## Report objectives

**The objectives of this report are multifaceted and ultimately contribute to the growing body of evidence around Adaptive Social Protection in the LAC region.** The primary objective of this report is to provide a comprehensive snapshot of good practices related to ASP advancements within the LAC region. To achieve this, the report draws upon country-level assessments, specifically the Stress Test assessments, conducted by the World Bank over the past two years in the region. These assessments, the bulk of which were carried out within the framework of the project “Towards Shock-Responsive Social Protection in LAC” ASA, offer valuable insights into the LAC countries’ efforts to enhance social protection systems, especially in light of the wide spectrum of covariate shocks to which the region is exposed.

**An essential aspect of this report is its role in guiding future dialogue and informing policymaking around Adaptive Social Protection in the LAC region.** By analyzing the wealth of data and findings from the World Bank’s Stress Test assessments, the report aims to provide evidence-based recommendations and insights. Policymakers, governmental bodies, and development practitioners can leverage such insights and design more effective and targeted policies that cater to the unique challenges faced by vulnerable groups in the region.

**This report predominantly centers on social assistance and cash transfer programs as key components of Adaptive Social Protection.** Considering the compatibility of such measures in a shock-responsive perspective, the ‘programs and delivery systems building block’ of the Stress Test assessments conducted by the World Bank largely focused on measuring the adaptiveness of existing social assistance programs and their supporting social protection infrastructure and platforms. By analyzing successful case studies and identifying good practices, the report aims to offer valuable insights that can be applied to similar contexts.

**While acknowledging the relevance of recent synthesis notes and assessments centered on ASP in the region, this report sets itself apart through its unique approach.** During recent years, several reports have been produced for Latin American countries on the issue of ASP.<sup>8</sup> This report distinguishes itself from previous reports by building on the valuable evidence generated by the World Bank around ASP in the LAC region, and utilizes the findings of the various Stress Test assessments carried out in the region to showcase both the emerging innovations around ASP, as well as shedding light on the identified overarching gaps that hinder the seamless deployment of assistance through extant social protection systems in times of crisis.

**The report is structured around four chapters** and begins by offering a comprehensive overview of the region's climate and disaster risk profile in Chapter 1. This is followed by Chapter 2 which provides a snapshot of the current status of social protection systems in the region. Chapter 3 conducts a detailed analysis of the World Bank's stress test assessments in the LAC region, showcasing good practices and overarching weaknesses categorized according to the building blocks of the Adaptive Social Protection (ASP) framework. Building on the assessment findings, Chapter 3 also provides a set of transnational emerging recommendations geared towards the advancement of the ASP agenda in LAC. Chapter 4 takes a forward-looking approach, exploring the World Bank's role in contributing to making social protection systems in the region more adaptive. This chapter also touches upon crucial issues within the region, including migration and the high levels of informality, thereby providing a broader perspective on the challenges and opportunities surrounding the advancement of this crucial agenda in the LAC countries.

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<sup>8</sup> The evidence has been generated mainly through the following reports and synthesis notes: 1) Towards Adaptive Social Protection Systems in Latin America and the Caribbean: A Synthesis Note on using Social Protection to Mitigate and Respond to Disasters and Climate-Related Risks(William and Gonzalez, 2020); 2) Making Social Protection Information Systems Adaptive (World Bank, 2020b); 4) Tailoring Adaptive Social Safety Nets to Latin America and the Caribbean(World Bank, 2020d); 5) Using Social Work Interventions to Address Climate and Disaster Risks in Latin America and the Caribbean(World Bank, 2020e); 6) Disaster Risk Finance for Adaptive Social Protection(World Bank, 2020a); *Adaptive Social Protection in the Caribbean: Building Human Capital for Resilience* (Beazley and Williams. 2021); & *Shock-Responsive Social Protection in the Caribbean Synthesis report* (Beazley, Ciardi and Bailey, 2020)

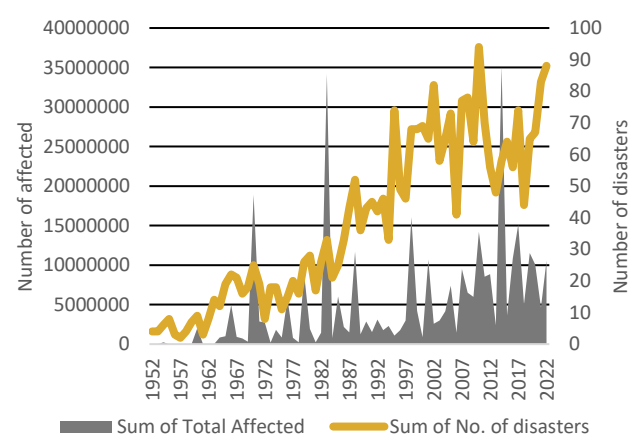


# Chapter 1: Disaster and Climate Risk in Latin America and the Caribbean

Climate change is having a profound impact on the frequency and intensity of climate-related shocks in the Latin American and Caribbean (LAC) region. Rising temperatures and sea levels are expected to exacerbate the severity of hydrometeorological natural disasters, such as droughts, storms, floods, and prolonged heatwaves in LAC.<sup>9</sup> Over the past few decades, the occurrence of these natural disasters has witnessed a staggering surge in the region with the number of annual disasters in 2022 more than twice as high as in 1990. During this period, the region experienced a total of 2,078 recorded disasters (Figure 14).<sup>10</sup>

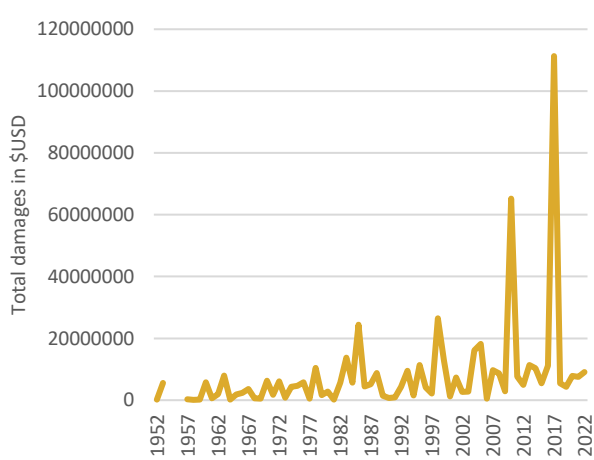
At the same time, the economic toll of disasters in the LAC region has been substantial and is anticipated to increase. Economic losses have displayed an upward trend since the 1950s, with damages associated with disasters amounting to approximately USD 9 billion in 2022 alone (Figure 15). The higher frequency and intensity of climate related natural disasters imply a greater risk of larger economic losses in the years ahead, posing significant challenges for the region's resilience and ability to recover. Disasters do not only incur a cost on physical assets but also inflict devastating losses in terms of human lives and livelihoods. The number of people affected by climate shocks in the LAC region has also witnessed a concerning rise in recent decades (Figure 14). On average, around 6.7 million individuals per year have been affected by climate-related shocks between 1990 and 2022. During the same timeframe, natural disasters led to the loss of 343,617 lives, mostly due to earthquakes, responsible for about 67 percent of the total deaths.<sup>11</sup> These statistics emphasize the pressing need for effective disaster risk management and climate resilience strategies in the region to protect people in the face of growing climate change-related challenges.

Figure 14: Latin America and the Caribbean: Occurrence and number of affected, 1952-2022



Source: The Emergency Events Database (EM-DAT). (2023).

Figure 15: Latin America and the Caribbean: Total damages (USD), 1952-2022



<sup>9</sup> UNDRR. (2021). *Regional Assessment report on Disaster Risk in Latin America and the Caribbean*. United Nations Office for Disaster Risk Reduction (UNDRR).

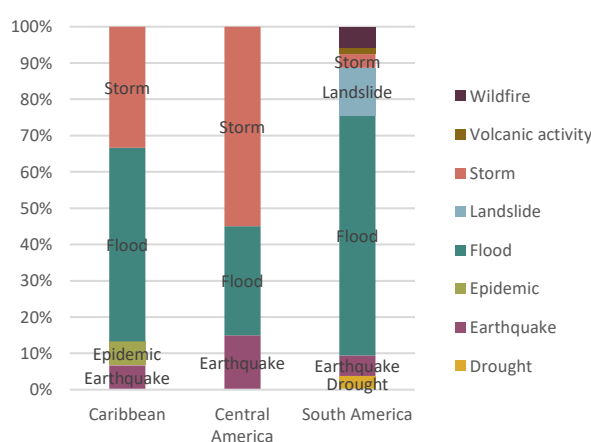
<sup>10</sup> Based on calculations using EM-DAT data between 1990 and 2022

<sup>11</sup> Based on calculations using EM-DAT data between 1990 and 2022

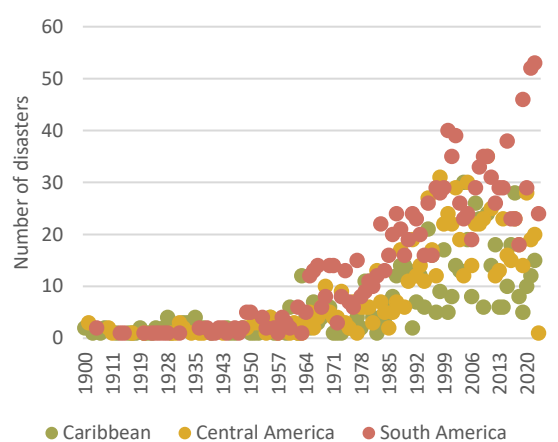
## Sub-regional exposure to climate shocks

**LAC demonstrates a high exposure to a myriad of hazard types.** The region is affected by multiple hazard types including storms, floods, earthquakes, landslides and droughts (*Figure 16*). Between 1990 and 2022, 66 percent of the 2078 events that occurred in the region were of hydrometeorological origin (mainly floods and storms). Among the geological events, earthquakes (7 percent) and landslides (6 percent) were the most common. South America is the sub-region that is hit most frequently out of the three sub-regions (*Figure 17*). While most of the disasters in South America are floods and droughts, wildfires have also become increasingly problematic during recent years. Central America and the Caribbean are mainly affected by storms and floods. The Caribbean is subject to considerable tropical storm activity and hurricanes every year. Since the Caribbean islands are small, the impact of these events tends to be large relative to the size of their economy. <sup>12</sup> **Box 1** outlines examples of different types of disasters that have hit the region during the last two decades.

*Figure 16: Latin America and the Caribbean: Distribution of disaster type by sub-region*



*Figure 17: Latin America and the Caribbean: Occurrence of disasters by sub-region*



Source: EM-DAT. (2023).

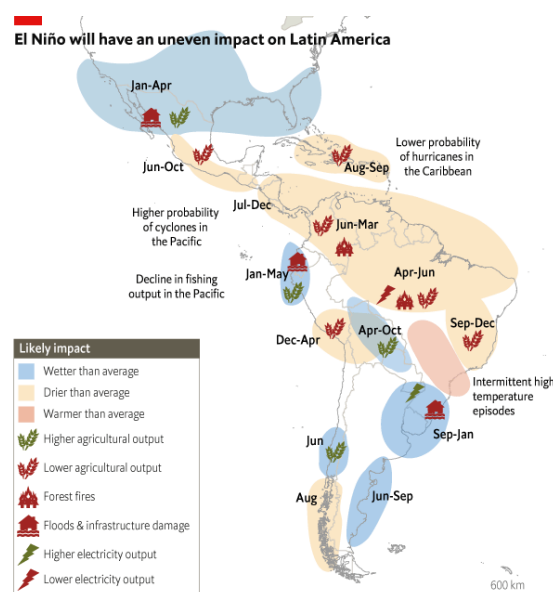
**The natural El Niño was declared in July 2023 and may have several consequences for the LAC region over the next months.** El Niño is a natural climate pattern that has occurred for centuries affecting weather worldwide and in Latin America and the Caribbean in particular. On June 8, 2023, scientists declared the inception of the El Niño Southern Oscillation (ENSO) phenomenon. El Niño is associated with higher water temperatures in the central and eastern tropical Pacific Ocean. The Latin America and Caribbean region feels the largest impact of El Niño due to its proximity to these warm waters. Coastal areas of South America in countries such as Peru and Ecuador often experience heavier rains due to El Niño, which may result in major floods and landslides. The Caribbean and Central America, on the other hand, usually face drier conditions (*Figure 18*). The El Niño event usually occurs every 2 to 7 years and persists for 9-12 months. The extreme weather brought by El Niño can affect rain-driven agricultural commodities, lead to higher food prices and inflation, and can trigger disasters that pose an additional burden on economic performance across Latin America and the Caribbean.<sup>13, 14</sup>

<sup>12</sup> Spencer, N., Strobl, E. (2020). *Hurricanes, climate change, and social welfare: evidence from the Caribbean*. *Climatic Change* 163, 337–357.

<sup>13</sup> World Bank. 2023. *Update on El Niño Southern Oscillation (ENSO)*.

<sup>14</sup> See the forthcoming report *Caribbean Social Protection Responses to Surging Inflation* for more information on the impact of inflation and responses among Caribbean countries.

**Figure 18: Impacts from El Niño in Latin America and the Caribbean**



Source: World Bank. (2023b). *Update on El Niño Southern Oscillation (ENSO) 2023/2024* - based on National meteorological agencies; International Research Institute for Climate and Society; United Nations Environment Programme/GRID-Arendal; World Meteorological Organization; Oceana, Infobae; La Nacion (Argentina); 2000 Agro (Argentina); Meteored (Chile); Bio Bio Chile; Ministerio de Agricultura (Colombia); EIU.

**Across the sub-regions, Haiti, Mexico, and Brazil stand out as the countries with the highest occurrence of disasters (Table 1).** Observing EM-DAT data for disasters spanning from 1990 to 2020, it is evident that Haiti has experienced the highest number of disasters in the Caribbean, enduring a total of 102 disasters during this period. Mexico faced a staggering 224 disasters, accounting for approximately 34 percent of all disasters in the region since 1990. Meanwhile, in South America, Brazil bore the brunt of 186 disasters, representing 19 percent of the total disasters in the sub-region over the same period. These figures highlight the disproportionate vulnerability and exposure to natural hazards of these three countries within their respective regions.

**Table 1: Top-5 impacted countries in Latin America and the Caribbean by disasters between 1990 and 2022 (total number of disasters)**

| Country         | Number of disasters |
|-----------------|---------------------|
| <b>Mexico</b>   | 224                 |
| <b>Brazil</b>   | 186                 |
| <b>Colombia</b> | 168                 |
| <b>Peru</b>     | 140                 |
| <b>Haiti</b>    | 102                 |

Source: EM-DAT. (2023).



**Box 1:** *Rapid and slow onset shocks<sup>15</sup> have had devastating impacts in LAC*

**Over the past decade, Latin America has experienced a series of rapid onset effects of climate change with significant impacts:**

- **Extreme weather and floods:** In 2020, a total of 30 storms were registered in the Atlantic Basin during hurricane season, beating the previous record of 28 in 2005. Almost half of these storms became hurricanes.<sup>16</sup> *Eta* and *Iota*, two category 4 hurricanes, affected over 7.5 million and displaced over 1.5 million people in Central America, causing tens of billions of dollars in damage and loss of lives. Guatemala, Honduras, and Nicaragua were the worst-affected countries.<sup>17</sup>
- **Wildfires:** During the summer of 2022, Argentina and Paraguay experienced unusually high wildfire activity due to a heatwave combined with extremely dry conditions.<sup>18</sup> In Argentina, eight different wildfires burned through almost one million hectares of land and devastated almost 60 percent of the Iberia National Park<sup>19</sup>.
- **Earthquakes:** Haiti was hit by a magnitude 7.0 earthquake in 2010 that struck 15 miles south of the capital, Port-au-Prince.<sup>20</sup> 3.4 million people were affected and around 250,000 lives were lost, with economic losses totaling USD 3.7 billion.<sup>21</sup>
- **Landslides:** In 2015, a massive landslide buried part of Santa Catarina Pinula in Guatemala, killing 350 people.<sup>22</sup>

**Simultaneously, slow onset effects of climate change are causing long-term challenges in various sectors across LAC:**

- **Increased heat extremes and droughts:** the so-called Central Chile Mega Drought, which has persisted for 13 years, is the longest drought in the region in a thousand years.<sup>23</sup>
- **Sea-level rise and acidification and warming oceans:** The impact of climate change on sea-level rise is also evident in some parts of Latin America, leading to coastal flooding.<sup>24</sup> Additionally, acidification and warming oceans are causing erosion, coral bleaching, and changes in fisheries, posing further challenges to the region's marine ecosystems.<sup>25</sup>

<sup>15</sup> Shocks can be categorized based on their onset speed. Slow-onset shocks, such as droughts, unfold gradually, while rapid-onset shocks, such as floods or hurricanes, strike suddenly.

<sup>16</sup> IFRC. (2022). *Central America: Hurricanes Eta & Iota - Final Report (MDR43007)*

<sup>17</sup> IFRC. (2021). *Communities affected by Hurricanes Eta and Iota are threatened by food insecurity, displacement and the climate crisis*. Press Release IFRC. Published 11/11/2021. Available at: <https://www.ifrc.org/press-release/communities-affected-hurricanes-eta-and-iota-are-threatened-food-insecurity> (accessed 9/20/2023)

<sup>18</sup> Copernicus. (2022). *South America sees record wildfire activity in early 2022*. Published 03/02/2022/ Available at: <https://atmosphere.copernicus.eu/south-america-sees-record-wildfire-activity-early-2022> (accessed 9/20/2023)

<sup>19</sup> CDP. (2022). *Corrientes, Argentine, Wildfire*. Available at: <https://disasterphilanthropy.org/disasters/corrientes-argentine-wildfires/> (accessed 9/20/2023)

<sup>20</sup> Winthrop, R. (2010). *Haiti's Earthquake: Prevention and Preparedness Woefully Low*. *Brookings Commentary*. Published on: 01/14/2010. Available at: <https://www.brookings.edu/articles/haitis-earthquake-prevention-and-preparedness-woefully-low/> (accessed 9/20/2023)

<sup>21</sup> Based on calculations using EM-DAT data

<sup>22</sup> Based on calculations using EM-DAT data

<sup>23</sup> UN News. (2022). *Mega-drought, glacier melt, and deforestation plague Latin America and the Caribbean*. Published: 07/22/2022. Available at: <https://news.un.org/en/story/2022/07/1123032> (accessed 9/20/2023)

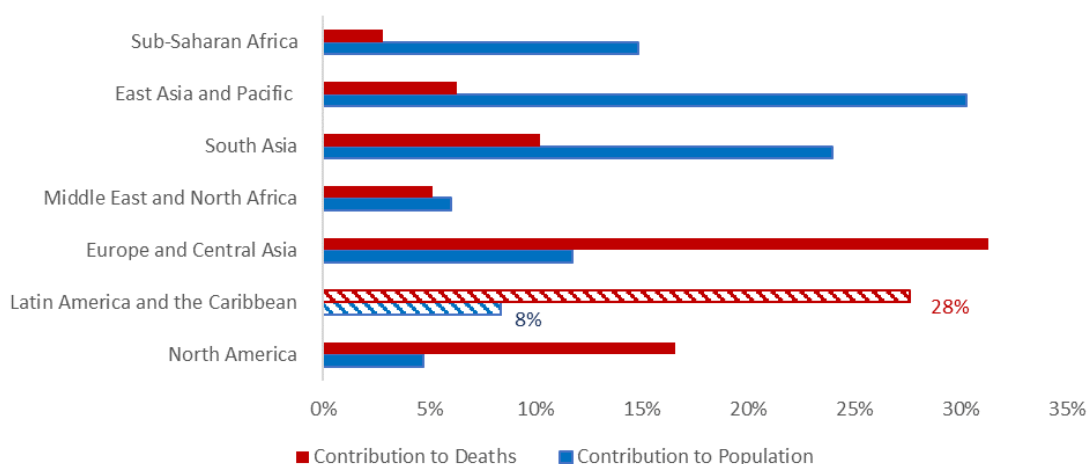
<sup>24</sup> WMO. (2021). *State of the Climate in Latin America and the Caribbean 2020*. Geneva: WMO.

<sup>25</sup> Tambutti, M.; & Gómez, J. J. (2020). *The Outlook for Oceans, Seas and Marine Resources in Latin America and the Caribbean: Conservation, Sustainable Development and Climate Change Mitigation*. Santiago: ECLAC.

## COVID-19, inflation and food insecurity

**Aside from the devastating loss of lives, the pandemic triggered a profound socio-economic crisis in Latin America and the Caribbean (LAC), making it the hardest-hit region worldwide.** From the onset of the pandemic in 2020 up to early December 2022, the region experienced an overwhelming death toll, being the second region with the largest number of cumulative deaths. By July 2022, LAC accounted for only 8 percent of the world population, but triple that share in terms of the world’s documented COVID-related deaths (27 percent (*Figure 19*)).<sup>26</sup> Brazil, Mexico, Peru, Colombia, and Argentina were among the countries with the highest number of deaths caused by the pandemic.<sup>27</sup> Although COVID-19 restrictions and closure of businesses in Latin American and the Caribbean countries helped to curb the spread of the virus, it brought inevitable negative consequences for households and the economy as a whole. The International Monetary Fund (IMF) reported a 7 percent economic contraction for Latin America and the Caribbean in 2020 and 32 million additional people fell back into poverty due to the pandemic.<sup>28</sup> In addition to addressing the COVID-19 emergency, numerous countries in the LAC region faced concurrent challenges posed by a rise in migration, notably involving Venezuelan migrants and others, creating a dual crisis encompassing both public health and migration issues.

*Figure 19: Contribution of global totals for population and number of COVID-19 related deaths (%), by region, March 2020-March 2022*



Source: World Bank. (2022d). *Two Years After: Saving a Generation*. Washington, D.C.: World Bank. Note: based on data from WHO COVID-19 dashboard

**The impact of COVID-19 on the region's employment, work hours, and income was severe, with LAC facing the highest reduction in work hours and labor income globally.** At the inception of the COVID-19 outbreak, a significant share of workers stopped working across LAC countries (*Figure 20*), with devastating impacts on incomes in countries across the region (*Figure 21*). Even those who managed to keep their jobs experienced a substantial 16 percent decline in working hours and about a 10 percent

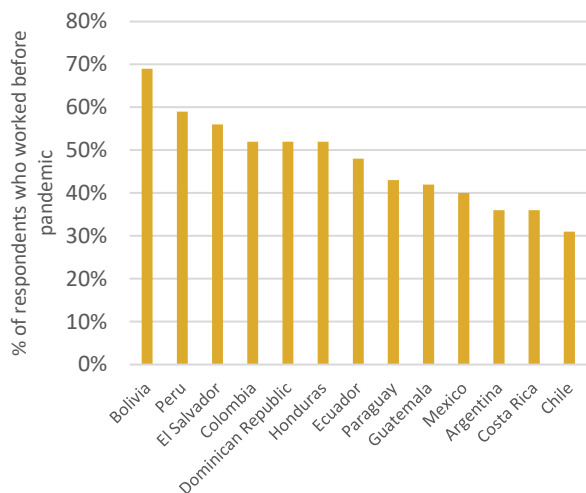
<sup>26</sup> World Bank. (2022a). *Building Resilient Health Systems in Latin America and the Caribbean: Lessons Learned from the COVID-19 Pandemic*. Washington D.C.: World Bank.

<sup>27</sup> Ballon Fernandez, P. M.; Mejia-Mantilla, C.; Olivieri, S. D.; Lara Ibarra, G.; & Romero Haaker, F. J. (2021). *Lives or Livelihoods: The Costs of Staying Healthy - COVID-19 in LAC*. Policy Note, no. 1 Washington, D.C.: World Bank.

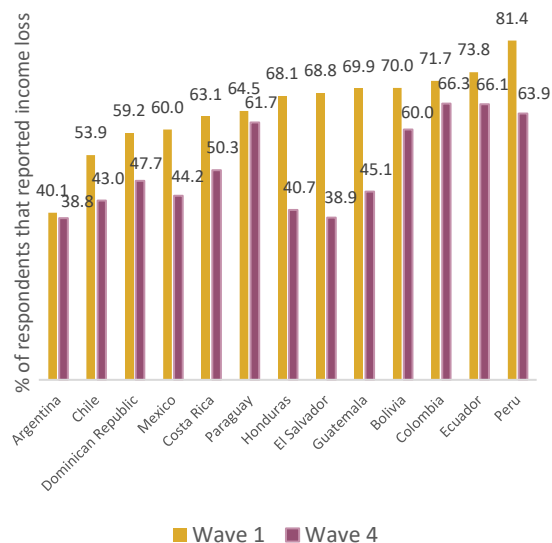
<sup>28</sup> Ballon et al. (2021).

decrease in income compared to 2019. Particularly vulnerable groups, such as women, young workers, and individuals with limited education and internet access, bore the brunt of the economic fallout.<sup>29</sup>

**Figure 20:** Latin America and the Caribbean: Stopped working since COVID-19 outbreak (% of respondents who worked before the pandemic and were above 18 years old), Wave 1



**Figure 21:** Latin America and the Caribbean: % of people who reported a loss of income during the pandemic



Source: World Bank, High Frequency Phone Surveys (HFPS), Washington D.C.

Note: Data for Wave 1 collected between May and June 2020; data for Wave 4 collected between May and July 2021

**The post-COVID recovery was slowed down by the invasion of Ukraine, spiking inflation and a food and fuel crisis.** The combination of successive crises following the pandemic has led to a slowdown in recovery with slow economic growth, sluggish employment creation, and strong inflationary pressures that have pushed up food and energy prices.<sup>30</sup> (**Box 2:** Social protection response to the fuel and food crisis discusses the response to the macro-economic shock brought about by the heightened inflation and food and fuel crisis in the LAC region in further detail.)

## Socio-economic implications of shocks

### Impact on poverty

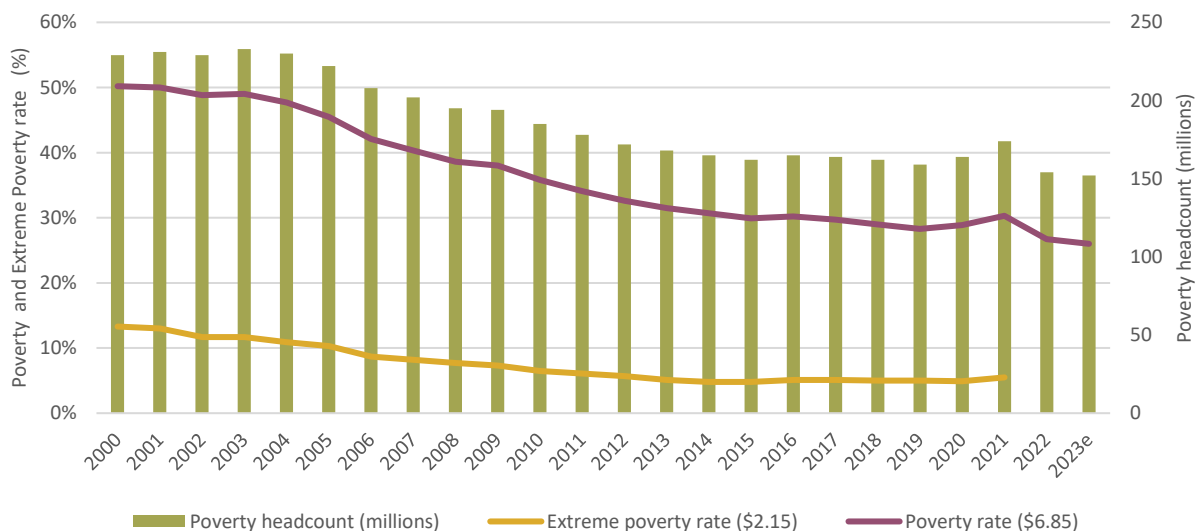
**The region witnessed a decreases in poverty and extreme poverty rates during the last two decades.** Poverty rates (measured as individuals living below \$6.85 per day) and extreme poverty rates (measured as individuals living below \$2.15 per day) have decreased steadily across Latin America and the Caribbean over the past decades (*Figure 22*). In aggregate, between 2000 and 2022, poverty measured by the 6.85 poverty line was reduced by 23 percentage points, from 50 to 26.6 percent. During the pandemic, between 2019 and 2021, poverty rates increased by 2 percentage points from 28.3 to 30.3 percent and extreme poverty rates grew from 5 to 5.5 percent. In 2022, poverty rates showed a significant recovery from the pandemic levels and returned to pre-pandemic levels (26.7 percent). This was driven by a quick

<sup>29</sup> Maurizio, R. (2020). *Labour Overview in times of COVID-19: Impact on the labour market and income in Latin America and the Caribbean*. Second Edition. Geneva: ILO.

<sup>30</sup> ECLAC. (2022). *Social Panorama of Latin America and the Caribbean, 2022* (LC/PUB.2022/15-P). Santiago: Economic Commission for Latin America and the Caribbean (ECLAC).

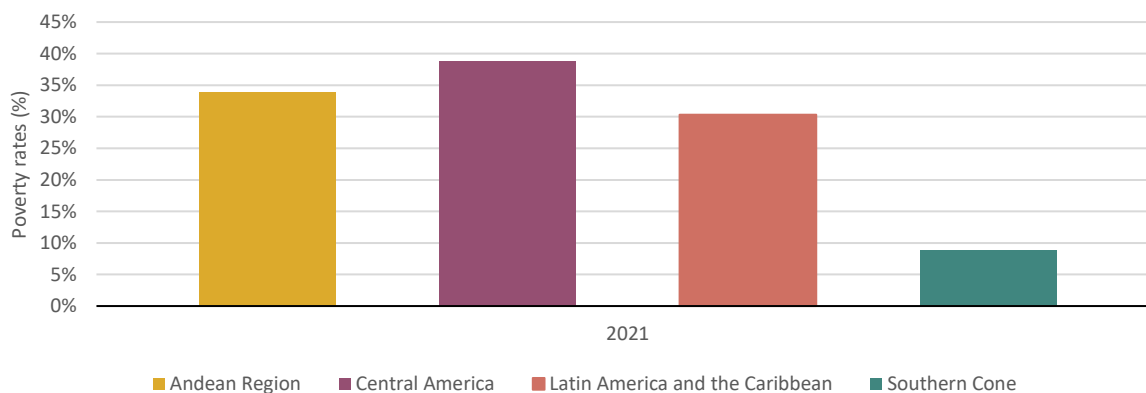
recovery in Brazil and Mexico, which both affect the aggregate figures in the region.<sup>31</sup> The Central America region is the poorest sub-region, with almost two-fifths of the population living in poverty, followed by the Andean region (**Figure 23**).

**Figure 22:** Latin America and the Caribbean (18 countries): poverty headcount, poverty and extreme poverty rates, 2000 – 2021. Poverty \$6.85; Extreme poverty \$2.15 (2017 PPP)



Source: World Bank (2023f) based on SEDLAC (CEDLAS and the World Bank) tabulations.  
 Note: 2017 PPP. Data is preliminary for 2022 and outcomes are based on predictions for 2023.

**Figure 23:** Latin America and the Caribbean (18 countries), Central America, Andean and Southern Cone poverty rates 2021. Poverty \$6.85



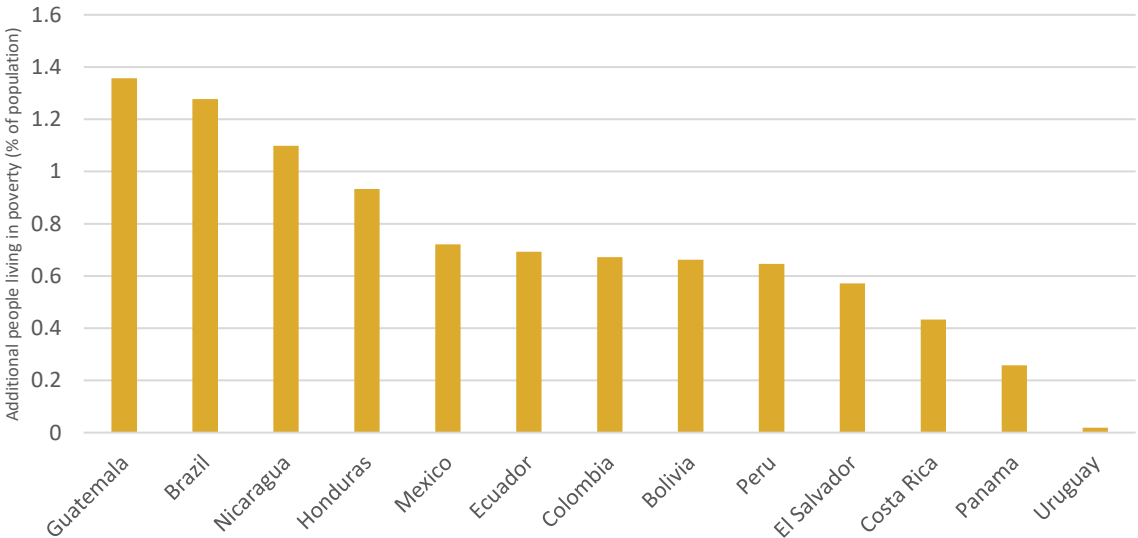
Source: LAC Equity Lab tabulations of SEDLAC (CEDLAS and the World Bank).  
 Note: 2017 PPP. The LAC aggregate is based on 18 countries. The Central America Region is the aggregate of Costa Rica, Guatemala, Honduras, Nicaragua, El Salvador, Panama and the Dominican Republic. The Andean Region is the aggregate of Bolivia, Colombia and Peru. The Southern Cone region is the aggregate of Argentina, Chile, Paraguay and Uruguay.

<sup>31</sup> World Bank. 2023. *Los retos que enfrenta America Latina y el Caribe para erradicar la pobreza*. World Bank Blog: Latin America and the Caribbean. Published 10/17/2023. Available at: <https://blogs.worldbank.org/es/latinamerica/retos-america-latina-caribe-erradicar-la-pobreza>

**Climate change is expected to dramatically increase poverty and extreme poverty rates in the region.**

Climate change exacerbates poverty and inequality through two main channels: Firstly, many economically disadvantaged countries, regions, and individuals are disproportionately affected by climate change and natural disasters. Secondly, when a climate-related shock occurs, marginalized individuals experience greater proportionate losses compared to those with more wealth and have fewer resources to cope with and recover from climate-induced shocks.<sup>32</sup> According to 2020 estimates, climate change could drive anywhere from 2.4 million to 5.8 million people into extreme poverty in the LAC region by 2030.<sup>33</sup> Among the countries in LAC, Guatemala, Brazil, and Nicaragua are predicted to be the most affected, with a larger proportion of their populations falling into poverty due to the impacts of climate change (Figure 24).

*Figure 24: Latin America and the Caribbean: Additional people living in poverty (below \$1.90 per day) in 2030 due to climate change (% of population)*



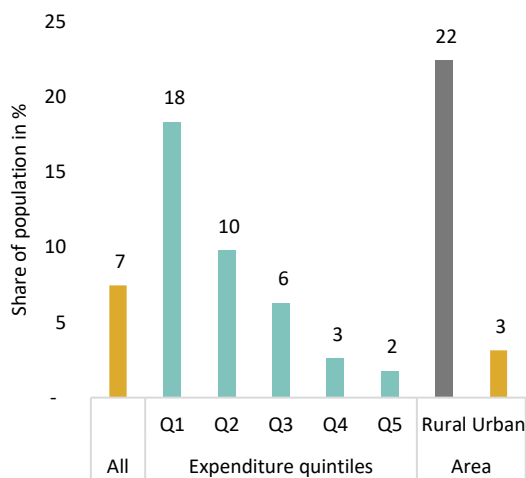
Source: Hallegatte et al. (2016).  
 Note: Based on high-impact climate scenario

**Climate change disproportionately impacts poorer countries, regions, and individuals.** The fact that climate change disproportionately impacts poorer countries is well recognized.<sup>34</sup> Within Latin America, evidence shows a strong negative correlation between Gross Domestic Product (GDP) per capita and baseline temperature, with poorer countries being more exposed to higher temperatures.<sup>35</sup> Furthermore, climate change's effects will disproportionately affect poorer individuals who are more likely to reside in disaster-prone areas or informal housing that is more vulnerable to climate change.<sup>36</sup> To illustrate these disparities, data from the Peru households survey shows that nearly 20 percent of the

<sup>32</sup> Busso, M. & Messina, J. (2020). *The Inequality Crisis: Latin America and the Caribbean at the Crossroads*. Inter-American Development Bank.  
<sup>33</sup> Jafino, et al. (2020).  
<sup>34</sup> Hallegatte, S.; Bangalore, M; Bonzanigo, L.; Fay, M.; Kane, T.; Narloch, T.; Rozenberg, J.; Treguer, D.; & Vogt-Schilb, A. (2016). *Shock Waves: Managing the Impacts of Climate Change on Poverty*. Climate Change and Development Series. Washington, D.C.: World Bank.  
<sup>35</sup> Busso, M. & Messina, J. (2020).  
<sup>36</sup> Idib

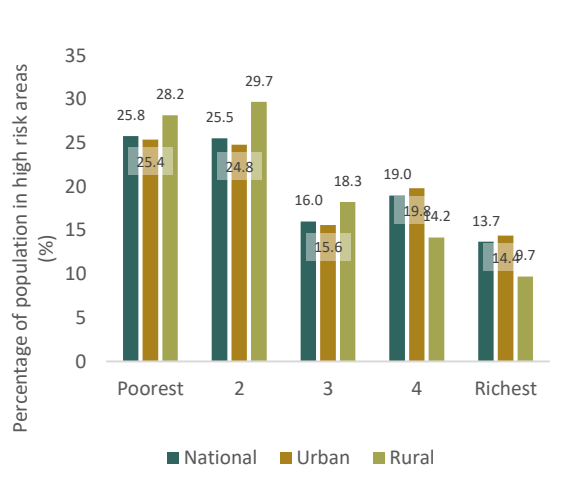
poorest quintile reported their household being affected by a covariant natural shock in the last 12 months, while only 2 percent of the richest quintile experienced the same (Figure 25). In the Dominican Republic, every fourth poor household at the bottom quintile of the income distribution resides in high-risk areas of flooding, which is significantly higher than rich households (13.7 percent). This further underscores the unequal impact of climate-related disasters on poor and vulnerable households (Figure 26). In both Peru and the Dominican Republic rural populations are impacted by climate-related disasters to a larger extent than urban households.

**Figure 25:** Peru - People exposed to covariant natural shocks by expenditure quintile and location (2021)



Source: World Bank (2023). Rising Strong: Peru Poverty and Equity Assessment. Washington, D.C.: The World Bank. Based on data from the National Household Survey

**Figure 26:** Dominican Republic - Percentage of households living in high-risk areas of flooding, by wealth quintiles and rural/urban areas (2021)



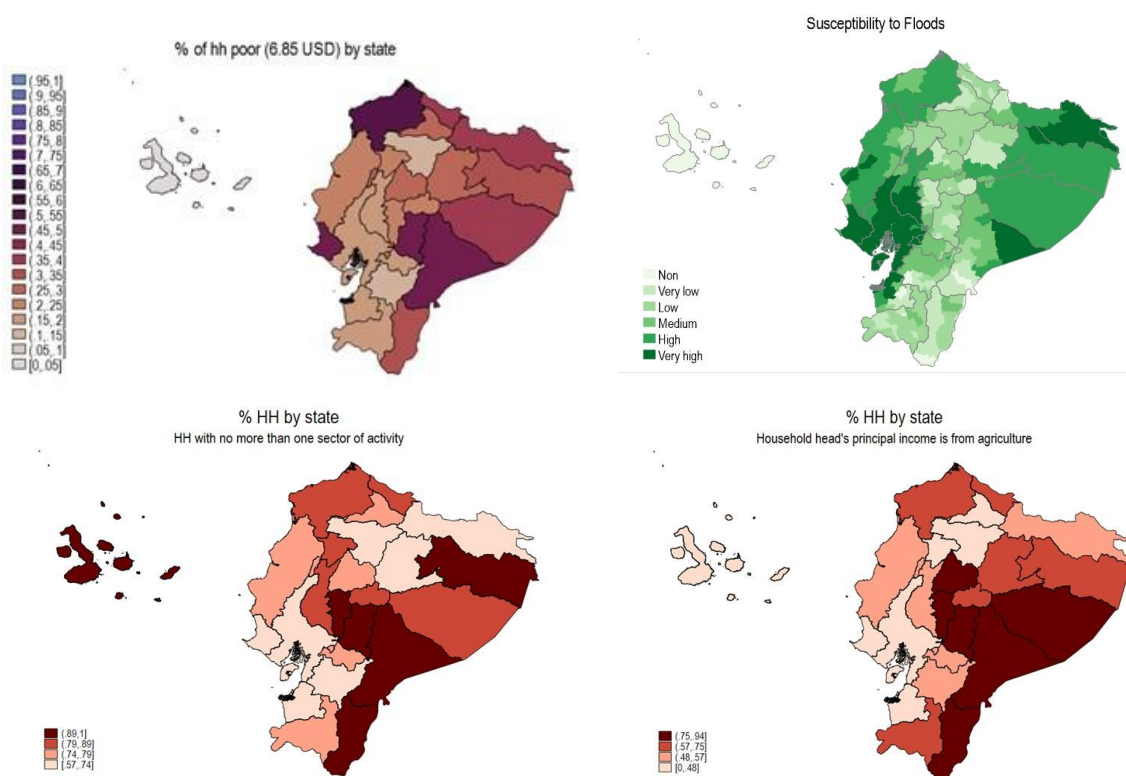
Source: World Bank. Forthcoming. Dominican Republic Poverty Assessment.

**Poor households suffer greater losses in proportion to economic wealth as a result of climate-induced shocks.** A notable example occurred in 1998 when Hurricane Mitch struck Honduras. The devastation resulted in the poorest quintile of households losing a staggering 18 percent of their assets, while the highest quintile experienced a comparatively lower loss of only 3 percent of their assets.<sup>37</sup> This is because economically disadvantaged households have fewer resources to cope with and recover from climate-induced shocks. For instance, when studying floods in the eastern states of Ecuador, it becomes evident that a substantial percentage of vulnerable households with low-income diversification heavily rely on agriculture, making them particularly susceptible to potential flood damage. Among these regions, Morona Santiago stands out as an example of households lacking coping capacity, where the incidence of household poverty measures around 50 percent. Moreover, the state faces a higher vulnerability to floods. Unfortunately, the ability of these households to cope with floods is significantly limited, with over 90 percent relying on a single stream of income and 70 percent depending on agriculture as their main source of income (Figure 27).<sup>38</sup>

<sup>37</sup> Morris, S. S., O. Neidecker-Gonzalez, C. Carletto, M. Munguía, and J. M. Medina. (2002). *Hurricane Mitch and Livelihoods of the Rural Poor in Honduras*. World Development 30: 49–60.

<sup>38</sup> Tisei, F. (2022). Ecuador Stress Test Brief.

Figure 27: Ecuador – poverty, vulnerability to climate change and coping mechanisms, by province



Source: Tisei, Francesco. 2022. Ecuador Stress Test Brief.

## Impact on human development

**Natural disasters and climate shocks have adverse consequences for the accumulation of human capital.** These events can lead to a decline in human capital by disrupting educational achievements and negatively affecting health, which, in turn, is likely to hamper future productivity.<sup>39</sup> Evidence from LAC shows that exposure to weather-related shocks in early life can result in increased infant mortality, impaired nutrition, and short-term health issues, with long-term impacts on education and labor market outcomes.<sup>40</sup> Extreme heat can also reduce learning and educational attendance among school-aged children. Studies focusing on the impacts of hurricanes and tropical storms in Central America reveal negative effects on the nutrition and educational attendance of young individuals.<sup>41</sup> Among the working age population, climate change can affect earnings and jobs. For instance, in coastal areas of LAC relying on tourism, bleaching of coral reefs threatens the livelihood of thousands.<sup>42</sup> Furthermore, climate change is linked to an increased incidence of vector-borne diseases in LAC, posing a significant risk to people

<sup>39</sup> Human Capital Project. (2022). *Avoiding the Meltdown in Human Capital: Delivering for people and the planet*. Washington D.C.: World Bank.

<sup>40</sup> e.g. Andalon, M.; Azevedo, J. P.; Rodríguez-Castelán, C.; Sanfelice, V.; & Valderrama-González, D. (2016). *Weather Shocks and Health at Birth in Colombia*. *World Development* 82:69-82; Adhvaryu, A.; Nyshadham, A.; Molina, T.; & Tamayo, J. (2018). *Helping Children Catch Up: Early Life Shocks and the Progresa Experiment*. Working Paper 24848, National Bureau of Economic Research, Cambridge, MA

<sup>41</sup> Oviedo, A. M.; & Moroz, H. (2014). *A Review of the Ex Post and Ex Ante Impacts of Risk*, Background paper for the 2014 World Development Report.

<sup>42</sup> IDB. (2017). *How does climate change affect Latin American and Caribbean jobs?* Published: 12/12/2017. Available at: <https://blogs.iadb.org/sostenibilidad/en/how-does-climate-change-affect-latin-american-and-caribbean-jobs/#:~:text=Although%20they%20might%20seem%20as,regulations%20and%20policies%20meant%20to> (accessed 9/28/2023)



lacking access to safely managed water supplies, safe sanitation, and health <sup>43</sup> [108]

### Impact on displacement and migration

**Climate change is becoming a significant factor driving human mobility on a global scale.** As documented by the 2022 Intergovernmental Panel on Climate Change (IPCC) report, various studies have found a relationship between climate change and human mobility, such as migration or forced displacement. While this may include international migration, most climate-induced migration is expected to occur within country borders. The IPCC report highlights that rapid-onset climatic events tend to trigger involuntary migration and short-term, short-distance mobility, while climatic events such as droughts and the rising sea-level are more likely to lead to long-distance internal displacement trends. <sup>44</sup>

**The World Bank "Groundswell" report provides projections for the number of internal climate migrants in Mexico and Central America by the year 2050.** Under a pessimistic scenario, the average number of internal climate migrants in Mexico and Central America is projected to reach 2.1 million people, which represents approximately 1 percent of the population. In the Dominican Republic, a similar methodology was used to estimate the number of climate migrants in the country. It was estimated that during the period 2020–2050, between 149,000 and 368,000 people could potentially migrate internally due to the impacts of climate change, accounting for 1.2–2.8 percent of the Dominican Republic's population. Additionally, the report estimates that up to 176,000 Haitian migrants will migrate to the Dominican republic as a result of climate change. <sup>45</sup>

**Migrant populations furthermore face significant difficulties as a result of residing in areas that are disproportionately exposed to climate-induced shocks.** In the case of Colombia, migrants constitute an exceptionally vulnerable population within host cities as they tend to settle in the most marginalized areas that are particularly susceptible to climate shocks. 67.3 percent of Venezuelan migrants in Colombia live in municipalities and territorial entities with medium, high, and very high hydrometeorological risks. <sup>46</sup>

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<sup>43</sup> World Bank. (2014). *Turn Down the Heat: Confronting the New Climate Normal*. Washington, D.C.: World Bank.

<sup>44</sup> IPCC. (2022): *Climate Change 2022: Impacts, Adaptation and Vulnerability*. Contribution of Working Group II to the Sixth Assessment Report of the Intergovernmental Panel on Climate Change. Cambridge, UK and New York, NY, USA: Cambridge University Press. 3056 pp.

<sup>45</sup> Martinez, R. M. & Aguilera A. I. (2023). *Climate Migrants in the Dominican Republic*. Washington D.C.: World Bank.

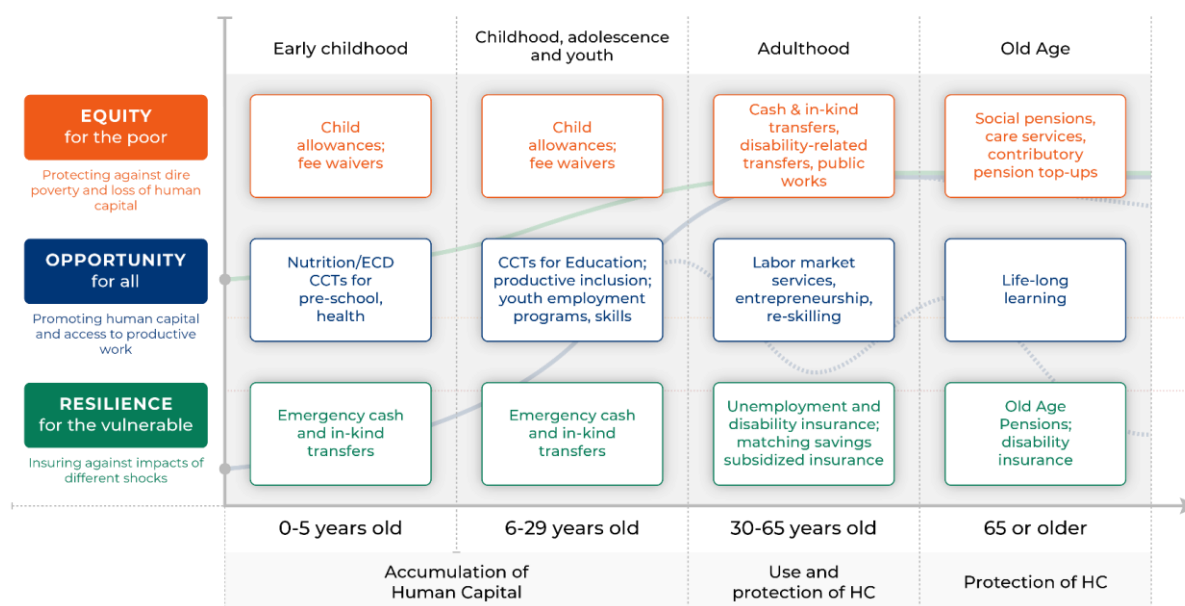
<sup>46</sup> World Bank. (2021 d). *Social and Economic Integration of Migrants Development Policy Financing (P176505)*. Based on calculations using data from Migración Colombia, administrative records from the SIRE, PEP, Ministry of Foreign Affairs registries (as of January 31, 2021), the 2018 National Population and Housing Census, the Institute of Hydrology, Meteorology and Environmental Studies (IDEAM) 2017. Tercera Comunicación Nacional de Cambio Climático. IDEAM, PNUD, MADS, DNP, CANCELLERÍA, FMAM. Bogotá D.C., Colombia



## Chapter 2: A snapshot of the state of social protection in LAC

LAC countries have a long-standing tradition in implementing social protection programs and services to help vulnerable and poor households manage risk. Although social insurance had already existed for decades, social protection systems boomed in the 1990s across countries in Latin America with the introduction of non-contributory programs to respond to the pressing issues of poverty and vulnerability in the region.<sup>47</sup> Since then, nearly all LAC countries have embraced strategies to advance social protection, with a main focus on the development of social assistance programs. The menu of social protection programs and services offered in LAC countries is extensive and encompasses non-contributory social safety nets, including conditional cash transfers, in-kind contributions and social services; contributory social insurance schemes, including provisions for pensions and unemployment insurance; and active labor market programs, such as training and job placement services, as well as interventions for productive inclusion (Figure 28). Today most countries in LAC have an established social protection system and the region performs relatively well compared to others in terms of spending, coverage, and adequacy of social protection benefits.

Figure 28: Social Protection and Jobs Programs in LAC across the lifecycle



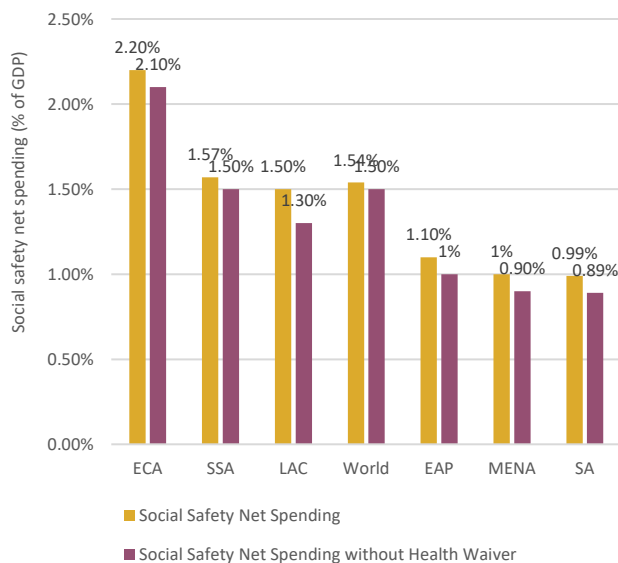
Source: World Bank (2021). Social Protection and Jobs Compass.

**Social safety net spending in LAC is on par with the world average, with great variations across countries within the region.** Europe and Central Asia is the world-leading region in terms of spending on social safety nets with an average spending of 2.2 percent of GDP (Figure 29). The Latin America and Caribbean and Sub-Saharan African regions are in the middle range of social safety nets globally, with an average

<sup>47</sup> Ferreira, F. H. G.; & Robalino, D. A. (2010). *Social Protection in Latin America: Achievements and Limitations*. World Bank Policy Research Working Paper No. 5305.

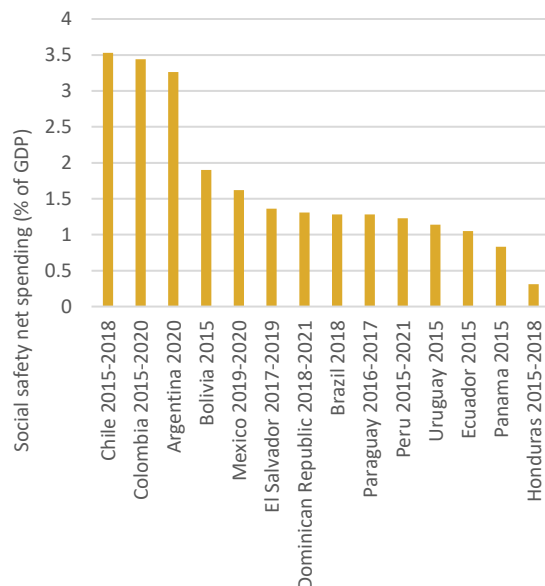
expenditure of 1.5 percent of GDP. Within LAC, countries exhibit different levels of spending. For instance, countries like Chile, Colombia and Argentina spend above the Europe and Central Asia average on social safety nets. In contrast, countries such as Ecuador, Panama and Honduras allocate a significantly smaller proportion of spending towards social safety nets and spend less than the South Asia average (Figure 30).

Figure 29: Social safety net spending (% of GDP), by region



Source: World Bank. (2018). *The State of Social Safety Nets 2018*. Washington, D.C.: World Bank.

Figure 30: Annual Social Safety Net Spending as a Percentage of GDP



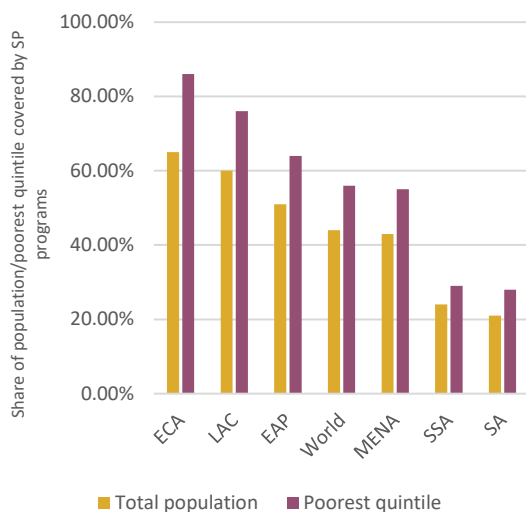
Source: ASPIRE (Atlas of Social Protection Indicators of Resilience and Equity). Washington, D.C.: World Bank. <https://www.worldbank.org/en/data/datatopics/aspire>.

**Social protection programs in LAC cover a large segment of the poor.** A characterizing feature of labor markets in LAC is high informality, with approximately half of the employed population being informal.<sup>48</sup> This, in turn, has an impact on the coverage of social protection systems in LAC, leaving a large share of informal workers excluded from social insurance and thereby less protected from risks<sup>49</sup>. Despite this, the overall coverage of any form of social protection, as well as coverage of the poorest quintile in LAC, is the second highest in the world, after Europe and Central Asia. Close to 60 percent of the overall population in the LAC region and 76 percent of the poorest quintile are receiving some form of social protection benefit (Figure 31). Within LAC, the countries with the highest coverage are Uruguay, Costa Rica, Paraguay and Peru, with overall coverage and poorest quintile coverage ranging between 70 and 90 percent. At the other end of the spectrum, countries such as Colombia still exhibit low coverage of social protection programs (Figure 32).

<sup>48</sup> ECLAC/ILO. (2023). *Employment situation in Latin America and the Caribbean: : Towards the creation of better jobs in the post-pandemic era*. Note: The countries included in this average are: Brazil, Chile, Colombia, Costa Rica, Ecuador, Mexico, Panama and Paraguay.

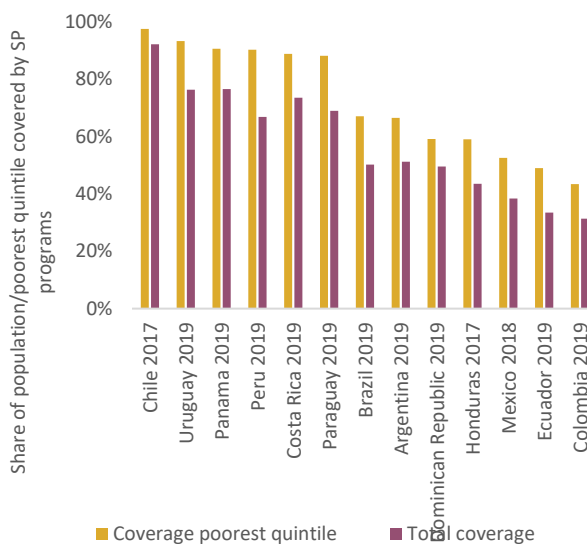
<sup>49</sup> UNDP. (2021). *How effective are Social Protection Policies in Latin America and the Caribbean?*

**Figure 31:** Share of population and poorest quintile that receives any social protection, as captured by household surveys, by region.



Source: World Bank. (2018). *The State of Social Safety Nets 2018*. Washington, D.C.: World Bank.

**Figure 32:** Coverage of social protection programs by select countries in Latin America and the Caribbean



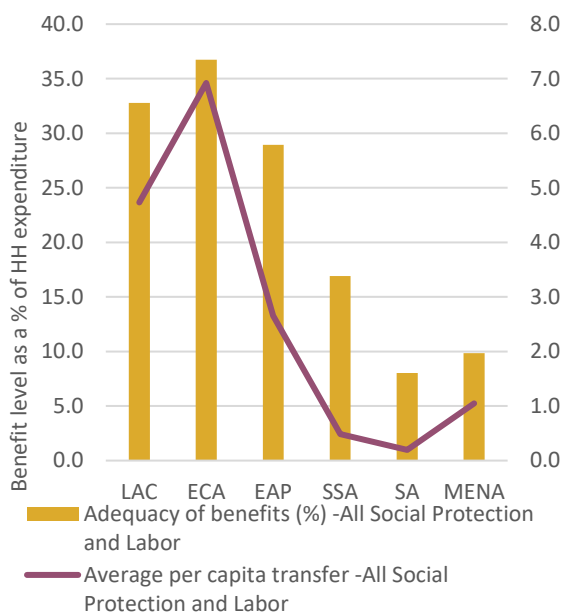
Source: ASPIRE (Atlas of Social Protection Indicators of Resilience and Equity). Washington, D.C.: World Bank. <https://www.worldbank.org/en/data/datatopics/aspire>.

### The benefits provided by social protection programs cover one-third of household consumption in LAC.

Benefit levels can be considered relatively adequate and are proven to have a positive impact on poverty reduction. Despite only covering, on average, one-third of household consumption, benefits are more adequate compared to most other regions in the world (*Figure 33*). Bolivia and Belize have the highest benefit adequacy in the region, whereby social protection benefits cover almost half of the expenditures of poor households. Honduras and the Dominican Republic exhibit the lowest benefit adequacy in the region, where benefits cover less than 10 percent of household expenditures (*Figure 34*). Social protection programs have also demonstrated results in reducing poverty and inequality and increasing human capital. Between 1998 and 2014, social protection programs (including pension) in the LAC region have, in fact, led to a reduction in the poverty headcount ratio by a staggering 28.4 percent.<sup>50</sup>

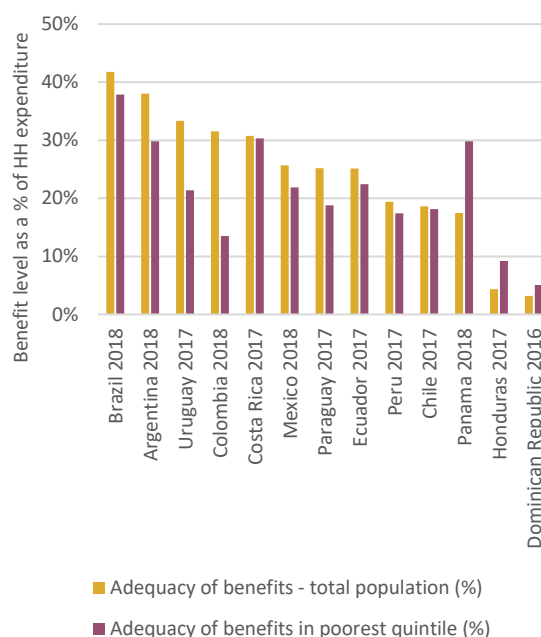
<sup>50</sup> Estimates based on ASPIRE (Atlas of Social Protection Indicators of Resilience and Equity), World Bank, Washington, D.C.: <https://www.worldbank.org/en/data/datatopics/aspire>.

**Figure 33:** Adequacy of social protection (benefit level as a percentage of household expenditure), by region



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

**Figure 34:** Adequacy of social protection (benefit level as a percentage of household expenditure) by selected Latin American and Caribbean countries



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

**Box 2: Social protection response to the fuel and food crisis**

Several LAC countries have leveraged their social protection systems to respond to the rising prices of food items and fuel. Russia’s invasion of Ukraine has impacted trade in the LAC region. While such an impact may be positive for some countries (e.g. petroleum and gas exporters), it yields no gain for others (e.g. importers of petroleum and gas).<sup>51</sup> Many of the countries that have been negatively impacted by the invasion of Ukraine are adopting several policy measures related to fiscal and trade policy, as well as social protection.

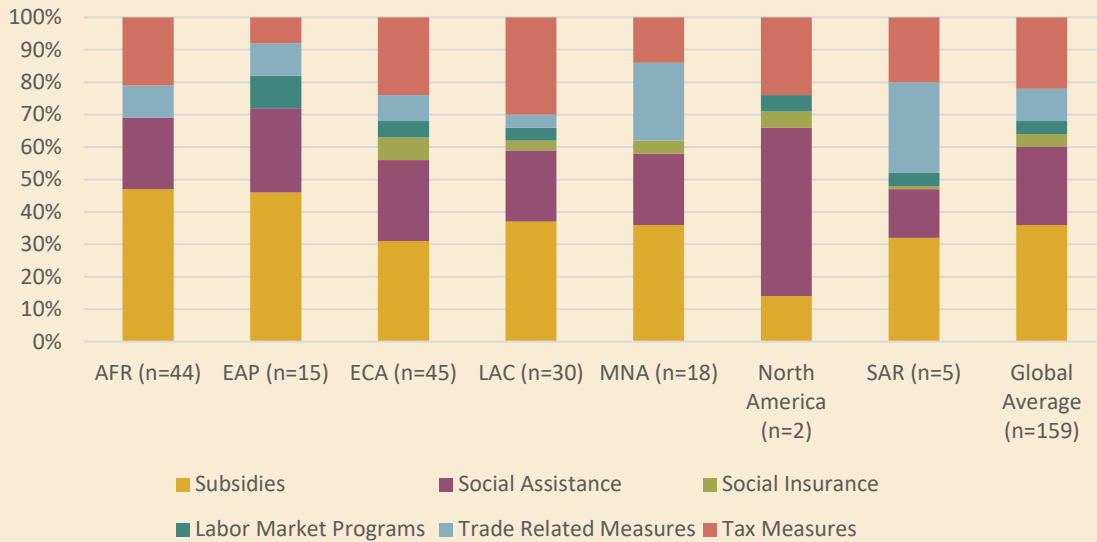
A notable trend in the responses of LAC countries has been their preference for subsidies over social assistance. The approach to addressing shocks through social protection in LAC countries has shifted significantly, with subsidies becoming the primary social protection measure, often accompanied by tax measures (Figure 35). This marks a significant departure from the early stages of the pandemic, when social assistance programs were either extensively expanded or introduced throughout the region.<sup>52</sup> For instance, in the Dominican Republic 300,000 families were enrolled in the *Supérate* and *BonoGas* subsidy programs. In addition, a three-month agreement was formed between the

<sup>51</sup> World Bank. (2022c). *The impact of the Ukraine war and associated sanctions on LAC countries*. Washington D.C.: World Bank

<sup>52</sup> Gentilini, U.; Almenfi, M.; Orton, I.; & Dale, P. (2020). *Social Protection and Jobs Responses to COVID-19: A Real-Time Review of Country Measures*. World Bank, Washington, D.C.

government and private food retailers, resulting in the provision of a weekly food basket for less than USD 20. In Chile, a new initiative called "Chile Apoya, Plan de Recuperación," which builds upon the existing "Chile Apoya" social programs, was implemented. As part of this package, a price control measure for electricity came into effect on May 16, 2022, whereby electricity prices are capped for consumption up to 350 kWh. For consumption levels between 350 and 500 kWh, there is a maximum allowable 5 percent increase in the cost, and for consumption exceeding 500 kWh, a maximum 15 percent increase in the total cost is applied.<sup>53</sup>

**Figure 35:** Composition of global social protection responses to the food and fuel crisis by region



Source: Gentilini, Ugo; Almenfi, Mohamed; Lyengar, Hrishikesh TMM; Okamura, Yuko; Urteaga, Giorgia V.; Muhindo, Jimmy V.; & Aziz, Sheraz. 2022. *Tracking Global Social Protection Responses to Price Shocks*. Living paper v.3. Discussion paper No. 2211. Washington D.C.: World Bank.

**Subsidies present a number of challenges<sup>54</sup>:**

1. Subsidies typically benefit wealthier segments of the population rather than poorer families.
2. Subsidies are costly measures that are cumbersome to discontinue once the crisis subsides.
3. Subsidies can have negative externalities, such as in the case of fuel, which may have negative environmental impacts.

Advancing the ASP agenda can guide governments in transitioning from subsidies towards the provision of social assistance in times of crisis.

**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.** The social protection delivery chain framework becomes instrumental in preparing for and strategically planning the implementation of

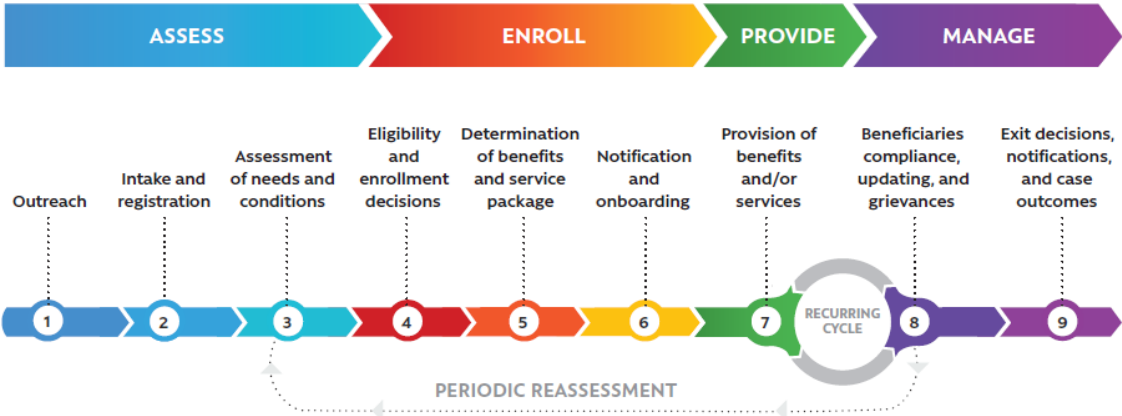
<sup>53</sup> World Bank. (2022c).

<sup>54</sup> based on: Murthi, M.; Rutkowski, M.; & Gentilini, U. (2022). *Helping families cope with price shocks -without subsidies*. *World Bank Blog*. Published: 10/07/2022. Available at: <https://blogs.worldbank.org/voices/helping-families-cope-price-shocks-without-subsidies> (accessed 9/21/2023)



routine and shock-responsive social protection interventions in specific contexts. The delivery chain comprises four pivotal implementation phases: 'Assess,' 'Enroll,' 'Provide,' and 'Manage', as outlined in Figure 36, and can serve as an apt framework to evaluate and effectively bolster government-owned social protection across the program cycle. Many countries in LAC have recently digitalized or adopted converging technologies as part of their delivery chain. Some countries have transferred to beneficiary outreach through social media, digital provision of benefits (such as digital payments) and Machine Learning as a means to minimize exclusion and inclusion errors, improve the quality of data, and verify the accuracy of information (see Box 4). A digital delivery system makes it easier to target and keep real time tracking of beneficiaries and deliver aid in shock-affected areas.

Figure 36: The Social Protection Delivery Chain



Source: Lindert, Kathy; Karippacheril, Tina George; Rodriguez Caillava, Inés; Nishikawa Chavez, Kenichi. 2020. Sourcebook on the Foundations of Social Protection Delivery Systems. Washington, DC: World Bank.

**The higher levels of benefit adequacy as well as social protection spending and coverage compared to most regions give the LAC region an advantage in leveraging social protection systems to respond to shocks.** Building on the evidence presented around the LAC region’s structural vulnerabilities, the vast array of hazards to which it is exposed, as well as the social protection context in the region, the next chapter puts forth the results yielded by the various Stress Test Assessments conducted in various LAC countries in the past two years. Based on these results, the good practices and overarching weaknesses detected by the assessments are presented, combined with emerging recommendations divided by ASP building block.



## Chapter 3: Good practices in the Latin America and Caribbean region

**The LAC region is at the forefront of initiatives aimed at making their existing social protection systems more adaptive.** As discussed in Chapter 2, many countries in the region have invested in building inclusive social protection systems that reduce poverty and stimulate the productive potential of vulnerable households. In light of the covariate shocks that recur in such countries, leveraging social protection systems to cushion the most vulnerable segments of society from the socio economic repercussions of extreme events has become increasingly relevant. While many countries in the region benefit from consolidated DRM functions that provide relief assistance in the aftermath of extreme natural events, the recent COVID-19 pandemic and global inflation have carved out a more prominent role for the social protection sector in disaster risk management. This realization is helping build consensus in the region on the importance of being able to rely on versatile and adaptive social protection systems that can be leveraged in response to all types of shocks – including less frequent ones – and which can help stimulate the recovery of shock-affected populations.

**Countries in the LAC region are frequently regarded as champions in the field of social protection.** Significant progress has been made in devising robust social protection systems, with varying degrees of success across different countries and sub-regions. However, many countries in the LAC region are still struggling to shift from the launch of *ad hoc* shock responses to a more predictive and risk-informed *modus operandi* of providing assistance to shock-affected populations in the aftermath of extreme events. Building on the results yielded by the Stress Test assessments conducted by the World Bank, this chapter highlights some of the observed good practices in making national social protection systems in the region more adaptive, segregated by ASP building block. Moreover, the chapter also touches upon the critical overarching weaknesses detected by the various assessments, as well as offering key high-level recommendations to address such shortcomings with the ultimate goal of advancing towards more adaptive social protection systems in the region.

### Overall Stress Test Assessment Results

**A total of 14 Stress Test assessments have been conducted in LAC between 2021 and 2023, shedding light on the varying levels of adaptiveness of the various social protection systems in the region, as summarized in Table 2.** All the assessments were carried out either during or right after the COVID-19 crisis – a time when most governments in the region invested significant resources in enhancing social protection systems to curb the negative impacts of the pandemic on their citizens’ socio-economic welfare. While many countries in the region have pledged to maintain some of the initiatives and developments achieved in response to the pandemic, conducting a new round of assessments in the near future will be essential to ascertain whether such advancements are still effective. *Table 2* is not intended to establish a hierarchy of adaptiveness of the countries’ social protection systems, but rather seeks to enhance understanding of the strengths and weaknesses in the LAC region from an ASP perspective, highlighting areas of progress and potential areas for further improvement and investment. Additionally, it is important to note that comparing systems between Caribbean and South American countries is challenging due to several factors, ranging from population size, the nature and impacts of covariate shocks, and fiscal space/budgetary considerations.

**Table 2** reports the high level of adaptiveness of the more 'established' social protection systems in the region, highlighting the notable adaptability of well-established programs and the significant strides made by other LAC countries in developing adaptive programs and delivery systems. With a few exceptions, the region exhibits moderately adaptive data and information systems that can support the deployment of risk-informed shock responses. On the financing front, only two countries showcase robust disaster risk funding mechanisms, underscoring a need for intensified efforts in all other countries. Finally, the country-level assessments have shed light on the absence of *ex ante* institutional arrangements in many countries, in part due to the lack of institutionalized linkages between the DRM and social protection sectors, which manifests in the form of overlapping mandates and *ad hoc* post-disaster coordination between the various stakeholders in times of crisis.

*Table 2: Stress Test results in Latin America and Caribbean countries*

|                    | Programs    | Data and Information | Financing   | Institutional Arrangements | Overall score |
|--------------------|-------------|----------------------|-------------|----------------------------|---------------|
| Argentina          | Established | Emerging             | Established | Established                | Established   |
| Belize             | Nascent     | Nascent              | Emerging    | Emerging                   | Nascent       |
| Brazil             | Established | Established          | Emerging    | Established                | Established   |
| Chile              | Established | Established          | Emerging    | Established                | Established   |
| Colombia           | Emerging    | Emerging             | Emerging    | Emerging                   | Emerging      |
| Costa Rica         | Emerging    | Established          | Nascent     | Emerging                   | Emerging      |
| Dominican Republic | Established | Established          | Emerging    | Established                | Established   |
| Ecuador            | Emerging    | Emerging             | Nascent     | Emerging                   | Emerging      |
| Honduras           | Emerging    | Nascent              | Nascent     | Nascent                    | Nascent       |
| Mexico             | Emerging    | Emerging             | Emerging    | Emerging                   | Emerging      |
| Panama             | Emerging    | Emerging             | Nascent     | Emerging                   | Emerging      |
| Paraguay           | Nascent     | Nascent              | Nascent     | Nascent                    | Nascent       |
| Peru               | Established | Emerging             | Established | Emerging                   | Emerging      |
| Uruguay            | Established | Established          | Emerging    | Established                | Established   |



## Stress Test results, good practices and persisting challenges by ASP building blocks

**Devising robust ASP systems implies improving social protection mechanisms at multiple levels: Programs and Delivery Systems, Data and Information Systems, Finance, and Institutional Arrangements/Partnerships.** The following section provides an explanation of the relevance of each building block of the ASP framework, showcasing good practices and highlighting overarching gaps that have emerged from the various country-level assessments. Furthermore, based on the findings yielded by the Stress Test assessments in the LAC region, a number of country-specific recommendations geared towards the advancement of the ASP agenda have emerged for each building block of the ASP framework. Building on the overarching gaps detected through the various assessments, a series of general recommendations to address these issues are set forth.

### Programs and Delivery Systems

**The recent large-scale covariate shocks that occurred over the past three years have shed light on the value added of directing support towards impoverished and susceptible households through existing government-run social protection schemes.** Compared to other regions, many of these schemes are already established in LAC countries, whereby assistance is provided also once the crises subside as a means to support the recovery of households from the negative impact of these extreme events. Furthermore, certain programs possess the potential to enhance households' ability to cope *vis-a-vis* future shocks by diversifying income sources, bolstering local infrastructure and human resources, and imparting knowledge about managing risks and coping strategies. Global evidence indicates that proactive efforts to enhance resilience *ex ante* can result in a faster recovery for households affected by sudden crises.<sup>55</sup> The Stress Test assessment analyzes the capacity of existing social protection programs and mechanisms to be adjusted to respond to the heightened needs caused by covariate shocks. *Table 3* summarizes the Stress Test results for the crucial building block of programs and delivery systems.

**The delivery and payment systems employed to distribute assistance within these programs are pivotal in promptly extending aid during emergencies,** especially to individuals who are typically excluded from social protection schemes. For such reasons, the Stress Test assessment duly measures the capacity of existing delivery and payment systems to effectively support programmatic efforts in times of crisis.<sup>56</sup>

*Table 3: Stress Test results - Programs & Delivery Systems*

|                  | Programs    | Delivery Systems | Payment Systems | Programs - overall |
|------------------|-------------|------------------|-----------------|--------------------|
| <b>Argentina</b> | Established | Established      | Established     | Established        |
| <b>Belize</b>    | Nascent     | Emerging         | Nascent         | Nascent            |
| <b>Brazil</b>    | Emerging    | Established      | Established     | Established        |

<sup>55</sup> Bowen et al. (2020).

<sup>56</sup> Johnson et al. (2022).

|                    |             |             |             |             |
|--------------------|-------------|-------------|-------------|-------------|
| Chile              | Established | Established | Established | Established |
| Colombia           | Emerging    | Emerging    | Established | Emerging    |
| Costa Rica         | Established | Emerging    | Established | Emerging    |
| Dominican Republic | Emerging    | Established | Established | Established |
| Ecuador            | Emerging    | Emerging    | Emerging    | Emerging    |
| Honduras           | Emerging    | Emerging    | Emerging    | Emerging    |
| Mexico             | Emerging    | Emerging    | Emerging    | Emerging    |
| Panama             | Emerging    | Emerging    | Established | Emerging    |
| Paraguay           | Emerging    | Nascent     | Emerging    | Nascent     |
| Peru               | Established | Established | Established | Established |
| Uruguay            | Established | Emerging    | Established | Established |

Key

Latent

Nascent

Emerging

Established

Advanced

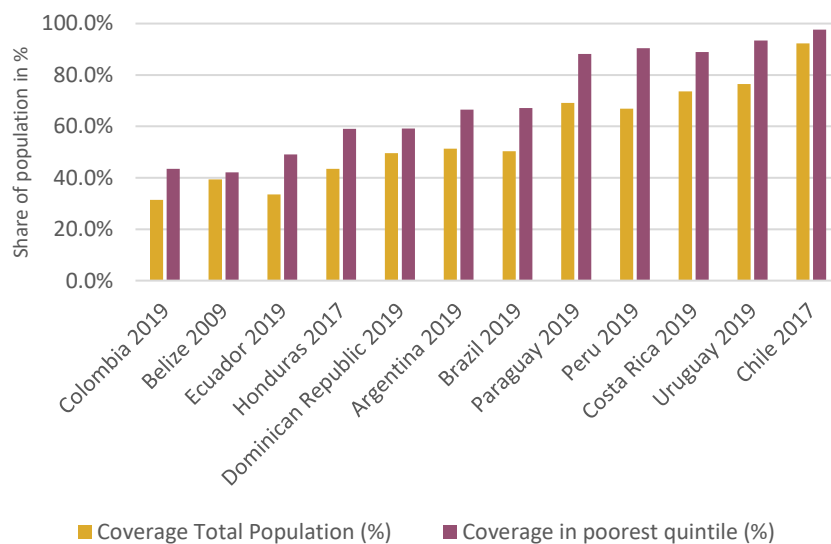
### *Programs: Stress Test results*

As shown in **Table 3**, many LAC countries rely on established and scalable social protection schemes, while others are strongly pursuing efforts to develop dynamic and fiscally sustainable programs that can be expanded in times of crisis. In many countries with ‘nascent’ social protection systems, the country-level assessments have underscored how the COVID-19 pandemic has helped carve a more prominent role for social protection in shock response deployment and management, which have typically been DRM-focused. Considering the ASP’s framework focus on resilience-building and shock recovery efforts, the assessments have also shed light on the existence of those measures that can help build household resilience ahead of shocks, as well as other mechanisms that can ensure their recovery in the aftermath of such events.

Many of the assessed LAC countries have a long-standing tradition of implementing social assistance programs to support the most vulnerable segments of society. *Figure 37* shows the coverage of social assistance programs (total population and the poorest quintile) across the region. While it is worth mentioning that the extent of coverage of social assistance programs does not necessarily reflect their effectiveness and quality, it certainly displays the firm commitment of governments to eradicate poverty and promote socio-economic empowerment amid the most vulnerable sectors of society. Moreover, while the LAC region is renowned for having pioneered conditional cash transfer programs with human capital development objectives, social protection programs have been generally underutilized for

resilience building and productive economic inclusion.<sup>57</sup> Advancing the ASP agenda can help unleash the full potential of social protection programs to address risk reduction and enhance climate change adaptation in a region as exposed to covariate shocks as LAC.<sup>58</sup>

**Figure 37:** Coverage of social assistance (total population and poorest quintile) by select Latin America and Caribbean countries



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

### *Programs: good practices of specific countries*

**Within the LAC region, numerous social protection programs have proven to be highly effective, thus establishing standards on a global scale.** Such government-led programs, characterized by their innovative approaches and positive impact on poverty reduction and socio economic empowerment, have not only garnered attention within the region but have also served as benchmarks for social protection practitioners worldwide. To this effect, countries such as Brazil and Uruguay have made considerable efforts in establishing well-sequenced and inclusive social protection programs that effectively address the well-being of their citizens. Moreover, the creation of linkages between social assistance schemes and basic services such as health and education has catalyzed efforts towards human capital development. This sub section also recognizes the enormous strides carried out by the Government of Argentina (GoA) in devising well-sequenced social protection programs with a lifecycle approach, and in ensuring that vulnerable categories and women are included in routine social protection programs and shock responses alike.

#### *Brazil*

**Brazil’s world-renowned social protection system, which comprises various programs, has extensive coverage of the vulnerable population.** Estimates suggest that before 2019, about 90 percent of Brazilian households had at least one member eligible for a ‘protected income’, either through their formal work

<sup>57</sup>Williams & Gonzalez. (2020).

<sup>58</sup>Ibid



status, old age, or their level of household income.<sup>59</sup> Brazil's main social protection program is called *Bolsa Família* (BF) and is the largest conditional cash transfer program in the world.<sup>60</sup> The program provides basic monthly income to families living in extreme poverty, while also promoting human capital accumulation. To be eligible, families must be registered in the national social registry and be classified as 'extremely poor'. The program, which also targets poor pregnant women and households with children and teenagers, assisted over 21 million beneficiaries in 2023 (60 percent of Brazil's poor families).<sup>3</sup> The basic monthly benefit was USD 89 in 2019 with a variable depending on household size and two other variable amounts for pregnant women or nursing mothers. Several studies have found a positive effect of the program on socio economic indicators. While past studies have not been able to isolate the program's effect on poverty and inequality in the country, there is a consensus that the program played an important role in this process.<sup>61</sup>

**The country-level assessment in Brazil has duly underscored both the robustness and the high level of adaptiveness of its main social assistance program.** In response to the COVID-19 pandemic, several social protection measures were leveraged to cushion the most vulnerable segments of the population from its negative economic impacts, including: (i) expanding BF; (ii) implementing a new temporary emergency cash transfer intervention called *Auxílio Emergencial* (AE); and (iii) providing subsidies to maintain formal labor contracts (*Benefício Emergencial de Manutenção do Emprego e da Renda* and *Benefício Emergencial de Suporte ao Emprego*).<sup>62</sup> The BF program was expanded horizontally, extending assistance to an additional 1.2 million families. During its expansion phase, the BF program eliminated the waiting list of families that met the eligibility criteria for accessing BF but could not be enrolled due to binding budget constraints of the previous program.<sup>63</sup> Over the course of the pandemic, BF beneficiaries were also automatically enrolled to receive AE benefits whenever the latter proved to provide larger benefits.<sup>64</sup> The BF cash transfer has also been leveraged in response to previous disasters, such as the dam collapse in *Brumadinho* in 2019. Two days after the disaster, the Ministry of Citizenship in Brazil, which is the main implementer of BF, announced that beneficiaries in the shock-affected areas could make anticipated withdrawals of the benefit and conditionalities were temporarily lifted.<sup>65</sup>

## Uruguay

**Uruguay's social protection system is characterized by a well-balanced combination of social safety net programs, social security mechanisms, and livelihood promotion schemes, covering more than 85**

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<sup>59</sup> It is important to highlight that 90 percent is achieved if the social protection system works at perfect implementation: all families claim the benefits that they are entitled to, all benefits are available, there are no waiting lists, and no misinformation.

<sup>60</sup> Morgandi, M.; Pereira Sousa Tsukada Lehmann, R. K.; Ed, M.; Zviniene, A.; Paiva, L. H.; & Barbosa, B. F. 2022. Social Protection for Brazil of the future: preparing for change with inclusion and resilience. Washington D.C.: World Bank.

<sup>61</sup> Neves JA, Vasconcelos FAG, Machado ML, Recine E, Garcia GS, Medeiros MAT. 2022. *The Brazilian cash transfer program* (Bolsa Família): A tool for reducing inequalities and achieving social rights in Brazil. *Glob Public Health*. ;17(1):26-42.

<sup>62</sup> World Bank. (2021a). *Auxílio Emergencial: Lessons from the Brazilian experience responding to COVID-19*. World Bank Latin American and Caribbean Studies. Washington, D.C.: World Bank

<sup>63</sup> Morgandi, M. (2020). *Project Information Document - Brazil: Income Support for the Poor affected by COVID-19 - P174197*. Washington, D.C. : World Bank Group.

<sup>64</sup> World Bank.(2020a).

<sup>65</sup> Ministerio do Desenvolvimento e Assistência Social, Família e Combate à Fome. (2019). *Moradores de Brumadinho terão pagamento do Bolsa Família antecipado*. Published: 1/28/2019. Available at: <https://www.gov.br/mds/pt-br/noticias-e-conteudos/desenvolvimento-social/noticias-desenvolvimento-social/moradores-de-brumadinho-terao-pagamento-do-bolsa-familia-antecipado> (accessed 9/28/2023).

percent of the population in the country.<sup>66</sup> The country's progressive legislation, strong institutional capacity, and public support have fostered an environment conducive to the implementation of robust social policies and integrated social protection programming.<sup>67</sup> Uruguay's social protection system currently encompasses two cash transfer programs targeting the poor and vulnerable households, *Tarjeta Uruguay Social* (TUS) and *Asignaciones Familiares – Plan de Equidad* (AFAM-PE), with a relevant coverage of the bottom two quintiles of the population.<sup>68</sup> The TUS program, managed by the Ministry of Social Development (MIDES), encompasses the provision of unconditional monthly cash transfers to the poorest households ranging from USD 30 to USD 81 depending on household size. The AFAM-PE program is managed by the Social Protection Bank (*Banco de Previsión Social*) and provides conditional cash transfers to poor households with pregnant women or children under 18 years of age. The value of entitlement is calibrated based on the number of children in the household and the children's level in the educational system. The basic value of the transfer amounts to USD 53, while the supplement for secondary education attendance amounts to USD 23. Eligibility for both programs is determined by the application of the Critical Deficiency Index (*Índice de Carencias Críticas*), which is periodically cross-checked in the social security database to monitor potential changes in the income status of beneficiaries. Moreover, the Government of Uruguay also implements a number of Active Labor Market Programs (ALMP), such as *Accesos* – a skills-plus cash program introduced in 2022 which provides skills training and a cash amount equivalent to the national minimum wage for up to seven months. Upon completion of the *Accesos* program, beneficiaries are connected to private or public employers affiliated with the scheme.<sup>69</sup>

**Building on the COVID-19 pandemic experience, the Government of Uruguay (GoU) is proactively ensuring that all its social protection measures feature shock-responsive mechanisms.** The COVID-19 pandemic was an unparalleled challenge for the GoU. Despite the lack of pre-agreed protocols documenting the minimal accepted value for emergency cash transfers, the GoU was dynamic in utilizing the pre-existing parameters of the routine AFAM-PE and TUS programs as the basis for the calculation of the value of entitlements. Both programs were successfully vertically expanded up to 70 percent of the routine entitlement between April 2020 and December 2021 in an attempt to prevent the most vulnerable segments of society from falling deeper into poverty.<sup>70</sup> Since the pandemic, the GoU has been working on developing a scalability framework to regulate the expansion of such programs *vis-à-vis* potential future shocks. Furthermore, given the relatively low labor informality rate in Uruguay (24.5 percent),<sup>71</sup> unemployment insurance mechanisms and subsidies are also widely utilized to curb the socio-economic repercussions of covariate shocks, as observed during the COVID-19 pandemic.

## Argentina

**The ASP framework emphasizes the importance of both building resilience ahead of time to minimize the immediate impacts of shocks, as well as guaranteeing inclusivity, especially among the vulnerable categories of society.** In this regard, the Government of Argentina (GoA) has a long-standing tradition of

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<sup>66</sup> Amarante, V.; & Scalese, F. (2022). *Tax-benefit responses in Uruguay during the COVID-19 pandemic*. WIDER Working Paper Series wp-2022-161, World Institute for Development Economic Research (UNU-WIDER).

<sup>67</sup> World Bank. (2020c). *Social Inclusion in Uruguay*. Washington, D.C.: World Bank.

<sup>68</sup> 94 percent of TUS beneficiaries are also AFAM beneficiaries

<sup>69</sup> Ministerio de Desarrollo Social. (2020). *Programa Accesos, edición 2022. Documento de Diseño*. Uruguay: Ministerio de Desarrollo Social.

<sup>70</sup> Amarante, Veronica & Scalese, Frederico. (2022).

<sup>71</sup> Rossel, c.; & Gutierrez, M. (2021). *Uruguay's Social Policy Response to Covid-19: Strong Fundamentals, Selective Expansion*. CRC 1342 Covid-19 Social Policy Response Series, 15 Bremen: CRC 1342

implementing a combination of social protection programs with a lifecycle approach and with a strong inclusivity lens.<sup>72</sup> Over the past decades, despite the repeated macroeconomic shocks that have affected the country, the GoA has been able to devise an articulate social protection system that addresses the risks faced by vulnerable individuals throughout their lifetime. By providing non-contributory ‘protective’ social assistance, combined with livelihood and employment protection programs, emphasis is placed on building the resilience of the most vulnerable segments of society ahead of a covariate shock, and in stimulating their recovery in the aftermath of such extreme events. The country’s most prominent social protection system is the Universal Child Allowance (*Asignación Universal por Hijo* - AUH), a cash transfer program introduced in Argentina in 2009 that provides financial assistance to over 4.4 million poor and vulnerable families with children, with demonstrated impacts on poverty reduction. According to an impact evaluation carried out in 2021, the AUH reduced poverty incidence by 16 percentage points among its beneficiaries between 2018 and 2020.<sup>73</sup> Eligible families receive cash transfers ranging from USD 55 to USD 220 per month, depending on their level of vulnerability; 96 percent of the recipients of AUH entitlements are women, who disproportionately bear the brunt of poverty in the country.<sup>74</sup>

**Argentina’s social protection programs have repeatedly been leveraged in response to covariate shocks, including the COVID-19 pandemic.** In response to the pandemic, the AUH program was vertically expanded and combined with the launch of the standalone *Ingreso Familiar de Emergencia* (Emergency Family Income), which covered all those households that despite being vulnerable, were excluded from non-contributory programs, such as the unemployed, the self-employed, and domestic workers. The AUH and other subsidy and productive inclusion schemes such as the Extraordinary Subsidy for Retired Women and Men, the *Entra 21*,<sup>75</sup> and the Economic Assistance Program for Homes and Residences have in-built social mobility components that aim at achieving gender equality as well as catering to the special needs of vulnerable categories, e.g., the elderly, migrants, and people living with disabilities.

#### *Delivery and Payment Systems: Stress Test results*

**As mentioned, this sub-building block of the ASP framework helps identify whether the country can rely on delivery and payment systems that can be easily adapted to the heightened needs caused by the onset of covariate shocks.** The findings of the country-level assessments have acknowledged the capacity of numerous social protection systems in the region to seamlessly execute vertical and horizontal expansions without any major bottlenecks. However, challenges in promptly and efficiently delivering aid to shock-affected populations persist in some countries. For these countries, the Stress Test assessments are proving valuable in enhancing policymakers' and practitioners' comprehension of the precise aspects within payment and delivery systems that necessitate increased investment and more defined protocols. These enhancements are critical in ensuring the successful and smooth implementation of shock responses.

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<sup>72</sup> Some of these programs include the Food Card, the Universal Allowances for Children, the Enhance Work Program, and others.

<sup>73</sup> Poy, S.; Sánchez, M. E.; Salvia, A.; & Tuñón, I. (2021). Evaluación de impacto de la Asignación Universal por Hijo (AUH) en la infancia a diez años de su implementación. Documento de investigación. Informe Especial. 1ª ed. Ciudad Autónoma de Buenos Aires: Educa, 2021.

<sup>74</sup> Potenza Dal Masetto, F. & Repetto, F. 2012. Social protection systems in Latin America and the Caribbean: Argentina. CEPAL.

<sup>75</sup> *Entra 21* is a government-owned scheme that combines life-skills and vocational training, along with internships with employers from the private sector. Source: Guillermo, C. 2014. New insights for *Entra21* in Cordoba. World Bank Blogs.

Published: 12/15/2014. Available at: <https://blogs.worldbank.org/jobs/new-insights-entra21-cordoba>(accessed: 9/21/2023)

### *Delivery and Payment systems: good practices of specific countries*

**Over the past years, numerous countries in the LAC region have demonstrated remarkable levels of innovation within their delivery and payment systems to sustain the expansion of social protection programs in times of heightened need.** The examples of Chile, Colombia, and Peru are put forth to showcase the level of innovation and the importance of leveraging existing structures and platforms to support the prompt deployment of assistance in times of crisis.

#### *Chile*

**Chile relies on robust delivery systems, which enable the prompt deployment of shock responses.** The social protection line ministry, the *Ministerio de Desarrollo Social y Familia* (MDSF), plays a key role in the needs assessment for shock responses, thanks to the deployment of the *Ficha Básica de Emergencia* (FIBE) and the *Ficha Básica de Emergencia Hídrica* (FIBE-H) tools and the *Calificación Socio Económica* (CSE) index.<sup>76</sup> The FIBE and FIBE(H) are surveys that enable data collection from shock-affected people or families who have undergone socio-economic damage and require immediate assistance. These tools have been instrumental in promoting risk-informed decision-making *vis-à-vis* the transfer modality and duration of socio-economic post-disaster responses.

**Chile relies on various payment solutions that support the deployment of assistance through social protection systems,** including the *CuentaRut*, a Government to Person (G2P) solution, whereby cash transfers are directly transferred to beneficiaries through their *BancoEstado* bank accounts. To extend assistance to households residing in the more remote areas of the country, the Government of Chile (GoC) relies on mobile phone payment systems. This menu of available payment systems technically enables the GoC to execute horizontal and vertical expansions and reach targeted beneficiaries across all areas of the country, due also to the extensive coverage of the social registry (*Registro Social de Hogares - RSH*), which covers 87 percent of the population.<sup>77</sup>

#### *Colombia*

**It is pertinent to recognize the tremendous efforts carried out by the Government of Colombia (GoCO) in strengthening its payment systems in support of social protection during the COVID-19 pandemic.** Following regulatory changes that enabled the authorization of e-money issuers in 2015, and the development of low-value payment mechanisms, Colombia's fintech ecosystem has flourished over the past eight years. Building on such progress, at the onset of the COVID-19 pandemic, the GoCO, through the *Departamento para la Prosperidad Social* (DPS), has been versatile in its ability to incorporate and leverage robust payment systems benefiting from transparent payment reconciliation procedures and robust internal protocols. This resulted in the provision of timely and transparent assistance to beneficiaries within the framework of its *Ingreso Solidario* socio-economic response. In this regard, the enhancement of payment systems successfully supported the implementation of the *Ingreso Solidario* program during the pandemic, whereby assistance was provided to a total of 3 million beneficiary households (63 percent of whom were women). Moreover, both for the *Ingreso Solidario* and the *Compensación del IVA* programs, financial inclusion efforts were carried out through the provision of mobile digital wallets for the unbanked population. Such user-centric innovations have been made

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<sup>76</sup>The CSE is a tool used to rank households based on the income and characteristics of their members. The CSE comprises a total of seven income or socioeconomic vulnerability brackets. Source: Ministerio de Desarrollo Social y Familia. Unidad Sistema Integrado de Información Social. (2023). Sistema Integrado de Información Social – SIIS. Official Web Portal.

<sup>77</sup> Consultations with the MDSF carried out in May 2023 as part of the Stress Test assessment

possible thanks to a successful Public-Private Partnership (PPP) between the GoCO and the banking sector, which resulted in a lasting increase in low-income households' access to financial products.<sup>78</sup> It is crucial for the GoCO to build on this successful experience in order to perpetuate the integration of fintech solutions for social protection as a means to deliver rapid and transparent shock responses, as well as to promote gender-responsive digital financial inclusion in Colombia.

## Peru

**Through the transition to a multi-provider payment model as well as the introduction of innovative communication strategies, the Government of Peru (GoPE) has made significant strides in rendering its delivery and payment systems more resilient to shocks.** The GoPE has made enormous progress with respect to the modernization of its payment systems, transitioning away from a single provider to a multi-provider model, which now includes a vast array of commercial banks and microfinance institutions. Moreover, direct physical cash handouts were mostly replaced by digital payments, including transfer modalities such as mobile banking accounts and digital e-wallets. This digital transformation was combined with financial inclusion efforts, whereby beneficiaries are required to open transaction accounts linked to their national identification number (the *Cuenta-Documento Nacional de Identidad – DNI*).<sup>16</sup> Such improvements, which have contributed to broadening options for beneficiaries, streamlining the delivery of benefit processes, and promoting financial inclusion among the most vulnerable segments of society, are also crucial within an ASP perspective. To this effect, being able to rely on robust payment systems for social protection systems can minimize delays in providing assistance in times of crisis, as well as ensuring accountability and transparency in government social assistance.

**Moreover, thanks to recent investments, the Government of Peru has strengthened its communication mechanisms to disseminate key social protection-related information to beneficiaries and potential beneficiaries in times of crisis,** as in the case of the *Contigo* program<sup>17</sup> during the COVID-19 pandemic outbreak. To this effect, in line with a thorough communication plan developed by the National Registry of Identification and Civil Status (*Registro Nacional de Identificación y Estado Civil – RENIEC*), an innovative web platform was introduced to disseminate key programmatic information to potential beneficiaries. The web platform was utilized by a number of key stakeholders across various sectors to shed light on the various government services made available in response to the pandemic - important innovations from an ASP perspective.

### *Programs and Delivery Systems: Persisting challenges*

**A number of overarching gaps were observed in the existing social protection programs analyzed through the various country-level assessments, including the fragmentation of social protection programs and the weakness of certain elements of delivery systems.** In times of shock, many LAC countries face the common challenge of leveraging existing social protection programs, which are fragmented in nature. Unlike other regions around the world, numerous LAC countries often opt for the approach of introducing independent shock responses rather than expanding their pre-existing programs. This policy choice, on one hand, showcases the agility of institutions to rapidly launch entirely new social protection initiatives when confronted with emerging crises. On the other, it also reflects the inherent fragmentation within the diverse routine social protection systems of these countries, combined with

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<sup>78</sup> Davico-Thaler, G. & Tellez-Merchan, C. (2021). *Colombia's Ingreso Solidario: Public-private Collaboration in Covid-19 Emergency Payments Response*. Better than Cash Alliance Blog. Published: 11/08/2021. Available at: <https://www.betterthancash.org/news/learning-series-covid-colombia> (accessed: 9/21/2023)

lengthy bureaucratic processes that impede the rapid expansion of pre-existing social protection programs. The various assessments have, in many cases, shown how the fragmentation of routine social protection programs can negatively affect the performance of shock responses. Countries such as Chile, whose routine social protection system is complex but inherently fragmented, are in the process of transitioning from *ad hoc* and post-disaster decisions regarding the parameters of shock responses to the development of *ex ante* and shock-specific programmatic packages to save precious time in the aftermath of a shock. Moreover, in many countries, the fragmentation of social protection programs with overlapping objectives, implemented by a great number of stakeholders, hinders the coherence and sequencing of the various protective and productive interventions, ultimately resulting in a reduced impact on resilience-building and poverty reduction outcomes as well as in higher levels of vulnerability to shocks in the longer-term.

**The various assessments have also shed light on the need for many LAC countries to increase the speed at which payments are disbursed in times of shock and to incentivize financial inclusion.** As shown in **Figure 38**, most assessed countries experience moderate delays in extending assistance to new beneficiaries through horizontal expansions. While some countries such as Chile and Costa Rica rely on technically sound payment systems, lengthy administrative processes often hinder the rapid deployment of assistance. On the other hand, other countries with more nascent payment systems such as Grenada and Belize are currently undergoing a digital transformation, which is expected to allow for a more rapid and traceable deployment of assistance. The roll-out of innovative payment systems might be hindered by low levels of financial inclusion in some countries (**Figure 39**). In such contexts, it is important to complement the digital transformation of payments with financial inclusion efforts, such as in Peru, as a means to enable the participation of the poorest segments of society in formal economic activities and bolster resilience against financial shocks by instilling the culture of savings and insurance. To this effect, participation in Grenada's Support for Education, Empowerment and Development Program (SEED) is now dependent on beneficiaries opening a bank account, as stipulated by the government, in an attempt to incentivize financial inclusion amid the most vulnerable households in the country.

**Investments in Grievance and Redress Mechanisms (GRM) are imperative to ensure accountability to shock-affected populations.** Widespread deficiencies concerning GRMs have been identified by various country-level assessments, especially due to the absence of reliable case management systems (CMS). These systems are structured and organized approaches to the management and resolution of complaints, concerns, and grievances, which promote accountability and enhance transparency in social assistance provision. While formal GRMs for social protection do not exist in certain LAC countries, others, such as Costa Rica, have instituted program-specific hotlines but mostly still rely on appointment systems and waiting lists for potential beneficiaries. In Costa Rica, the waiting lists for potential beneficiaries are maintained by the social protection line ministry (*Instituto Mixto de Ayuda Social – IMAS*) either on paper or in Excel format, without any automated method for resolution linked to pre-defined timeframes. This issue is particularly visible at the sub-national level and in times of crisis, where the social workers' capacity is strained by continuous in-person solicitations for assistance given the lack of effectiveness of the appointment system. Other countries such as Honduras have temporarily test-run the importance of relying on GRMs in times of shock, such as in the case of the *Bono Vida Mejor* Conditional Cash Transfer (CCT) program, which was expanded vertically in response to hurricanes Eta and Iota in late 2020. The program, which has been discontinued, also relied on a webpage for beneficiaries and the public, who could file complaints and report misuse of assistance in real-time. It is important to integrate such valuable

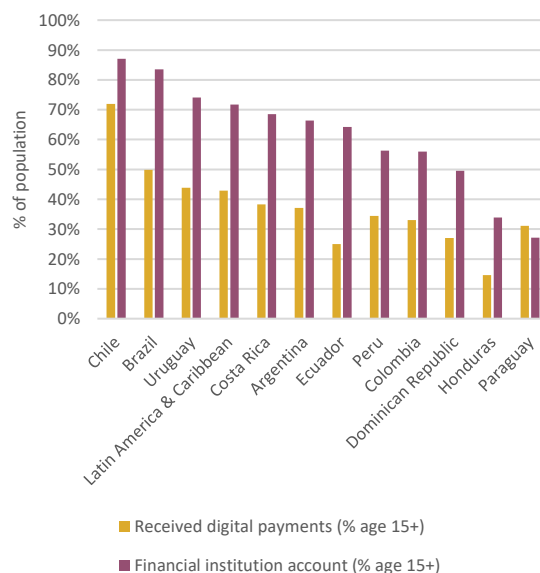
lessons learned in future social protection programming efforts in Honduras and to invest in GRMs supported by modern CMS solutions.

**Figure 38:** How fast can payment scale after a shock?



Note: Based on Argentina, Belize, Brazil, Chile, Colombia, Dominican Republic, Costa Rica, Ecuador, Honduras, Mexico, Panama, Paraguay, Peru and Uruguay Stress Test assessments. Graphic is created using MapChart (<https://www.mapchart.net>).

**Figure 39:** Percentage of population that has a financial institution account and that has received digital payments (age 15+) by select Latin America and Caribbean countries



Source: World Bank Findex database. 2021.

## Programs and delivery systems: Emerging recommendations

### Programs

- 1. Review gaps and overlaps in the social protection sector and formulate strategies to address them.** In contexts with nascent and emerging social protection systems, it is imperative to address the fragmented nature of social protection programs by reviewing the overall structure of the sector and devising strategies to increase the efficiency and effectiveness of social assistance. This approach helps promote higher levels of complementarity and sequencing of programs with protective and productive objectives, hence mitigating the immediate impact of covariate shocks on the well-being of households.
- 2. Ensure that benefit levels can cover a higher proportion of the consumption needs of the poor and vulnerable.** It is pertinent for all LAC countries to review the adequacy of benefits on a rolling basis for both routine social protection programs and shock responses as a means to match the

inflationary trends that particularly affect the purchasing power of the bottom two quintiles of the populations.<sup>79</sup>

- 3. In many LAC countries, strengthening Monitoring and Evaluation (M&E) systems in the context of ASP is essential.** Robust M&E frameworks are crucial for assessing the effectiveness of social protection programs, identifying gaps in coverage, and refining policies to better address the unique challenges and vulnerabilities within the region.

### ***Delivery and Payment Systems***

- 1. Intensify investments in Grievance and Redress Mechanisms for routine social protection programs and shock responses alike.** Specifically, innovative solutions to the introduction of Case Management Systems, standardized processes, appeal mechanisms, and appropriate sensitization for both beneficiaries and non-beneficiaries can ensure higher levels of transparency and accountability *vis-à-vis* the citizenry.
  - 2. Combine investments in the digitalization of payment systems with financial inclusion interventions.** In countries with more nascent social protection systems, further investments in payment systems are required. This can contribute to the creation of a more resilient social protection delivery chain, especially with respect to the capability of enabling the execution of smooth horizontal expansions in times of shock. In countries with already established payment systems, the focus should lie on expediting the digital transformation of those systems, while at the same time promoting financial inclusion, especially among the most underserved segments of society. This approach facilitates the rapid deployment of assistance through digital transfers in times of shock and promotes socio-economic inclusion.
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<sup>79</sup> For instance, in Honduras and the Dominican Republic, routine social assistance benefits cover less than 10 percent of household expenditures.



## Data and Information

**Reliable data and information systems are a prerequisite for the advancement of the ASP agenda, as they inform and enable the deployment of assistance to shock-affected populations in a rapid manner.**

This building block of the ASP framework focuses on two key functional elements: Early Warning Systems (EWS) and Registries. Early warning systems, powered by meteorological, seismological, and oceanographic data, offer key foresight with respect to impending natural disasters. Robust EWS linked to existing social protection systems can allow for rapid and risk-informed decision-making with respect to shock response deployment. On the other hand, registries are crucial tools that assist governments in effective outreach, beneficiary intake, and determination of potential eligibility to one or more social protection interventions.<sup>80</sup> *Table 4* summarizes the findings of the Stress Test country level assessments for the data and information building block.

**The advancement of social protection in LAC is in part due to the intensified investments and integration of converging technologies in social registries and early warning systems over the past two decades.**

The role of converging technologies is proving to be increasingly significant in this building block of the ASP framework, as demonstrated, for instance, by the diffusion of data analytics and Artificial Intelligence (AI) in data and information systems (e.g. social registries), and the utilization of high-end geospatial technologies for early warning systems. The integration of such technologies in support of social protection and DRM is leading to the creation of new opportunities for the sectors, facilitating the resolution of complex issues, and in many cases benefiting the overall effectiveness and accuracy of assistance provision.<sup>81</sup> Please refer to **Box 4** for more information.

*Table 4: Stress Test Results – Data and Information Systems*

|                           | Early warning systems | Registries  | Data and information - overall |
|---------------------------|-----------------------|-------------|--------------------------------|
| <b>Argentina</b>          | Emerging              | Established | Emerging                       |
| <b>Belize</b>             | Emerging              | Nascent     | Nascent                        |
| <b>Brazil</b>             | Established           | Established | Established                    |
| <b>Chile</b>              | Established           | Established | Established                    |
| <b>Colombia</b>           | Nascent               | Established | Emerging                       |
| <b>Costa Rica</b>         | Emerging              | Established | Established                    |
| <b>Dominican Republic</b> | Established           | Established | Established                    |
| <b>Ecuador</b>            | Emerging              | Established | Emerging                       |

<sup>80</sup> Leite, P. George Karippacheril, T. Sun, C. Jones, T. & Lindert, K. 2017. Social Registries for Social Assistance and Beyond: A Guidance Note & Assessment Tool. Washington, D.C.: World Bank.

<sup>81</sup> Bashir, Sajitha; Dahlman, Carl J.; Kanehira, Naoto; Tilmes, Klaus. (2021). *The Converging Technology Revolution and Human Capital: Potential and Implications for South Asia. South Asia Development Forum*. Washington, D.C.: World Bank

|          |             |             |             |
|----------|-------------|-------------|-------------|
| Honduras | Nascent     | Nascent     | Nascent     |
| Mexico   | Established | Emerging    | Emerging    |
| Panama   | Emerging    | Emerging    | Emerging    |
| Paraguay | Nascent     | Nascent     | Nascent     |
| Peru     | Nascent     | Emerging    | Emerging    |
| Uruguay  | Established | Established | Established |

### *Early Warning Systems: Stress Test results*

As illustrated in **Table 4**, based on the results obtained from the country-level assessments, many LAC countries need to increase investments in developing the monitoring and alerting capacity of their EWS, as well as working towards making them interoperable with national social protection programs. In addition to assessing the technical capacity of national early warning systems to monitor and alert the onset of natural disasters, this sub-section of the Stress Test assessment relates to determining the existence of shock-specific and objective indicators that can automatically trigger the deployment of heightened assistance.

### *Early Warning Systems: good practices of specific countries*

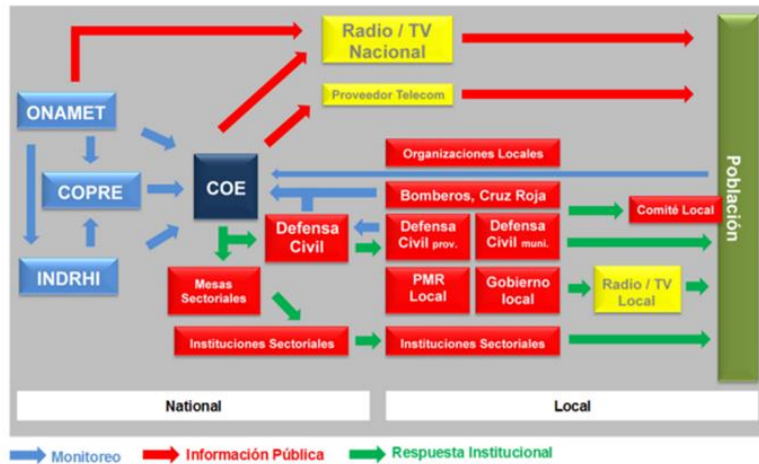
Given the region's high susceptibility to a wide range of natural disasters, several LAC countries have taken progressive steps to strengthen their respective EWS. However, the level of adaptiveness of these systems in many assessed countries remains suboptimal due to various factors. These include the fragmentation of EWS structures and the lack of objective and empirical triggers that can easily prompt the official declaration of disasters. Furthermore, in several cases, EWS are housed within different DRM entities, and the alignment and coordination with the social protection sectors are not always smooth. This section highlights the progress made by the governments of the Dominican Republic and Costa Rica in strengthening their respective EWS capabilities. It also recognizes the importance of regionwide efforts in advancing EWS in the Caribbean.

#### *Dominican Republic*

In the Dominican Republic, the Early Warning System (EWS) for hydro-meteorological events covers a wide spectrum of shocks, such as droughts, tropical storms, hurricanes, and their resulting impacts like river overflows, floods, landslides, coastal flooding, and windstorms. The Operational Emergency Committee (COE), equipped with crucial information from the *Oficina Nacional de Meteorología* (ONAMET), the National Institute of Hydraulic Resources (INDRH), and the Dams Committee, assesses these events and distinguishes between three alert levels: green, yellow, and red. The Government of the Dominican Republic (GoDR) has developed Standard Operating Procedures (SoPs) to regulate the EWS alert chain. Uniquely, these SoPs include actions not only for response but also for the period between a potential event warning and impact, with specific times and steps outlined for each institution at each stage, as illustrated in *Figure 40*. However, while the system employs a simple three-level warning category for diverse hydro-meteorological hazards, this simplicity nonetheless restricts its capacity to

address hazard-specific requirements comprehensively, impeding the establishment of precise triggers, timing, and response scales for each type of event.

Figure 40: The Structure of the Dominican Republic's EWS



Source: GIZ. Integrated Development of Early Warning Systems. Innovation Through Partnership.

**In the Dominican Republic, a vulnerability index identifies beneficiaries based on socio-economic vulnerability and exposure to natural hazards.** The Vulnerability to Climate Hazards Index (*Índice de Vulnerabilidad ante Choques Climáticos – IVACC*) was introduced by the GoDR and linked to its registry managed by the *Sistema Único de Beneficiarios* (SIUBEN) in 2014. IVACC enhances criteria for selecting vulnerable households by considering their exposure to natural hazards and socio-economic vulnerability. This index, informed by EWS, assesses the likelihood of a household being affected by natural phenomena, thereby supporting the formulation of resilience and risk mitigation strategies and post-disaster support for the shock-affected populations. Covering 85.5 percent of the country's population, IVACC can be considered a significantly valuable tool for beneficiary identification, for routine programs and shock responses alike.<sup>82</sup> Yet its main challenge is updating the socio-economic vulnerability data, which should occur every four years according to SIUBEN's mandate but faces limitations due to a number of governmental constraints. To address this, SIUBEN is transitioning to a Universal Social Registry, integrating administrative registries to enhance the identification of vulnerable households and integrating real-time satellite data for enhanced precision and capabilities under the SIUBEN+ strategy.<sup>83</sup>

### Costa Rica

**Over the past decades, Costa Rica has established a robust and well-structured multi-hazard Early Warning System (EWS) to address its exposure to a wide range of recurring natural phenomena,**

<sup>82</sup> World Bank. (2021b). Strengthening Social Protection Interventions for Disaster Preparedness and Response in the Dominican Republic (P164854): Summary of Outputs. Washington, D.C.: World Bank Group.

<sup>83</sup> Presidencia de Republica Dominicana. 2022. Proyecto sobre impacto Comunidades de Cuidados presentado por el SIUBEN es seleccionado entre 230 proyectos de América Latina y el Caribe. Published: 4/11/2022. Available at: <https://presidencia.gob.do/noticias/proyecto-sobre-impacto-comunidades-de-cuidados-presentado-por-el-siuben-es-seleccionado> (accessed: 9/21/2023)

including floods, cyclones, hurricanes, landslides, coastal flooding, and droughts.<sup>84</sup> Prior to the socio-economic responses to the COVID-19 pandemic and inflation, shock responses have typically been managed and deployed by the country's DRM authority, the *Comisión Nacional de Emergencias* (CNE). Among its various functions, the CNE oversees a comprehensive EWS that not only covers readily detectable shocks but also extends to more elusive ones like earthquakes and volcanic activity. This intricate network of EWS leverages various monitoring and alerting mechanisms, including a community radio system with over 500 strategically located radio posts across the country, many of which are managed in collaboration with other institutions, including those from the social sector.<sup>85</sup> Additionally, cooperation with neighboring Panamanian authorities extends to monitoring border towns susceptible to recurring floods.<sup>86</sup> The historical collection of EWS data spanning four decades forms the basis for research on shock impact, including mortality rates and economic damage caused by disasters. Facilitated by clear institutional roles, particularly under the *Instituto Meteorológico Nacional de Costa Rica* (IMN), data collection and analysis have been consistent over time in Costa Rica.<sup>87</sup>

Figure 41: Early Warning Barometers for wildfires published on the Costa Rican Meteorological Website<sup>88</sup>



Source: IMN. *Sistema de alerta temprana de incendios forestales (SATIF): Conifor Costa Rica*. Available at: <https://www.imn.ac.cr/en/alerta> (accessed: 9/21/2023)

**While the CNE conducts vulnerability and risk assessments primarily centered on potential economic damages, the wealth of available EWS data is prompting the GoCR to enhance its technical capacity to quantify populations affected by shocks.** Although Costa Rica does not rely on automated EWS triggers for social protection actions, the country emphasizes well-structured information-sharing through the Emergency Operation Center (COE), responsible for convening institutions and the scientific community as well as managing government and non-government collaboration in disaster prevention and response. The Technical Climate Assessment Committee of the COE evaluates shock magnitudes using EWS data, subsequently defining appropriate response measures, including a state of emergency. Ultimately, the declaration of a state of emergency or exception regime rests with the discretionary power of the

<sup>84</sup> Furthermore, the country is also acutely vulnerable to volcanic eruptions and earthquakes, prompting the establishment of early warning structures and community sentinel networks nationwide.

<sup>85</sup> Consultations with the CNE in November 2022

<sup>86</sup> Consultations with CNE in November 2022

<sup>87</sup> IMN. *Quienes somos?*. Available at: <https://www.imn.ac.cr/web/imn/quienes-somos> (accessed: 9/21/2023)

<sup>88</sup> Ibid

Executive branch.<sup>89</sup> Once a state of emergency has been declared, resources can be reallocated to the *Fondo Nacional de Emergencia*. Costa Rica's comprehensive EWS structure, scientific engagement, and institutional responsiveness underline the nation's commitment to minimizing the impact of diverse natural shocks on its citizens' well-being.

**Box 3:** *Regional Early Warning Systems Consortium (REWSC) A regional multi-hazard system covering several Caribbean states*

**A number of countries in the Caribbean are pooling resources and expertise to foster cross-border collaboration for EWS.** Considering the often-transboundary nature of recurring covariate shocks in the Caribbean sub-region, the Regional Early Warning Systems Consortium (REWSC) has been established by the Caribbean Disaster Emergency Management Agency (CDEMA) to work towards a regional multi-hazard EWS that can allow for seamless data-sharing and EWS interoperability across borders. Adopting a regional approach to EWS holds the potential to leverage the capabilities of the countries' national systems while at the same time serving as an apt platform to showcase best practices that highlight the intrinsic value of strengthening linkages and synergies between the DRM and social protection sectors.<sup>90</sup>

**The REWSC will strengthen synergies of current EWS in the Caribbean.** This includes fostering collaboration and cooperation among regional and national institutions. These institutions encompass entities that specialize in different risks (e.g. research centers on climate change, public health agencies, meteorological services, and coordination groups for coastal hazards) or important elements related to DRM or warning (e.g. DRM organizations, telecommunication agencies). The REWSC also aims to promote standardization of alerts for different hazards and harmonization of key messages and the promotion and adoption of new technologies.<sup>91</sup>

### *Registries: Stress Test results*

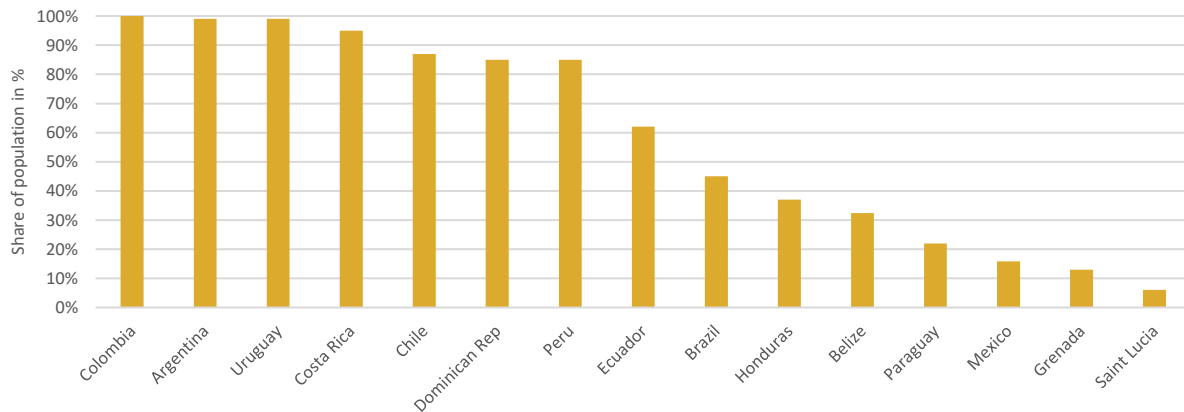
**Many LAC countries have invested significant resources in building social registries with extensive coverage of their populations as highlighted by the results of the various country-level assessments.** In several of the assessed countries, the motivation to further expand the coverage and technical capabilities of their registries has been partly prompted by the COVID-19 pandemic and the ongoing fuel and food crisis. On the other hand, other governments in LAC do not yet have social registries per se, but rather rely on program-specific databases and management information systems (MIS) to channel their socio-economic responses in times of shock. This setup is usually not ideal for the deployment of all shock responses, due to the lack of interoperability with other databases (e.g., social security, tax authority, telecom, and humanitarian databases) that could significantly expand reach during such occurrences. It is imperative to build on the momentum created by the COVID-19 pandemic and food and fuel crises to continue working towards the development of social registries in countries that still rely on program databases, and to continue expanding the population coverage of existing ones to enable rapid and empirical shock responses. An updated overview of the coverage rates of social registries in select countries in the region is provided in *Figure 42*.

<sup>89</sup> Picado Rojas, Carlos. 2020. *La Declaración del Estado de Emergencia en Costa Rica: Aplicación del Régimen de Excepción*.

<sup>90</sup> CDEMA. (2019). *Terms of Reference (TOR): Regional Early Warning Systems (EWS) Consortium*.

<sup>91</sup> Ibid.

**Figure 42:** Population Coverage of Social Registries in select Latin America and the Caribbean countries



Source: Based on Isik-Dikmelik (2022); Berner & Van Hemelryck (2021) and Part 2 of Stress Test assessments

### *Registries: good practices of specific countries*

**This section showcases the well-established *Registro Social de Hogares* in Chile, which over the years has benefited from the pioneering of technological solutions to streamline data collection in the aftermath of shocks, and the *Registro Social* in Ecuador which has been significantly enhanced to better manage the risks associated with the wide range of covariate shocks to which the country is exposed.**

#### *Chile*

**Chile relies on strong data and information management systems for shock responses, which allows for the prompt identification and selection of eligible beneficiaries in times of crisis.** Over the years, Chile has consistently made efforts to develop its Integrated System for Social Information (SIIS) and its System for Social Information in Emergencies (SISE),<sup>92</sup> both managed by the MDSF.<sup>93</sup> In addition, the MDSF is also managing the Social Household Registry (*Registro Social de Hogares* - RSH), which covers over 87 percent of the country’s population.<sup>94</sup> The RSH contains information on households and individuals, including their income, assets, and socio-economic characteristics. Through the deployment of the Socio-Economic Index (CSE), households are ranked in seven vulnerability categories, and selected for a number of routine programs and benefits, as illustrated in *Figure 43*.<sup>95</sup> While an excellent resource, issues have been reported regarding the quality of input data due to the reliance of the RSH on self-reported data, which in turn have hindered the registry from capturing the evolving needs of households over time.

<sup>92</sup> Government Ministerial Resolution 312 of May 2020 replaces the Unidad de Sistema Integrado de Catastro Social en Emergencia (SICE) of the Social Service Sub-Secretariat with the Sistema de Información Social en Emergencia (SISE).

<sup>93</sup> Ministerio de Desarrollo Social y Familia. Unidad Sistema Integrado de Información Social. (2023). *Sistema Integrado de Información Social – SIIS*. Official Web Portal.

<sup>94</sup> Internal data provided by Ministerio de Desarrollo Social in May 2023

<sup>95</sup> Ministerio de Desarrollo Social y Familia. Instituto de Previsión Social (IPS). (Nov. 2022). *Registro Social de Hogares (RSH)*. ChileAtiende. Official Web Portal.

Figure 43: The CSE Ranking of Households



Source: Universidad de Chile. *Registro Social de Hogares*. Available at: <https://uchile.cl/presentacion/vicerrectoria-de-asuntos-estudiantiles-y-comunitarios/direccion-de-bienestar-y-desarrollo-estudiantil/becas-y-beneficios/registro-social-de-hogares> (accessed 09/28/2023)

The RSH is part of the overarching Social Information Registry (*Registro de Información Social – RIS*), which was introduced in 2018 as part of the GoC’s efforts to modernize its social protection platforms and tools. The RIS is designed to be accessible to a wide range of public institutions due to interoperability agreements between central government ministries and sub-national government authorities. Such elevated levels of interoperability grant the RIS a high degree of flexibility and versatility, making it a powerful instrument for routine social protection programs, but also for shock responses, thanks to the FIBE and FIBE(H) tools.

These tools comprise surveys that enable data collection from shock-affected people or families who have undergone socio-economic damage and require immediate assistance. The FIBE and FIBE(H) tools have been instrumental in promoting risk-informed decision-making *vis-à-vis* the transfer modality and duration of socio-economic post-disaster responses. Simultaneously, they allow for rapid post-disaster assessments, which help determine the type of assistance required at the household level and can later facilitate updating existing household-level data within the RSH to reflect changes in socio-economic welfare as a result of a covariate shock. The information collected through the FIBE(H) is shared with the designated MDSF extension workers responsible for the maintenance of RSH at the sub-national level. While the establishment of the RIS has allowed for the rapid deployment of horizontal expansions in times of shock, the varying quality of data of other government-owned databases can significantly affect the quality of beneficiary targeting and selection.

The MDSF, in collaboration with other GoC actors such as the Chilean DRM Authority (*Servicio Nacional de Prevención y Respuesta ante Desastres – SENAPRED*), is carrying out active efforts to devise mechanisms for the permanent incorporation of shock vulnerability data in the RSH. The GoC has recently started to produce a wealth of early warning and shock vulnerability data on a regular basis that could benefit beneficiary targeting and selection for routine social programs – an important area of work in view of potential future covariate shocks. The introduction of the CSE index to identify shock-prone groups and areas is crucial from a climate change adaptation perspective as it can mitigate the impact of shocks on the socio-economic welfare of disaster-affected households by actively building their resilience and adaptive capacity ahead of time.

#### Ecuador

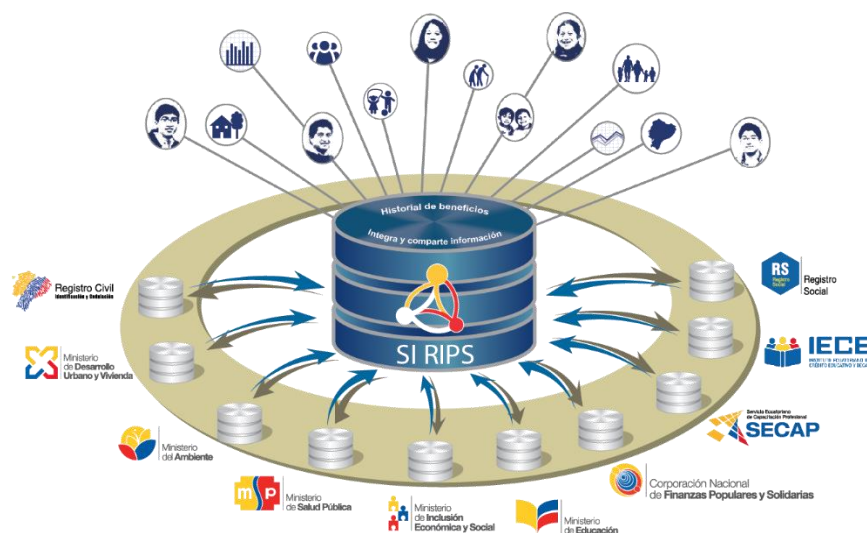
The Stress Test assessment in Ecuador has duly highlighted the increasing role played by the *Registro Social* (Social Registry) in effectively guiding the intake, registration, and determination of household eligibility for social protection programs, especially thanks to the enhancement of its existing socio-



**economic welfare index.**<sup>96</sup> The COVID-19 pandemic has recently tested the versatility of the Social Registry, showcasing the importance of continuing to develop the reliability and coverage of this tool, which is crucial from an ASP perspective, especially in light of the country’s exposure to a wide range of covariate shocks. While at the time of the 2016 earthquake, the Social Registry was not deemed versatile enough to support such a large-scale shock response, the COVID-19 pandemic completely shifted its importance in shock responses. Thanks to relentless coverage expansion efforts, the *Registro Social* (Social Registry) has now achieved a coverage of 2.9 million households across all population income quintiles in its system (equivalent to approximately 11 million people,<sup>97</sup> or 62 percent of the total population),<sup>98</sup> with a predominantly higher coverage in urban areas (64 percent).

**The GoE is aiming to achieve full coverage of its population through administrative data by introducing the *Registro Interconectado de Programas Sociales (RIPS)*.** To this effect, RIPS is an information system that integrates various databases of different institutions and programs for better targeting and enhanced monitoring, as illustrated in *Figure 44*. This investment is key from an ASP perspective, as it is expected to pave the way for the creation of a Unified Beneficiary Registry (*Registro Único de Beneficiarios – RUB*). Moreover, in response to the need for more robust protocols to systematize the updating of records in the Social Registry, the GoE has piloted the *Modelo de Actualización Permanente*, which promotes the systematization of permanent information gathering between public institutions.<sup>99</sup>

Figure 44: The RIPS Structure



Source: Secretaría Técnica Ecuador Crece Sin Desnutrición Infantil. *La información del Registro Interconectado de Programas Sociales es ahora más accesible*. Available at: <https://www.infancia.gob.ec/la-informacion-del-registro-interconectado-de-programas-sociales-es-ahora-mas-accesible/> (accessed 09/28/2023)

**It is expected that the full rollout of RIPS will allow for the smooth execution of horizontal expansions in response to shocks in Ecuador thanks to higher interoperability between databases from various**

<sup>96</sup> World Bank. 2019. *Ecuador - Social Safety Net Project*.

<sup>97</sup> MIES internal data – November 2022

<sup>98</sup> The average household size in Ecuador is 3.8 people.

<sup>99</sup> Consultations with MIES.



**institutions.** Currently, some of the most prominent databases utilized for shock response include the *Registro Único de Afectados y Damnificados (RUAD)*, which was created *ad hoc* to guide the deployment of the 2016 earthquake response and housed under the Ecuadorian DRM authority (*Secretaría de Gestión de Riesgos – SNGRE*). RUAD contains the information of households that were enumerated during the rapid post-disaster evaluations (*Evaluación Inicial de Necesidades – EVIN*). Given the need to create linkages between data from the social protection and disaster risk management sectors and in line with the GoE’s relentless efforts to promote database interoperability, a tripartite data-sharing agreement was signed in 2022 by the MIES, the Social Registry Unit, and the SNGRE.<sup>100</sup> It is worth noting that despite the Government of Ecuador’s commendable efforts to promote database interoperability, non-State actors engaged in social protection and emergency response activities in Ecuador face challenges in accessing the Social Registry data. This is partly due to the stringent data privacy laws in Ecuador, which regulate the sharing of sensitive personal information.<sup>101</sup> It is expected that the full roll-out of the RIPS will be matched by legal provisions to ensure linkages between humanitarian cash transfers implemented by non-State actors and social protection systems in Ecuador.

#### **Box 4: Converging Technologies in Support of Social Protection in LAC**

**More and more countries in LAC have started adopting converging technologies to support the delivery of social protection.** Converging technologies refer to the fusion of various technological solutions to solve complex problems. In the context of the Data and Information Systems ASP building block, converging technologies such as Artificial Intelligence (AI) and Big Data can effectively support the delivery of efficient and tailored social protection support and ultimately contribute to human capital development.<sup>102</sup> A number of LAC countries are at the forefront of efforts to introduce converging technologies in their data and information systems. For instance, Ecuador, Costa Rica, and Colombia have been introducing forms of AI such as Machine Learning in their social registries as a means to minimize exclusion and inclusion errors, improve the quality of data, and verify the accuracy of information. The application of such technologies in social registries has the potential to standardize data, making it consistent and reliable. In a targeting perspective, predictive analytics are particularly useful in forecasting variations in the socio-economic welfare of households, hence informing the identification of new vulnerable groups and the exclusion of ineligible households.<sup>103</sup>

**The pandemic became an unexpected accelerator of the use of converging technologies in Brazil’s social protection system.** The GoB launched the emergency cash transfer program, *Auxilio Emergencial* in 2020 to mitigate the social and economic impacts caused by the COVID-19 pandemic. The delivery of the aid was assigned to two state companies: Dataprev (in charge of processing applications to the program and checking eligibility) and *Caixa Economica Federal* (in charge of paying the benefit). One entry channel into the program was through an app in which Brazilians could enter their credentials

<sup>100</sup> As of March 2023, the tripartite agreement had not yet been put in practice.

<sup>101</sup> Gobierno del Ecuador. 2012. *Constitución de la República del Ecuador*: Título II, Cap. 5, Artículo 66, n. 19 y n. 21.

<sup>102</sup> Bashir et al. (2021).

<sup>103</sup> World Bank. (2023a). *Estado del arte de los registros sociales en América Latina y el Caribe*. World Bank Presentation (9/19/2023)

and apply. In total, the app got 115 million downloads.<sup>104</sup> Dataprev adopted Big Data technologies and developed a big analytical database to determine the eligibility of several million applicants and cross-check their information against several administrative registries. This experience is a good example of how technology can enable efficiency and agility for governments by solving complex needs.<sup>105</sup> *Auxilio Emergencial* was the largest income transfer in Brazilian history considering the number of beneficiaries, reaching 55.6 percent of the population and becoming one of the most agile responses worldwide.<sup>106</sup>

**In light of the region’s exposure to a wide range of covariate shocks, it is imperative to prioritize the integration of shock vulnerability and exposure data into social registries.** The utilization of novel data sources can indeed help enhance the precision of targeting for government-led initiatives with social resilience and climate change adaptation objectives, as well as shock responses.

**It is worth noting that the integration of novel data sources and converging technologies presents a number of inherent challenges,** including concerns related to data privacy and ethics; the potential unjust exclusion of vulnerable and specific groups of society (e.g. migrants, households employed in the informal labor market, etc.) and transparency issues stemming from the complexity of such technologies.

### *Data and Information Systems: Persisting challenges*

**A number of weaknesses have been highlighted by the country-level assessments in LAC regarding early warning systems and registries.** One of the main weaknesses related to EWS is the fragmentation of its various functions, which leads to disjointed disaster-related information flows and ultimately hampers the efficiency and effectiveness of preparedness and multi-sectoral response efforts. Working towards centralized and multi-hazard EWS can allow for the consolidation of data sources and the streamlining of data dissemination, ultimately enabling timely responses to a wide range of covariate shocks.

**Various weaknesses have been underscored by the Stress Test assessments in relation to registries.** Among these weaknesses, issues related to data quality in the registries have been identified, both due to the lack of data updating protocols and appropriate data quality assurance mechanisms (e.g. filtering mechanisms for input data). As illustrated in *Figure 45*, a significant portion of countries still struggle with regularly updating beneficiary household data in their respective registries or databases. In the case of Costa Rica this was observed during the 2022-23 socio-economic response to inflation (*Bono Inflación*), which exhibited significant challenges in effectively extending assistance to the selected beneficiaries due to the lack of up-to-date household data within the SINIRUBE.<sup>107</sup> Furthermore, in Costa Rica, despite its Unified Beneficiary State Registry (*Registro Único de Beneficiarios del Estado - SINIRUBE*), high interoperability across sectors and its almost universal coverage, effective filtering strategies that can

<sup>104</sup> G2Px. (2021). *Brazil’s Auxilio Emergencial: How digitization supported the response to COVID-19*. World Bank presentation held on 12/15/2021. Available at: <https://www.worldbank.org/en/events/2021/12/15/Brazils-Auxilio-Emergencial#3> (accessed 9/28/2023)

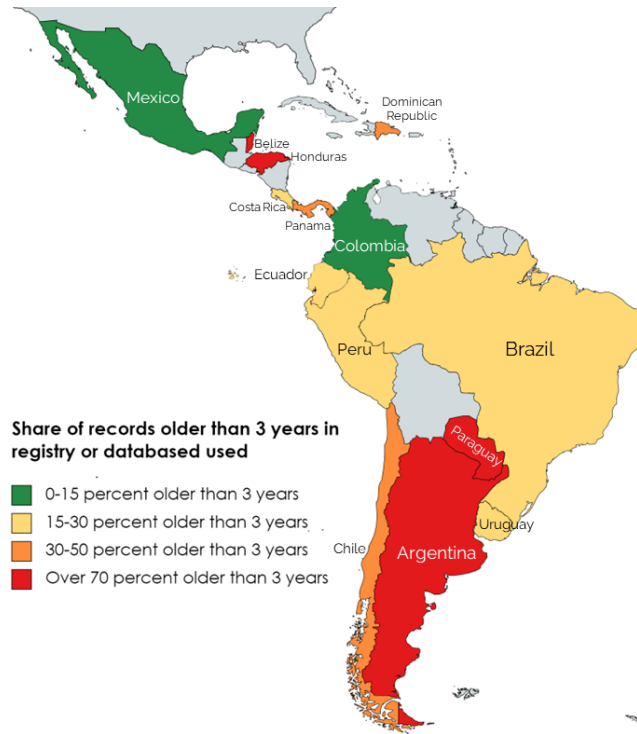
<sup>105</sup> Ronqui, R. M., Oliveira, T. C. de S., da Silva, A. L. B., Brandão, C. E., da Silva, R. R., Helouani, W. B., Lara, T., & Francisco, E. de R. (2023). *COVID-19 emergency aid: how the Brazilian government used social big data analytics to give economic support and protect vulnerable citizens*. *Revista Contemporânea*, 3(8), 12537–12560.

<sup>106</sup> World Bank. (2021a).

<sup>107</sup> Consultations with IMAS

safeguard the quality of inputted data are still lacking. This issue, which has also been observed in other assessed countries, can be attributed to the absence of automated internal protocols for updating household records, which may have significant repercussions on equitable beneficiary targeting and selection for social programs.

**Figure 45:** Share of records older than 3 years in registry or database used



Note: Based on Argentina, Belize, Brazil, Chile, Colombia, Dominican Republic, Costa Rica, Ecuador, Honduras, Mexico, Panama, Paraguay, Peru and Uruguay Stress Test assessments. Graphic is created using MapChart (<https://www.mapchart.net>).

**Numerous countries in the region still rely on program-dedicated databases to support the deployment of shock responses.** As previously mentioned, being able to rely on robust social registries significantly improves the overall shock-responsive social protection delivery chain. As observed during the COVID-19 pandemic, several governments without established registries were urged to build an *ad hoc* registry to enable the deployment of their socio-economic responses. In Paraguay, for example, such a massive undertaking delayed the deployment of assistance and underscored the need to accelerate efforts towards the full roll-out of the *Registro Social de Hogares* (RSH) in the country. Similar to the Paraguayan context, a number of Caribbean countries, such as Saint Lucia, are also working towards the establishment of social registries – an important investment that holds the potential to revolutionize the nature of social protection and shock responses in such contexts.

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## Data and Information: Emerging recommendations

### *Early Warning Systems*

- 1. Develop centralized multi-hazard EWS.** In countries with nascent and emerging systems, there is a clear need to address the fragmented nature of EWS by working towards centralized and multi-hazard EWS that can allow for the deployment of risk-informed shock responses to a number of known covariate shocks. Centralizing the EWS functions can also pave the way for the creation of more intimate linkages between the DRM and social protection sectors in many contexts. Efficient and effective EWS should also be people-centered.
- 2. Carry out regular risk vulnerability assessments.** The country-level assessments have underscored the need for investments in government technical capacity to periodically carry out realistic and relevant risk vulnerability assessments that can generate evidence regarding the direct and indirect impacts of shocks on the population's socio-economic well-being. The World Bank and other development partners are well positioned to continue assisting countries with varying levels of SP maturity in the region in effectively integrating technological solutions to be leveraged to enhance their early warning capabilities, ranging from shock risk predictions to early detection.
- 3. Work towards legally recognized objective early warning triggers.** In most contexts, it is important to effectively address the lack of objective triggers and to develop parameters and thresholds for all known covariate shocks in any given context that can prompt the automated deployment of assistance through social protection channels, hence laying the foundation for the adoption of legally recognized objective early warning triggers linked to social protection and DRM systems. This gap should not be addressed by the scientific community alone, but rather supported by robust intergovernmental institutional arrangements, including public institutions involved in EWS.

### *Registries*

- 1. Implement actions to improve data quality in all contexts,** including (i) standard protocols for household data collection and updating, (ii) clear rules and protocols for data-sharing among institutions, and (iii) strategies to guarantee beneficiaries' data privacy. Working towards reliable and high-quality data can foster accountability, equity, and effectiveness in delivering social protection support.
- 2. For countries with nascent and emerging social protection systems that still rely on beneficiary registries, it will be important to understand the benefits of transitioning towards more comprehensive social registries** that serve more than one program and that are integrated with complementary layers of data (i.e. taxes, social security, national ID, DRM, etc.). Transitioning from beneficiary registries to social registries can be boosted by promoting south-south knowledge exchanges (SSKE) and bilateral cooperation. Considering the large number of advanced social registries in the region, countries with incipient data and information systems could learn valuable lessons from their regional peers.

3. In the majority of the assessed countries, working on the **integration of climatic shock vulnerability indexes in their social registries** is an important area of work that could help promote risk-informed targeting within the framework of both routine social protection programs, as well as shock responses.
  4. **Actively scope the potential to introduce converging technologies into social registries of countries with more mature social protection systems.** Building on the emerging lessons learned from LAC countries that have incorporated AI, such as machine learning, into their social registries, it is pertinent to increase innovation and accuracy of social registries metrics. However, it is important not to lose sight of the profound existing disparities in the region, and the need to rely on adequate strategies to connect with individuals and households as a means to gain a better understanding of their specific needs and challenges.
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## Finance

**The impact of climate change associated with high risks of natural hazards, along with other covariate shocks, can generate fiscal volatility resulting in a growing burden on public and private spending due to sudden, unexpected expenditures required during and after a disaster.**<sup>108</sup> Additionally, there is an implicit responsibility on governments to protect and support the most vulnerable in post-disaster situations. Therefore, effective post-disaster ASP responses require being able to rely on established funding arrangements – including predictable financing, robust policies, legal and institutional frameworks, and adequate in-country technical capacity to mobilize adequate resources for a timely and effective response in the aftermath of a covariate shock.

### *Finance: Stress Test results*

**Results from the stress test carried out in LAC show that the finance building block is the weakest one, with most countries scoring either ‘nascent’ or ‘emerging’ (Table 5).** The financing building block assessment focuses on analyzing governments’ capacity in four aspects: existence of a national strategy, policy or legislation setting out commitments to disaster risk financing; ability to analyze and model potential cost implications of shocks; having financing or risk transfer mechanisms in place to ensure a timely response to shocks; and existence of systems or mechanisms that can be used for ASP interventions.<sup>109</sup>

**In most countries in the region, countries have in place some legislative or financial commitments to financing disaster response.** Some have disaster risk financing (DRF) policies in place to advise on the strategic use of financial instruments and public financial management for cost-effective response. Additionally, some countries have financing instruments earmarked for ASP response to low-intensity shocks, or to enable the scaling up of existing systems to respond to the emergency. However, the amount is limited to smaller events which have regular scale-up and the mobilization of required additional financing is typically delayed. In terms of systems or mechanisms that can be utilized for ASP, there is no specific trend. While all countries have some systems or mechanisms for distribution in line with the social protection system, only Brazil, the Dominican Republic, and Peru benefit from adequate systems to disburse and reconcile expenditure down to the beneficiary level. Except for Honduras (which has no ability to analyze the potential cost implications of shocks), all countries have either ‘nascent’ or ‘emerging’ ability in terms of analyzing the potential costs implications of shocks.

*Table 5: Stress Test Results – Finance*

|           | Overall score |
|-----------|---------------|
| Argentina | Established   |
| Belize    | Emerging      |
| Brazil    | Emerging      |
| Chile     | Emerging      |

<sup>108</sup> Cubas, Diana; Gunasekera, Rashmin; Humbert, Thibaut. (2020). *Disaster Risk Finance for Adaptive Social Protection*. Washington, D.C.: World Bank.

<sup>109</sup> World Bank. (2021c).

|                    |             |
|--------------------|-------------|
| Colombia           | Emerging    |
| Costa Rica         | Nascent     |
| Dominican Republic | Emerging    |
| Ecuador            | Nascent     |
| Honduras           | Nascent     |
| Mexico             | Emerging    |
| Panama             | Nascent     |
| Paraguay           | Nascent     |
| Peru               | Established |
| Uruguay            | Emerging    |

**Among the four aspects of financing analyzed by the Stress Test assessments, the most robust is related to the presence of a legal or policy framework or a DRF strategy that targets ASP actions.** In Brazil, financing instruments are usually part of large-scale programs from the federal government, which aim to reduce poverty and promote social inclusion, and which, therefore, reach communities exposed to disaster risks. In 2012, Law 12.608 established the National Policy on Protection and Civil Defense which defines the roles of the Union, states, and municipalities for Disaster Risk Reduction (DRR). In Honduras, the Ministry of Finance published in 2020 a new Strategy for Disaster Risk Finance Management which aims to strengthen fiscal resilience and financial response capacity to disaster risk associated with natural hazards, adverse effects of climate change, and public health emergencies, and consists of five priority areas of action for disaster risk finance management.<sup>110</sup> In other countries where this aspect is still nascent, such as Colombia, the GoCO has worked during the past decades on designing a policy for public financial management for DRM, identifying relevant policies to improve the overall management of contingent liabilities and support both macroeconomic stability as well as fiscal harmony and balance.<sup>111</sup>

**Despite existing gaps in the ability for countries to analyze the potential costs of shocks, most countries have made significant progress.** In the Dominican Republic, the Ministry of Economy, Planning and Development (MEPYD) has the capacity to analyze and model potential cost implications of covariate shocks. MEPYD was responsible for the financial estimations supporting the emergency cash transfer *Quédate en Casa* during the COVID-19 pandemic and has carried out financial estimations of cost implications for some shocks in partnership with the World Bank.<sup>112</sup> In Paraguay, while the government is continuing to broaden its technical capacity on modeling the economic impact of shocks, in 2019, studies were developed by the Climate Change National Directorate to model the potential cost implications of the main covariate shocks to which the country is exposed.

<sup>110</sup> Ministry of Finance of Honduras (SEFIN), 2020.

<sup>111</sup> Interview with Ministry of Finance and Public Credit (MHCP) of Colombia.

<sup>112</sup> Interview with MEPYD

**While only two countries have established financing instruments earmarked for ASP response to shocks, all countries have some instruments that could contribute to covering the cost of scaling up assistance in the aftermath of shocks.** For example, the Solidarity and Social Protection Fund (SSPF) in Honduras is capitalized by sales tax and seeks to guarantee financing for social protection and the protection and generation of income. However, the level of capitalization is limited – additional finance is generally required for larger shock events, and the different processes needed for authorization and access to both the existing fund and other sources of financing make the process of reaching beneficiaries time-consuming.<sup>113</sup> The SSPF has been complemented with investment from agencies such as the World Bank, including a Catastrophe- Deferred Drawdown Option (Cat-DDO) approved in April 2020 for USD 119 million, however, this was still not sufficient to cover the cost of the pandemic response.<sup>114</sup> Other sources of funding were obtained by the government to fund the horizontal expansion after Eta and Iota, such as a loan with the Central American Bank for Economic Integration. In Paraguay, most of the contingency financing in the National Emergency Fund (FONE) is earmarked for first response (emergency food assistance, shelter, etc.) and asset rehabilitation, and not for ASP. However, in response to the COVID-19 pandemic, the two socioeconomic government-led responses were financed through the FONE. This sets a precedent and paves the way for a potential reframing of the role of social protection in emergency response. Municipalities and local governments have a budgetary line for emergency funding, which is considered flexible, but its disbursement is not consistently informed by empirical analysis.

**All countries have systems or mechanisms that may not have been established for ASP but could be used for this purpose if needed.** Currently, in Honduras, the CCT program and even the Social Protection Policy consider its implementation as shock responsive. While no timescales or a defined strategy to follow in case of a shock exists, the Honduran Bank for Production and Housing (BANHPROVI) has the capabilities to manage the distribution of cash benefits and reconciliation of expenditure in place to react to a shock in a timely manner. However, clear procedures for the disbursement of resources are required. On the other hand, in Paraguay, which scored ‘nascent in the Finance building block, the Ministry of Finance issued USD 1 billion in sovereign bonds with a ten-year maturity and a yield at 4.95 percent to finance a stimulus package for its population to respond to the economic impacts of the pandemic. Such bonds were utilized mainly to modernize the country’s health infrastructure (especially for pandemic preparedness) to neutralize the threat caused by the pandemic and in financing the *Ñangareko* and *Pytyvõ* temporary social protection schemes. Such funding was complemented by loans from the World Bank, and emergency loans through the International Monetary Fund’s rapid financing instrument.<sup>115</sup> The successful utilization of such a financing instrument in times of shock paves the way for the potential adoption of DRF instruments linked to social protection systems.

**With respect to financing for social protection, governments have begun to approach budgeting for social protection as one aspect of DRF and seek to make financial decisions based on quantifiable predictions of risk and projected expenditure for social protection.** The analytics and data on contingent liabilities related to social protection have improved and allowed for the development of market-based risk transfer products or even more sophisticated cost-benefit analyses regarding disaster risk reduction

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<sup>113</sup> SEDIS interview, BANHPROVI interview, 2022.

<sup>114</sup> World Bank. (2021).

<sup>115</sup> EIU. (2020). *Paraguay accesses bond markets to fund coronavirus response*. Economist Intelligence Website.



for vulnerable populations versus plans for shock responses. Moreover, advances and innovations have been observed with respect to livelihood protection insurance. For instance, the Livelihood Protection Program was piloted in the Caribbean under CCRIF and has since been modified and re-marketed but was the catalyst for private insurers to develop their own products in competition to ultimately respond to the demand for affordable income insurance in the Caribbean and Central America. The region is also beginning to capitalize on lessons learned from approaches utilized in other regions of the world.

### *Finance: good practices of specific countries Caribbean*

**The Caribbean and Central America regions have paved the way for innovations in disaster risk financing (DRF).** The world's first regional parametric risk pool, the Caribbean Catastrophe Risk Insurance Facility (CCRIF SPC), was established in 2007 for countries in the Caribbean. In 2015, it expanded its reach to include the Central America region. Today, the CCRIF SPC operates as a multi-regional partnership that promotes the coordination of the Caribbean Community (CARICOM) and the Council of Ministers of Finance of Central America, Panama, and the Dominican Republic (COSEFIN) to provide immediate liquidity through a range of affordable and innovative insurance products. CCRIF membership now stands at 26, including 19 Caribbean governments, four Central American governments, and three Caribbean electric utility companies. CCRIF offers five parametric insurance products covering tropical cyclones, excess rainfall, earthquakes, fishery sector insurance, and electric utilities.

**Mechanisms like CCRIF's parametric insurance allow rapid payouts to help member countries finance their initial disaster response and maintain basic government functions after a catastrophic event.** These funds play a vital role in providing financial protection and enabling quick recovery, as well as ensuring access to funds for emergency response, infrastructure repair, and community rebuilding efforts. By leveraging these financial tools, countries in the region can better allocate resources, strengthen resilience, and accelerate recovery, minimizing the long-term economic and social disruptions caused by natural hazards and climate change. The hurricane season of 2022 brought significant challenges and devastation to Central America and the Caribbean and underscored the urgent need for improved disaster preparedness, early warning systems, resilient infrastructure, and financial mechanisms to mitigate the devastating effects of future storms in the region. CCRIF SPC made payouts totaling US\$17 million to Nicaragua, Trinidad and Tobago, Belize, and Antigua and Barbuda as payouts for hydrometeorological events associated with the 2022 hurricane season. Overall, since 2007 CCRIF SPC has made 60 payouts totaling US\$262 million to 16 member governments.

**Several efforts have been carried out or are planned to advance ASP through the CCRIF.** In 2022, the government of Belize (GoB) entered into an agreement with the World Food Program (WFP) to receive a top-up of US\$100,000 per year for the premium of the CCRIF Tropical Cyclone and Excess Rainfall Policies. A portion of this top-up will be earmarked for cash assistance payouts to vulnerable households after a shock.<sup>116</sup> The WFP has done similar arrangements in Dominica and Nicaragua. As part of collaborations under the CCRIF-WB program, the Bank will seek opportunities to work on advancing the adaptive social

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<sup>116</sup> Belize MHD Facebook page. (2022). *WFP Supporting Belize To Increase Protection For The Most Vulnerable Through Climate Risk Insurance*. Available at: <https://www.facebook.com/GOBPressOffice/posts/pfbid02L5yUX4JtsVzLrNhaewFC6JCoSmVbeVSKCWsjAMRuyBXAVmDL7Eqkqbte2QdbGDtAl>

protection agenda in the region as a critical element of the rapid response and recovery, as well as long-term resilience building.

### *Dominican Republic*

**Since 2017, through reforms under a Catastrophe Deferred Drawdown Option (Cat DDO), the country has established institutional structures for quantifying, pricing, and managing the contingent liabilities associated with climate and disaster risks.** These include (i) an interinstitutional body to assess and quantify the socioeconomic and fiscal impacts of disasters; (ii) a legal mandate to the Ministry of Finance to assess the impacts of disaster and climate-related risks on fiscal accounts as part of managing contingent liabilities; and (iii) a legal mandate to the Ministry of Finance to manage the contracting of financial instruments for risk transfer according to the country's applicable legislation.<sup>117</sup>

**Additionally, the DR has a series of financial instruments to prepare for and respond to disasters.** One of the main sources is the Public Calamities and Emergencies Fund, which obtains its resources through an annual budgetary allocation report.<sup>118</sup> Since 2006, the National Budget allows for the potential allocation of 1 percent of the Current Income in case of the materialization of adverse events—with the power to include an additional 0.5 percent of the nominal GDP if necessary—to cover contingencies due to public calamities.<sup>119</sup> Additionally, the country has access to emergency credit lines with different multilateral organizations such as the World Bank and the Inter-American Development Bank and means of risk transfer to the private sector such as agricultural insurance for agricultural producers.

**The DR continues to work towards having a comprehensive framework that establishes the policy continuum from understanding fiscal risks to reducing them and managing the residual ones through financing instruments.** Through reforms under the second Cat DDO, the GoDR has undertaken to formulate and approve the first Disaster Risk Fiscal Policy (DRFP) as part of one of its main budgetary planning tools, the Medium Term Macro-Fiscal Framework. This DRFP establishes priority actions aiming at increasing fiscal resilience against disasters and climate risks. It includes activities that support the economic and fiscal assessment of disaster risks including climate related ones and the identification and implementation of disaster risk financing instruments under a layered approach.<sup>120</sup>

**Arranging financing, developing policies, legal and institutional frameworks, and building capacity in advance, allows funding to be available and efficiently used for rapid response and resilient recovery after a disaster.** It allows governments to plan and structure their budget execution and, with the scale-up/out criteria established in advance, provide rapid assistance through post-disaster SP benefits to households identified for support. For example, in September 2022, Hurricane Fiona impacted the Dominican Republic, being the first event of this magnitude to enter Dominican territory since 2004, causing floods, landslides, blockages of communication routes and catastrophic damage mainly in the

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<sup>117</sup> World Bank. *Dominican Republic - Second DRM Development Policy Loan with a Catastrophe Deferred Drawdown Option (English)*. Washington, D.C.: World Bank group. <http://documents.worldbank.org/curated/en/099120011092214083/BOSIB04c431f950c90b3700d2e3791f06da>

<sup>118</sup> Dominican Republic Hacienda. (2023). *Medium Term Macro-Fiscal Framework 2023-2027*. Available at: [https://www.hacienda.gob.do/wp-content/uploads/2023/05/2MAY\\_MFMP-2023-2027-0426202376.pdf](https://www.hacienda.gob.do/wp-content/uploads/2023/05/2MAY_MFMP-2023-2027-0426202376.pdf)

<sup>119</sup> World Bank. *Dominican Republic - Second DRM Development Policy Loan with a Catastrophe Deferred Drawdown Option (English)*. Washington, D.C. : World Bank group. <http://documents.worldbank.org/curated/en/099120011092214083/BOSIB04c431f950c90b3700d2e3791f06da>

<sup>120</sup> Ibid.

Eastern region of the country. In response to the disaster caused by Fiona, the Government deployed several measures to attend the emergency including a *Bono de Emergencia*, which consisted of unconditional cash transfers aimed at 35,000 families affected by the hurricane.<sup>121</sup>

## *Mexico*

**Mexico has been instrumental for over two decades in effectively supporting a national DRM strategy in the different disaster phases.** Mexico's National Disaster Fund, FONDEN, was initially created in 1996 and became operational in 1999. In 2022, Mexico decided to replace the Fund with a budgetary mechanism, which continues to finance rehabilitation of public infrastructure and other eligible assets.<sup>122</sup> While there have been recent changes to the legal, institutional, and administrative DRM frameworks in Mexico, Mexico continues to promote the use of pre-arranged mechanisms to expedite response to natural disasters, based on a clear framework for damage and loss assessments, emergency response and reconstruction with established procedures to access resources and implementation timelines between Hacienda and affected sectors. Mexico is a country that has historically financially managed emergency responses and reconstruction effectively and efficiently.<sup>123</sup>

### *Finance: Persisting challenges*

**Despite progress in the general mindset of governments planning ahead for disaster impacts, with most countries having at least one financial instrument for disaster risk management in place, linkages to Social Protection are still lacking.** The institutional practices still lag behind in setting aside financing in advance or accessing instruments that allow for quick liquidity to finance the scale-up of social protection systems. The stress test showed that many countries had general access to financing in place for disaster response, but it was not specifically linked to any ASP interventions (*Figure 46*). Or, if financing was linked to ASP interventions, it was limited to less severe or more frequent events.

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<sup>121</sup> Dominican Republic Hacienda. (2023).

<sup>122</sup> World Bank. (2012). FONDEN: Mexico's Natural Disaster Fund--A Review. Washington, D.C.: World Bank.

<sup>123</sup> World Bank. (2013a). *FONDEN--Mexico's National Disaster Fund: An Evolving Inter-Institutional Fund for Post-Disaster Expenditures*. Disaster risk financing and insurance case study. Washington, D.C.: World Bank

**Figure 46:** Government policy or strategy that recognizes the role of (adaptive) SP in disaster risk management (DRM)



Note: Based on Argentina, Belize, Brazil, Chile, Colombia, Dominican Republic, Costa Rica, Ecuador, Honduras, Mexico, Panama, Paraguay, Peru and Uruguay Stress Test assessments. Graphic created using MapChart (<https://www.mapchart.net>).

**Many governments in LAC currently either do not have the capacity to model and assess the potential impacts of shocks on vulnerable populations, or do not systematically carry out such assessments utilizing available data.** Estimating the cost of a shock is a difficult endeavor, as most disasters result in a myriad of direct and indirect financial impacts. However, having a cost estimate is critical for governments to ensure that appropriate DRF mechanisms are in place. Various methodologies exist for estimating the cost of a disaster including ex-ante quantification of social protection financing needs or the usage of historical data to evaluate the costs of disasters of different categories of households.<sup>124</sup> According to the Stress Test Assessment, some countries have the capacity to analyze and model potential costs of more than one shock. However, in some cases, there is still no systemic use of this data to plan for financing and risk reduction actions. Other countries lack the capacity to model the potential financial implications of shocks on the social protection sector. In the case of Costa Rica, the government does not currently have the capacity to model the potential impacts of natural disasters on shock-prone populations, despite the wealth of existing historical weather and shock data that has been collected over the past forty years. Strengthening the technical capacity of governments to model the socio-economic cost implications of

<sup>124</sup> Ibid.

covariate shocks can guarantee financial readiness and enable adequate planning *vis-à-vis* such extreme events.

**Some LAC countries have established DRF strategies, but these strategies often lack linkages to (adaptive) social protection.** Consequently, most post-disaster social protection responses rely on ad-hoc budget reallocations or slow-to-arrive international assistance, falling short in providing timely and adequate benefits. A well-defined DRF strategy that clearly outlines the rules for the amount and timing of post-disaster social protection benefits can help governments to take a proactive approach, ensuring quick and effective relief for vulnerable populations impacted by disasters.

**In most LAC countries, financing is in place to ensure a timely response to disasters, but funds are not earmarked for supporting vulnerable populations.** Governments can optimize their DRF approach by combining different instruments to protect against events of different frequency and severity. Another common finding in LAC is that countries may have one or more risk financing instruments in place, whether a risk retention or risk transfer instrument, with guidelines for their potential use and the severity of disaster they will be utilized for. However, their governance mechanisms may fall short of determining a needs-based process for the use of funds, prioritizing funding for vulnerable populations after emergency response needs are met.

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#### Finance: Emerging recommendations<sup>125</sup>

- 1. Combining different financial instruments:** Governments can optimize their financial coverage by combining different instruments before a disaster strikes to protect against events of different frequency and severity. Determining the right mix of instruments depends on the financial liabilities the government may face from natural hazards, its fiscal space, and overall risk aversion.
- 2. Adopting a risk layering approach:** International best practices around DRF suggest the adoption of a risk layering approach for disaster risk financing protection strategies that combine risk retention (such budget allocations or contingent credit lines) and risk transfer (such as insurance, which passes on the risks of the government associated with a certain event to another party) instruments, according to the temporal dimension of post-disaster funding needs, the opportunity and fixed costs of different instruments.
- 3. Addressing technical capacity gaps at the governmental level:** Strengthening the technical capacity of governments to model the socio-economic cost implications of shocks, especially in contexts with more nascent and emerging social protection systems, can increase financial readiness and enable adequate planning *vis-à-vis* potential future shocks.
- 4. Incentivizing innovations in disaster risk financing instruments, including risk transfer and insurance mechanisms.** This can take the form of the government protecting its own implicit contingent liabilities of vulnerable populations and subsidizing livelihood insurance (social protection) for vulnerable populations, or aggregating risk transfer for social protection at the

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<sup>125</sup> Recommendations based from Cubas, Diana; Gunasekera, Rashmin; Humbert, Thibaut. 2020. *Disaster Risk Finance for Adaptive Social Protection*. World Bank, Washington, D.C.

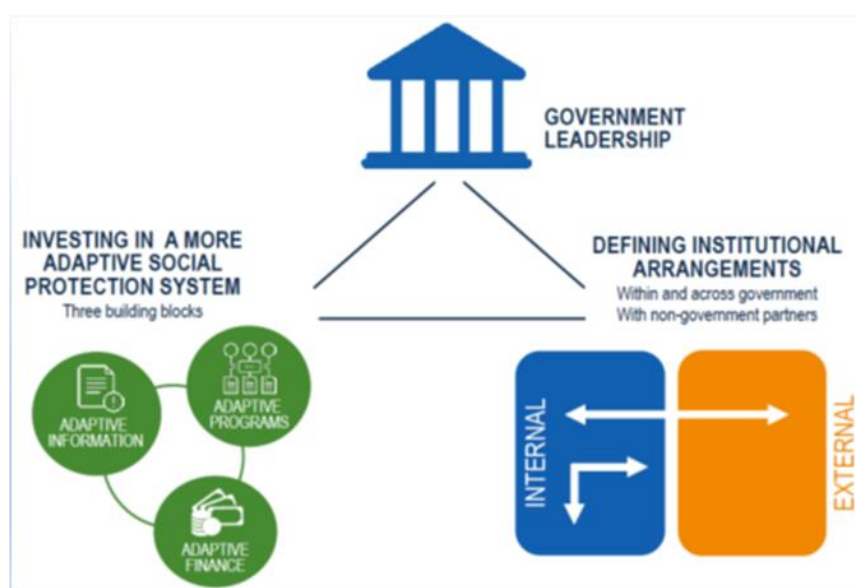
sovereign level through a parametric risk pool or other parametric product. Governments can also work closely to make non-life insurance more affordable and attractive to all consumers. Offering cost-effective options for the non-poor could alleviate the pressure on post-disaster social protection benefits and significantly reduce the cost of a disaster.

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## Institutional Arrangements and Partnerships

**Robust institutional arrangements and partnerships allow for the creation of ‘responsive by design’ social protection systems.** Considering the relative unpredictability of disasters and the need for a one-government approach to overcome such crises, DRM policies and laws typically outline the roles and responsibilities of the various government actors and their interactions with non-governmental partners. However, considering the growing prominence of the social protection sector in the framework of shock response deployment and management, the need for clear institutionalized linkages between the DRM and social protection sectors has become increasingly important.<sup>126</sup> Defining institutional arrangements within government vis-à-vis shock response deployment and management can also pave the way for smooth external coordination with humanitarian and development partners that are typically active in the aftermath of covariate shocks (Figure 47).

Figure 47: Government leadership and investments in Adaptive Social Protection



Source: Bowen et al. 2020.

**The formal definition of roles and responsibilities of the two sectors is key to the advancement of the ASP agenda in any country,** as it minimizes the risk of duplicating efforts through the creation of parallel competing systems as well as lessening the likelihood of resorting to *ad hoc* and post-disaster coordination. This approach is conducive to the deployment of timely assistance to shock-affected populations. By analyzing the existing policies, strategies, and plans relevant to DRM, shock response management, and social protection, this section of the Stress Test assessment assesses the government’s institutional capacity to coordinate and lead the deployment of emergencies and shock responses, before, during, and after the onset of crises<sup>127</sup>

<sup>126</sup> Johnson et al. 2022

<sup>127</sup> World Bank. (2021c).

This section of the Stress Test assessment also analyzes the quality of country-level partnerships and coordination with humanitarian and development non-governmental actors. In this sense, despite LAC’s overall lower level of dependency on external aid compared to other regions in the world, non-government partners continue to play a key role in supporting LAC governments in times of crisis, especially in the Caribbean sub-region. As such, the interactions between these partners and governments demand effective articulation and regulation. **Table 6** summarizes the results of the country-level Stress Test Assessment for the Institutional Arrangement and Partnership building block.

*Table 6: Stress Test results - Institutional Arrangements and Partnerships*

|                    | Government leadership | Institutions | Institutional arrangements and partnerships - overall |
|--------------------|-----------------------|--------------|---|
| Argentina          | Established           | Established  | Established   |
| Belize             | Nascent               | Established  | Emerging  |
| Brazil             | Established           | Advanced     | Established   |
| Chile              | Emerging              | Established  | Established   |
| Colombia           | Nascent               | Emerging     | Emerging  |
| Costa Rica         | Emerging              | Emerging     | Emerging  |
| Dominican Republic | Established           | Established  | Established   |
| Ecuador            | Emerging              | Emerging     | Emerging  |
| Honduras           | Emerging              | Nascent      | Nascent   |
| Mexico             | Emerging              | Emerging     | Emerging  |
| Panama             | Emerging              | Emerging     | Emerging  |
| Paraguay           | Nascent               | Emerging     | Nascent   |
| Peru               | Emerging              | Emerging     | Emerging  |
| Uruguay            | Established           | Established  | Established   |

*Institutional Arrangements and Partnerships: good practices of specific countries*

As illustrated in **Table 6**, the country-level assessments have yielded varying results with respect to government leadership and institutional arrangements governing shock responses in the region. While some governments in the region have taken deliberate steps to establish institutionalized linkages between DRM and social protection sectors to promote policy coherence, other countries are still in the



process of reconfiguring the roles and responsibilities of the various sectors involved in emergency and shock responses. Only a few of the assessed countries have managed to effectively transition from *ad hoc* and post-disaster coordination to the establishment of *ex ante* institutional arrangements that can support the deployment of timely and well-coordinated assistance. In countries such as Chile, the institutional architecture for shock responses is periodically updated over time as a means to promptly deploy assistance to shock-affected households during emergencies in a streamlined and efficient manner.

**The assessments have also highlighted the need to simplify lengthy administrative and bureaucratic processes in support of rapid shock response deployment.** In this regard, some governments have proactively carried out simplification efforts to reduce the burden of administrative and bureaucratic processes linked to the routing of assistance through social protection channels. In other contexts, administrative barriers hamper the rapid expansion of assistance, urging decision-makers to launch standalone interventions rather than expanding existing ones. This section sheds light on the innovative institutional arrangements and collaborative frameworks pioneered by the Governments of Brazil and the Dominican Republic.

### *Brazil*

**A notable strength of Brazil's Social Protection lies in its robust institutional arrangements for shock response.** The country has established a comprehensive system that seamlessly regulates interactions between the DRM and social protection agencies, delineating clear roles and responsibilities to minimize overlaps between relevant actors. Central to this effort is the National Policy for Protection and Civil Defense, channeled through the National System for Protection and Civil Defense (SINPDEC). This system is designed to strategically align prevention, mitigation, preparedness, response, and recovery actions in the face of recurring or sudden disasters within the country. When a state of emergency is declared, an intricate network of agencies comes into play. The process begins with the activation of Early Warning Systems (EWSs) developed by the National Center for Monitoring and Early Warning of Natural Disasters (CEMADEN) in high-risk areas. Subsequently, the Civil Defense steps in, triggering the Unified Social Assistance System (SUAS) to promptly identify affected individuals to start active search efforts and enroll families in the *Cadastro Único* registry. The Ministry of Citizenship (MoC) intervenes by providing temporary benefits, including advance payments of the Bolsa Familia Program or the minimum income guarantee for the disabled and elderly, *Benefício de Prestação Continuada* (BPC). Furthermore, the reference center for social assistance, (*Centro de Referência Especializado de Assistência Social – CRAS*), thanks to its advanced referral mechanisms, guides families to access essential services such as shelter, healthcare, social care, and other public amenities. This orchestrated collaboration ensures a comprehensive response to crises.<sup>128</sup>

**A significant leap in Brazil's preparedness for emergencies is the establishment of a comprehensive shock response plan.** In 2021, the National Secretariat for Social Assistance (SNAS) introduced Guidelines for the implementation of the Social Assistance Policy in contexts of Social Assistance Emergency. This framework delves deep into the role of Social Assistance during emergencies, offering a set of proactive

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<sup>128</sup> Consultations with the Ministry of Citizenship of Brazil carried out in January 2022 as part of the Stress Test assessment

measures to be taken before, during, and after such situations. The guidelines consider the distinct competencies and roles of entities across the three tiers of government: federal, state, and municipal. The plan encompasses six main strategic axes: Legal, Administrative, and Budgetary Management; Social Assistance Surveillance; Social Work with Families and Individuals; Social Assistance Benefits and Income Transfer; Reception; and Articulation and Intersectionality.<sup>129</sup> The plan's scope extends to a wide array of risks, including natural disasters like earthquakes, floods, hurricanes, as well as epidemics and plagues. This holistic approach positions Brazil to respond adeptly to a diverse range of challenges while ensuring a well-coordinated and synchronized effort across all levels of governance.

### *Dominican Republic*

**The GoDR's strong commitment to advancing the ASP agenda is demonstrated by the progress it has achieved at the institutional level over the past four years.** Since 2019, the GoDR has been carrying out relentless efforts to establish robust *ex ante* institutional arrangements as part of its national Integrated ASP Strategy (*Estrategia Integral de Protección Social Adaptativa*). The Strategy envisions enhancing coordination levels between the Social Protection (SP) and Disaster Risk Management (DRM) systems, namely through the development of protocols that enable social protection programs to respond swiftly to disasters, thus improving their effectiveness and overall performance in times of shock. This involved refining the Social Registry (SIUBEN) to identify households affected by disasters and establishing eligibility criteria for emergency response programs. Concurrently, the Social Subsidy Administration (ADESS) was adapted to ensure seamless benefit distribution during emergencies. In alignment with the Strategy, existing social protection tools were repurposed to better respond to the COVID-19 pandemic. And in 2021, thanks to the support provided by the World Bank through its Integrated Social Protection, Inclusion and Resilience Project (INSPIRE), a comprehensive institutional reform of the social protection sector was implemented, encompassing the replacement of the *Progresando con Solidariedad* (ProSoli) program with the conditional cash transfer *Supérate* program, characterized by well-defined ASP objectives.<sup>130</sup> The reform also aimed to effectively redefine the institutional framework for social protection in the country and create a resilient financing structure to support the expansion of social protection programs in response to covariate shocks.<sup>131</sup> Despite such progress, a number of institutional challenges remain, including the absence of a social protection law and a dedicated Ministry, which could effectively embed ASP provisions and establish actionable fiscal protocols.

**The existence of updated and risk-informed disaster and contingency plans also shows the GoDR's strong government leadership in planning for and coordinating shock responses.** To this effect, the National Plan for Integral Disaster Risk Management guides policies for reducing risks, ensuring the population's safety, and protecting the environment, and is aligned with public, private, and social efforts and policies.<sup>132</sup> Moreover, the National Emergency Plan, which outlines the roles and responsibilities of all relevant actors during crises, is supported by the Contingency Plan and facilitates quick and efficient

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<sup>129</sup> SNAS, 2021. *Diretrizes para a atuação da Política de Assistência Social em contextos de Emergência Socioassistencial*.

<sup>130</sup> World Bank. (2023c). *World Bank Approves \$100 Million to Support the Integration of Social Protection Services, Economic Inclusion and Resilience in the Dominican Republic*. Press release. Published: 05/24/2023. Available at: <https://www.worldbank.org/en/news/press-release/2023/05/23/banco-mundial-aprueba-100-millones-dolares-apoyo-integracion-servicios-de-proteccion-social-dominicana> (accessed: 9/22/2023)

<sup>131</sup> iila. 2021. *Hacia la reforma de la protección social en República Dominicana*. Published 01/29/2021. Available at: <https://iila.org/es/hacia-la-reforma-de-la-proteccion-social-en-republica-dominicana/> (accessed: 9/22/2023)

<sup>132</sup> Comisión Nacional de Emergencias República Dominicana. 2011. *Plan Nacional de Gestión Integral del Riesgo de Desastres*

responses to specific hazards, approved by the Emergency Operations Center (COE).<sup>133</sup> Moreover, shock-specific disaster response plans exist, such as the 2018 Drought Action Plan, which addresses desertification and drought impacts.<sup>134</sup> All of these documents benefit from the wealth of data produced by the GoDR institutions involved in EWS, as well as by external development partners.

### Institutional Arrangements and Partnerships: Persisting challenges

**A number of gaps were underscored by the various country-level assessments in the region, including the lack of institutionalized linkages between the DRM and social protection sectors.** Such an overarching issue results in many governments resorting to *ad hoc* and post-disaster coordination, with negative implications for the scope, effectiveness, and timeliness of their shock responses. For example, in Costa Rica, the relatively low rating on the Stress Test assessment can be attributed to the absence of institutionalized linkages between the DRM and social sectors, which in turn is partially due to the fragmentation of the current social sector in Costa Rica – a gap that has the potential to impact the effectiveness of responses to natural disasters in the country.

**The lack of a one-government approach to shock response deployment and management often results in challenging coordination with non-State actors.** In many assessed contexts, coordination with non-government partners presents a number of challenges and is often carried out on a post-disaster basis. For instance, in Honduras, the absence of official guidelines and SoPs that outline the roles and responsibilities of public institutions in times of crisis, translates into lengthy and disorganized coordination with non-State actors. This *ad hoc* and post-disaster coordination setup ultimately results in significant delays and reduced effectiveness of assistance as well as serving as a fertile breeding ground for the potential duplication of efforts.<sup>135</sup>

**In various LAC countries, the fragmentation of routine social protection systems is mirrored during shock responses.** Complex routine social protection systems can hinder the predictable deployment of assistance and are often characterized by lengthy bureaucratic and administrative procedures. In contexts characterized by a multitude of institutions with overlapping mandates, agreeing on the parameters of shock responses should be carried out *ex ante* in order to avoid resorting to post-disaster coordination. For instance, in Chile, it is important to address such an issue by establishing *ex ante* institutional arrangements for ASP comprising a number of governance models to be activated based on the specific shock events. On the other hand, in the case of Ecuador, it is pertinent to devise strategies that can help bypass the bulky administrative procedures, which have in the past delayed the timely deployment of assistance. Stronger linkages between EWS data, DRM mechanisms, and social protection systems can ultimately allow for more streamlined and predictable procedures to be automatically activated in times of shock.

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<sup>133</sup> Centro de Operaciones de Emergencia. Republica Dominicana. (2018). *Sistema Nacional para la Prevencion, Mitigación y respuesta ante Desastres. Plan Nacional de Emergencias.*

<sup>134</sup> United Nations Dominican Republic. (2020). *Presentan Plan de Acción Nacional contra la Desertificación y la sequía en la Republica Dominicana.* Published: 06/24/2020. Available at: <https://dominicanrepublic.un.org/es/50904-presentan-plan-de-acci%C3%B3n-nacional-contra-la-desertificaci%C3%B3n-y-la-sequ%C3%ADa-en-la-rep%C3%ABlica> (accessed 9/22/2023)

<sup>135</sup> Consultations with SCGG in 2022

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## Institutional Arrangements and Partnerships: Emerging recommendations

- 1. Address existing policy gaps between DRM and social protection sectors.** In many instances, especially in contexts with more nascent and emerging social protection systems, there is a clear need to transition from the adoption of *ad hoc* and post-disaster social protection DRM linkages to the establishment of institutionalized linkages that can allow for smooth coordination in times of shock. In order to facilitate this transition, it is imperative for policymakers to update their DRM policies to duly reflect the important role to be played by social protection in potential future shock responses and to address the policy gaps between the DRM and social protection sectors. The creation of national ASP strategies, as showcased in the Dominican Republic example, can help catalyze efforts towards addressing policy gaps of this nature.
- 2. Outline roles and responsibilities of actors involved in shock response.** In contexts characterized by fragmented social protection programs (regardless of social protection system maturity), mapping the various roles and responsibilities of actors involved in emergency responses can lay the foundation for more robust *ex ante* institutional arrangements for each known covariate shock and also benefit the level of external coordination with non-government partners in times of shock.
- 3. Formulate solutions that can help bypass time-consuming bureaucratic and administrative procedures** for the channeling of assistance through existing social protection systems. Several LAC countries do not rely on streamlined administrative procedures, hence driving many governments to launch *ad hoc* temporary standalone schemes, whereby decisions on programmatic parameters are decided on a post-disaster basis. This ultimately leads to delays in the deployment of assistance and to potential inaccuracies in program design (e.g. targeting and eligibility criteria).
- 4. Develop national ASP strategies** to effectively catalyze efforts towards the advancement of the ASP agenda and leverage multi-stakeholder partnerships, as highlighted in the Dominican Republic case study. Such an approach can be particularly beneficial for countries with more mature ASP systems that are, however, fragmented in nature.



## Chapter 4: Strategic relevance of ASP in LAC

**The World Bank is committed to continuing to work closely with government counterparts in the LAC Region to enhance the level of adaptiveness of their social protection systems.** The *Towards Shock-Responsive Social Protection in LAC* ASA project has been instrumental in generating evidence and gathering insights on the level of adaptiveness of existing social protection systems in various countries across the LAC Region. Having gained a clearer picture of the current state of social protection, disaster risk management, and disaster risk financing systems in the various countries that have been assessed, the World Bank is now well-placed to better assist host governments through well-targeted interventions and technical assistance efforts in all four building blocks of the ASP Framework. Furthermore, through the analysis of existing overarching gaps and strengths across countries, it is expected that this report will also pave the way for increased opportunities for cross-learning within the LAC region. The first section of this chapter outlines the *Priority areas to advance the ASP agenda* based on the challenges and opportunities identified. The second section *Promoting the ASP agenda through World Bank projects in the LAC region* delves into the World Bank's ongoing efforts to advance the ASP agenda in the LAC region.

### Priority areas to advance the ASP agenda

**Countries in the LAC region have pioneered innovative solutions in support of their social protection delivery, payment, and data/information systems.** Over the past years, many countries in the region have taken enormous strides to modernize their social protection systems as a means to enable them to be able to provide social assistance in a more efficient manner, as well as to effectively absorb the negative impacts of covariate shocks in times of crisis. In this sense, tremendous progress has been made with respect to the introduction of converging technologies in support of social protection instruments, as in the cases of Brazil, Chile, Ecuador, and the Dominican Republic whose delivery/payment and data/information systems benefit from robust technological solutions that guarantee risk-informed, fast, and reliable assistance delivery. As observed in Chapter 3, countries such as Costa Rica and Ecuador are reaping the benefits of sustained investments in their respective national social registries, as attested by their high levels of population coverage and their progressively higher levels of interoperability with databases from other sectors. In the case of Uruguay, thanks to continuous investments, the Integrated Social Sector Information System (*Sistema de Información Integrada del Área Social – SIIAS*) has been able to achieve universal coverage and is capable of leveraging all required data to identify and target poor and shock-vulnerable households in a number of shock scenarios. It is worth mentioning that the wealth of data and technological capacity of the SIIAS has had positive spillover effects in the DRM sector, leading to the development of the MIRA (*Monitor Integral de Riesgos y Afectaciones – Integrated Monitoring of Risks and Hazards*) – a cross-sectoral informational system with high interoperability capacity that integrates real-time data from a number of sectors, and which is being utilized for ASP interventions in the country.

**Innovations around the Finance building block of the ASP Framework have been progressing at a slower pace in the region.** Considering the need to develop robust and comprehensive ASP systems within increasingly limited budget constraints, the World Bank is well-positioned to support governments in transitioning from relying on fixed budgets to adopting predictable and innovative financing earmarked for ASP. Greater levels of innovation and flexibility in DRF can enable the deployment of socio-economic responses on a needs basis rather than on a resource basis. Successful innovative solutions such as the Caribbean Catastrophe Risk Insurance Facility (CCRIF) have effectively pooled risk and provide reliable financial assistance in the aftermath of the recurring natural disasters to which countries in the Caribbean

and Central America sub-region are exposed. It is worth mentioning that the introduction of such DRF instruments should be coupled with capacity strengthening efforts at inter-ministerial level, especially with respect to financial modeling and projections *vis-à-vis* the cost implications of covariate shocks. To carry out such efforts, it will be essential to establish formal partnerships and institutional linkages between social protection, DRM, and the public finance and fiscal sectors.

**It is equally important to assist LAC countries in devising robust *ex ante* institutional arrangements to support the seamless deployment of shock responses.** While some country-level assessments have highlighted significant progress in devising adequate legal frameworks for the active role of social protection sectors in shock response deployment, in other contexts, they have also underscored the tendency to rely on *ad hoc* post-disaster coordination. In order to move towards the establishment of responsive-by-design ASP systems, it is important to address several issues that impede the rapid deployment of shock responses in the various countries. These issues include, in some cases, establishing clear data-sharing protocols across institutions to enhance database interoperability, as well as clearer coordination structures with non-state actors. For instance, in the Ecuadorian context, it is crucial to carry out normative reforms within the National Social and Economic Inclusion sector, and more specifically, within the social protection line ministry (*Ministerio de Inclusión Económica y Social – MIES*) to enable the institution to independently implement and lead the ASP agenda in the country.

**While working with LAC Governments, it is important to convey the multisectoral nature of the ASP agenda.** As mentioned earlier, the ASP agenda emphasizes not only efforts and investments to enhance various phases of the social protection delivery chain but also *ex ante* and *ex post* actions (such as actively building resilience before the onset of a covariate shock; and devising long-term livelihood diversification programs). As such, the World Bank needs to continue involving as many relevant sectors as possible in its policy dialogue and advocacy efforts around the need to invest in ASP systems and bridge any existing knowledge gaps. In some countries in the region, such as the Dominican Republic and Chile, the policy dialogue on ASP has been facilitated by both the pre-existing robust systems in place as well as the widespread consensus on the importance of continuing to make social protection systems more adaptive. On the other hand, in other contexts in the region, institutional barriers to the advancement of the ASP agenda have been observed, particularly within the DRM and Finance sectors. To this effect, it is important to devise local strategies to overcome such barriers, for instance by showcasing the important role played by social protection sectors across the region in responding to the unprecedented COVID-19 crisis or to highlight the equally important role to be played by other sectors in times of crisis.

**The recent and ongoing diagnostic efforts carried out by the World Bank, which are offering a wealth of insights and recommendations to governments in the region, can help pave the way towards intensified ASP-related investments.** The World Bank will leverage not only the evidence it has generated through the Stress Test assessments but also through the various poverty assessments and related analytical work it periodically conducts worldwide, as well as the Country Climate and Development Reports (CCDR) it has been carrying out in the LAC region.<sup>136</sup> In this regard, the CCDRs are core diagnostic reports that are helping countries prioritize actions towards Greenhouse Gas (GHG) emissions reduction and increased climate change adaptation outcomes within the framework of the various national

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<sup>136</sup> As of August 2023, the World Bank has published CCDRs for a number of countries in the LAC region, including Honduras, Brazil, Argentina, Colombia, and Peru.

development plans.<sup>137</sup> Leveraging the findings of the CCDRs can help advance policy dialogue around the need for more adaptive social protection systems, as they provide emerging insights with respect to climate change-related challenges. As such, the collaboration with other World Bank Global Practices (GPs) through a ‘whole system approach’ will continue to be instrumental in effectively advancing the ASP agenda in the region.

### Promoting the ASP agenda through World Bank projects in the LAC region

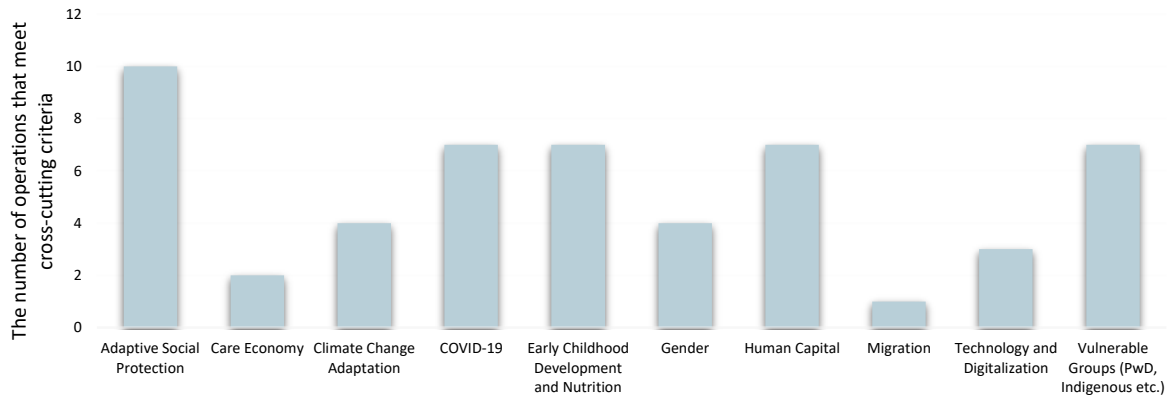
**To effectively support government counterparts in the region in advancing their ASP agendas, the World Bank is planning a number of lending operations and technical assistance projects.** Advancing ASP in the LAC region is a priority for the World Bank, as demonstrated by its current social protection portfolio, where a significant portion of analytical work and lending operations are focused on this crucial agenda (*Figure 48* and *Figure 49*). The World Bank’s approach of conducting analytical efforts under its analytical projects helps inform the design of well-targeted lending operations. In this regard, it is worth mentioning how the *Towards Shock-Responsive Social Protection in LAC* analytical project has been instrumental in advancing policy dialogue with a number of governments in the LAC region<sup>138</sup>, shedding light on the areas that require further investment to advance the ASP agenda. For example, the Stress Test assessment carried out in Costa Rica between November 2022 and April 2023 has served as an evidence base for potential future areas where the World Bank may extend its support, which could include the promotion of interoperability between geo-referenced social protection registry and DRM data and information systems. This effort could better guide the Costa Rican social sector in its disaster risk reduction and resilience-building interventions and allow for the rapid and accurate deployment of assistance in times of shock. Other areas of support encompass expediting the digitalization of payment systems, disaster risk financing solutions linked to social protection, and enhanced coordination structures between the social and DRM sectors within the framework of shock responses in the country. In addition to the planned areas of support in Costa Rica, the World Bank is carrying out similar efforts in Peru, supporting the integration of shock vulnerability-related criteria in the household targeting system (*Sistema de Focalización de Hogares – SISFOH*) linked to its national household registry, as well as supporting its expansion in terms of household coverage – both critical investments from an ASP perspective.

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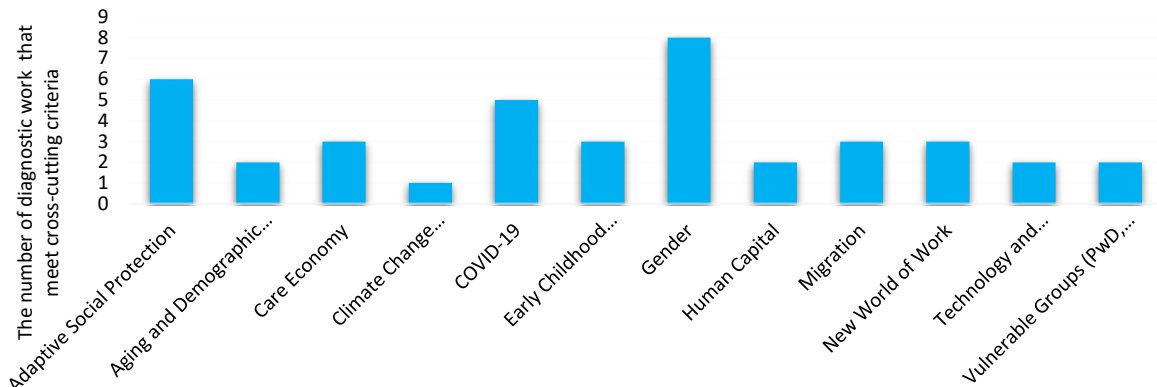
<sup>137</sup> World Bank. *Country Climate and Development Reports*. Available at: <https://www.worldbank.org/en/publication/country-climate-development-reports> (accessed 9/28/2023)



**Figure 48:** Ongoing operations by cross-cutting theme (World Bank Latin America and the Caribbean Social Protection and job portfolio overview FY24)



**Figure 49:** Ongoing diagnostic work by cross-cutting theme (World Bank Latin America and the Caribbean Social Protection and job portfolio overview FY24)



Source: LAC SPJ Portfolio Taxonomy. (2022).

Note: The two graphs depict ongoing activities during the beginning of FY24

**Considering the ASP agenda’s objective of fostering complementarities between protective and productive measures, investments are required not only around non-contributory measures but also in support of contributory schemes such as unemployment insurance schemes.** A growing body of evidence is shedding light on the positive correlation between the onset of covariate shocks and increases in labor market informality. In this sense, when people employed in the formal labor market lose their jobs as the result of a covariate shock, they are prone to find new employment in the informal labor market. In light of such a trend, the World Bank is planning to assist the Governments of Jamaica and Grenada in respectfully establishing and strengthening unemployment insurance schemes. These schemes can aid workers recover from shocks, and reduce the likelihood of resorting to negative coping strategies during sudden income fluctuations.<sup>139</sup> Such efforts are aligned with the fundamental principles of the ASP framework, where robust data and information systems can help better capture the changing needs of the work force and provide time-bound and affordable assistance in a dynamic manner.

<sup>139</sup> Consultations with World Bank LAC SPJ colleagues.

**The COVID-19 pandemic has highlighted the gaps in various social protection systems in the region to readily respond to large-scale shocks, hence underscoring the need to invest in advancing the ASP agenda.** In many countries in the LAC region, the unparalleled challenges posed by the pandemic have clearly carved out a more prominent role for social protection in responding to covariate shocks. Countries such as Chile, Brazil and Costa Rica have been able to capitalize on the robustness of their existing data/information and payment systems, as well as their strong institutional arrangements, to deploy empirical, time-bound, and cost-effective assistance to the most affected households, ultimately minimizing the immediate socio-economic repercussions of the pandemic on their well-being. On the other hand, countries that had invested less in social protection infrastructure, such as Paraguay, had to resort to the creation of *ad hoc* linkages between DRM and social protection mechanisms, and establish *de novo* shock-specific systems to support shock response deployment. However, despite the difficulties encountered by a number of LAC countries, the COVID-19 response has undoubtedly highlighted the important role played by social protection systems in emergency responses. In some cases, this has consequently prompted a series of reforms and a reconsideration of the sector's role and contributions *vis-à-vis* the various pillars of DRM.

**Building on the lessons learned from the pandemic, high inflation, and other large-scale covariate shocks, the World Bank is committed to continuing to support governments across the region in strengthening their national systems and programs,** especially in light of the wide spectrum of shocks to which their countries are exposed. To this effect, emphasis will be placed on assisting governments in making their systems more adaptive to shocks, while considering overarching regional (and global) issues such as climate change, high inflation and their relationship to food insecurity, as well as intra-regional migration and internal displacement. In this regard, it is important to continue generating evidence on the relationship between this pressing socio-economic phenomenon, the informal sector, and climate change as a means to advance both the social protection and the jobs/economic transformation agendas in the region in a risk-informed and data-driven manner. Greater knowledge on such issues can in fact help pave the way for the formulation of coherent government-led employment support and productive economic inclusion schemes in the region.

## Conclusion

**This report contributes to the growing body of evidence and insights regarding good practices in ASP in the region, with a specific focus on the multifaceted risks posed by climate change and other covariate shocks.** The evidence generated through this analytical project along with other past, ongoing, and future technical assistance efforts conducted by the World Bank are serving as valuable guidance for addressing the existing gaps that hinder the smooth deployment of assistance during times of crisis. In particular, the insights and data provided by the various country-level assessments conducted in LAC clearly highlight the need for proactive measures to enhance the level of adaptiveness of social protection across the different building blocks of the ASP framework. It is expected that the good practices, persistent challenges, and emerging recommendations identified through the diagnostic work carried out by the World Bank will serve as an invaluable resource for policymakers and practitioners seeking to work towards more adaptive social protection systems in response to the evolving challenges faced by the region.

**As the challenges faced by the LAC countries continue to evolve, so must the World Bank's approach to providing support to government counterparts.** Considering the vast and diverse array of hazards and

risks confronting the region, along with its structural and emerging issues, such as the large share of the population employed in the informal labor market and the increasing intra-regional migration trends, the World Bank's continued and tailored support will be required to navigate such complex challenges in Latin America and the Caribbean. Espousing an approach to advancing the ASP agenda that recognizes the diversity of challenges, the varying levels of technical and operational capacity, and policy architectures across LAC countries can ultimately lead to the provision of technical and financial support that is effective, pertinent, and in line with the specificities of each context. Given that social protection and DRM are the cornerstones of ASP systems, it is imperative for the World Bank to maintain and strengthen their alignment for higher impact. This can be achieved by actively pursuing joint project implementation opportunities. Increased synergies between the two practices can in fact allow for greater outreach, promoting the social inclusion of vulnerable and marginalized categories, and promoting gender transformative policies within the frameworks of social protection and DRM across the region.

**The pioneering spirit of many of the LAC countries to social protection innovations makes the region well-placed to effectively advance the ASP agenda.** Building on the innovative spirit exhibited by many countries in the region in devising robust social protection systems to support the most vulnerable segments of society, it is important to continue investing in converging technologies. In addition to enhancing the efficacy and effectiveness of social protection systems, intensifying efforts and investments in this domain can also contribute to enhancing their adaptiveness vis-a-vis the evolving challenges and heightened needs caused by the onset of extreme events in the region. Therefore, working towards more responsive, risk-informed, and adaptive approaches to social protection is key to the advancement of the ASP agenda in Latin America and the Caribbean.

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## Annex – Stress Test Module 2 Questionnaire

### 1. Programs & Delivery Systems

#### a. Programs

|   |   |   |
|---|---|---|
| 1 | What kind of noncontributory cash/in-kind transfer programs does the government operate?  | <ul style="list-style-type: none"> <li>• None, or donor/NGO-run programs only = 1</li> <li>• Government-run programs exist, but in limited geographic areas = 2</li> <li>• Government-run programs exist nationally but are limited to specific categories (e.g. disability, old age pension) = 3</li> <li>• Government-run programs are operated nationwide but are fragmented or overlapping = 4</li> <li>• A coordinated government-run program(s) is present nationally without fragmentation or overlaps<sup>140</sup> = 5</li> </ul>  |
| 2 | What kind of livelihoods/employment protection programs exist?  | <ul style="list-style-type: none"> <li>• None, or donor/NGO-run programs only = 1</li> <li>• Selected programs exist (some of them run by the government), but are limited in scope and/or to certain geographic areas = 2</li> <li>• Programs exist nationally but are limited in scope (e.g. skills training only) = 3</li> <li>• Various programs (delivering, e.g., skills plus cash, credit and/or counseling) are operated nationwide but are fragmented or overlapping = 4</li> <li>• An integrated government-run livelihoods program (or in complete coordination with NGOs) is operating nationally = 5</li> </ul>  |
| 3 | Does the amount of benefit provided during shocks change as per circumstances to ensure that there is no drastic change in household welfare? | <ul style="list-style-type: none"> <li>• Amount of benefit far from allowing households to maintain pre-shock consumption levels =1</li> <li>• Amount of benefit covers a small part of the consumption impact and decision on amount is based on resources available rather than standard protocol =2</li> <li>• Amount of benefit covers significant portion of the consumption impact, though coverage still a priority (can sometimes cover a lot sometimes a little) =3</li> <li>• Amount of benefit provided compensates significantly (though not fully) for consumption impact, with some parameters for transfer amount outlined in protocol and minimal acceptable value = 4</li> </ul> |

<sup>140</sup> Overlap in beneficiaries that can lead to “double dipping”

|   |  |  |
|---|--|--|
|   |  | <ul style="list-style-type: none"> <li>Amount of benefit provided compensates for potential consumption impact with formal guidelines/standards in place= 5</li> </ul> |
| 4 | What is the coverage of social protection programs in the country? | <ul style="list-style-type: none"> <li>0-15%=1</li> <li>15%-30%=2</li> <li>30%-50%=3</li> <li>50 to 70%=4</li> <li>Over 70%=5</li> </ul>                               |

| Latent (1)   | Nascent (2)  | Emerging (3)  | Established (4)   | Advanced (5)  |
|--|--|---|---|---|
| Government does not have any substantial programs, most SP covered by NGOs and donors and limited coverage of SP, leading to low levels of resilience among its population | Government has some SP programs and limited coverage, which remain uncoordinated and thus limiting resilience building | Government has relevant programs at the national level and some basic coverage which can promote resilience | Significant coverage through SP, through national safety net programs, and livelihood ones ensuring strong resilience of population | Strong coverage of safety net and livelihood programs providing a suite of interventions and a lot of complementarity ensuring population is very resilient to shocks |

### b. Delivery system

|   |   |  |
|---|---|--|
| 1 | Are there communication mechanisms in place that can be leveraged in times of a shock to inform target beneficiaries about the program? | <ul style="list-style-type: none"> <li>No=1</li> <li>Yes, but instruments are used in an ad hoc manner and are not tailored to the target population (e.g. using pamphlets or using pamphlets in one language and not others when target population is illiterate) = 2</li> <li>Yes, with more effective strategies in some areas but is not implemented well in other areas = 3</li> <li>Yes, a comprehensive strategy is implemented (or is available) in both urban and rural areas, which are served by the program, but don't have capacity to expand to areas not currently covered = 4</li> <li>Yes, a comprehensive strategy that uses multiple sources (e.g., a mix of cell phone, tv/radio, newspaper and other print media, and local community leaders) is available that can be scaled up as needed= 5</li> </ul> |
| 2 | Is the delivery of assistance informed by a needs assessment?   | <ul style="list-style-type: none"> <li>There is no needs assessment tool=1</li> <li>There is a tool designed for needs assessments for cash as well as other assistance (such as food or</li> </ul>  |

|   |  |   |
|---|--|---|
|   |  | <p>shelter), but there are no mechanisms to link it to existing programs=2</p> <ul style="list-style-type: none"> <li>• There is a tool designed for needs assessments and it informs the delivery of assistance through social protection programs via cash transfers=3</li> <li>• There is a tool designed for needs assessments and it informs the delivery of assistance through social protection programs assistance other than cash transfers (such as food or shelter) =4</li> <li>• There is a tool designed for needs assessments and it informs the delivery of assistance through the social protection programs via cash transfers as well as other assistance (such as food or shelter) =5</li> </ul> |
| 2 | How are beneficiaries enrolled in the program in times of shock?   | <ul style="list-style-type: none"> <li>• No enrolment mechanisms specified in case of horizontal expansion or existing beneficiaries have to register again for vertical expansion = 1</li> <li>• In person near their place of residence at a specific time (no permanent structure available for registration) =2</li> <li>• Self-enrollment in person (kiosk, one stop shop) or online/phone without provision for alternative access = 3</li> <li>• Self-enrollment by phone or internet as well as in person = 4</li> <li>• Automatic enrollment Or multiple mechanisms used that ensure everyone among target population<sup>141*</sup> can be enrolled =5</li> </ul>   |
| 3 | What percentage of the poorest two quintiles of population has a government authorized/recognized ID (national ID, birth certificate, voters ID, tax ID, etc.)? <sup>142</sup> | <p>Total coverage, not the difference between the affected population and ID prevalence</p> <ul style="list-style-type: none"> <li>• 0-20%=1</li> <li>• 20-40%=2</li> <li>• 40-60%=3</li> <li>• 60 to 80%=4</li> <li>• Over 80%=5</li> </ul>  |
| 4 | Can beneficiaries or target population register complaints? Is there a grievance redress mechanism in place to resolve the complaints?   | <ul style="list-style-type: none"> <li>• No/yes, but not functional =1</li> <li>• Yes, but only through community committees/ in person and is limited to beneficiaries only =2</li> <li>• Yes, there are multiple ways to register complaints, which can also be used by non-beneficiaries. However, complaint resolution process is not tracked =3</li> <li>• Yes, there are multiple ways to register complaints with triggers for response that tracks complaint resolution process = 4</li> <li>• Yes, there are multiple ways to register complaints with triggers for response and tracking of complaint</li> </ul>  |

<sup>141</sup> 'Target population' refers to the intended beneficiaries a of a particular benefit i.e. those who you want to be able to reach when you scale up a benefits/relief program

<sup>142</sup> This data is available in Findex database. Other sources such as government records, if available, can also be used.

|   |   |  |
|---|---|--|
|   |   | resolution process. After complaint resolution, follow up with beneficiaries to get feedback = 5   |
| 5 | Does the shock response expansion have specific programs/design features to ensure inclusion of women?  | <ul style="list-style-type: none"> <li>No specific efforts are made to ensure inclusion of women=1</li> <li>Some efforts are made to improve access or outreach, but these are not effective or contextually appropriate =2</li> <li>Some efforts are made to improve access or outreach, including context-specific adjustments or measures to address upstream constraints (e.g. provision of IDs or SIM cards to women to have better access) = 3</li> <li>Shock response plan includes a social mobilization component on top of tweaks in design features that tries to influence behavior or change restrictive norms to improve women's access to systems = 4</li> <li>The existing system already accounts for the major constraints faced by women and includes strategies to mitigate their constraints and improve access =5</li> </ul> |
| 6 | Does the shock response expansion have specific programs/design features to ensure inclusion of other vulnerable categories (people with disabilities, elderly, refugees etc.)? | <ul style="list-style-type: none"> <li>No specific efforts are made to ensure inclusion of other vulnerable categories=1</li> <li>Some efforts are made to improve access or outreach, but these are not effective or contextually appropriate=2</li> <li>Some efforts are made to improve access or outreach, including context specific adjustments or measures to address upstream constraints=3</li> <li>Shock response plan includes a social mobilization component on top of tweaks in design features that tries to influence behavior or change restrictive norms or constraints to the inclusion of other vulnerable groups = 4</li> <li>The existing system already accounts for the major constraints faced by other vulnerable groups and includes strategies to mitigate their constraints and improve access=5</li> </ul>           |

| Latent (1)   | Nascent (2)   | Emerging (3)   | Established (4)   | Advanced (5)   |
|--|---|--|---|--|
| The basic SP system delivery chain is limited and has no ability to flex and adapt to shocks. Remains inaccessible to women and/or | The basic SP system is somewhat adequate and has minimal ability to adapt to shocks. However, can | SP delivery system has some adaptive capacities to respond to shock. There is a focus on inclusion but right now addresses the | SP system is for the most part adaptive and able to respond to different types of shock with some shortfalls. Efforts are made to be inclusive of all vulnerable groups but | SP delivery system fully adaptable to respond to all relevant shocks. Mechanisms in place to make the program accessible |

|                          |                      |                                   |                              |                               |
|--------------------------|----------------------|-----------------------------------|------------------------------|-------------------------------|
| other vulnerable groups. | remain exclusionary. | needs of only some of the groups. | some groups remain excluded. | to all the vulnerable groups. |
|--------------------------|----------------------|-----------------------------------|------------------------------|-------------------------------|

### c. Payment Mechanism

|   |   |  |
|---|---|--|
| 1 | <p>Currently, how are benefits or cash transferred to the beneficiaries?</p> <p><i>Digital transfers or e-payment refer to prepaid cards, magstripe debit cards, smart cards, mobile money, accounts in financial institutions. Digital component does not have to be end to end but can refer to the sending the payment digitally to a bank account. Digital payments here include mobile payments, credit or debit cards, online bank account etc.</i></p> | <ul style="list-style-type: none"> <li>• Payments/transfers are cash based or in kind undertaken in person by MFIs or other and no set up for digital transfers=1</li> <li>• Payments/transfers cash based or in kind undertaken in person by MFIs or other but a small scale/pilot or discussion on digital transfers ongoing=2</li> <li>• Some payments are digital or paid to bank accounts=3</li> <li>• Most payments are digital or paid to bank accounts but use of funds is restricted to cash withdrawals from designated places =4</li> <li>• All payments are digital with ability to spend directly from the account, e.g. by debit card at merchant POS machine=5</li> </ul>   |
| 2 | <p>How quickly can the payment system scale?<br/><i>(Thinking of all the processes required to get a payment to beneficiary, from the launch of an intervention/operation how long would it take for beneficiary to receive payment assuming that within a few days, i.e. quickly is the goal)</i></p>  | <ul style="list-style-type: none"> <li>• Payments would require significant time as system not in place or nor appropriate for response = 1</li> <li>• Payments would experience some delay relative to shock as some systems in place but not most appropriate for some shock(s) identified in part 1=2</li> <li>• Payments would experience moderate delays as new accounts would need to be set up with moderate delays for identification and approval = 3</li> <li>• Payments can be made with little delay for some shock(s) identified in part 1 = 4</li> <li>• Payments can be made rapidly for all shocks identified in part 1 (consider for different shocks different payment systems may be necessary, so ability to be able to adapt payment method as necessary-fit for purpose- is essential) = 5</li> <li>•</li> </ul> |
| 3 | <p>What is the capacity of the payment system to handle a horizontal expansion of the main program?</p>   | <ul style="list-style-type: none"> <li>• Expansion of payments/benefits cannot be done at scale of need and limited to already targeted areas/localities=1</li> </ul>  |



|  |  |  |
|--|--|--|
|  |  | <ul style="list-style-type: none"> <li>• Expansion payments/benefits but systems can be done at limited scale of need =2</li> <li>• Some ability to moderately expand payments/ benefits relative to need =3</li> <li>• Significant ability to expand payments/benefits relative to need =4</li> <li>• Strong ability to expand transfers/benefits to cover most of the need or country if needed</li> </ul> |
|--|--|--|

| <b>Latent (1)</b>  | <b>Nascent (2)</b>  | <b>Emerging (3)</b>  | <b>Established (4)</b>  | <b>Advanced (5)</b>   |
|--|---|--|---|---|
| No mobile or digital payments as of now and no ability to scale payments in times of shocks. | Possibility of mobile/digital payments for regular transfers but scale up of payments or assistance for shock response is limited in scale and experience severe delay. | Some payments made by mobile/digital methods for regular system. There is some ability to scale payments or assistance delivered beyond current case load but moderate delays and limited ability to tailor payment system to specific shock or need | Majority payments are mobile/digital, with exception of very remote/ vulnerable populations. In times of shocks payments or assistance delivery can be done with relatively no delay and reach significant scale. | All payments are mobile/digital with in-built mechanisms to ensure access but the system can also adapt to any shock (modify payment mechanism to suit shock) and respond relatively quickly and at the required scale. |

**2. Data and Information**  
**a. Early Warning systems**

|   |   | Questions   | Answers  |
|---|---|---|--|
| 1 | <i>Risk information and communication</i> | <p>Is/are there a <b>functional</b> EWS for the shock(s) the country is exposed to? (shocks that are identified in part 1)</p> <p><i>An EWS is functional if it can monitor and alert on the occurrence of a natural hazard or shock</i></p>                    | <ul style="list-style-type: none"> <li>• No=1</li> <li>• Yes, but not fully functional or pilot form=2</li> <li>• Yes, for the some shock(s) and functional while some others exist but very weak /not fully functional =3</li> <li>• Yes, for most or all shocks and mostly functional=4</li> <li>• Yes, for all regular/known/recurrent shocks and with high functionality/multi-hazard early warning system=5</li> </ul>  |
| 2 |   | <p>Is the national EWS capable of warning (monitoring and alerting) of one or more shocks identified in part 1?</p> <p><i>Capable refers to ability to collect high quality, accurate data in real time. High quality data should have scientific basis</i></p> | <ul style="list-style-type: none"> <li>• Inadequate monitoring and warning capability of any hazard (for natural shock)/ or other shocks (health, food insecurity etc.) = 1</li> <li>• Some but limited monitoring and/or warning capability of hazards /or other shocks =2</li> <li>• Some adequate monitoring and/or warning capability for hazards /or shocks most relevant to the country, though some issues with accuracy still, and limited ability to monitor other less relevant more infrequent shocks = 3</li> <li>• Significant monitoring capability for hazards /or other shocks most relevant to the country but no other hazards/shocks =4</li> <li>• High level of monitoring and warning capability across hazards and/or shocks =5</li> </ul>   |
| 3 |   | <p>Has the government undertaken vulnerability and risk assessment(s) to assess the impact of shock(s) identified in part 1 based on EWS data?</p>  | <ul style="list-style-type: none"> <li>• No detailed vulnerability or risk assessments by govt exist = 1</li> <li>• Outdated or poor-quality assessment(s) of risk/vulnerability exist = 2</li> <li>• Some assessment to determine impact of different shocks on different populations exists but relies heavily on external support /or is not wholly adequate = 3</li> <li>• Government has the capacity to (and does) undertake risk/ vulnerability assessment for some shocks regularly based on hazard or shock exposure and data and provide granular data on people in need = 4</li> <li>• Government has the capacity to (and does) undertake a credible risk/vulnerability assessment regularly that is capable of providing granular data on estimated people in need in advance or very quickly in response to multiple shocks = 5</li> </ul> |
| 4 |   | <p>Is there an agreed trigger to initiate shock response or to</p>  | <ul style="list-style-type: none"> <li>• Shock response does not rely on EWS data for response = 1</li> </ul>  |

|  |  |   |  |
|--|--|---|--|
|  |  | scale up social protection systems in shock response (for the shocks identified in part 1)? | <ul style="list-style-type: none"> <li>• There is an ad hoc linkage shock response and EWS, where EWS data is used only sometimes = 2</li> <li>• Some attempts to identify and document EW indicators, which can be used to plan disaster response, but actual timing and scale of response follow resources =3</li> <li>• EW indicators are well-defined and documented with pre-agreed trigger thresholds to initiate a shock response. However, this is only limited to pilot programs or little coverage =4</li> <li>• Defined/automatic EW triggers that lead to relevant agencies initiating the shock response, which includes guidelines on amount and coverage for some shock(s) = 5</li> </ul> |
|--|--|---|--|

| Latent (1)               | Nascent (2)  | Emerging (3)   | Established (4)  | Advanced (5)  |
|--------------------------|--|--|--|---|
| No EWS or not functional | EWS covers one a/some shock(s) though not fully reliable as and data quality inputted into EWS and provided by EWS remains weak. | EWS for a/some shocks is mostly reliable though falls short on some quality and/or timeliness aspects of the data. | EWS for all shocks are mostly reliable with agreed upon trigger to initiate and plan the response. | EWS for all shocks with good quality and timely data with ability for real time monitoring across hazards and indicators with clear triggers and implementation guidelines and mechanisms in place. |

## b. Registry

|   |                    | Questions  | Answers  |
|---|--------------------|--|--|
| 1 |                    | <p>What kind of registry or database is used to target beneficiaries for a shock response?</p> <p><i>This question is not scored, and allows the team to frame the discussion with the right terminology</i></p> | <ul style="list-style-type: none"> <li>• A program social registry</li> <li>• Several program registries/databases</li> <li>• A national registry</li> <li>• A voter ID database</li> <li>• Humanitarian partners databases</li> <li>• Civil registry</li> <li>• Social security database</li> <li>• Telecom companies or client lists</li> <li>• Pension and social security databases</li> <li>• Dedicated MIS</li> <li>• None of the above/ad-hoc registration</li> </ul> |
| 2 | Coverage and Scale | What is the difference in terms of urban coverage in the registry/databases <sup>143</sup> vs.   | Calculate the difference between simulated number of affected urban population and those in the registry   |

<sup>143</sup>Given there is a huge variation across countries in how they identify and reach target population, here registry/database can refer to social registry, beneficiary registry, any other database that has significant coverage (e.g. tax records, voter registration)

|   |   |   |
|---|---|---|
|   | <p>the likely affected urban population based on simulation?</p> <p><i>To answer this question, there needs to be a number of average populations affected by shock from part 1. If you have not done Part 1 simulation, please use an estimate on the number of people in need.</i></p>  | <ul style="list-style-type: none"> <li>• Over 70%=1</li> <li>• 50-70%=2</li> <li>• 30%-50%=3</li> <li>• 15-30%=4</li> <li>• More households in the registry/database, or 0-15% fewer in the database than urban affected population%=5</li> </ul>   |
| 3 | <p>What is the difference in terms of rural coverage in the registry vs. the likely affected rural population based on the simulation?</p> <p><i>To answer this question, there needs to be a number of average populations affected by shock from part 1. If you have not done Part 1 simulation, please use an estimate on the number of people in need.</i></p>  | <p>Get the difference between simulated number of affected rural population and those in the registry</p> <ul style="list-style-type: none"> <li>• Over 70%=1</li> <li>• 50-70%=2<sup>144</sup></li> <li>• 30%-50%=3</li> <li>• 15-30%=4</li> <li>• More households in the registry/database, or 0-15% fewer in the database than urban affected population%=5</li> </ul>           |
| 4 | <p>Share of records older than 3 years in the registry or database used? It can also be an approximation</p>  | <ul style="list-style-type: none"> <li>• Over 70% (or information not available) = 1</li> <li>• 50-70%=2</li> <li>• 30%-50%=3</li> <li>• 15-30%=4</li> <li>• 0-15%=5</li> </ul>   |
| 5 | <p>Based on approximation, are disaster prone areas covered by the registry or relevant databases?</p>  | <ul style="list-style-type: none"> <li>• None=1</li> <li>• Few disaster-prone areas covered=2</li> <li>• Some of the disaster-prone areas covered = 3</li> <li>• Most of the disaster-prone areas covered =4</li> <li>• All the disaster-prone areas covered =5</li> </ul>  |
| 6 | <p>Is there a protocol for updating the registry or relevant database (full update not day to day updates)?</p> <p><i>In ideal circumstances, a protocol would include the following but can vary from country to country:</i></p> <ul style="list-style-type: none"> <li>- Frequency of data collection/update</li> <li>- Whether it allows dynamic data entry</li> <li>- Points of data entry or access (door to door, one stop shop, online etc.)</li> </ul> | <ul style="list-style-type: none"> <li>• No=1</li> <li>• Yes, a protocol exists but has never been followed=2</li> <li>• Yes, a protocol exists and has been mostly followed with some shortcomings (whether delays, or some deviation from the protocol or short of the full needed update) OR a protocol does not exist, but some updates have happened regardless = 3</li> </ul> |

systems etc.), any database that is currently being used for a specific program or any database that can potentially be used for the purpose.

<sup>144</sup> This figure is calculated based on the 8.8 million Zambians living under the national poverty line, and the 13.2 million people living under the vulnerability line (Poverty line X 1.5).

|   |  |   |  |
|---|--|---|--|
|   |  | - Access to entry points by potential beneficiaries   | <ul style="list-style-type: none"> <li>• Yes, a protocol exists and has been followed and helped update the database completely, but the updates are irregular and at least 5 years apart = 4</li> <li>• Update is regular and/or automatic =5</li> </ul>  |
| 7 |  | <p>Does the data in the registry or in the databases used allow targeting, identifying, locating, and contacting the beneficiary and transferring the benefit (i.e. having the address/phone/account information of the beneficiary) during shock response?</p> <p><i>For seamless use of social registry during a disaster response, it must have adequate information that would allow targeting people based on changing needs (for example targeting for poverty while also being able to contact and locate them).</i></p> | <ul style="list-style-type: none"> <li>• Data collected in the registry/database is not sufficient to target in a shock response =1</li> <li>• Data collected in the registry/database is somewhat sufficient to target during a shock=2</li> <li>• Data collected in the registry/database is mostly sufficient to target for a/some shock(s)=3</li> <li>• Data collected in the registry/database is mostly sufficient to target for all shocks=4</li> <li>• Data collected in the registry/database is fully sufficient to target for all shocks=5</li> </ul>   |
| 8 | <i>Interoperability and coordination</i> | Do humanitarian partners use the government's registry or other relevant government databases for their response?   | <ul style="list-style-type: none"> <li>• No, humanitarian partners use their own proprietary beneficiary lists, with little coordination of lists =1</li> <li>• Some use it but not consistently, relying on their own lists with some coordination but remains insufficient =2</li> <li>• All have access but don't use it consistently relying on their own lists partially with some coordination, but overlaps remain =3</li> <li>• They have access but use their own proprietary lists. However, mechanisms in place to avoid overlap in targeted beneficiaries i.e. different programs are not covering the same beneficiaries= 4</li> <li>• All have access and use it consistently /or humanitarian partners not involved in response =5</li> </ul> |
| 9 |  | <p>Are there other adequate (up to date, relevant data, geographic coverage) databases (telecom, humanitarians) available that can significantly expand reach?</p> <p>Note: beyond the data the government mainly uses. (e.g. in the social registry).</p>  | <ul style="list-style-type: none"> <li>• No other databases available=1</li> <li>• Databases available but not interoperable=2</li> <li>• Databases available and could be made interoperable but no data sharing pre-agreements = 3</li> <li>• Databases available and have data sharing pre-agreements = 4</li> </ul>  |

|    |                     |   |  |
|----|---------------------|---|--|
|    |                     |   | <ul style="list-style-type: none"> <li>Databases available, which are interoperable and allow seamless expansion, or the government does not need to rely on other databases as its own database/registry has full coverage = 5</li> </ul>   |
| 10 | <i>Data privacy</i> | Are there any data privacy regulations with specified course of action in case of privacy breach? | <ul style="list-style-type: none"> <li>No data privacy/security regulations exist = 1</li> <li>Data privacy regulations exist but are not implemented = 2</li> <li>Data privacy regulations exist with strict data sharing protocols with the private sector. However other government agencies can access and use this data = 3</li> <li>Data privacy regulations exist with strict data sharing protocols where the beneficiary is made aware of all the entities that could access their data = 4</li> <li>Data privacy regulations exist where beneficiary data is not shared with anyone. Other entities can only access aggregated or anonymized data = 5</li> </ul> |

| <b>Latent (1)</b>   | <b>Nascent (2)</b>  | <b>Emerging (3)</b>   | <b>Established (4)</b>  | <b>Advanced (5)</b>   |
|---|---|---|---|---|
| Registries/databases not adequate: Very low coverage of registry/beneficiary lists/databases which are fragmented and not adequate for targeting. | Registries/databases somewhat adequate: Registry/databases coverage is limited to no more than 50 percent of potential population in need shock prone areas covered. Limited ability to expand via non-government databases | Registry/databases cover between 50 to 70% of potential population in need with somewhat improved data, particularly in shock prone areas, though Interoperability limited still and some fragmentation remains | Registries/databases mostly adequate across shocks: cover(s) most of the potentially impacted population with significant coverage of areas susceptible to shocks and high degree of data reliability and accuracy. | Registries/databases fully sufficient to respond to all shocks: Integrated social registry/complete databases covering nearly all population and can be updated frequently on demand and used across multiple shocks. |

**3. Finance**

|    |   |   |
|----|---|---|
| 1. | Does the Government have a national strategy, policy or legislation setting out commitments to disaster risk financing? | <ul style="list-style-type: none"> <li>No disaster risk financing strategy or policy document/s exist = 1</li> <li>Disaster risk financing policy document/s are under development, or if they exist are outdated and not linked to any ASP interventions= 2</li> </ul> |
|----|---|---|

|    |   |  |
|----|---|--|
|    |   | <ul style="list-style-type: none"> <li>• Some disaster risk financing policies or strategies exist but not backed by legislation or financial instruments = 3</li> <li>• Disaster risk financing policy exists for at least one shock and some legislative / financial commitments in place = 4</li> <li>• Clear disaster risk financing strategy exists for wide range of shocks with supporting legal / financial instruments in place that mention ASP interventions = 5</li> </ul>   |
| 2. | Does the government have ability to analyze and model the potential cost implications of the shocks identified in part 1 over time?   | <ul style="list-style-type: none"> <li>• No systems exist = 1</li> <li>• No, but the government is actively building capacity in this area = 2</li> <li>• Yes, an analysis has been performed based on historical data for a/some shock(s), including ASP scale-up plans = 3</li> <li>• Yes, an analysis has been performed based on historical data as per ASP scale-up plans for some shocks and is owned by the Government = 4</li> <li>• Yes, an analysis has been performed based on historical data as per ASP scale-up plans for all shocks and is owned by the Government = 5</li> </ul>   |
| 3. | Is financing in place to ensure a timely ASP response to disasters?   | <ul style="list-style-type: none"> <li>• No specific financing instruments earmarked, response fully dependent upon budget reallocation and external aid = 1</li> <li>• Some disaster funding earmarked but fully dependent upon budget reallocation and external aid and not specifically for ASP response. Some coordination with development partners and ministries to access finance = 2</li> <li>• Some financing instruments earmarked for ASP response to some shocks, but amount limited to smaller events/more regular scale-up. Where additional finance required this experiences delays = 3</li> <li>• Some contingency financing and / or market-based instruments in place for some proportion of potential ASP costs. Larger and infrequent shocks not fully covered = 4</li> <li>• Instruments are ear-marked to quickly cover the cost of ASP scale-up from all shocks. Minimal delays to response =5</li> </ul> |
| 4. | Are there systems/mechanisms which can be utilized for ASP interventions?<br><br>Note: while some systems may not have been established for the purposes of ASP they are able to act in this way if needed. | <ul style="list-style-type: none"> <li>• No clear system/mechanism in place to scale up ASP assistance in place = 1</li> <li>• Systems/mechanisms exist for final distribution of assistance in line with SP system – no upstream timelines or protocols exist. Systems to disburse and reconcile expenditure= 2</li> <li>• Systems/mechanisms exist for the release of resources, but no clear timescales established and challenges in implementation remain. Systems to disburse and reconcile expenditure adequate = 3</li> <li>• Systems/mechanisms and timescales for the release of resources exist but challenges in implementation remain.</li> </ul>   |

|  |  |  |
|--|--|--|
|  |  | <p>Good systems to disburse and reconcile expenditure down to beneficiary level = 4</p> <ul style="list-style-type: none"> <li>The processes and timescales exist for the release of all resources for ASP and good systems to disburse and reconcile expenditure down to beneficiary level = 5</li> </ul> |
|--|--|--|

| Latent (1)   | Nascent (2)  | Emerging (3)  | Established (4)   | Advanced (5)  |
|--|--|---|---|---|
| No government strategy, analysis or funding commitments for disaster risk finance, funding needs and allocation determined after the event with no guidelines on disbursement. | Strategy and costing analysis under development, no disaster risk finance instruments in place for ASP with funding needs determined after the event and requiring budget reallocation and vulnerable to delays. | Disaster risk financing strategy in place and some earmarked financial commitments for disaster response (including ASP) for some shocks. | Disaster risk financing strategy in place and earmarked financial commitments to ensure timely response, including a range of pre-positioned instruments for a proportion of potential ASP costs for some shocks. | Disaster risk financing strategy and portfolio of financial instruments regularly reviewed to provide full coverage of risk landscape and flexible to new shocks. |

#### 4. Institutions and partnerships

##### a. Government leadership

|   | Question   | Answers  |
|---|--|--|
| 1 | <p>Is there any government policy or strategy that recognizes the role of (adaptive) SP in disaster risk management?</p> <p>Is there any government policy or strategy that recognize (clarifies or centers) the role of SP in responding and recovering to covariate shocks (emergency preparedness and response, humanitarian response, crisis response)</p> | <ul style="list-style-type: none"> <li>No (A)SP or DRM strategy / policy =1</li> <li>Strategies / policies exist, but are outdated Or SP and DRM do not link to each other and ASP not mentioned=2</li> <li>Up to date strategies / policies exists with some recognition of the role of ASP in DRM (or vice versa) = 3</li> <li>Relevant SP and DRM strategies exist with strong complementarity and links to some legislation and fiscal commitments =4</li> <li>Clear and reinforcing commitment to ASP in SP and DRM strategies supported by appropriate legislation and fiscal commitments = 5</li> </ul> |
| 2 | Is there a contingency plan* or response plan (whether drafted by the government or not, it is recognized as such in times of crisis), with links to   | <ul style="list-style-type: none"> <li>No=1</li> <li>There is a plan, but it was never activated during a shock/ not consistently activated OR there is a</li> </ul>   |



|   |  |   |
|---|--|---|
|   | <p>risk assessment which determines the actions to be taken in case of one of the shocks identified in part 1?<sup>145</sup></p> <p>Contingency plan will include human resource as well as technical, financial, and institutional capacity. This may require reviewing the adequacy periodically and adjusting the available resources/contingency plans accordingly</p> <p><i>(if a country is vulnerable to only 1 shock, score will be 5)</i></p> | <p>plan, but it is outdated and does not incorporate risk assessments=2</p> <ul style="list-style-type: none"> <li>• There is an up to date plan which is/would be activated but does not have fully actionable implementation roadmap for an effective response and is not periodically reviewed nor tested=3</li> <li>• There is an up to date, comprehensive and relevant plan for some shock(s), which includes risk assessment and scenario building which has been tested, is actionable and implementation-ready=4</li> <li>• There is a plan for each/all shocks (including an action plan for unanticipated shocks), and clear guidelines as to when it is/would be activated and up to date and is tested/implemented regularly and refined = 5</li> </ul>  |
| 3 | <p>How effectively<sup>146</sup> does the government lead the response plan<sup>147</sup> and implementation?</p> <p><i>The leadership of the government is independent of whether a contingency plan exists. This question seeks to understand what the actual role of the government is in the planning and implementation of response to a shock.</i></p>   | <ul style="list-style-type: none"> <li>• There are no government led ASP activities – all is led by humanitarian partners without coordination with SP or DRM=1</li> <li>• Government (SP and/or DRM) and non-governmental agencies run parallel ASP initiatives without coordination =2</li> <li>• Government (SP and/or DRM) and non-governmental agencies run parallel ASP initiatives with ad hoc post disaster coordination =3</li> <li>• Government SP and DRM have functioning institutionalized linkages and coordination (sharing data and information and coordinate on response based on respective roles) but no coordination with non-governmental agencies=4</li> <li>• Government SP and DRM have functioning institutionalized linkages and coordination (sharing data and information and coordinate on response based on respective roles) and a coordination mechanism with non-governmental agencies is functional=5</li> </ul> |

|                   |                    |                     |                        |                     |
|-------------------|--------------------|---------------------|------------------------|---------------------|
| <b>Latent (1)</b> | <b>Nascent (2)</b> | <b>Emerging (3)</b> | <b>Established (4)</b> | <b>Advanced (5)</b> |
|-------------------|--------------------|---------------------|------------------------|---------------------|

<sup>145</sup> A plan refers to any strategy or policy document that delineates steps to deliver the response and covers areas such as source of identification of stakeholders (both public and private); financing; coordination between agencies and stakeholders; deployment or hiring of staff where needed; ways to horizontally or vertically expand the existing system; scenario building and assessments; integrates results of risk assessment and early warning system etc.

<sup>146</sup> Effectiveness is based on whether the government is able to meet its targets

<sup>147</sup> It refers to the process of planning after a shock hit. Which agency or partner takes the lead in planning and implementing the response?

|  |  |  |   |  |
|--|--|--|---|--|
| No strategy and/or ad hoc programming in place with no leadership role for the government. | There is a strategy or policy, which is mostly outdated. At the same time, the government has limited capacity to lead the response. | The strategy is outdated but government institutions are strong, which enable the government to take lead in response. However, role of SP and DRM are not clearly delineated. | There is an up to date strategy and policy in place which clear defines the role of SP and DRM in shock response. Government has the capacity to respond on most aspects of shocks. | Strong SP DRM strategy with government leading all aspects of response . |
|--|--|--|---|--|

|   | Questions  | Answers   |
|---|--|---|
| 1 | Is there a public agency which is formally tasked with leading the shock response efforts (for the shocks identified in part 1)? ( <i>whether centrally or decentralized depending on where decision making occurs</i> ) | <ul style="list-style-type: none"> <li>No agency tasked =1</li> <li>No formal responsibility designated, but many agencies respond using their own systems and processes =2</li> <li>Several agencies tasked with response of some shock(s) (overlapping mandates) with limited level of coordination=3</li> <li>Clear responsibility and roles for some shock(s) assigned to agency(ies) though not for all shocks =4</li> <li>One agency tasked with shock response (or multiple agencies with designated roles and responsibilities) and covers all the shocks =5</li> </ul>   |
| 2 | Is there a coordination mechanism or institutionalized linkage between DRM (or institutionalized system responsible for shock response) and SP agencies (for the shocks identified in part 1)?                           | <ul style="list-style-type: none"> <li>No linkages: SP actors (or agency) do not have an active role and/or do not have coordination mechanism with DRM actors=1</li> <li>Ad hoc linkages (not institutionalized), OR coordination institutionalized but in reality, SP counterparts still struggle to coordinate with DRM counterparts=2</li> <li>Mostly functioning institutionalized linkages and coordination between SP and DRM for the some shock(s) only (SP and DRM counterparts share data and information and coordinate on response based on respective roles for some shock only) =3</li> <li>Mostly functioning institutionalized linkages and coordination between SP and DRM actors for most shocks =4</li> <li>Strong linkages and institutionalized coordination mechanisms between SP and DRM for all shocks=5</li> </ul> |

|                   |                    |                     |                        |                     |
|-------------------|--------------------|---------------------|------------------------|---------------------|
| <b>Latent (1)</b> | <b>Nascent (2)</b> | <b>Emerging (3)</b> | <b>Established (4)</b> | <b>Advanced (5)</b> |
|-------------------|--------------------|---------------------|------------------------|---------------------|

|  |   |  |  |  |
|--|---|--|--|--|
| <p>Weak to non-existent institutional infrastructure for shock response with lack of assigned roles and responsibilities</p> | <p>Limited and unclear assigned responsibilities for some shock(s) and fragmented and weak coordination between SP actors and with DRM actors</p> | <p>Roles and responsibilities clearly assigned with some institutionalized coordination established particularly for some shock(s) though some overlap and gaps remain</p> | <p>Recognized roles and responsibilities of each agency to respond to the various shocks though some gaps and weaknesses remain (could be some overlap, delays, or missing actors)</p> | <p>Recognized roles and responsibilities for all shocks with strong coordination across all relevant SP and DRM actors without delays or any overlap</p> |
|--|---|--|--|--|

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