



Executive Education on DRF for Indonesia

 SESSION: DRF for Adaptive Social Protection

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Disaster Risk Financing
& Insurance Program



Global Shield
Financing Facility



What is Social Protection?

Social Protection

helps individuals and societies manage risk across the life cycle and protects them from poverty and destitution.

↓
Preventive Function
Through contributory Social Insurance

Protective Function
Through non-contributory social assistance

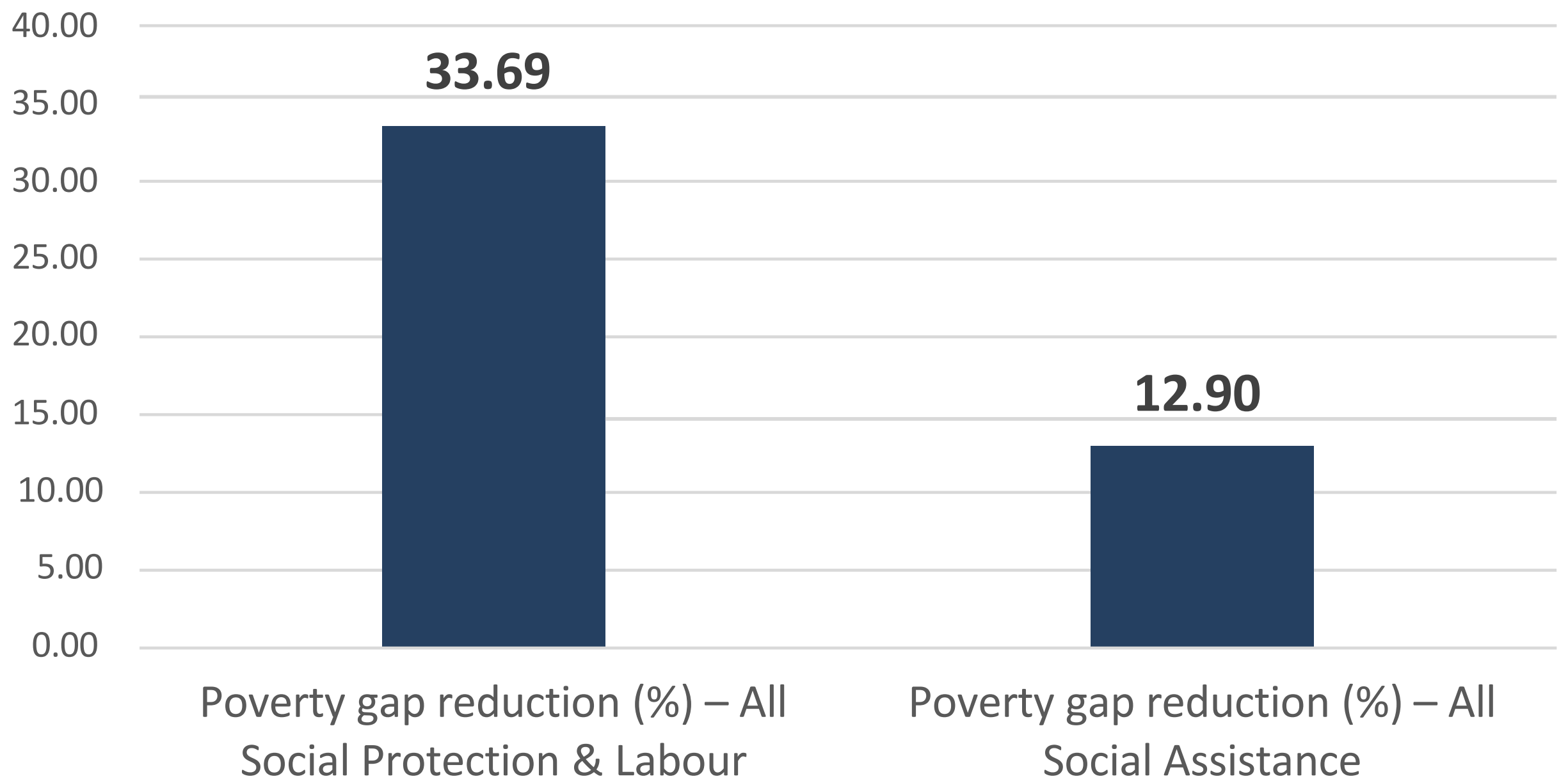


Promotive Function
Through active labour market programs

Social Protection Impact



Social Protection has been an important contributor to poverty reduction globally



Social Protection in Indonesia



PROTECTION (Regular Social Assistance)

- PKH conditional cash transfer for poor households
- BPNT/Sembako Food Assistance for poor households
- PIP cash transfer for poor and vulnerable students
 - PBI-JKN subsidized health insurance
- BLT-Dana Desa Village Fund unconditional cash transfer
- RS-Rutilahu cash transfer for social rehabilitation of uninhabitable houses (MoSA)
 - PKT cash-for-work



PROTECTION (Emergency Social Assistance)

- Compensation for heirs of disaster victims
- Jadup Living Support Allowance cash transfer for disaster victims
- Housing Stimulus Assistance cash transfer (MoPHW)
 - Huntara assistance for temporary shelter (BNPB)
 - Huntap assistance for permanent housing (BNPB)



PREVENTION

- JP old age pension
- JHT old age savings
- JKN national health insurance
 - JKP job loss guarantee unemployment insurance
 - JKK work-related accident insurance
 - JKM death benefit



PROMOTION

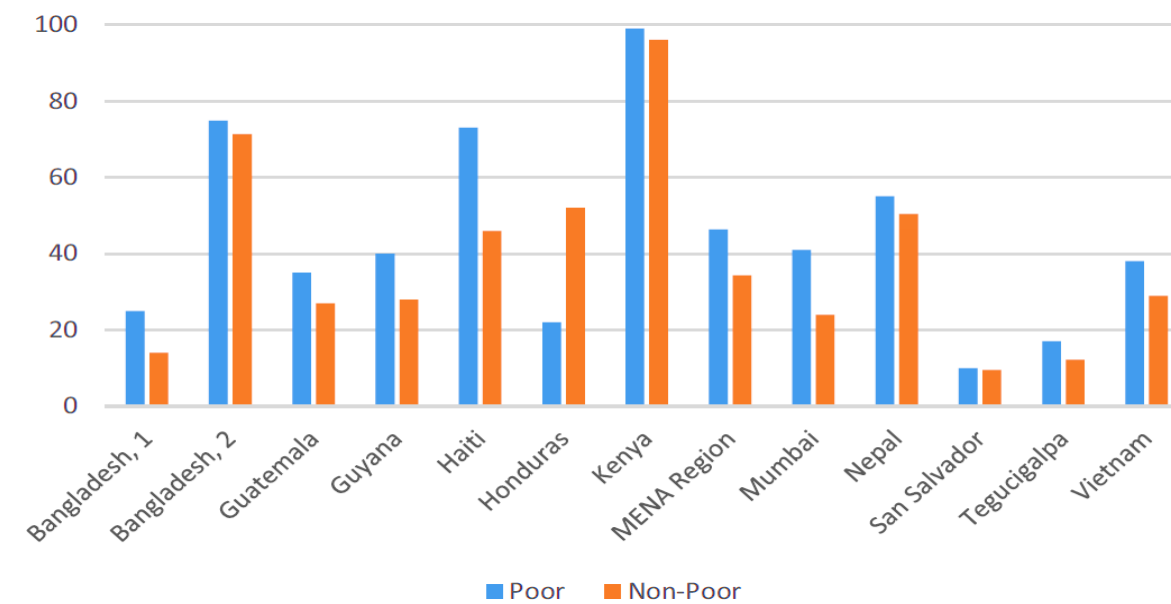
- Kartu Prakerja

Why Adaptive Social Protection?

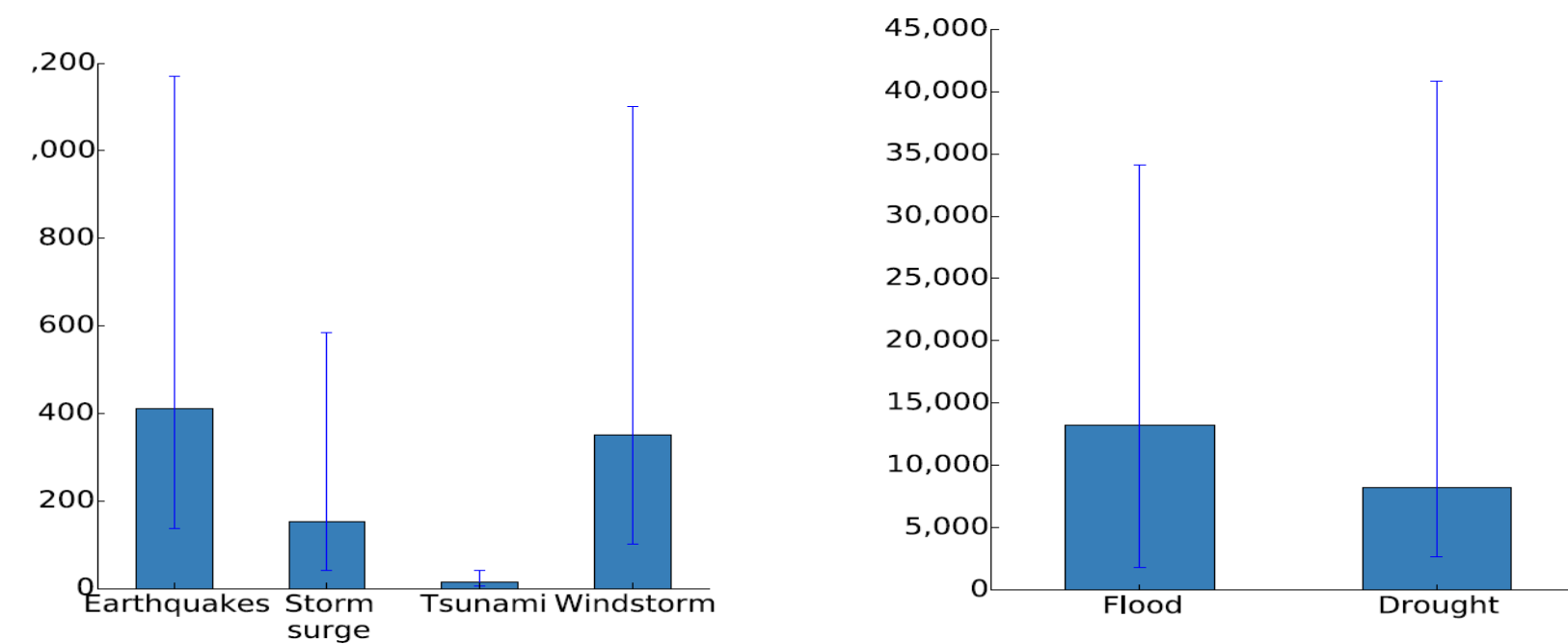


The poor are disproportionately impacted by shocks, and millions of people to fall into poverty each year from regularly occurring shocks like floods and drought.

Percent of poor and nonpoor affected by natural hazards, selected countries



Average annual number of people falling into poverty (thousands)



Poverty Impacts of Shocks in Indonesia

- One in ten Indonesians were vulnerable to falling into poverty due to covariate shocks. (Ali and Setiawan, 2022)
- Over 110 million people in approximately 60 Indonesian cities are exposed to negative impacts of climate change (World Bank 2019).
- Indonesia is among the 10 countries with the highest number of poor people exposed to floods (Hallegatte et al. 2017)
- Of the 76 million flood-exposed people in Indonesia, 40 million live in poverty on less than US\$5.50 per day (14.3 percent of the population).

In Indonesia
11.4 million rural households and
6.6 million urban households will likely
need
Social Protection support
in an average crisis

Ali and Setiawan
World Bank, 2022.

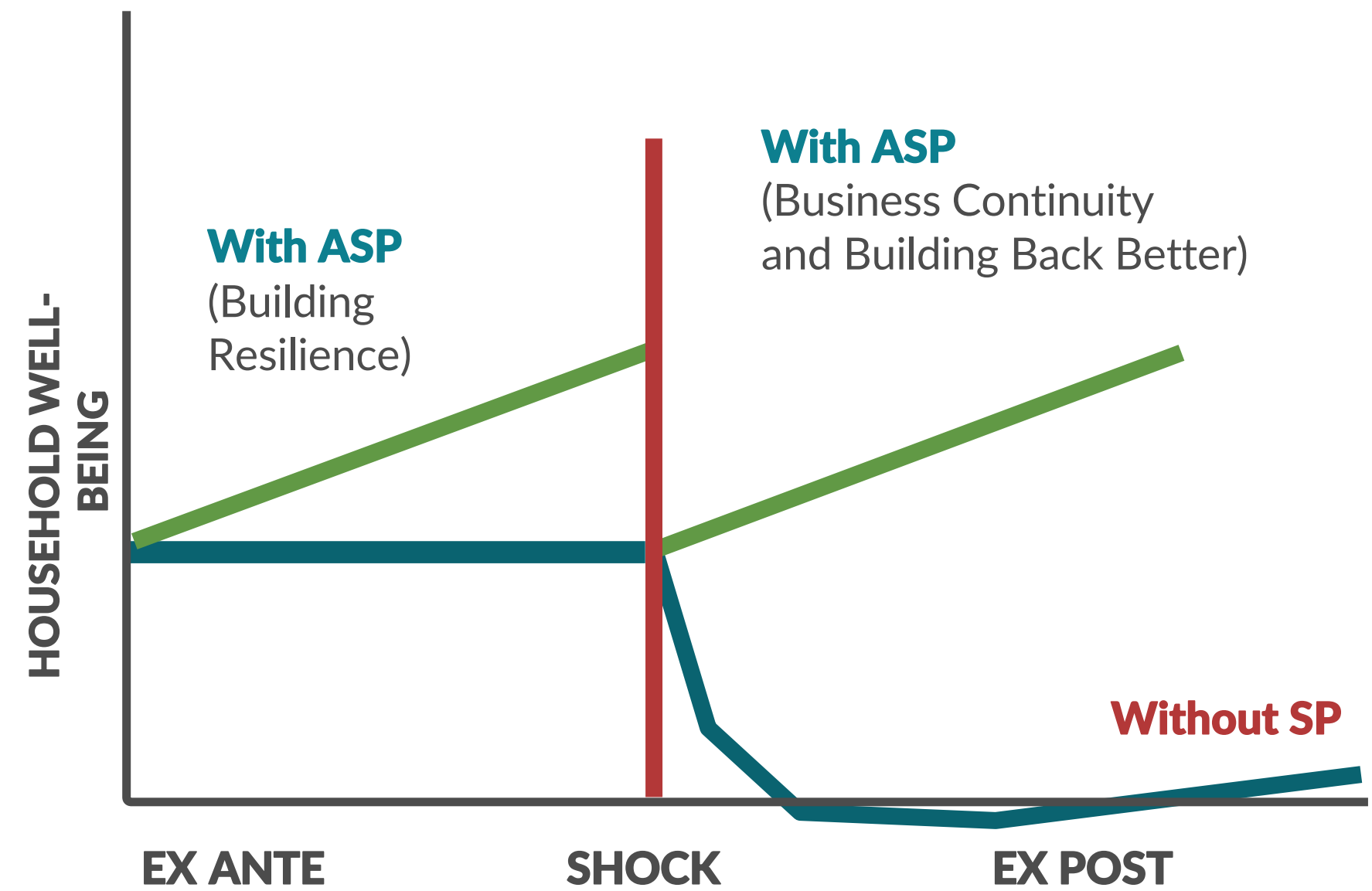
Adaptive Social Protection Goals

1. Support people's capacity to prepare, before the shock

2. Support people's capacity to cope during and after the shock



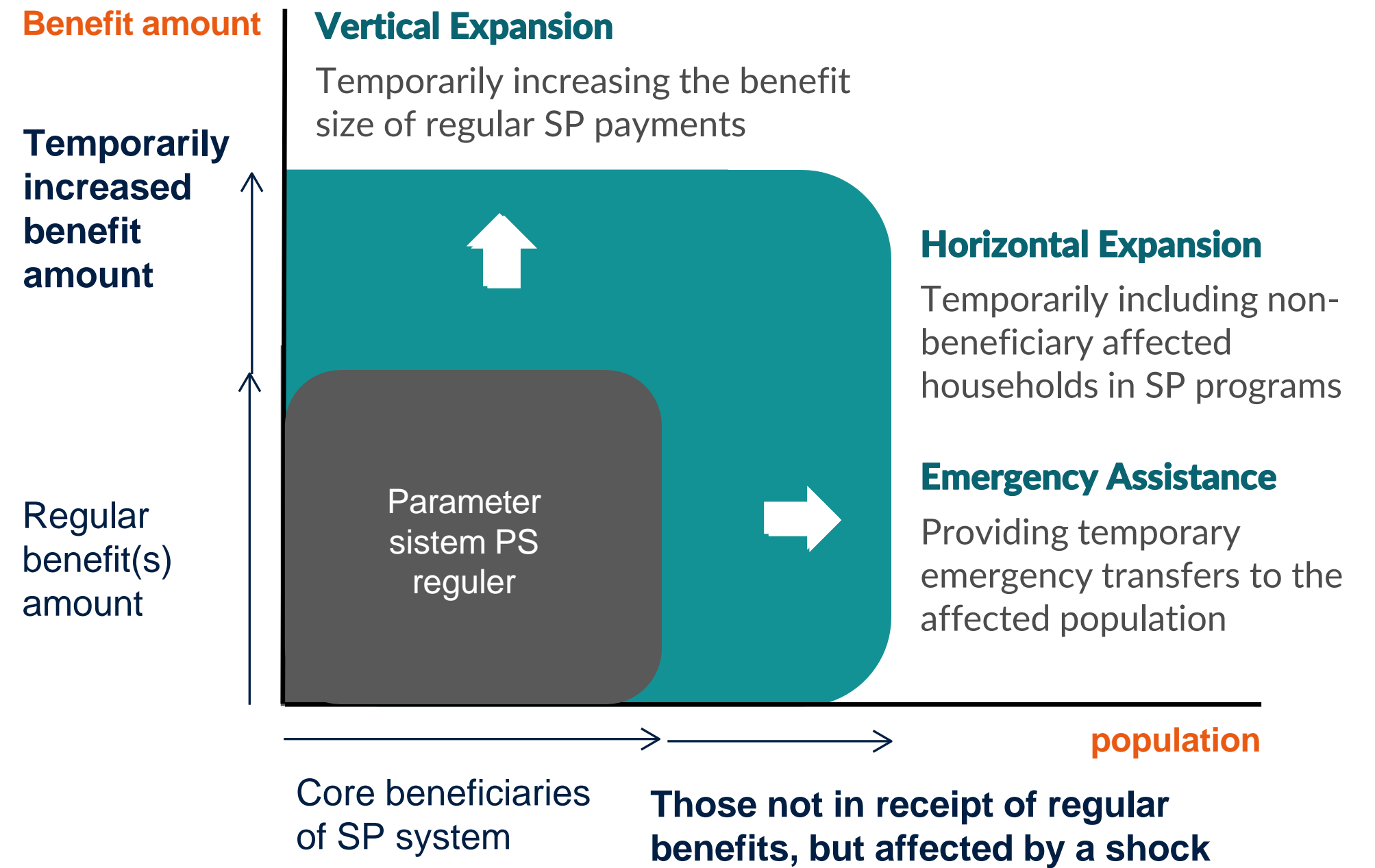
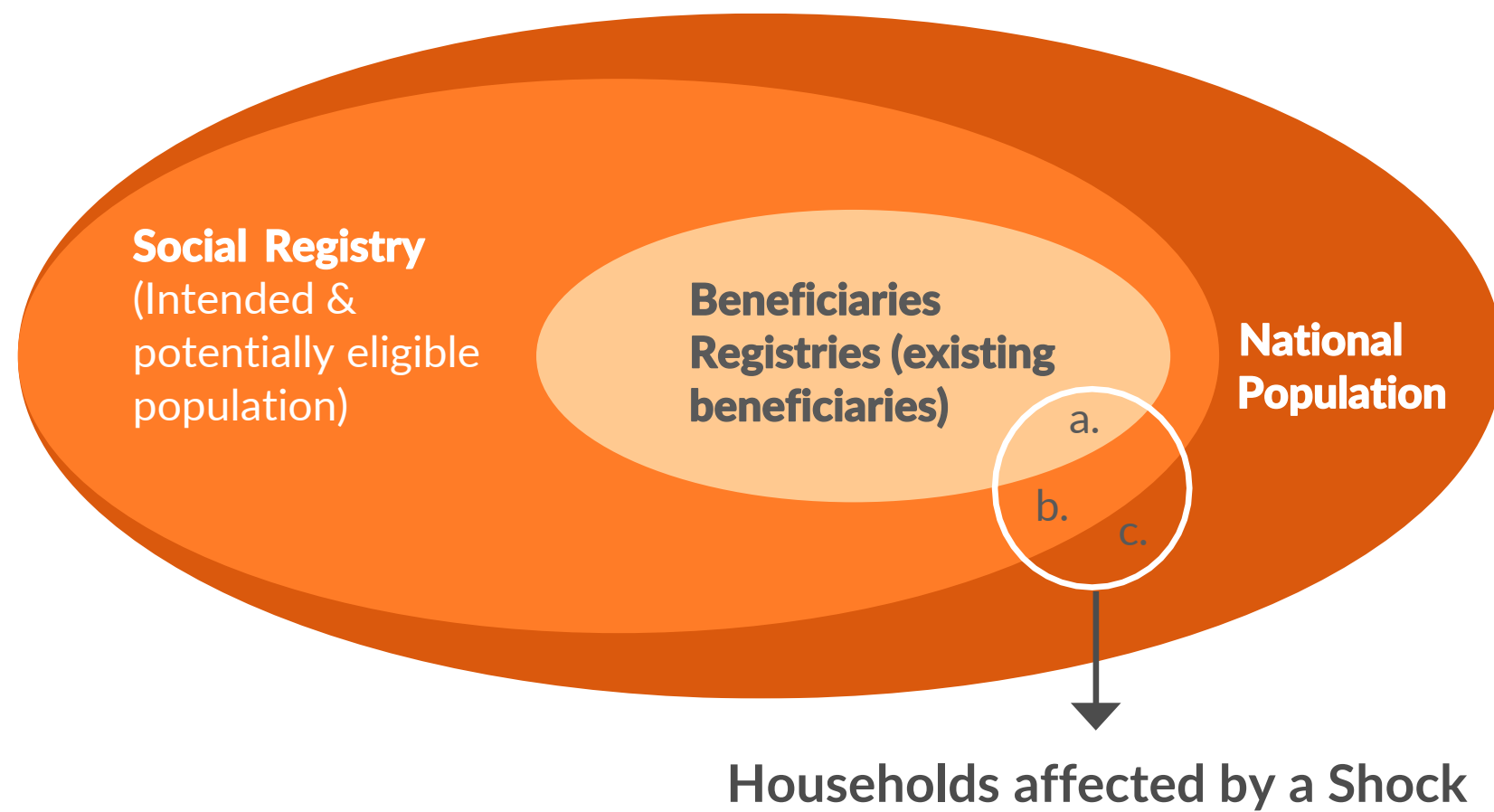
3. Continuously support people's capacity to adapt, investing in ways to reduce exposure



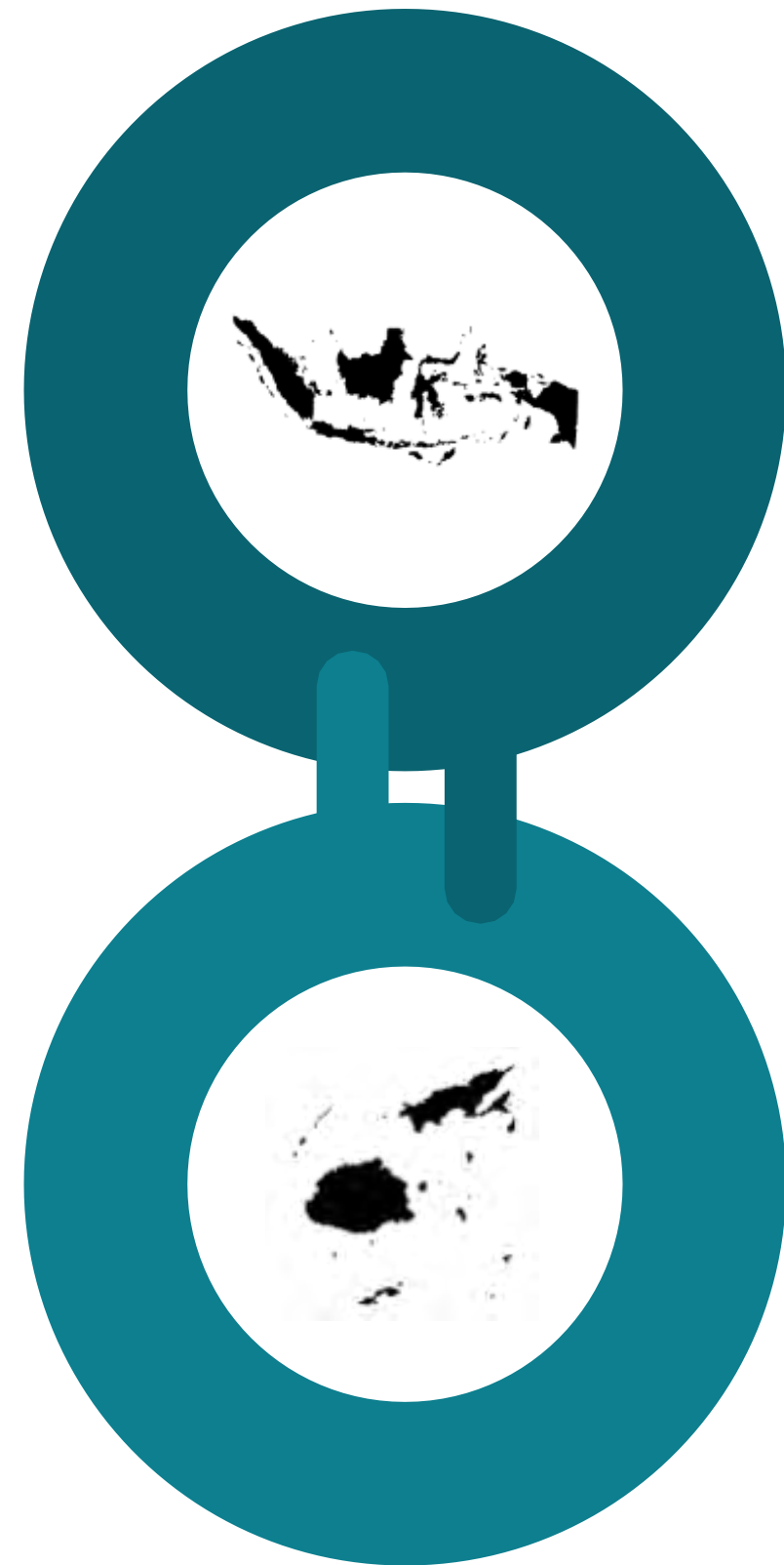
Source: World Bank

ASP Response Options

It is important to ensure data availability to inform rapid scale-up to non-beneficiary affected households



ASP helps households recover better and faster

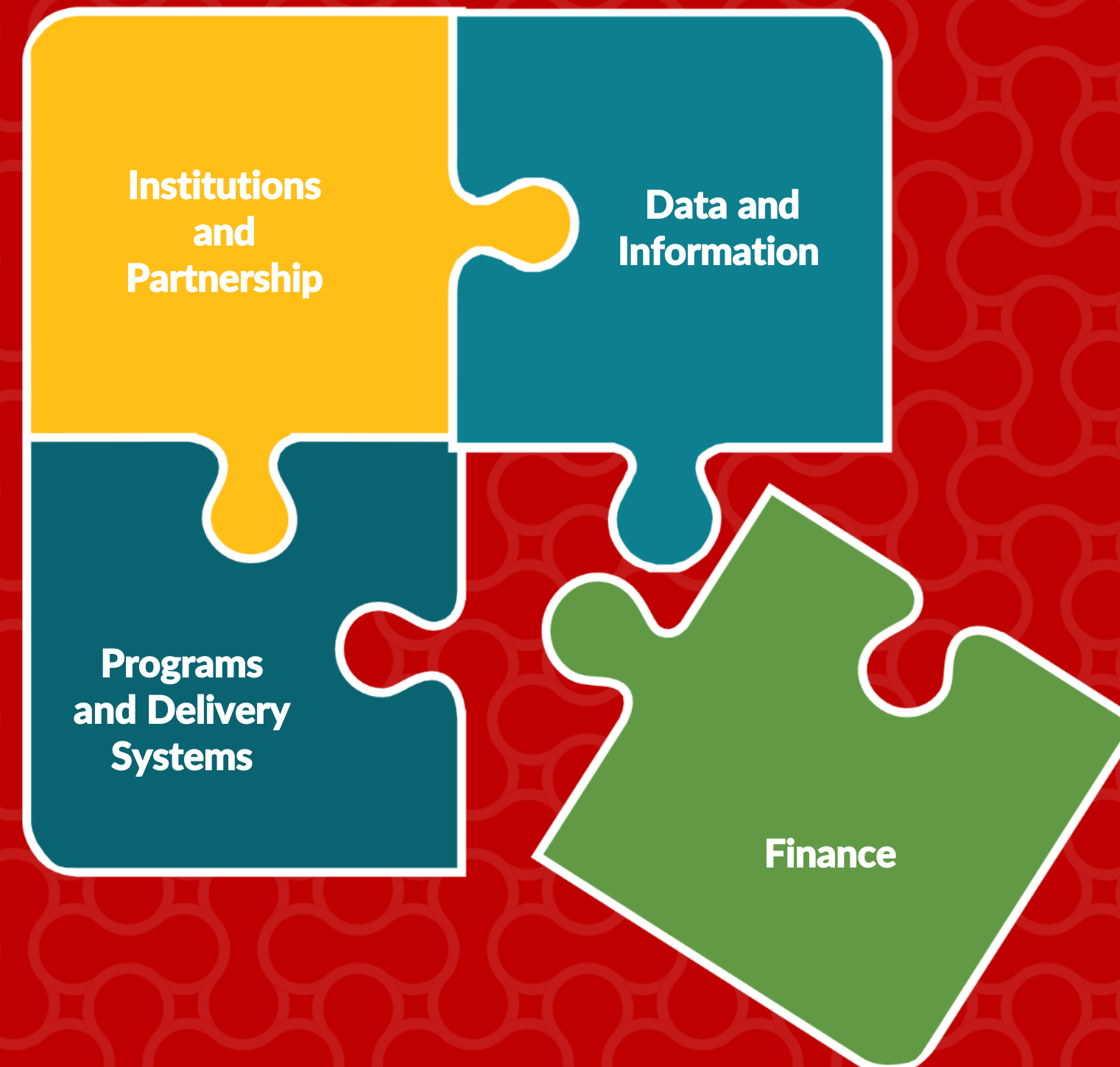


Indonesia - Central Sulawesi Disaster 2018: A Welfare Tracking Survey after the disaster found that those who received government and NGO assistance were more likely to demonstrate faster, long-term employment and welfare recovery. (World Bank, 2020)

Fiji - Tropical Storm Winston 2016: cash transfers provided to social assistance beneficiaries (vertical expansion through an additional three months of regular transfers) and vouchers to low-income households whose homes were damaged or destroyed. An impact evaluation found that beneficiaries who were given the top-up were more likely recover from the shock compared to similar households that did not receive the additional assistance. (World Bank, 2017)7)



ASP Building Blocks



ASP Building Blocks - Core Principles

Programs and Delivery Systems	Data and Information	Institutions and Partnerships
Expand regular SP coverage to include poor households not covered	Integrate poverty and vulnerability data with disaster risk data to better understand household vulnerability	Firmly establish Government leadership on the ASP agenda
Make SP programs risk informed and ready to respond when needed	Expand social registry coverage and frequent updating – particularly in high poverty and high-risk areas	Ensure policy coherence and cross-sector collaboration , particularly across SP, DRM and climate change actors
Strengthen SP delivery systems (payment systems, registries etc.) to support rapid and effective response, appropriate to varied shocks	Link SP systems to early warning systems, to predict needs and promote timely action based on predefined triggers	Invest in stronger human, financial, and physical capacity required for ASP delivery
Use SP programs to build resilience and adaptive capacity of beneficiaries	Improve capacity to conduct post-shock household assessments to better understand household needs and to inform responses.	Define national and nongovernment roles and responsibilities , building on comparative advantages in design and delivery, and supported by strong coordination and partnership

Spotlight on Finance

Why DRF for ASP is important for Indonesia



11.4 million rural households and 6.6 million urban households will likely need social protection support in an average crisis in Indonesia. Ali and Setiawan (2022)



In past disasters, ensuring assistance was provided quickly has also been a challenge. After the Central Sulawesi Earthquake, Tsunami and Liquefaction in 2018, Compensation for Heirs and Jadup (Living Support) assistance were received ~8-12 months after the disaster; while households eligible for house repair compensation waited ~20 months (Purnamasari et al. 2021). Regular payments for programs like PKH were also slightly delayed.

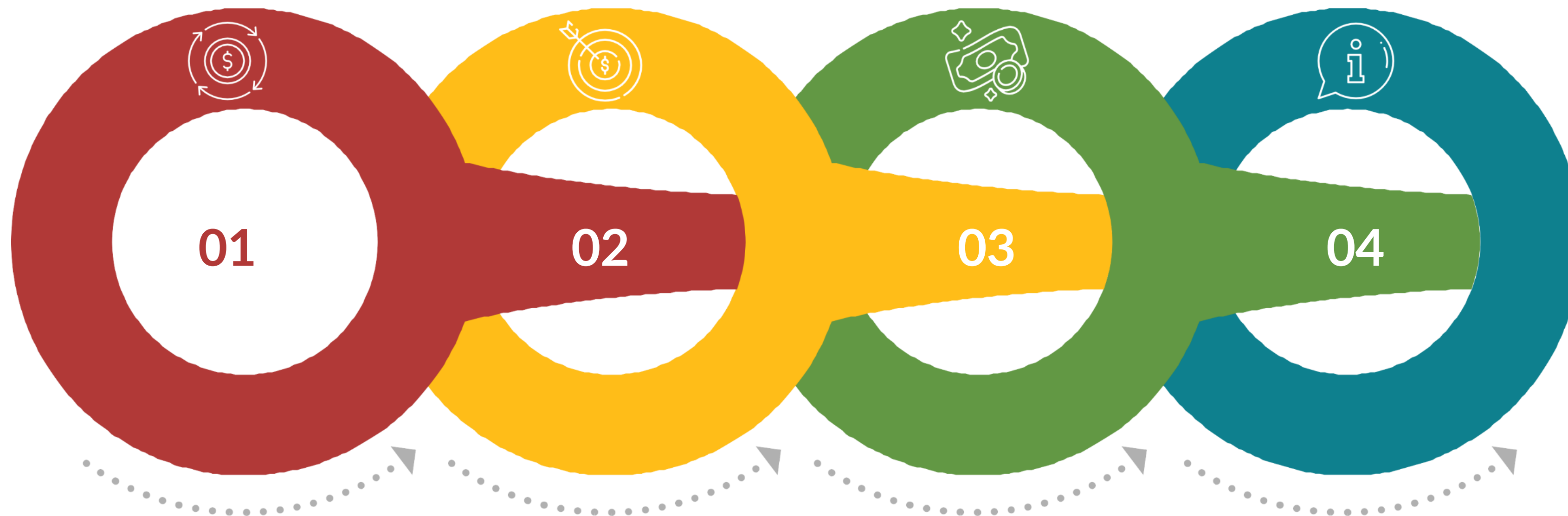


To provide social assistance to households affected disasters, governments must have ex-ante disaster risk finance (DRF) solutions in place to help facilitate rapid, targeted, and efficient post-disaster response



It is also critical to ensure that financing can be distributed quickly, to the agencies responsible for providing assistance and then to beneficiaries and affected households, and that the right benefits, appropriate to needs, are provided.

Core Principles for Linking ASP to DRF



01

Timeliness of funding:

Funds are available quickly when—and only when—they are required

02

How money reaches beneficiaries

Led by the Government and its policy priorities. Partners are bound to pre-agreed objectives, decision processes, and implementation modalities.

03

No single financial instrument

Using a combination of instruments makes SRSNs more transparent, and predictable

04

Have the right information.

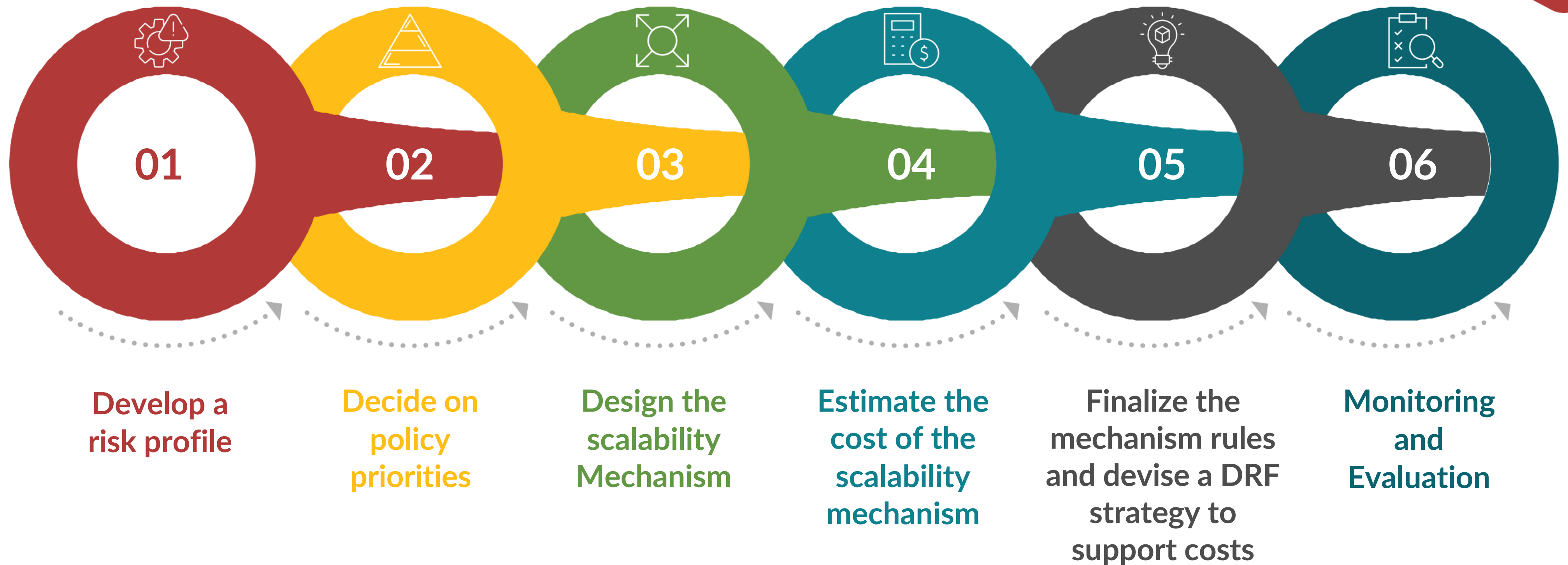
Data plays an important role in the design of the ASP delivery mechanisms

Getting Started: 6 steps for establishing effective Disaster Risk Finance for ASP Responses



Six Steps

Towards Strengthening Financial Resilience



Step 1

Develop a risk profile to determine the possible impacts of shocks on poor and shock-vulnerable households

The risk profile helps determine the financial impact of shocks (poverty impacts and other financial burdens) on affected households, using data from several sources:



Household Survey Data



Data on hazard events



Data on historical disaster response costs from government



Data on the geographical footprint of existing safety nets



Data on historical disaster responses from development partners and humanitarian orgs.



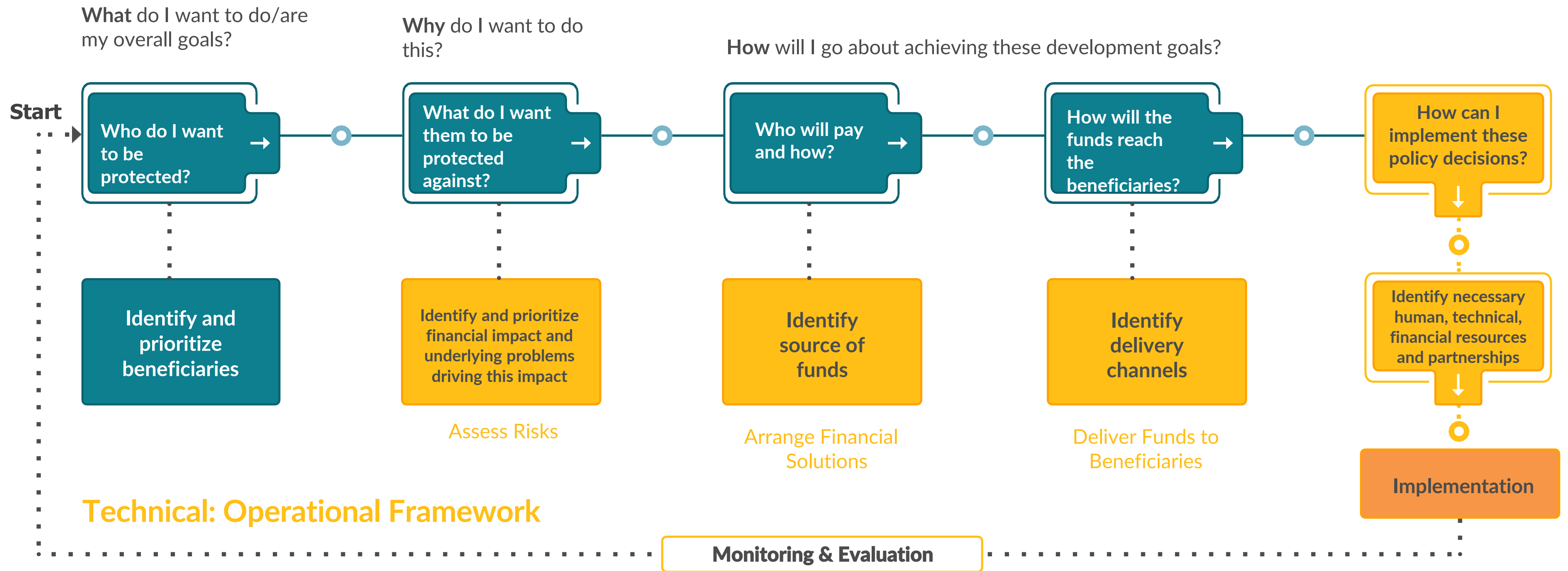
Post-Disaster Assessments (PDNAs and PDHAs) and other post-disaster analyses



Step 2

Decide on Policy Priorities

Policy: Financial Protection Strategy & Action Plan



Step 3

Design the intervention's scalability mechanism, including what triggers will determine scale-up, which households will be covered, and what level of aid they will receive.



Type of monitoring to conduct (e.g., ongoing, periodic, seasonal)



How will the scale-up process will unfold once triggered, including all delivery processes from beneficiary identification, payment, and M&E. evaluation.



Type of data to use in devising the trigger for the ASP mechanism, and what trigger threshold will prompt scale-up (disbursement of financing and payments to affected households).



Geographical area a scale-up is intended to cover, and through what administrative unit, including whether support will be provided to all affected households; affected poor households; households with significant impacts only etc.



Number of Beneficiaries

Step 3 continued

Key questions for designing the scalability mechanism

- ✦ What major shocks are likely to affect the target population?
- ✦ How frequently do these shocks occur?
- ✦ For each risk, can its scale and magnitude be quantified?
- ✦ Which areas of the country or parts of the population are most likely to be affected?
- ✦ What response is required to enable the identified populations to cope in or overcome the immediate impacts?
- ✦ How long will this assistance be required?



Step 4

Estimate the costs of the scalability mechanism to determine how far (constrained) resources will go



Modeling tools are needed and must be developed to determine the costs of ASP responses under different scenarios



The model used should ideally be stochastic, capable of generating 10,000 years of simulations for the cost of the scalability mechanism



These simulations would then create a distribution, which could inform the country of both the cost on average and the cost for more extreme events, such as a 1-in-50-year shock.

Step 5

Finalize the mechanism rules and devise a Disaster Risk Financing strategy, that includes as policy responses, to support costs and ensure immediate action for future shocks.



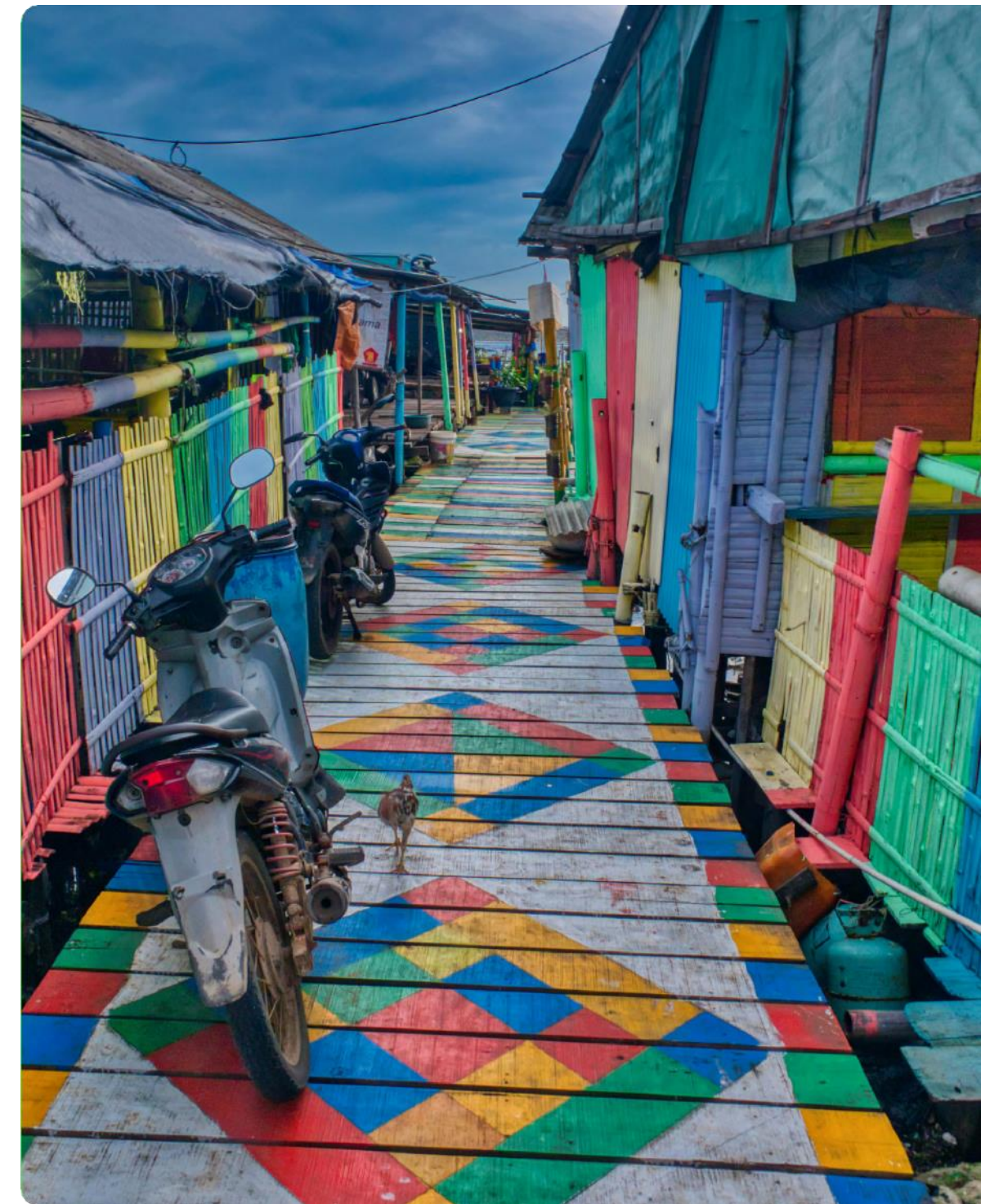
Scalability
Mechanism



Financing
Strategy

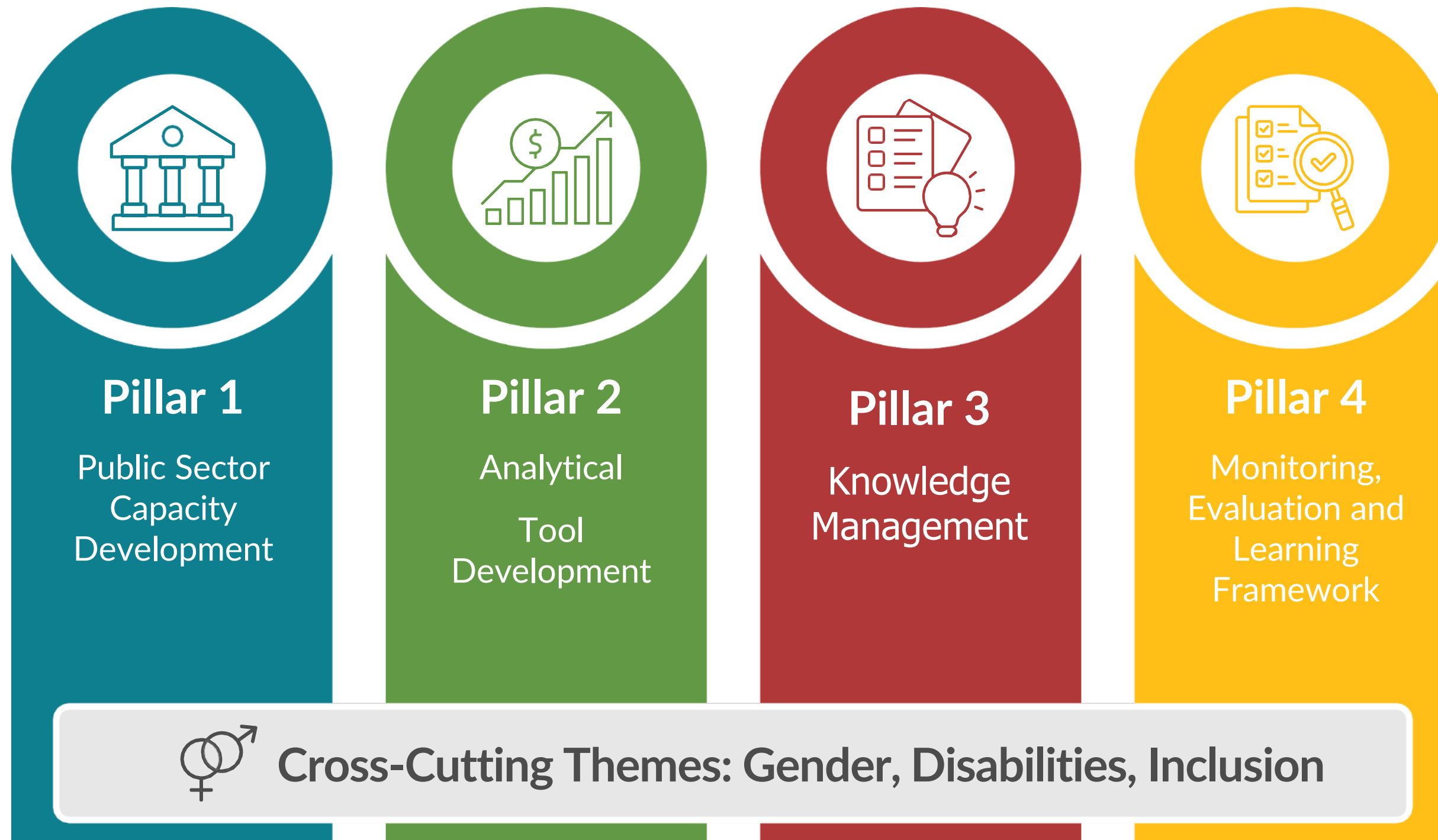
Note!

It is also important to reduce budgetary bottlenecks to ensure efficient disbursement to program agencies and more importantly, to beneficiaries and affected households



Step 6

Conduct monitoring and evaluation to understand how this mechanism, and others like it, can be improved.



DRF for ASP in Action - Kenya's Hunger Safety Net Program (HNSP)

Risk Profiling: Using twice yearly post-rains assessment and past historical data and information they estimated that:

- 77% percent of the population needed support for high-magnitude drought, and
- 50% percent of households in the affected areas would need food aid

Establishing an ASP Trigger: In times of drought, the National Drought Management Agency monitors drought conditions via the Vegetation Condition Index (VCI). When the triggered drought conditions in the VCI are met, cash transfers are automatically paid the next month. The duration of the transfer is directly linked to the VCI data.

Prepositioning for Rapid ASP Response. The HNSP registered almost all households in four high-risk counties— nearly 300,000 hhs—and pre-enrolled them, including giving them bank accounts into which post-shock payments can be deposited.

DRF for ASP in Action: Kenya's HNSP cont'd Scalability Framework

Source: World Bank, 2021

Geographic Location	Trigger Vegetation Condition Index (VCI)		Drought Phase Equivalent	Maximum Coverage of HHs to receive CT	Amount of Transfer	Frequency	Duration of Transfer
Sub-County	≥50 and 35 to 50	Wet or No Drought	1 Normal	Routine HSNP HHs	Standard payment	Every 2 months	On-going
		Moderate Drought	2 Alert	Routine HSNP HHs	Standard payment	Every 2 months	On-going
		HHs beyond routine % only If another Sub-County in the County has hit the severe or extreme VCI threshold		Emergency payment	Every month	For each month VCI at severe drought status	
	10 to 20	Severe Drought	3 Alarm	Routine HSNP HHs	Standard payment	Every 2 months	On-going
				HHs beyond routine up to approximately 50%* Coverage in each Sub-County	Emergency payment	Every month	For each month VCI at severe drought status
	<10	Extreme Drought	4 Emergency	Routine HSNP HHs	Standard payment	Every 2 months	On-going
				HHs beyond routine up to 75% Coverage in each Sub- Location	Emergency payment	Every month	For each month VCI at severe drought status

Strengthening Resilience: Adaptive Social Protection in Malawi

Overview: The Government of Malawi implemented a scalable mechanism in its Social Cash Transfer Program to respond rapidly to climate shocks, supported by the WB's Social Support for Resilient Livelihoods project.

Mechanism Design:

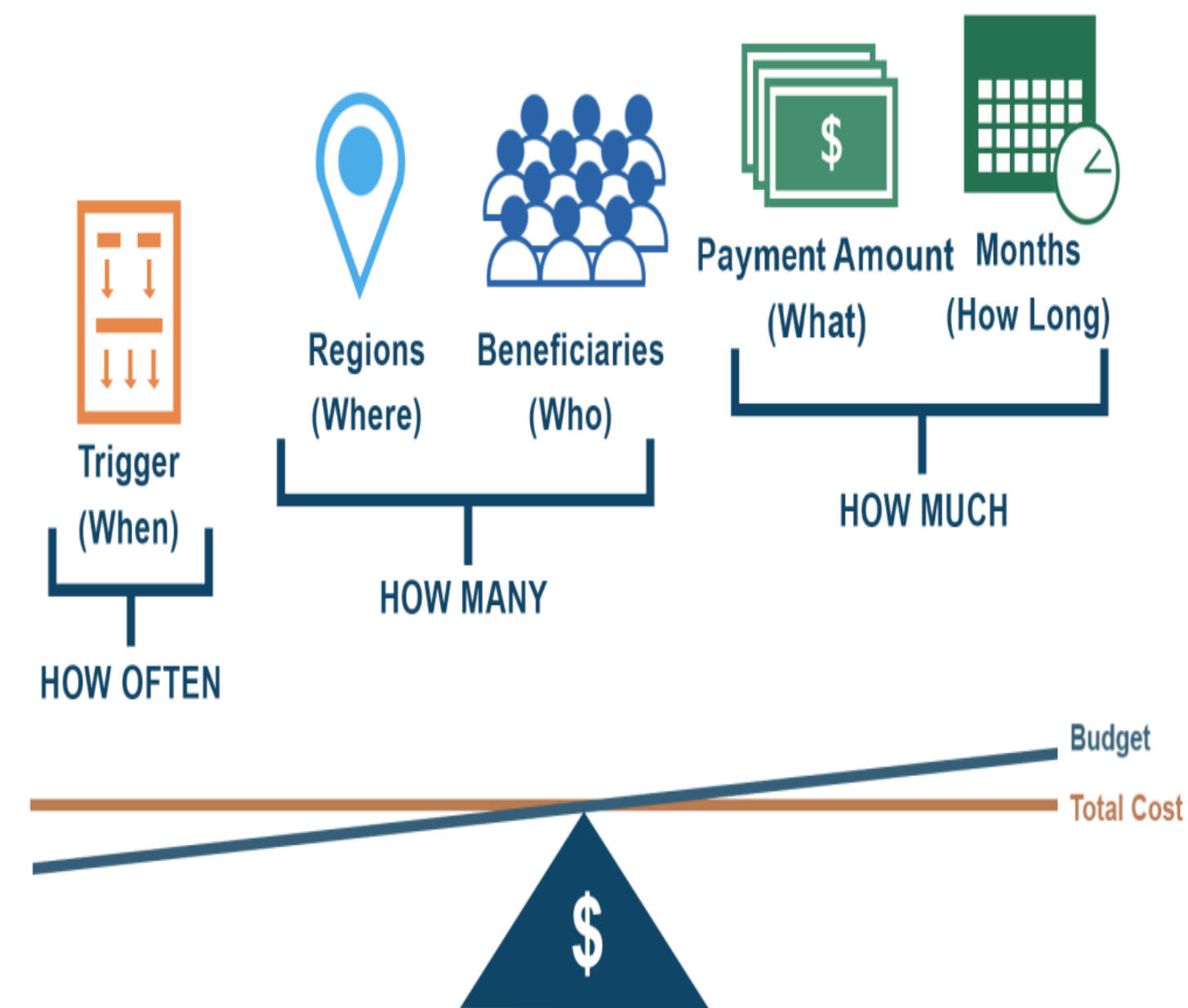
- Initially targeted three districts, expanding to six, with a long-term goal for nationwide coverage.
- Dual approach using satellite data for rainfall monitoring and food insecurity conditions to initiate cash transfers before lean season.
- *Parameters:* Decisions on coverage extent, trigger events, assistance amount, and duration established to optimize cost-effectiveness.

Financing: Contingency fund and risk transfer instruments.

Capacity Building: Task force with relevant ministry officials established to develop scalable DRF mechanism. WB created specialized learning roadmap for task force. Post-design, officials from Department of Climate Change and Meteorological Services received training on monitoring mechanism's triggers using satellite rainfall data, indicating the sustainability of the project.

First Year Results: a) Triggered scale-ups in Ntcheu, Thyolo, and Blantyre due to drought conditions; b) Effective use of pre-agreed rules and financing instruments facilitated rapid response and fund disbursement.

Figure 2. Trade-offs Entailed in Selecting Key Mechanism Parameters



DRF for ASP in Action

Dominican Republic Mapping Vulnerability

Risk Profiling - Dominican Republic's developed a Climate Change Vulnerability Index (IVACC in Spanish)

IVACC assesses vulnerability to hurricanes, storms, and floods at the household level.

IVACC uses data from the SIUBEN social registry on house features; monthly per capita household income; and cross references this with hazard maps to estimate household proximity to hazard prone areas.

IVACC scores range from 0 (least vulnerable) to 1 (most vulnerable).

This provides Government with ready data on who will need support when a hurricane, storm, or flood is likely to occur in a location.



Household head: Altagracia Martínez
½ km to 1 km from river; 2 children, Spouse; Cement roofing, concrete block wall
IVACC: 0.524



Household head: Juan Pérez
½ km from river; 6 children, Spouse; Zinc roof, palm tree wall;
IVACC: 0.853



Household head: María Gómez
½ km from river; 2 children, 1 elderly, Zinc roof, concrete wall
IVACC: 0.757



DRF for ASP in Action

Mexico's Natural Disasters Fund (FONDEN)



About FONDEN: Established as a budget line in in 1996 in the Federal Expenditure Budget and made fully operational in 1999. It had two main accounts: FONDEN Program for Reconstruction and FOPREDEN Program for Prevention.



Funding Sources: Federal budget and market-based risk transfer instruments viz insurance and CAT (catastrophe) bonds. Law mandated that FONDEN and associated accounts must receive a minimum of 0.4% of the annual federal budget (approximately US\$800 million yearly) and that if funds were not sufficient, they should be transferred from other sources, such as oil revenue surpluses.



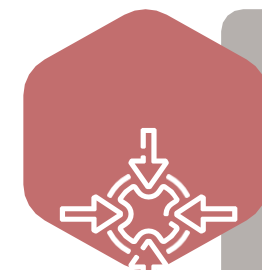
Trigger and Process: Declaration of a disaster (immediate transfer to states and agencies affected); damage and loss assessments; submission of additional funding requests; review; transfer of resources.



Eligible Activities: Reconstruction projects, low-income housing; public infrastructure, environmental projects etc. – all within the framework of building back better.



Links to Social Protection: Linked to the previous emergency Temporary Employment Program (PETi), a cash for work program that provided cash transfers to eligible individuals whose livelihoods were affected by disasters. The works were generally community projects in marginalized/affected areas.



Impact: From 2000-2010, PET reached approximately 3.2 million beneficiaries. In 2010, approximately US\$89 million was disbursed on 12,694 community projects that benefited more than 468,000 people

DRF for ASP in Action

Connecting DRF and ASP Strategy in Tonga

Tonga's Disaster Risk Financing (DRF) Strategy 2021-2025: The objective of the strategy is to “provide strategic guidance and direction for the Government of Tonga and its institutions to reduce the economic and fiscal effect of disasters by combining instruments that address various identified risks.”

Priorities

- 01** Identify and quantify disaster-related economic and financial risks;
- 02** Review the portfolio of risk financing instruments annually to ensure they meet government objectives cost-effectively;
- 03** Assess options to transfer risk to private sector and strengthen domestic insurance markets;
- 04** Strengthen disaster-related public financial management;
- 05** Develop Adaptive Social Protection;
- 06** Develop national DRM policy frameworks and plans, and invest in DRR priorities to mitigate and minimize the effect of future shocks.



Scope of Priority 5 on ASP:

Set program rules for when ASP programs, including trigger conditions; determine program eligibility, benefit amounts, and duration; and plan the costs of ASP programs.



ASP Strategy Actions:

- ➔ Establish an institutional coordination mechanism with government, key humanitarian agencies and donors.
- ➔ Carry out assessment of cost implications for ASP options
- ➔ Design Standard Operations Procedures (SOPs) for ASP programs – including adjustments to regular programs in times of emergencies.
- ➔ Enhance existing management information system for ASP programs, including social registry.

DRF for ASP in Action

The Benefit of DRF for ASP in Ethiopia



Leveraging DRF to respond to drought affected households with ASP, and doing so quickly, resulted in savings.



The **timeliness of funding** that was made available to respond to the drought created savings of over **\$6 million**.



The longer-term economic **cost of responding later could have been \$47.9 million**

ASP Priorities for Indonesia

A recently completed ASP Stress Test for Indonesia identified priority actions which would help inform smooth and rapid financing of SP shock responses, but would also need to be supported by robust financing arrangements. These include, inter-alia:

✦ **Close lingering social protection coverage gaps** to provide social assistance to poor and vulnerable households that do not receive it.

✦ **Improve the use of social registry systems for shock response** – including cross-referencing with hazard risk information, using it as a source for identifying households to receive emergency support etc.

✦ **Develop an integrated tool** linked to Early Warning Systems (EWS) data to quantify post-shock **social protection needs and estimate optimal post-shock benefit levels.**

✦ **Establish an integrated post-disaster household assessment (PDHA)**, with interoperability mechanisms to share data across agencies to inform multi-sector shock responses.

✦ Facilitate broader choice to **select appropriate payment mechanisms tailored to shock contexts.**

✦ **Define post-shock operational processes** for identification, enrollment, payment processes, program conditions, and other adaptations to program design; and **ensure these are clearly communicated to implementers, beneficiaries, and the public.**



Useful Resources

Adaptive Social Protection, Human Capital and Climate Change: Identifying policy priorities for Indonesia. World Bank 2024.

[Adaptive Social Protection: Building Resilience to Shocks - World Bank 2020](#)

[Emerging Lessons in Financing Adaptive Social Protection - World Bank 2021](#)

[Guidance Note Series: Towards Adaptive Social Protection Systems in Latin America and the Caribbean - World Bank 2020](#)

[Integrating Information Education and Communication Tools to Strengthen Disaster Preparedness and Resilience Among Social Assistance Beneficiaries: Lessons for Indonesia and Beyond - World Bank 2022](#)

[Investing in People: Social Protection for Indonesia's 2045 Vision - World Bank 2020](#)

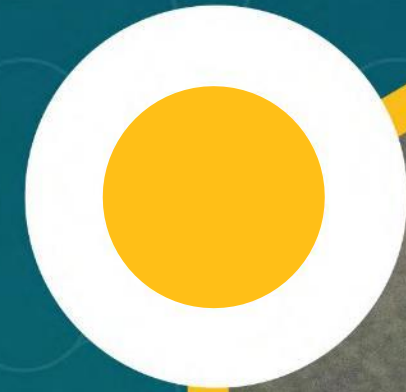
POST-DISASTER HOUSEHOLD ASSESSMENT AND LINKS TO SOCIAL PROTECTION IN INDONESIA:
Summary Report – World bank, forthcoming 2024.

[Social Protection and Humanitarian Assistance Nexus for Disaster Response: Lessons Learnt from Fiji - World Bank 2017](#)

[Welfare Tracking in the Aftermath of Crisis: The Central Sulawesi Disaster Response - World Bank 2021](#)



Thank You



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