Comprehensive Disaster Risk Management

Strategies for Building Resilience

June 21, 2022
9:00-10:15 am ET
TODAY’S Agenda

- Opening Remarks
- Technical Presentation
- Open Q&A
- Closing Remarks
Michael Kunz

Senior Knowledge Management Advisor, USAID Center for Resilience
Today’s Speakers

Lara Evans
Social Protection Advisor
USAID Center for Resilience

Kathryn Stahlberg, PhD
Senior Risk Advisor
USAID Center for Resilience
Disaster Risk Management
A powerful approach for identifying and managing risks
Disaster Risk Management

Individuals, households, communities, and systems are able to identify their risk exposure and plan and prepare for how to manage risks, thus lessening negative impacts and improving resilient outcomes.
Disaster Risk Management (DRM)
A tool for resilient outcomes

**Examples are illustrative, not exhaustive.**
Analyze risk

**Develop your risk profile:**

✓ Which risks?
✓ Who is affected?
✓ What is their level of vulnerability?
✓ What are their capacities to manage the risk?

**Example:**

SERVIR-Hindu Kush Himalaya in Kathmandu, Nepal, collaborated with NASA to develop a 48-hour flash flood forecast for rivers in Nepal and Bangladesh. During the monsoon season, data is continuously disseminated to Bangladesh’s Flood Forecast and Warning Center and Nepal’s Department of Hydrology and Meteorology, as well as local NGOs and civil society actors.

As information gets into the hands of local partners, decision-makers on the ground can stay ahead of potentially devastating floods, saving lives and livelihoods.
Avert risk

Minimize risk exposure:

Environmental risk
✓ Promote climate-smart agriculture
✓ Improve data availability and access
✓ Strengthen early warning systems

Health risk
✓ Strengthen health systems
✓ Manage emerging threats
✓ Promote routine health-seeking behaviors

Economic risk
✓ Diversify livelihoods
✓ Build savings and assets

Conflict risk
✓ Strengthen social cohesion
✓ Increase equitable access to resources

Example:
In 2019, Cyclone Idai—the biggest storm to ever hit Africa—caused 447 deaths and massive destruction in Mozambique. A shift to systems thinking, better early warning systems, resilient housing, and WASH programs can reduce the risk of loss of life and livelihoods in future storms.
Disaster Risk Management

Adapt to risk

Build resilient capacities to cope with risk:

✓ Build savings and assets
✓ Enhance human and social capital
✓ Increase access to services/information
✓ Improve planning and preparedness
✓ Strengthen aspirations and confidence to adapt

Example:

In Ethiopia, USAID layered livelihood diversification activities, drought insurance, and health insurance onto the national Productive Safety Net Program (PSNP).

These investments helped people diversify their incomes and protect the assets they were building through the PSNP, increasing their ability to withstand future shocks without compromising their well-being.
Disaster Risk Management

Transfer risk

Share what you can’t bear:
✓ Purchase insurance
✓ Purchase catastrophe bonds
✓ Secure contingent credit
✓ Prearrange emergency loans

Example:
With USAID support, WFP bought an indexed-based insurance policy for drought for the people of Mali in 2021. It triggered, yielding $7 million in disaster relief.
Cyclone Batsirai hits Madagascar 2022

✓ Madagascar was prepared to weather the storm:
  ○ Priority risks were pre-identified
  ○ DRM strategy was developed pre-disaster
  ○ Risk exposure was reduced through natural resource management activities to build cyclone-resilient villages
  ○ Risks the government could not manage were transferred through a sovereign risk insurance policy.
Disaster Risk Management

Response

Save lives and livelihoods:

✓ Humanitarian assistance
✓ Social protection benefits
✓ Insurance payout
✓ Catastrophe bonds payout
✓ Emergency loan issued
✓ Contingent Credit payout
✓ Budget reallocation
Disaster Risk Management

Recovery

Build back better:

✓ Rebuild critical infrastructure and transportation systems
✓ Restore basic services
✓ Revive livelihoods
✓ Replenish savings and assets
✓ Strengthen risk-informed, shock-responsive, and adaptive social protection systems
# Resilience Conceptual Framework

## Resilience

**Resilient lives, livelihoods, and systems:**

- ✓ Resilient capacities built
- ✓ Ability to withstand shocks and stresses, without negative coping, enhanced
- ✓ Inclusive and responsive systems developed

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### Resilience Conceptual Framework

<table>
<thead>
<tr>
<th>Context</th>
<th>Disturbance</th>
<th>Absorptive, adaptive, &amp; transformative capacities</th>
<th>Reaction to Disturbance</th>
<th>Well-being Outcomes</th>
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<td>Assets</td>
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<td>Exposure</td>
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<td>Resources</td>
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<td>Strategies</td>
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- More resilient: Better off than before
- Bounce back
- Recover some but worse than before
- Less resilient: Collapse

*Derived from no 7 paper of building Resilience for Food and Nutrition Security, T.R. Frankenberger, 2014*
 DRM offers an approach for understanding risk probability and exposure, and provides a set of tools for managing risks.

Early, predictable, and well-coordinated responses can lessen negative coping mechanisms, shorten recovery periods, and ensure resilient outcomes.

USAID supports countries in mainstreaming disaster and climate risk management into national and local development planning, and identifying and pre-financing appropriate disaster risk financing mechanisms.
USAID views social protection as a set of policies and programs aimed at preventing, reducing, and eliminating economic and social vulnerabilities to poverty and deprivation from birth to old age.
Robust social protection systems allow poor and marginalized populations to break intergenerational cycles of poverty, increase gender equity and social cohesion and strengthen human and social capital that leads to economic growth and greater self-sufficiency.

Source: Adapted from World Bank, 2018
Implement nationally appropriate social protection systems and measures for all, including floors, and by 2030 achieve substantial coverage of the poor and vulnerable.

3.8 GOOD HEALTH AND WELLBEING
Achieve universal health care coverage, including financial risk protection, access to quality essential health-care services and access to safe, effective, quality, and affordable essential medicines and vaccines for all.

5.4 GENDER EQUALITY
Recognize and value unpaid care and domestic work through the provision of public services, infrastructure, and social protection policies and the promotion of shared responsibility within the household and the family, as nationally appropriate.

10.4 REDUCED INEQUALITIES
Adopt policies, especially fiscal, wage, and social protection policies, and progressively achieve greater equality.

8.5 DECENT WORK AND ECONOMIC GROWTH
By 2030, achieve full and productive employment and decent work for all women and men, including for young people and persons with disabilities, and equal pay for work of equal value.
The Core Social Protection System is a set of policies and programs designed to protect people from shocks across their lifecycles, equip them to improve their livelihoods, and create opportunities to build a better life for themselves and their families.

### Families
- Pregnancy & ECD
  - Cash Transfers (UCT or CCT)
  - Food Stamps/Vouchers
  - Maternity Benefits
- Childhood
  - School Feeding, Supplies, Transport
  - Nutrition Supplements
- Youth
  - Parenting Services
  - Services for at-risk Youth
- Active-Age Adults
  - Public Works
  - In-Work Benefits
- Disabled
  - Disability Assistance
  - Caregiver Allowance
- Elderly
  - Social Pensions
  - Contributory Pensions

### Families
- Food Stamps/Vouchers
- Maternity Benefits
- Utility Subsidies
- Nutrition Supplements
- Housing Subsidies
- Housing Subsidies
- Transport Subsidies etc.
- Family Services
- Intermediation, Counseling, Psychosocial Support Services
- Child Protective Services

### Childhood
- School Feeding, Supplies, Transport
- Child Care Services

### Youth
- Parenting Services
- Services for at-risk Youth

### Active-Age Adults
- Public Works
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- Unemployment Insurance
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### Elderly
- Social Pensions
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### Universal Health Coverage
- Not just linked to employment
Core Social Protection System

Source: SPACE 2021; V. Barca et al.
Shock-Responsive Social Protection

**CORE SOCIAL PROTECTION**

**Level of Protection:** How adequately are risks covered?

**Adequacy**

**Population:** Who is covered?

**Coverage**

**System Strength:** Is the core social protection system high quality and institutionalised?

**Quality**

**Benefits/Services:** Which risk/contingencies are covered?

**Comprehensiveness**

- Increase financial/nonfinancial protection
- Extend to those not covered
- Include other benefits/services

Source: SPACE 2021; V. Barca et al.
Adaptive Social Protection

Economic inclusion is a layered and sequenced set of interventions that address the multidimensional needs of the poorest.

**GRADUATION PILLARS**

- Livelihood Promotion
- Social Protection
- Financial Inclusion
- Social Empowerment

**GRADUATION INTERVENTIONS**

- Livelihood Promotion
- Social Protection
- Financial Inclusion
- Social Empowerment

- Asset Transfer
- Technical Skills
- Consumption Support
- HealthCare
- Savings
- Social Integration
- Life Skills Training
- Coaching and Mentoring

**OUTCOMES**

Sustainable Livelihood Resilience

- Increased Assets
- Savings
- Access to Financial Services
- Productive Skills
- Livelihood Diversity
- Access Markets and Services
- Food Security
- Adequate Nutrition
- Increased Social Capital
- Psychosocial Resilience

Source: BRAC Graduation Model
Key Takeaways

✓ There is still a long way to go to achieve universal social protection.

✓ Strong social protection systems allow poor and vulnerable populations to break intergenerational cycles of poverty and augment human and social capital.

✓ Social protection is a valuable tool in USAID’s mission to promote inclusive development, economic growth, improved health outcomes, and gender equality.

✓ Social protection can provide the transformational changes needed to respond to the challenges of the 21st century.

Disaster Risk Financing (DRF)

Ex-ante financial tools to manage risk.
Disasters can lead to billions of dollars in humanitarian assistance, erode development gains, and increase the risk of political instability, as well as diminish future economic growth.

Early, predictable, and well-coordinated responses can mitigate negative coping mechanisms, such as reduced food consumption, livestock death, and distressed productive asset sales.

Pre-arranged financing:
- Ensures disaster risk management plans can be implemented
- Binds partners to pre-agreed objectives, decision processes, and implementation plans
- Promotes greater discipline, transparency, and predictability in post-disaster spending
- Protects future economic growth potential

Example of a Sovereign Risk Insurance for a Country
Disaster Risk Financing as a Valuable Risk Management Tool

✓ DRF improves climate and disaster risk management through the use of financial instruments, like insurance, to finance pre-agreed response activities so that support can reach vulnerable people more timely than through traditional response channels.

✓ Every USD $1 spent on the safety net and resilience programming in Ethiopia, Kenya, and Somalia results in net benefits of between USD $2.30 and USD $3.30 (Cabot Venton, 2018).

✓ Early response and resilience for 15 million people in Kenya, Ethiopia, and Somalia (including social protection) could have saved USD $4.3 billion over the previous 15 years, or an average of USD $287 million per year (Cabot Venton, 2018).

Outcome: Strengthen the ability of host country governments to prepare for and fund ex-ante disaster relief.
Disaster Risk Financing

✓ No single instrument can address all risks.
✓ Risk layering is the practice of tailoring the appropriate tools for the severity and frequency of a hazard.

Risk Management Layers

- **Layer 1**: High frequency, few losses
  - Risk mitigation

- **Layer 2**: Low frequency, medium losses
  - Risk mitigation + risk transfer

- **Layer 3**: Very low frequency, very high losses
  - Risk mitigation + risk transfer + risk coping

Return period

- Low frequency / high impact
- High frequency / low impact

Compensation beyond the limits of adaptation

- Public and donor post-disaster assistance necessary; insurers are reluctant to cover risks

Risk reduction is frequently the most cost-efficient response

Risk financing may be the most appropriate response if risk reduction is not cost-efficient

## Risk Layering in Agriculture

<table>
<thead>
<tr>
<th>Degree of Risk</th>
<th>Household/Community</th>
<th>Markets</th>
<th>Government</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Nonspecific</strong></td>
<td>● Avoiding exposure to risk</td>
<td>● New technology</td>
<td>● Irrigation infrastructure</td>
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<td></td>
<td>● Sharecropping</td>
<td>● Improved seeds</td>
<td>● Agriculture research and extension</td>
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<td></td>
<td>● Farmer self-help groups</td>
<td></td>
<td>● Early warning systems</td>
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<td></td>
<td>● Water resource management</td>
<td></td>
<td>● Weather data systems</td>
</tr>
<tr>
<td><strong>Low</strong></td>
<td>● Crop diversification</td>
<td>● Formal savings</td>
<td>● Routine social protection programs</td>
</tr>
<tr>
<td></td>
<td>● Savings in livestock</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>● Food buffer stocks</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Moderate</strong></td>
<td>● Labor diversification</td>
<td>● Formal lending (credit)</td>
<td>● State-sponsored lending</td>
</tr>
<tr>
<td></td>
<td>● Risk pooling (peers, family, members)</td>
<td>● Risk sharing (input suppliers, wholesalers)</td>
<td>● Contingent credit</td>
</tr>
<tr>
<td></td>
<td>● Informal lending</td>
<td></td>
<td>● Credit guarantee schemes</td>
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<tr>
<td></td>
<td></td>
<td></td>
<td>● Risk-sharing facilities</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>● Shock-responsive social protection</td>
</tr>
<tr>
<td><strong>High</strong></td>
<td>● Reduce consumption</td>
<td>● Insurance (indemnity and index)</td>
<td>● Disaster relief</td>
</tr>
<tr>
<td><strong>Catastrophic</strong></td>
<td>● Remove children from school</td>
<td></td>
<td>● Social funds</td>
</tr>
<tr>
<td></td>
<td>● Sale of productive assets</td>
<td></td>
<td>● Catastrophe bonds</td>
</tr>
<tr>
<td></td>
<td>● Default on loan</td>
<td></td>
<td>● State-sponsored pandemic insurance</td>
</tr>
<tr>
<td></td>
<td>● Migration</td>
<td></td>
<td>● Credit-guarantee schemes</td>
</tr>
<tr>
<td></td>
<td>● Do nothing</td>
<td></td>
<td>● Risk-sharing facilities</td>
</tr>
</tbody>
</table>

USAID Partnerships and Investments

Relevant USAID Partnerships:
✓ InsuResilience Global Partnership (IGP)
✓ Risk Informed Early Action Partnership (REAP)
✓ Insurance Development Forum (IDF)
✓ Universal Social Protection 2030 (USP2030)
✓ Social Protection Interagency Cooperation Board (SPIAC-B)

Current USAID/RFS Investments:
✓ ARC Replica; ADRiFi; (Sovereign insurance)
✓ Financial Resilience Program; Quality Index Insurance Certification
✓ FTF Innovation Lab: Markets, Risk and Resilience; BOMA Project
Key Takeaways
1. Disaster risk management plans allow countries, communities, and households to identify their risk exposure, plan and prepare for how to manage risk, and transfer what they cannot bear.

2. Robust social protection systems that are agile, shock-responsive, and adaptive can save lives and avert social and economic losses in future crises (whether climatic, pandemic-related, or economic).

3. Early, predictable, and well-coordinated responses to shocks and stresses can mitigate negative coping mechanisms, such as reduced food consumption, livestock death, and distressed productive asset sales, as well as protect future economic growth potential.

4. Prearranged finance increases the speed, predictability, and effectiveness of disaster response and recovery.

5. Strengthening local systems’ capacities to prepare for and fund ex-ante disaster relief, as well bolster social protection systems, allows poor and vulnerable populations to break intergenerational cycles of poverty and augment human and social capital that leads to economic growth and greater self-reliance.

6. The need for comprehensive risk management plans, robust social protection systems, and preplanned financing mechanisms for disasters is more urgent than ever in the face of increasing frequency and intensity of climatic events.
Thank You

Keep an eye on your inbox for post-event resources!