STRATEGIC RESILIENCE ASSESSMENTS

Applying a resilience lens to development strategies & programs

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Session Overview

- Conceptual Background
- STRESS Overview
- Applications & Experiences
Resilience Measurement
Practical Guidance Series:

Guidance Note No. 1 – Risk & Resilience Assessments

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Resilience Questions

Systems

OF WHAT?

FOR WHOM?

THROUGH WHAT?

TO WHAT?

CAPACITIES

PEOPLE

SHOCKS/ STRESSES
Resilience to What End?

- Meaningful employment maintained or improved
- Income stability and growth
- Food security and nutrition maintained or improved
- Health status maintained or improved
Conceptual Framework

TARGET GROUP | SYSTEMS / CONTEXT | SHOCKS/STRESSES | INTERACTION WITH CAPACITIES AND SYSTEM DYNAMICS | WELL-BEING OUTCOMES (i.e., FOOD SECURITY)

RESILIENCE FOR WHOM? | RESILIENCE OF WHAT? | RESILIENCE TO WHAT? | EXPOSURE | RESILIENCE CAPACITIES (CAPITALS, RESOURCES, ETC.)

RESILIENCE THROUGH WHAT?

NOTHING Avoided Disturbance
BOUNCE BACK BETTER
BOUNCE BACK
RECOVER, BUT WORSE OFF
COLLAPSE
Resilience Capacities

• Ability of people, communities and systems to achieve improved well-being in the face of shocks and stresses.
STRESS Overview
What is a STRESS?

- A strategic-level assessment process for understanding risk, drivers and required capacities to build resilience in a given context.
- Helps develop effective, measurable resilience-building strategies.
- Considers the complex interactions that exist between risks, people and the socio-ecological systems in which they live.
- Anchored in the five resilience questions.
What’s unique about a STRESS?

- SYSTEMS-FOCUSED
- SECTOR-NEUTRAL
- MULTIPLE SCALES
- MULTIPLE TIME FRAMES
- ANALYSIS OF RISKS AND RISK PROFILES
- ANALYSIS OF RESILIENCE CAPACITIES
STRESS Phases:

- **Scope**: Review team and expert knowledge through participatory workshops and identify knowledge gaps

- **Inform**: Conduct secondary literature review; complement with qualitative field methods

- **Analyze**: Develop risk profiles and evaluate resilience capacities

- **Strategize**: Develop a resilience-focused, measurable theory of change
Phase 1: SCOPE

- Determine the purpose, scope and scale
- Gather collective knowledge through workshops and rapid literature review
- Conduct systems mapping
- Identify knowledge gaps
- Prepare data collection plan
Systems Mapping

Resilience of what?

Gender Norms

Farm Production

Land Conditions

Water Availability

Consumption Practices

Gender Norms

Food Security

Income

Non-farm livelihoods

Government Regulation

Finance

Markets

Land Conditions

Water Availability

Gender Norms

Consumption Practices

Income

Non-farm livelihoods

Government Regulation

Finance

Markets

Gender Norms

Farm Production
Shocks and Stresses

RESILIENCE TO WHAT?

- Floods +
- Excess Rain +
- Drought +
- Land & Water Availability -
- Farming Production -
- Food price shocks +
- Income -
- Emergency borrowing +
- Stress migration +
- Debt +
Phase 1: Scoping Outputs

1) A preliminary *systems analysis* defining interaction between:
   - development or systemic constraints
   - shocks and stresses
   - gendered impacts

2) A preliminary understanding of *resilience capacities* – current and potential

3) A detailed *research plan* that identifies key knowledge gaps, primary data collection methods, and a sampling strategy.
Phase 2: INFORM

- Data collection should be focused and narrowed
- Fit for purpose, time and scale:
- Focus on knowledge gaps:
- Draw on existing tools and methods:
  - Secondary Data review
  - Qualitative interviews
  - Quantitative Survey
Phase 3: ANALYZE

KEY DELIVERABLES:

- Development trends, with focus on systemic relationships

- Risk Analysis:
  - Shocks/stresses to systems and target populations
  - Risk drivers and impacts
  - Risk profiles of target populations

- Resilience Capacity Analysis:
  - Existing v. required resilience capacities;
  - Underlying factors preventing access and use of resilience capacities
Phase 4: STRATEGIZE

KEY DELIVERABLES:

› Theory of Change
› M&E Framework
› Resilience-building strategies/logic chains
STRESS Deliverables:

Risk Profile
- Trends and interactions between shocks and stresses, and system dynamics

Resilience Capacities
- Existing and required resources – social, physical, financial, natural, political, human- and how they must be applied to mitigate risk

Theory of Change
- A high-level logical pathway defining the relationship how resilience capacities can support achieving well-being outcomes in the face of risk
STRESS
Examples
Case 1: Nepal

APPLYING STRATEGIC RESILIENCE ASSESSMENTS

Sustainable Food Security

- Food Utilisation
- Health and Nutrition practices
- WASH Infrastructure and Practices
- Natural Resources
- NRM
- Risk Reduction Infrastructure and Systems
- Stability

Food Availability
- Food Production
- Land Productivity
- AG Practices

Food Access
- Income
- Non-AG Enterprises
- Migration

Economic Infrastructure
- CREDIT, TVET and BDS
- Markets
- Food Access
- Food Utilisation

Food Production
- Land Productivity
- AG Practices

Income
- Non-AG Enterprises
- Migration
- Economic Infrastructure
- CREDIT, TVET and BDS

Economic Infrastructure
- CREDIT, TVET and BDS

Food Access
- Income
- Non-AG Enterprises
- Migration

Non-AG Enterprises
- Migration
- Economic Infrastructure
- CREDIT, TVET and BDS

Migration
- Economic Infrastructure
- CREDIT, TVET and BDS

CREDIT, TVET and BDS
- Economic Infrastructure
- Markets
Case 1: Nepal

Key Types of Impacts
Case 1: Nepal

Vulnerable Populations in the Middle and High Hills of Mid-and-Far-Western Nepal are Food Secure.

Utilization
- Improved Health and Nutrition Status

Availability
- Increased Agricultural Production

Access
- Increased Household Income

Resilience
- Shocks and Stresses Reduced and Mitigated

Positive Response and Coping Strategies

Adapted Economic Strategies
- Risk and Nutrition-sensitive Agricultural Practices
- Risk-informed Responsive Agricultural Markets
- Profitable, Safe, Off-Farm Livelihood Employment
- Appropriate Financial Services and Products Utilized for Risk-reducing Investments

Productive Natural Resources
- Sustainable Communal Resource Management
- Disaster and Climate Risk Awareness, Preparedness and Response Measures

Positive Health Practices
- Diverse, Nutrient-rich Food Consumption

Enabling Governance Systems
- Accountable, Responsive and Equitable Governance and Household Decision-Making
Case 1: Nepal

Key Findings

- Access to key resources alone is insufficient to determine resilience; use is critical and relies on a strong knowledge base and an enabling environment.
- Informal norms and formal rules and regulations are underlying factors that determine access and use of resilience capacities.

Programming Implications

- Build voice and participation as part of underlying social and behavioral change strategy.
- Strengthen cross-sectoral governance approach.
- Foster social capital and networks.
Chennai and its environs received a record-breaking 27.2 cm of rainfall in just 12 hours on December 1, 2015. This was 20% more than the city typically receives in the entire month of December, and some sites received over 200% more rainfall than usual. Floodwaters inundated the city, including the airport, major roads, and neighborhoods, causing widespread damage and loss of life. The floods, estimated to be the worst in 100 years, resulted in the displacement of over 1.5 million people in the city, with economic losses estimated at $1.67 billion – $1.8 billion, making it the eighth most expensive natural disaster in the world in 2015. Both the flooding and its impacts were exacerbated by recent developmental patterns, in which either expansion took place in hydrologically vulnerable areas, or encroachments occurred on existing protected areas.
Chennai Causal Systems Map

New developments ignore drainage regulations
Industrial zones shift to upstream locations as city center real-estate value increases

Urban expansion into upstream areas
Reduced land set-aside as green space
Increase in impermeable surface

Service costs are not recovered in full
Insufficient operations & maintenance
Ageing is reducing infrastructure efficiency
Unpermitted modifications by building/house owners

Increased unemployment
Products are unavailable, services disrupted

Extreme rain event
Ground is saturated from previous rain
High tide getting higher
City infrastructure is damaged
Waste blocks open drainage channels
Deforestation

Runoff exceeds capacity of municipal drainage system
Engineers cut roads to control flooding
Residential zones are prioritized

SMEs lose place in supply chain
SMEs are lost
No Insurance
Insurance payouts are slow
Insufficient Savings
Insufficient Savings
Insufficient Savings
Insufficient Savings
Insufficient Savings
Insufficient Savings
Insufficient Savings

SMEs are slow to recover
SMEs repeatedly lose money

Structural Damage
Inventory losses (stock, final products)
Capital equipment losses
Staff lose homes

Business Centers (main arteries) are flooded
Industrial Zones are flooded
Case 2: Chennai

Key Findings

- Chennai’s fragmented institutional and infrastructure context creates challenges for balancing economic growth with environmental safeguards for resilience.

- Damage and recovery, particularly for MSMEs, depends as much on business environment as it does on the intensity of the disaster.

- Financial products are often slow, inaccessible or ill-designed for MSMEs, undermining small business growth and stability.
Mongolia: Urban-Rural linkages

- Commodity Price Shocks → Bulging Unemployment → Alcoholism (Gender Based Violence)
- Rapid Youth Urban Migration → Poor government services and regulation
- Weak rural social cohesion
- Underperforming livestock economy
- Livestock Pests & Disease
- Low livestock yields
- Rangeland Degradation
- Dzud/Drought
- Ineffective land and no livestock number regulations
- Rising Numbers and Concentration of Livestock
- Concentration of investment in mining

Legend:
- Red: Ecological, Social and Economic Shocks and Stresses
- Turquoise: Economic System Constraints
- Yellow: Social System Constraints

Low urban social and economic well-being
Low rural social and economic well-being
Case 3: Mongolia

Key Findings

› Rural livestock economy essential to balanced growth:
  • Perceptions and low services are driving people to cities, not winter blizzards
  • Requires YOUTH buy-in to rural livestock economy
  • Need to build social capital and networks across urban-rural areas

› Simultaneous focus on urban and rural services job growth

› Need for expanded partnerships
Key Takeaways

➢ STRESS is an assessment approach, not strict methodology

➢ Needs to be “fit to size” based on purpose, scope and scale

➢ Focus on systems mapping in relation to well-being outcomes, risk analysis and resilience capacities

➢ Draw on existing knowledge

➢ Centered on multi-stakeholder engagement and capacity
Thank You!

Tom Van Cakenberghe for Mercy Corps