Workshop on assessing the impact of Slow-Onset Events

Technical Session 2: Post Disaster Needs Assessment
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PDNA and SOEs

- What are some theoretical constructs of the PDNA and why is it useful in assessing the effects and analysing the impact of SOEs
  - Vulnerability – economic, social, environmental
  - Threats/Risks/Shocks
  - Resilience/ Development: Economic, Social and Environmental
  - Recovery, Mitigation, Risk Reduction and Adaptation
  - The notions of damage and loss or ‘loss and damage’
  - Effect and impact

- What are some of the Tools for assessing effects and analysing impacts
  - The Scientific Information about the event
  - Primary Information collected on the effects of the event
  - Data from the National Accounting Framework
  - Social statistical data sets used for reporting on the SDG’s held within the country
  - National Environmental data sets (Climate variability, coastal erosion, soil degradation, water resources, forest cover, biodiversity, rainfall data)
The PDNA Assessment Methodology

Step 1: Identify pre-disaster/crisis context
• Overview of structure, performance of the economy and society sector by sector for 3-5 year period using published data as the baseline

Step 2: Identify the effects
• Effects of the event sector by sector
• Estimate change in production and delivery of goods and services,
• Disruption of access to goods and services, governance processes or action to reduce risks
• Estimate cost/value of change in flows (losses: lower revenue or higher operational costs.)

Step 3: Identify socio-economic impact
• Macro-economic: GDP, Balance of Payment, Fiscal position of the Government, Inflation, Debt to GDP
• Human/social: unemployment, decline in income, consumption, migration, indebtedness, food insecurity (change in productivity due to life lost, as may be necessary)
• Environmental: Likely consequences of change in existing environmental conditions

Step 4: Identify recovery needs
• Rights-based, gender-responsive, conflict-sensitive, CC sensitive, sector-wide strategy to revive economic activities, employment opportunities, social protection & food security

Step 5: Develop a recovery strategy
• Policy Recommended actions with strategy for implementation

How would the operational procedures differ

Key Sectors – Sudden Onset Events
• Infrastructure – telecommunications, Transport – Air, Sea, Land; utilities
• Productive Sectors-Agriculture, Energy, Commercial, Tourism, Manufacturing
• Social – Health, Education, Housing, Culture (tangible and non-tangible)
• Cross cutting issues - gender

Key Sectors – Slow Onset events
• Agriculture
  • Livestock
  • Fisheries
  • Crops
• Water and Sanitation –WASH
  • Production and Distribution
• Health
  • Nutrition
• Energy
• Education
• Culture
What does the assessor seek from the scientific information?

Is a Gap Analysis possible with an SOE?

- The key issue for a Gap analysis is finding the ‘before’ and ‘after’ or the ‘then’ and the ‘now’.
- The critical issue as in all research is to find the starting point and the end point.
- For the assessment it is the same
Data and the PDNA

PDNA is a Data hungry methodology
Uses Government produced data or government approved data
Requires 2 data sets:
• Data before the event (or the process being assessed – pandemic; usually 3-5 year trend analysis). This usually Government published data or administrative data held by Line Ministries
• Data that best measures or describes the effects of the event

• Uses data for three purposes:
  • for the estimation of damage and loss
  • the analysis of the impact (short term, medium term and long term impact)
  • The determination of the needs for recovery and estimation of costs

PDNA – SUDAN an estimation of the value of the effect – loss and damage

Figure 2: Distribution of Damages Across Sectors

- Environment & Natural Resource Management 55.31%
- Agriculture - Irrigated and Rain-Fed Crops 6.25%
- Agriculture - Livestock 34.34%
- Water Supply & Sanitation 4.11%

Figure 3: Distribution of Losses Across Sectors

- Environment & Natural Resource Management 27.34%
- Agriculture - Livestock 56.52%
- Other 5.05%
- Agriculture - Irrigated and Rain-Fed Crops 11.09%
RMI – Distribution of the effects by Sectors

Kenya – another look at loss and damage by sectors and over time
Impact analysis: Growth with and without drought

Figure 31 GDP Growth in Kenya, with and without drought

Source: Estimates by Assessment Team on basis of official information

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Human impact - Kenya
A growing need for emergency assistance among agriculturalists

Figure 26 Number of pastoralists, agro-pastoralists and marginal agriculturalists assessed as requiring emergency assistance (Source: Long and Short Rains Assessments)

Source: Estimates by Assessment Team on basis of official information

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Human Impact - Somalia
There were a number of contributory causes of the humanitarian crisis:
• drought was the immediate trigger for the crisis,
• compounded by other shocks.
  • post-election violence
• Impacts on the Community
  • high food and fuel prices
  • reduced purchasing power
  • Recurrent livestock disease outbreaks
  • a major aflatoxin infestation of maize in 2010.
  • competition over declining grazing and water resources,
Thank You

Questions?

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