Policy Oriented Post-Disaster Needs Assessment -
A Tool to Support Post-Disaster Reconstruction Planning

Submitted by: Chinese Academy of Science and Technology for Development (CASTED)
Policy Oriented Post-disaster Needs Assessment

--- a tool to support post-disaster reconstruction planning

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Needs Assessment in the Disaster Context
Disaster, Post-Disaster Assessments

• **Types of Disasters**
  – Chronic slow onset disasters
  – Acute Rapid onset disasters

• **Type of Assessment**
  – Damage-based
  – Needs-based
  – Right-based
Types of Post-Disaster Need Assessments

- Rapid versus Long-term Need Assessments
  - Immediate humanitarian assistance
  - Long-term reconstruction

- Single-topic versus Comprehensive Need Assessments
  - Specific concern
  - Certain group of people
  - Comprehensive need assessment
  - Multi-cluster need assessment (McRAM)
### Disaster Phases and Assessment Timeline

- **Post-Disaster Need Assessment Phases**
  - Immediate initial/ Emergency Phase
  - On-going initial/ Rehabilitation Phase
  - In-depth/ Reconstruction Phase

<table>
<thead>
<tr>
<th>Phase 0: Onset</th>
<th>Phase 1: First days</th>
<th>Phase 2: First 2 weeks</th>
<th>Phase 3: Second 2 weeks</th>
<th>Phase 4: Second month</th>
</tr>
</thead>
<tbody>
<tr>
<td>Immediate Initial Response</td>
<td>On-going Initial Response</td>
<td>Longer Term Planning</td>
<td></td>
<td></td>
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<tr>
<td>Initial rapid assessment</td>
<td>Rapid/detailed assessments</td>
<td>In-depth continual assessments</td>
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</tbody>
</table>
The POPNA Tool

- **Policy Oriented Post-disaster Needs Assessment**

- **POPNA is not ...**
  - to determine immediate humanitarian needs
  - to explore macro economic effects
  - a normal living condition survey

- **Specific Objective**
  - Policy oriented
  - Serving long-term post-disaster reconstruction planning
  - Comprehensive
    - Scope
    - Content
    - Methodology
POPNA in the Assessment Timeline

<table>
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<th>Phase 0</th>
<th>Phase 1: First days</th>
<th>Phase 2: First 2 weeks</th>
<th>Phase 3: Second 2 weeks</th>
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<tr>
<td>Onset</td>
<td>Initial Response</td>
<td>On-going Initial Response</td>
<td>Longer Term Planning</td>
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<tr>
<td></td>
<td>Rapid Assessment</td>
<td>Rapid/detailed Assessments</td>
<td>In-depth Continual Assessments</td>
<td></td>
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</table>
The Framework

- Taking the living condition framework as a point of departure
- Adding the focus on need for information in developing policies and measures
**POPNA**

**Comprehensive assessment of situation before and after disaster**

### Objective needs

<table>
<thead>
<tr>
<th>Resources:</th>
<th>Subjective needs</th>
</tr>
</thead>
<tbody>
<tr>
<td>Economy</td>
<td>Attitudes</td>
</tr>
<tr>
<td>Infrastructural</td>
<td>Opinions</td>
</tr>
<tr>
<td>Work</td>
<td>Values</td>
</tr>
<tr>
<td>Health</td>
<td>Satisfaction</td>
</tr>
<tr>
<td>Education</td>
<td>Feelings</td>
</tr>
</tbody>
</table>

### Subjective needs

- Attitudes
- Opinions
- Values
- Satisfaction
- Feelings
- Priorities

### Arenas

- Networks
- Labour market
- Community

**Outputs/Aims:**

**Comprehensive understanding of post disaster needs**

**For policy:**

- Overview
- Priorities
- Direction
- Opportunity / Space
- Evaluation
- Timeliness

**For knowledge:**

- New understandings
- Coping strategies
- Preparedness

**Policymakers (Governments and stakeholders) needs taken as input**

**Community survey**

**Household and individual surveys**

**Governments**

**Policy makers**

**Organizations**

**Advocacy groups**

**Communities**

**Civil society**

**Academics**
Content and scope

- **Comprehensive content**
  - Based on the population situation with focus on providing information that inform policy
  - Questionnaires
    - Household
    - Community
    - Optional additional modules
  - Related to International indicators
    - Existing guidelines/tools/indicators (Sphere, MDGs, WASH, etc.)

- **Broad scope**
  - Large geographic area
  - All affected population of the disaster
  - Specific sub groups
Output

- Wide range of outputs for different end users
  - Short term policy development, evaluation and reformulation
  - Long term disaster preparedness and disaster reduction policies
  - Monitoring tool
  - Information for organizations and advocacy groups
  - Public knowledge and awareness
  - Academic contributions

Outputs/Aims:
Comprehensive understanding of post disaster needs

For policy:
- Overview
- Priorities
- Direction
- Opportunity / Space
- Evaluation
- Timeliness

For knowledge:
- New understandings
- Coping strategies
- Preparedness

Governments
Policy makers

Organizations

Advocacy groups

Communities
Civil society

Academics
Methodology

• Qualitative method
  – Reviews of existing literature
  – Field observation
  – Focus group discussions
  – Key informant interviews

• Quantitative surveys
  – Community
  – Households

• Remote sensing, GIS techniques and PDA technology
Procedure

• Procedure of a POPNA Survey
  – Preparation
  – Contacting national/ local authorities
  – Qualitative pilot surveys
  – Questionnaire design
  – Recruit partners, samplers and interviewers
  – Fieldwork design
  – Sampler and interviewer training
  – Sampling
  – Surveying
  – Data analysis and reporting
Coordinate with Local Authorities

• Benefit
  – Identify policymakers’ needs and preferences
  – Official permissions
  – Practical help
    o Sampling frame
    o Locate sampled respondent
    o Legitimacy and trust problem

• Cost
Samplers and Interviewers

• **Specific Qualifications**
  – Local knowledge
  – Good health
  – Social and communication skills

• **Specific Trainings**
  – ‘Safety first’, keep away from secondary disasters
  – Avoid to get involved in social conflicts
  – Psychological preparation and debriefing
Sampling

• General Sampling Design Considerations in Disaster Situations
  – Representative sample
  – Geographic clustering of disaster impact
  – Imperfect sampling frame in emergencies
  – Reporting on Sub-groups

• Sampling Methods for the POPNA Surveys
  – Systematic geographic/ spatial sampling
  – Clustering sampling with PPS selection
  – EPI method
  – Modified clustering sampling with conventional PPS selection
Data collection

• Ways of Data Collection
  – Paper questionnaire interviews
  – Computer assisted personal interviews (CAPI)
    ○ Advantage
    ○ Challenge

• Tools of CAPI Method
  – Laptop and netbook
  – PDA
  – Smartphone
  – Tablet computer

• Equipment Maintenance and Data Management
Field Organization, Reporting and Monitoring

• **How to Organize Fieldwork**
  – Information and data transmission
  – Interviewer organization
  – Quality control

• **How to Analyze Data and Write Report**
  – Start as soon as possible
  – Clear and easy to understand
  – Focus on policy makers’ interested questions, but not limited by that

• **Monitoring Tool of Post-Disaster Reconstruction**
  – Good baseline data for longitudinal monitoring surveys
  – Record the HH information for possible following up survey
An Example in 2008
Wenchuan Earthquake
Policy-oriented Post-disaster Needs Assessment after Sichuan Earthquake in 2008

- Conducted in the end of June-July 2008, one and half month after the Wenchuan earthquake
- Aimed at providing needs information for the making of National Post-Wenchuan Reconstruction Plan
- A two-stage sample covered 24 affected-counties, 174 clusters, and 5000 households
- 80 interviewers, each equipped with an Asus ee-PC, interviewed 4526 households in 15 days
- The report was finished in July 15th, and was handed in to the state council leading group of Reconstruction Planning and other government agencies
Rapid response in Wenchuan earthquake

- Started pilot studies in Sichuan earthquake areas
- Started questionnaire design

May-12

- Leading group of Planning asked for representative information on specific topics and ordered us to start the survey

May-18

-- Started sampling, field organization and training of interviewers

June-5

-- Started field work

June-20

-- Finished field work, collected information of 4526 households in 24 affected counties

July-5

July-19

Series of internal reports, including the suggestion on starting a rapid needs assessment

May-12

June-20

July-15

July-19
Houses are seriously damaged by the earthquake

- One in three households in the affected area live in tents
- 9 percent of all households live in mobile homes or temporary self-built houses

- One in three households suffered so much damage to their house that they are unable to live there
For the majority housing is their main policy need

- For most victims, housing was their main policy need
- Housing needs related both to subsidies and housing conditions

The Priority of Policy Needs in the Stricken Areas (%)
Earthquake victims have diversified needs in resolving their housing situation

- Rural households who lost their house have high expectations for permanent housing subsidies
  - Median – 40,000 Yuan
  - Average – 52,000 Yuan

- Urban households who lost their houses prefer…
  - Low priced houses
  - Direct cash subsidies
  - Low rent housing
Land re-distribution may become a problem after earthquake

Most farming households planned to continue their work; the lack of arable land resources in rural areas and land re-distribution may become a serious problem after earthquake.

Percentage that agree with “it is necessary to re-distribute agricultural land after earthquake”
Most of those who lost their houses are willing to migrate

- The vast majority of the people whose houses were damaged are willing to obey the government’s relocation arrangement.
- The vast majority of people with intention of relocating prefer to move to nearby places.
- Rural dwellers who had lost their house and land wanted to migrate to other rural areas when they considered destinations.
- Housing and employment are their most urgent policy needs.

<table>
<thead>
<tr>
<th>Issue</th>
<th>Agree</th>
<th>Will Migrate Even not Willing to</th>
<th>Refuse</th>
</tr>
</thead>
<tbody>
<tr>
<td>Housing</td>
<td>49.7</td>
<td>17.2</td>
<td>16.9</td>
</tr>
<tr>
<td>Employment</td>
<td>46.7</td>
<td>15.7</td>
<td>16.5</td>
</tr>
<tr>
<td>Cash Compensation</td>
<td>53.1</td>
<td>18.7</td>
<td>17.7</td>
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<tr>
<td>Urban Hukou</td>
<td></td>
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<tr>
<td>Education</td>
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<tr>
<td>Living Relief</td>
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<td></td>
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<tr>
<td>Other Problem</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Keep Social Network</td>
<td>1.0</td>
<td></td>
<td>1.0</td>
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<tr>
<td>Health Service</td>
<td>1.0</td>
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<td>1.0</td>
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Impacts on Post-disaster Reconstruction Planning

• The above mentioned findings of POPNA are reflected in the *The State Overall Planning for Post-Wenchuan Earthquake Restoration and Reconstruction*, including…
  – The level of subsides for rebuilding of rural houses
  – Migration policies
  – Employment policies
  – Emphasis on the participation and self-organization of local people in reconstruction
  – ……
Upgrade to Monitoring Survey

- 2008 survey provides the base-line for monitoring surveys

- 2009, July-August
  - Panel survey: same area, same households
  - Focus on the recovery of living conditions, needs, and evaluations

- 2011, July-August
  - End of three-year Reconstruction Plan
  - Sampled 30 affected counties, 195 clusters, 4875 households
  - Focus on life change in the three years

- The series surveys collect data for middle-term and final evaluation of the implementation of Reconstruction Plan, and for academic study as well
Thanks

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