Impact of Earthquake on Food Security and Livelihoods

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Presentation Outline

- Background
- Objectives and Methodology
- Survey Findings
- Conclusion
- Recommendation
**Background**

Millennium Development Goal 1: Eradicate extreme poverty and hunger

**TARGET 1a. Between 1990 and 2015, halve the proportion of people whose income is less than one dollar a day**

<table>
<thead>
<tr>
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</thead>
<tbody>
<tr>
<td>Percentage of population below USD 1 per day (ppp value)</td>
<td>33.54</td>
<td>n/a</td>
<td>24.1</td>
<td>19.7</td>
<td>16.4a</td>
<td>17</td>
</tr>
<tr>
<td>Percentage of population below national poverty line</td>
<td>42</td>
<td>38</td>
<td>31</td>
<td>25.4</td>
<td>23.82</td>
<td>21</td>
</tr>
<tr>
<td>Poverty gap ratio at USD 1 per day (%)</td>
<td>n/a</td>
<td>11.75</td>
<td>7.55</td>
<td>6.1</td>
<td>5.60b</td>
<td>--</td>
</tr>
<tr>
<td>Share of bottom quintile in national consumption</td>
<td>7.6</td>
<td>6.2</td>
<td>-</td>
<td>8.3c</td>
<td>--</td>
<td>--</td>
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</tbody>
</table>

**Source:**

a NPC (2011)
b Poverty gap” (2010).
### Target 1c: Between 1990 and 2015 halve the proportion of hungry people

<table>
<thead>
<tr>
<th>Indicator ( % of population)</th>
<th>1990</th>
<th>2000</th>
<th>2005</th>
<th>2010</th>
<th>2013a</th>
<th>2015 Target</th>
</tr>
</thead>
<tbody>
<tr>
<td>Prevalence of underweight children aged 6–59 months</td>
<td>57</td>
<td>53</td>
<td>43</td>
<td>38.6</td>
<td>28.8</td>
<td>29</td>
</tr>
<tr>
<td>Proportion of population below minimum level of dietary</td>
<td>49</td>
<td>47</td>
<td>40</td>
<td>22.5</td>
<td>15.7</td>
<td>25</td>
</tr>
<tr>
<td>Proportion of stunted children aged 6–59 months</td>
<td>57</td>
<td>53</td>
<td>NA</td>
<td>49</td>
<td>40.5</td>
<td>30</td>
</tr>
</tbody>
</table>


<table>
<thead>
<tr>
<th>Number of people undernourished ( in millions)</th>
<th>Proportion of undernourished in total population</th>
</tr>
</thead>
<tbody>
<tr>
<td>4.2</td>
<td>5.2</td>
</tr>
</tbody>
</table>


The picture looks positive. But this was before the disaster struck.
Impact of earthquake

Earthquake has posed a challenge to the achievements in MDG

• Vulnerability of the poor was exposed. An additional 2.5 to 3.5 percent Nepalese are believed to have been pushed into poverty in FY 2015-2016. This translates into at least 700,000 additional poor.

• The per capita disaster effect in Bhaktapur was NPR 78,770, NPR 52,765 in Lalitpur and NPR 49,495 in Kathmandu district.

• Earthquake destroyed the stockpile of stored grains and devastated the livestock sector, which accounts for over 23 percent of value added in agriculture.

• The loss of over 17,000 cattle and about 40,000 smaller, domesticated animals has resulted in the downward revision of the projected growth in agriculture from 2.2 percent to 1.8 percent this year.
Goal and objectives of the study

The overall goal of this study is to assess the impact of earthquake on urban poor.

Following are the specific objectives of the study:

- To understand the situation of food security and livelihood issues of the urban poor in the post-earthquake scenario.
- To come up with recommendations which could be helpful in supporting food security and secured livelihood options of the urban poor.
Methodology

- Qualitative and Quantitative method
- Selection of Districts
  - Bhaktapur, Kathmandu, and Lalitpur
- Literature Review
- Household survey
  - 120 respondents in three districts
- Focus Group Discussions
  - One each in three districts
- Focus on urban poor
National poverty rate declined steadily from 41.8 percent in 1996 to 25.2 percent in 2011. While rural poverty declined, urban poverty doubled between 1996 and 2011. It was 21.6% in 1996, 10.0% in 2004 and rose to 15.5% in 2011.

11.47% of the total population in Kathmandu (CBS,2010/11).

The absolute number of urban poor continues to climb by 18,000 annually showing that the trend towards ‘urbanization’ of poverty has gathered strength.

Other studies have focused mainly on rural poor.
Survey limitations

- Time constraint
- The impact of the blockade had already started to be visible
- Due to the limited number of respondents and geographical location, this study could be a general indication.
Profile of the respondents

- **15-24**: 35.00%
- **25-34**: 19.17%
- **35-44**: 27.50%
- **45-54**: 11.67%
- **55+**: 6.67%
Education

- Illiterate: 47.50%
- Literate only: 2.50%
- Primary level: 27.50%
- Secondary level: 2.50%
- Intermediate: 8.33%
- SLC: 6.67%
- Bachelors: 4.17%
- Masters: 0.83%
Survey Finding

Most pressing issue

- Education: 65.00%
- Food: 25.83%
- Shelter: 5.00%
- Health: 3.33%
- Livelihood issues: 0.83%

Ed, Food, Shelter, Health, Livelihood
Survey Findings

- Analysed on the basis of four pillars of food security.
  - Availability
  - Accessibility
  - Utilization
  - Stability
Focus on Production and distribution

- Land ownership and use: Agricultural land has been occupied with temporary shelters which will affect agricultural production. Crop management has been affected this year.
- Damaged irrigation infrastructure
- Farmers have been preoccupied since the earthquake.
- Livestock breeding: 41.47% percent lost their livestock during the earthquake.
- Loss of standing crops and seeds
## Availability

<table>
<thead>
<tr>
<th>Standing crops</th>
<th>Rice</th>
<th>Maize</th>
<th>Wheat</th>
<th>Potato</th>
<th>Millet</th>
</tr>
</thead>
<tbody>
<tr>
<td>Percent lost</td>
<td>41.67%</td>
<td>70.17%</td>
<td>37.50%</td>
<td>65.63%</td>
<td>62.50%</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Seeds</th>
<th>Rice</th>
<th>Maize</th>
<th>Wheat</th>
<th>Potato</th>
<th>Millet</th>
</tr>
</thead>
<tbody>
<tr>
<td>Percent lost</td>
<td>25%</td>
<td>25%</td>
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<td></td>
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</tr>
</tbody>
</table>

Loss of standing crops and seeds is going to impact the food availability.
Loss of stored cereals will make an impact on food distribution.
Majority of the respondents (90%) are meeting their food requirements by purchasing it in the market.
Accessibility

- 97.5% of the respondents said there has been an increase in food prices after EQ
- Only 6% of the respondents received remittance.
- The families ate most of the meals together: Gender aspect
Coping mechanism

Coping mechanisms for Food Concerns

- Rely on cheaper options: 68.33%
- Borrow food: 15.83%
- Reduce the number of intakes: 13.33%
- Spent savings: 2.50%
Coping mechanism

- Though income has decreased drastically for some respondents, many have not changed their occupation; they were either unaware of the opportunities or simply did not have the confidence to change.
- None of the respondents were engaged in more than one occupation.
- Though generally selling of personal possessions is adopted as a coping mechanism, the research showed that 99% of the respondents had not sold any of their possessions till date.
Coping mechanisms adopted by the respondents have affected the level of nutritional intake.

The level of education (48% of the respondents were illiterate) will affect utilization of food; choices of food and subsequently nutrition.

2.5% of the respondents reported that they had post-earthquake illness.

74% of the respondents said that they were not satisfied by the health services.

Almost 87% of the respondents were using public tap water.

The average time taken to access the source of water is 1.66 minutes.

Access to toilet was satisfactory as almost 42% of the respondents were using their own toilet and the time taken to reach the toilet was less than one and half minutes on an average.
Stability

- Stability of food security has been affected by the natural disaster.
- Imbalance in the stability of supply and access of food.
- Economic factors: Income and Food Price fluctuations.
Impact on Livelihood

- Land is occupied with temporary shelter barring farmers from agricultural production.
- Decrease in income level
- Huge loss incurred on houses, equipments, livestock etc.
- People are preoccupied with unproductive activities barring them from income generating activities, less opportunities to use skills.
- Nutritional status
- Social capital and networks have been used to a large extent. People have drawn on this capital to solve common problems like the requirement for food, shelter etc.
Conclusion

- Food is the most pressing issue post earthquake.
- Though shelter is also a major problem it is still secondary to food.
- The earthquake has impacted all the four pillars of food security i.e. availability, accessibility, utilization and stability.
- The earthquake has created a huge negative impact on the livelihood of people in these districts.
Immediate actions

- Ensure availability of food through food aid; public food distribution system; effective market information and price monitoring system;
- Ensure access through cash transfers, ensuring zero corruption, provide meals in specific cluster; food for work programme—public construction;
- Ensure utilisation of food with specific interventions on required protein, vitamins and minerals; health and educational programme at community level.
- Ensure stability by monitoring food consumption shortfall and; create opportunities in the labour market to reduce/prevent hunger as an immediate response;
Medium and long term measures

- Ensure availability through measures to improve productivity and production; strengthen extension service and provide strong technical support. Invest in infrastructure, modern irrigation system, improve input and output market.
- Ensure access through skill development and promotion of earning opportunities; improve financial services.
- Ensure utilization through safe drinking water; initiate health education at community level; improve food handling and storage; implement food safety regulations.
- stability – facilitate diversification of household economic activities; improve insurance markets; introduce safety nets; improve access to credit to ensure stability.