Disaster Assessment

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Sustainable Development and Disaster Unit
Outline

1) Disaster assessment
2) The Sustainable Development and Disasters Unit
ECLAC has been a pioneer in the field of disaster assessment and in the development and dissemination of a disaster assessment methodology. Our history assessing disasters started in 1972 with the earthquake that struck Managua, Nicaragua.

Since then, ECLAC has taken part in more than 90 disaster assessments of the social, environmental and economic effects and impacts of disasters in 28 countries in the region.
In 1991 the experience gained by ECLAC in disaster assessment was compiled in the first edition of its disasters manual. A second edition was published in 2003, which helped transmit this methodology and other relevant expertise to governments in the region. The methodology was again updated in 2014.
Disaster Assessment:

1. **Estimation of effects:** damage, losses, and additional costs
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Damage means the effects the disaster has on the assets of each sector, expressed in monetary terms. These occur during the event giving rise to the disaster. Depending on the sector, assets may include:

   (a) Physical

   (b) Inventories
On the basis of the database of reports on disaster damage and loss assessments done by ECLAC between 1972 and 2011, we did a sectoral and regional profile of damage and losses estimates.

### The Caribbean: Different types of disasters (percentages)

<table>
<thead>
<tr>
<th></th>
<th>Social</th>
<th>Infrastructure</th>
<th>Productive</th>
</tr>
</thead>
<tbody>
<tr>
<td>Hurricanes &amp; storms</td>
<td>28.2</td>
<td>8.3</td>
<td>61.8</td>
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<tr>
<td>Extreme precipitation</td>
<td>1.6</td>
<td>66.7</td>
<td>31.6</td>
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<tr>
<td>Geophysical</td>
<td>79.6</td>
<td>6.6</td>
<td>11.3</td>
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</tbody>
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Disaster Assessment:

1. **Estimation of effects:** damage, losses, and additional costs

Losses are the value of goods that go unproduced and services that go unprovided during a period running from the time the disaster occurs until full recovery and reconstruction is achieved.
The Caribbean: Different types of disasters (percentages)

<table>
<thead>
<tr>
<th>Disaster Type</th>
<th>Social</th>
<th>Infrastructure</th>
<th>Productive</th>
</tr>
</thead>
<tbody>
<tr>
<td>Hurricanes &amp; storms</td>
<td>6.1</td>
<td>15.4</td>
<td>74.3</td>
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<tr>
<td>Extreme precipitation</td>
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<tr>
<td>Geophysical</td>
<td>47</td>
<td>22.1</td>
<td>30.9</td>
</tr>
</tbody>
</table>
Disaster Assessment:

1. **Estimation of effects:** damage, losses, and additional costs

Outlays required to produce goods and provide services as a result of the disaster. These represent a response by both the public and the private sectors, which may take the form of:

a) additional spending and/or
b) spending shifting.
Disaster Assessment:

1. **Estimation of effects:** damage, losses, and additional costs
2. **Estimation of impacts:** macro-economic and household level
3. **Estimation of financial needs:**
   - *Recovery:* it is estimated using losses and additional costs
   - *Reconstruction:* A disaster assessment should identify opportunities to incorporate disaster risk reduction in this process

These needs must be expressed in a disaggregated manner taking into consideration breakdowns by sector of economic activity, geo-political divisions, and groupings of affected population.
Disaster Assessment

There are three progressive stages for a country to achieve the successful integration of DDR into reconstruction:

a) Integrating DRR into disaster assessments
b) Incorporating DRR in the design and implementation of recovery programs
c) Translating the gains of resilient recovery into sustainable development
Sustainable Development and Disaster Unit

The technical assistance provided by the Sustainable Development and Disaster Unit focuses in four areas:

1) Disaster Assessment
2) Quality control for Disaster Assessment done by national or local governments
3) Training courses on Disaster Assessment methodology
4) Assessing disaster risk reduction institutions
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17th Meeting of the Monitoring Committee of the CDCC