Macro-economic impact
Objectives of this session

- Appreciate the differences and complementarities between the economic and human impact assessments
- Identify key macro economic variables for the economic impact assessment
- Analyse examples of past economic impact assessments
The PDNA Process

Baseline Analysis
- Pre-Disaster context-baseline of social, economic, cultural, financial, political status

Disaster Effect
- Infrastructure and assets
- Production of goods and services
- Governance processes
- Increased risks

Disaster Impact
- Macro economic
- Human

Recovery Needs

Recovery Strategy
Differences and Complementarities: macro-economic and human impact assessments

A GAP analysis undertaken at the national and regional levels for all sectors and all social groups

1. Economic Impact

Measures the temporary macroeconomic imbalances as well as temporary decline in employment, income and well being of affected individuals and households.

2. Human Impact

Represents the disruption of the population’s normal livelihoods and income, as well as the access to basic commodities and social services.
The damages and the losses caused by any disaster may have an impact on the value and growth of the economy of the affected country.

This depends on the extent of the affected area, and the economic value of the effects in the specific sectors.
The macroeconomic impact analysis is done by comparing:

- National account statistics of economic performance (GDP).
- **External effects** (balance of payments, imports, exports): estimating the possible increase in imports and the decline of exports in each sector of analysis, as well as possible reinsurance payments from abroad and relief donations.
- **Public finances** (tax revenue and expenditure and fiscal deficit): estimating increased expenditures associated with higher operational costs and recovery-related investments and repairs vs. lower revenues. Combination of a decline in tax revenues and an increase in spending will put pressure on the fiscal balance in the medium term.
- **Price fluctuations** estimated through consumer’s price index or inflation.
It has been observed that after a disaster GDP growth tends to decline but then increases due to, among others, recovery interventions...

Hurricane Mitch (1998), Honduras
The impact of a disaster is not homogeneous across different sectors of the economy...

Hurricane Mitch (1998), Honduras
After a disaster the current account balance is likely to decrease...

<table>
<thead>
<tr>
<th>Accounting Type</th>
<th>BOP projected prior to disaster (A)</th>
<th>Effect of Disaster (B)</th>
<th>BOP Post-Disaster (A+B=C)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Goods Balance</td>
<td>-291.1</td>
<td>-50.0</td>
<td>-341.1</td>
</tr>
<tr>
<td>Export (FOB)</td>
<td>201.6</td>
<td>0</td>
<td>201.6</td>
</tr>
<tr>
<td>Import (FOB)</td>
<td>-492.7</td>
<td>-50.0</td>
<td>-542.7</td>
</tr>
<tr>
<td>Services Balance</td>
<td>-4.2</td>
<td>-12.5</td>
<td>-16.7</td>
</tr>
<tr>
<td>Export (FOB)</td>
<td>7.3</td>
<td>0</td>
<td>7.3</td>
</tr>
<tr>
<td>Import (FOB)</td>
<td>-11.5</td>
<td>-12.5</td>
<td>-24.0</td>
</tr>
<tr>
<td>Income</td>
<td>125.0</td>
<td>45.0</td>
<td>170.0</td>
</tr>
<tr>
<td>Current Account Balance</td>
<td>-170.3</td>
<td>-17.5</td>
<td>-187.8</td>
</tr>
</tbody>
</table>
Example: Disaster Impact on Public Finance

Disasters alter the fiscal position of governments…

<table>
<thead>
<tr>
<th>Central Government Spending</th>
<th>Changes in Government Spending</th>
<th>Pre-Disaster</th>
<th>Estimated Disaster Losses</th>
<th>Post-Disaster</th>
</tr>
</thead>
<tbody>
<tr>
<td>Tax Revenues</td>
<td>In Million US$</td>
<td>74.2</td>
<td>-22.1</td>
<td>52.1</td>
</tr>
<tr>
<td></td>
<td>As a Percentage of GDP</td>
<td>0.40%</td>
<td>-0.12%</td>
<td>0.28%</td>
</tr>
<tr>
<td>Expenditures</td>
<td>In Million US$</td>
<td>-97.2</td>
<td>-14.2</td>
<td>-111.4</td>
</tr>
<tr>
<td></td>
<td>As a Percentage of GDP</td>
<td>-0.52%</td>
<td>-0.08%</td>
<td>-0.60%</td>
</tr>
<tr>
<td>Total</td>
<td></td>
<td>-23</td>
<td>-36.3</td>
<td>-59.3</td>
</tr>
</tbody>
</table>
• Analysis of impact on personal or household well-being: includes an estimation of employment loss and income decline due to the losses sustained in the productive and services sectors, as well as higher than normal family or personal expenditures.

• Attempt to estimate the impact on personal and household well-being is a challenge in contexts where productive activity is undertaken through the informal sector, subsistence farming and unpaid family and reproductive work (child-bearing/rearing responsibilities; domestic tasks often mainly performed by women).

The micro-economic impact analysis should be used when doing the human impact assessment.
The disaster impact assessment has two complementary components:

- The **macro-economic** impact
- The **human impact**

The macro-economic impact assessment measures the **temporary macroeconomic imbalances** along four main variables: Economic performance, external effects, public finances and price fluctuations.

An **specialized team** undertakes the macro-economic analysis based on the damage and loss estimates provided by the sectors.

The **micro-economic impact** of disaster is taken into account by the human impact assessment.
Questions?