Human Impact Assessment
In addition to their high economic cost, disaster events also affect people’s well-being.

They deprive households of their basic living conditions and standard of living, destroy their livelihoods and income base, erode their productive assets, reduce their access to basic services such as health and education, and compromise their food security.

As a result, poverty may become entrenched, inequality can increase, and the gains made in human development may be lost or compromised.

Therefore the Human Impact of the disaster has to be assessed.
Objectives

- Discuss the importance of measuring human impact of the disasters
- Introduce human impact indicators
- Understand how coping mechanisms could harm and compound the overall situation of the populations and communities
- Review the process and tools that can be used for assessing human impact
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/social

Recovery Needs

Recovery Strategy
• Understanding human dimension of the disaster’s impact is critical for designing a comprehensive recovery strategy

• HIA informs the recovery strategy, especially with a view of mitigating the worsening of the situation.

• HIA guides prioritization of the recovery actions and population groups, for example to prioritize the areas with the highest human impact or incidence of poverty and households that should be targeted.

• HIA informs the adjustment of national development plans, poverty reduction strategies, and social protection programs.

• HIA informs how the human impact may compromise the achievement of national SDG targets and the policy considerations.
Examples of Human Impact of the Disaster

- Poverty levels increase
- Food insecurity is aggravated
- Higher levels of morbidity
- Level of malnutrition becomes higher
- Migration increases
- Gender inequalities are reinforced
- Social divisions and exclusions are aggravated
- Greater incidence of child labour
- Increase in human trafficking; violence against women
Five core indicators to measure the human impact of disasters are proposed. A set of sub-indicators for each one of them is also suggested. The required information and data sources are suggested as well.
Living conditions, health and education: based on the multidimensional poverty index, this indicator is measured in terms of deprivations in water, sanitation, electricity, cooking fuel, housing and basic household assets, as well as health and education.

Livelihoods: measured in terms of people’s access to livelihoods (all occupations), income, and productive assets and resources.

Food security: measured in terms of the three pillars of food security and household coping strategies.

Gender equality: measured as the gender differential impact, access to resources and decisions.

Social inclusion: measured in terms of unequal access, unequal participation, denial of opportunities, and the identification of
Core Indicator 1: Living conditions, health and education

- **Standard of living**
  - Water
  - Sanitation
  - Electricity
  - Cooking fuel
  - Basic HH assets
  - Housing floor

- **Health**
  - Morbidity rate
  - Mortality rate
  - Malnutrition rate
  - Increased barriers to essential health services

- **Education**
  - Access to primary education
  - School drop-out rate

  **Multidimensional Poverty**

Core Indicator 2: Livelihoods

- **Access to livelihoods**
  - Livelihoods lost by occupation
  - Unemployment

- **Income Loss**
  - Number of people who lost income
  - Total income loss in $

- **Productive assets & resources**
  - Assets loss
  - Number of people who lost assets

**The Poverty Line**
Core Indicator 3: Food security

Core Indicator 4: Gender equality
Core Indicator 5: Social Inclusion

- Unequal participation
- Unequal access to resources
- Denial of opportunities
In each disaster, a selected set or all indicators could be assessed based in availability of data and time for conducting the assessment.
The five core indicators would provide a good understanding of post-disaster poverty, food security, gender inequality and inclusiveness.

- The selection of indicators should be guided by the local context, nature and scale of the disaster, availability of data.

- The general set of indicators should estimate pre and post-disaster conditions derived from the effects measured in all sectors.
Six core indicators used in the HIA of Somalia

1. **Living conditions and access to basic services**: measured in terms of access to healthcare, water, sanitation, education, cooking fuel, housing and basic household assets (based on the Multy Dimension Poverty Index).

2. **Livelihoods and income**: measured in terms of access to livelihoods, income and productive assets and resources.

3. **Food security and nutrition**: measured in terms of access and food security outcomes.

4. **Gender equality**: measured as the differentiated impact on women and girls.

5. **Profile of population affected and vulnerable groups**: measured as the differentiated impact and access to resources by different social groups.

6. **Poverty and human development impact**: measured in relation to the poverty line, the MDPI and the HDI.
Coping mechanisms

People have diverse options to protect themselves from a disaster which often require differentiated response from members of the household.

Coping strategies may be positive and act as an effective adaptation to the disaster’s impact. Most often, however, the coping strategies have shown, directly or indirectly, negative consequences.

The HIA identifies coping strategies of the affected population in relation to each of the five core indicators.
### Examples of coping mechanisms

#### Housing
People moving temporarily with relatives; migration to urban areas or other districts; displaced into temporary shelters or IDP camps.

#### Water & Sanitation
Purchase of water which increases household expenditures; increased travel distances in search of water for human or animal consumption; withdrawal of children from school to assist with water collection or work; reduce intake of water or drink contaminated water.

#### Education
Withdrawal of children from school due to reduced income in the families to afford school fees or need children to assist with household tasks; parents may need to borrow money to pay school fees, increasing their debt.

#### Electricity and cooking fuel
People may need to walk longer distances to fetch cooking fuel, typically women and/or children; they may resort to wood, charcoal or other sources of fuel for cooking which can have health and environmental consequences.

#### Health
Families may need to spend more to treat the increase in illness, borrow for healthcare which increases their indebtedness.

#### Livelihoods
To cope with the loss of employment and income, households may sell their productive assets (livestock, household items, land, etc.), use their savings to buy food, water or other basic items, turn to alternative income sources such as charcoal production, engage in hazardous work and negative forms of labor, withdraw children from school and send them to work, or migrate to urban centers or other geographic areas in search of employment.
Identifying coping mechanisms

Coping strategies are better identified through direct field visits, focus group discussions and interviews, as well as through a household survey.

Sector teams will likely also identify coping strategies for their respective sectors, and cross-check with other sectors to verify findings.
The HI results from the combination of the disaster’s immediate effects and people’s coping strategies.

Therefore the analysis needs to consider the cascading effect.

The combined analysis can be both qualitative and quantitative, and compare the findings with the baseline or pre-disaster context.
Sources of Data and Information for the indicators

- National and Local Human Development Reports
- Reports prepared by the sector specialists in course of conducting the PDNA
- Relevant information from academics, development practitioners, and specialized independent analysts
- A survey of the affected area and consultations with the affected population, government officials
- A lot of qualitative information, informed judgment, etc, especially where baseline information is not available.
• **Focus group discussions (FGD).**
  ◦ Can gather a wide range of information over a short span of time like impacts of disaster and the effect of relief and recovery across sectors and livelihoods, coping mechanisms, etc.
  ◦ Must be structured to ensure that the opinions/voices of all the people in the sectors across all income levels are represented.

• **In-depth interviews.**
  ◦ Good for a variety of information especially the sensitive ones like social cohesion, power struggles, corruption, etc.
  ◦ Normally cover few issues but dig deeper on these issues.

• **Informal discussions and participant observations.**
  ◦ Social relations between groups can be gathered by casual talk and observing how people interact in the disaster area.
Impact Assessment Tools (2)

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- **Simple surveys.**
  - Surveys are reliable in gathering simple and concrete data such as wage, prices, debts and interest rates, among others.

- **Information from the other PDNA sector teams.**
  - The information gathered by the assessment teams of the other sectors such as the number of people affected and the values of damages and losses, the socioeconomic impact, etc. should likewise be used by team in coming out with the report.
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<table>
<thead>
<tr>
<th>Base Line</th>
<th>Human Impact</th>
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<tbody>
<tr>
<td><strong>Food Security</strong></td>
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<tr>
<td>Prior to the drought 3.8 m people were considered to be food insecure (IPC phases 2, 3 and 4).</td>
<td>6.2 m people or (50% of the total population) across Somalia are facing food insecurity and are in need of assistance. Of these, 4 m are children.</td>
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<tr>
<td><strong>Water and Sanitation</strong></td>
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<td>About 60% of Somalis do not have access to an improved water source, increasing to almost 80% in rural areas. Access to improve sanitation is lacking for 85% of the population.</td>
<td>Over 4.4 m people in Somalia are expected to need emergency water and sanitation services through 2018.</td>
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<tr>
<td><strong>Health</strong></td>
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| Prior to the drought, the under 5 mortality rate was 133/1,000 and the maternal mortality rate was 732/100,000 live births, among the highest in Africa. | • Over 77,000 new cases of cholera/acute wat/ diarrhea (AWD) and more than 17,000 cases of measles, the majority children under 5.  
• 5.5 m people in Somalia lack access to basic health care services. |
| **Education** | |
| More than half of children in the country are out of school, and about one quarter of primary-age children attend primary school in the country. | • 80,000 children stopped attending school  
• 121,000 more children are at risk of dropping out  
• Delayed education attainment among children and youth |
| **Displacement (Housing/Shelter)** | |
| Prior to the drought, about 1.1 m people were internally displaced in Somalia. | An additional 926,000 people across Somalia were displaced between November 2016 and September 2017 due to drought-related reasons. |
Key takeaways

- Understanding human dimension of the disaster’s impact is critical for designing a comprehensive recovery strategy, and therefore HIA should be given priority in the overall evaluation.

- Human impact assessment should be based on direct inputs from the people on their recovery priorities.

- HIA should be conducted using the suggested 5 steps process and the menu of relevant tools offered.

- The selection of the HIA indicators depends on the size of the event and availability of data.
Questions?