

PDNA

POST-DISASTER NEEDS ASSESSMENT

DRF

DISASTER RECOVERY FRAMEWORK

Session 3

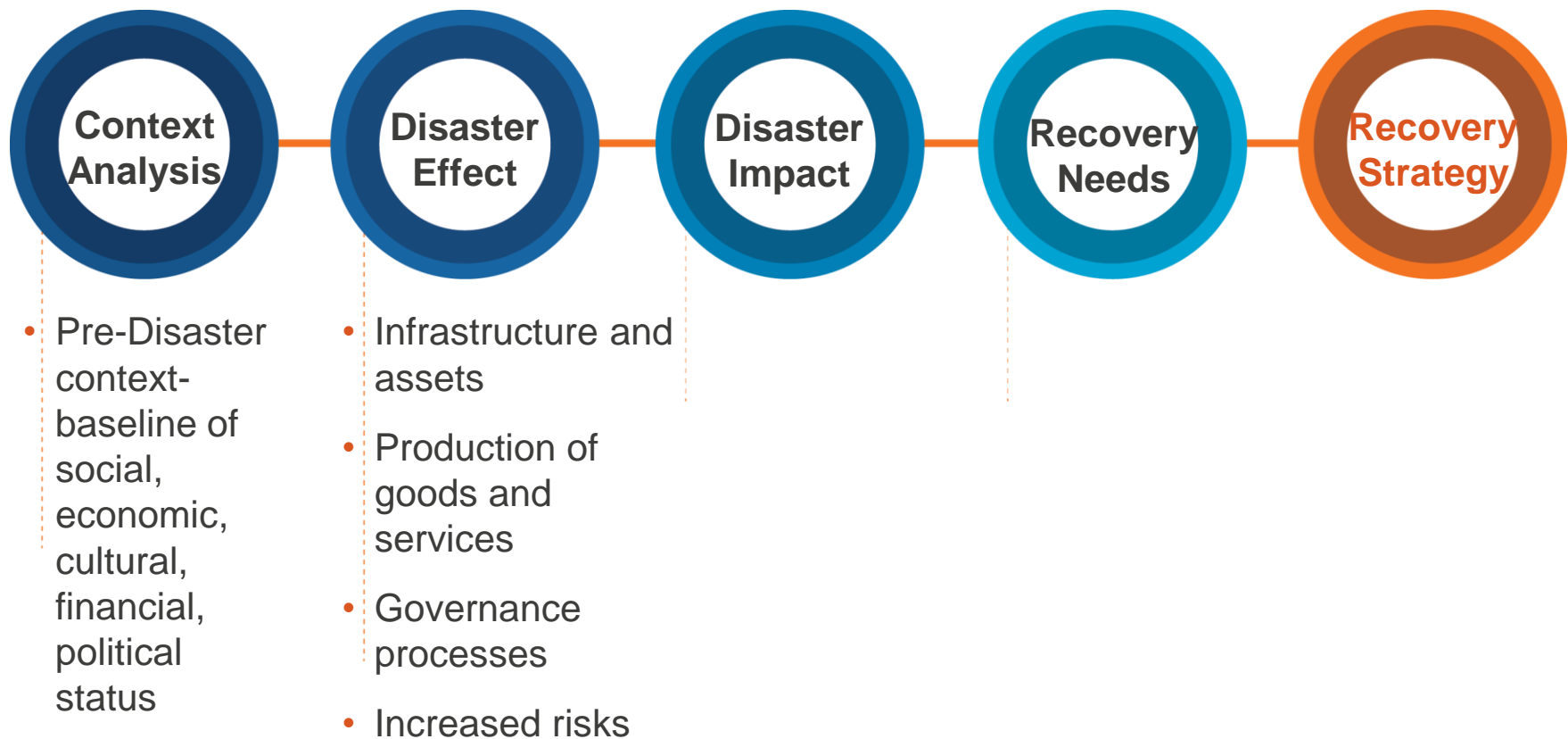
# Post-disaster effect



# Objective of this session

- Distinguish between the four dimensions of the disaster effect
- Identify typical examples of the disaster effect

# The PDNA Process



# What is the Disaster Effect?

The disaster effect refers to the **immediate** results of the event that is to be assessed.



## Activity 1

- At your table, come up with a list of examples of possible disaster effects
- Identify at least 5 examples

# What is the Disaster Effect?

Refers to the **immediate** results of the event that is to be assessed.

It is expressed in **quantitative and qualitative terms**, by sector, geographic divisions and gender, age, ethnicity.

This should be evaluated for each disaster-affected area and for each the sector. Aggregation of total effects follows a bottom up approach.

# Four dimensions of the disaster effect

## **DAMAGE**

**TO INFRASTRUCTURE  
AND PHYSICAL ASSETS**



## **DISRUPTION**

**OF ACCESS TO  
GOODS AND SERVICES**



## **DISRUPTION**

**TO GOVERNANCE AND  
DECISION MAKING  
PROCESSES**



## **INCREASED**

**RISKS AND  
VULNERABILITIES**



# Four dimensions of the disaster effect



## Damage to infrastructure and assets

Number, size, typology, construction material of physical assets , including **buildings and their contents**.

Ownership of physical assets: **public, private and community** .

**Level of Damage** occurred during, or immediately after the event. **Total or partial destruction**.

Monetary value of the damage is expressed as **the replacement costs according to market price** prevailing just before or immediately after the disaster.



# Four dimensions of the disaster effect



## Disruption of production & access to goods and services

Disruption of basic service delivery as well as declined quality of basic service delivery.

Constraints faced by households and communities to access services and goods.

Occur for a relatively long time period until restoration of service is achieved.

Valued at current price of additional costs incurred for accessing services.

# Examples: Effects on production of goods and services and access to goods and services

## Decline on output of the productive sectors associated with damage to infrastructure and assets:

- Foregone income due to lower production,
- Loss in income and revenue (public & private)
- Higher operating and unit costs

## Availability and quality of the delivery of basic services:

- Water and energy supply
- Health and education facilities
- Temporary shelters

## Loss of access and constraints suffered by individuals, families and communities in meeting basic needs after a disaster:

- Physical constraints to access such as debris and damaged roads
- Non-physical constraints via a vis the purchasing power of households

Occur over a long time period (from disaster until recovery)

# Four dimensions of the disaster effect



## Disruption to governance and decision making processes

- Effects of the disaster on management and administrative functions.

- Additional functions and capacities of national and local government to respond to emergencies and lead recovery process.

- Disruption in community governance process.

# Effects on Increased risks and vulnerabilities



## Increased risks and vulnerabilities

Assess immediate disaster risks to avoid emerging threats and/or deteriorating conditions

Assess pre-existing or underlying vulnerabilities that became apparent in the sector during the disaster



### Examples:

Planned and safe resettlements of sector assets and infrastructure.

Multi-hazard and risk mapping to inform recovery planning.

Handling of socio-political risks including conflict.

# Sources of Information for Effects

- **Primary sources:** collected by government in the form of surveys, field visits and direct inquiry / interviews, consultation with key informants, as appropriate or needed, focus groups discussions.
- **Secondary sources:** surveys undertaken at sector level after the disaster (emergency humanitarian needs assessments is done by local and international first responders), situation reports, media information.

Baseline data is also important to determine the overall impact of the disaster across all sectors. Sector teams gather data on pre-disaster baseline conditions pertinent to their sector.

# Total Disaster Effects

- The **aggregation** of sectorial damage and loss estimates including disruption of services, governance functions and increased risks.
- It uses **qualitative and quantitative** descriptors



# Example: Effects on the health sector

Infrastructure and physical assets	Production and access to G&S	Governance and decision making	Increased risk and vulnerabilities
<ul style="list-style-type: none"><li>• Facilities fully destroyed</li><li>• Facilities partially destroyed</li><li>• Equipment</li><li>• Furniture</li><li>• Medications and supplies</li></ul>	<ul style="list-style-type: none"><li>• Loss of revenue</li><li>• Demolition and rubble removal</li><li>• Higher number of patients due to injured during the disaster</li></ul>	<ul style="list-style-type: none"><li>• Analysis of epidemics</li><li>• Lack of personnel/staff</li></ul>	<ul style="list-style-type: none"><li>• Vulnerability analysis</li><li>• Considerations for retrofitting</li></ul>

# Key take-aways

- The disaster effect refers to the **immediate** results of the event that is to be assessed and is expressed in **quantitative and qualitative terms disaggregated** by sector, geographic divisions, and where possible gender, age and ethnicity.
- The disaster effect encompasses four dimensions:
  1. Damage to infrastructure and physical assets
  2. Disruption of access to goods and services
  3. Disruption to governance and decision making processes
  4. Increased risks and vulnerabilities.



# Discussion



Questions?

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