

**Module:** Public Health Disaster Planning for Districts

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**Author(s):** Dr. Simon Mamuya (Muhimbili Univ. SPH) (Lead Author); Dr. Christopher Orach-Garimoi (MakSPH), Dr. Roy William Mayega (MakSPH), Dr. Joseph Chuwa (MoH, Tanzania), Dr. Tabu Simiyu (Moi Univ. SPH), Mr. Mike Renny Wafula (OPM, Uganda), Dr. G. Kabagambe (LIPHEA)

**Resource Title:** Session 1.1: Introduction to Disasters

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# Introduction to Disasters



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Compiled by the Eastern Africa Disaster Management Training Core Team  
Narrated by Dr. Roy William Mayega

**WHAT DOES THE TERM  
'DISASTER' MEAN TO  
YOU????**

# Definition of Disasters

“A serious disruption of the functioning of a community or a society causing widespread human, material, economic or environmental losses which exceed the ability of the affected community or society to cope using its own resources.”

*WHO, 1998*



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# Definitions

- What is an emergency?
  - A state in which normal procedures are suspended and extraordinary measures are taken in order to avert a disaster



# Let's define other related terms...

- Hazard
- Risk
- Vulnerability
- Capacity



 whiteafrican, flickr



 Carol Mitchell, flickr

# Definitions

- What is hazard?
  - A threatening event or potentially damaging incident (*CDC*)
- What is risk?
  - The probability of suffering damage (to life, property, economic disruptions and environment) from a hazard for a given area and reference period. Risk is the product of hazard and vulnerability



# Definitions

- What is vulnerability?
  - Susceptibility to physical or emotional injury following a disaster
  - The degree to which an area, people, physical structures or economic assets are exposed to loss, injury or damage caused by the impact of a hazard  
(*Source: Red Cross*)
- What is capacity?
  - The resources available to cope with a threat or resist the impact of a hazard

# What is the relationship between these terms?



 doou, flickr

$$\text{Disaster Risk} = \frac{[\text{Hazard} \times \text{Vulnerability}]}{[\text{Capacity}]}$$

# Disaster Classification

Disasters may be:

- Natural
- Technological (human generated)
- Those in between or 'hybrid'

Another way to classify disasters is based on speed of onset:

- Rapid onset
- Slow onset

# Classification of Natural Disasters:

## Slow onset

- Drought and desertification
- Famine
- Deforestation
- Pests and plant diseases



# Classification of Natural Disasters:

## Rapid onset

### Climatic

- Floods
- Windstorms
- Wildfires
- Hail storms

### Geological

- Earthquakes
- Tsunamis
- Volcanic
- Landslides

# Technological Disasters

- Conflict and Wars leading to refugees and internal displacement (Complex Emergencies)
- Structure failure and building collapse
- Transportation crashes and accidents



 james\_gordon\_los\_angeles, flickr

# Technological Disasters

- Military accidents
- Fire disasters
- Terrorism
- Industrial incidents



 Timothy Wildey, flickr



# Name Recent Technological Disasters in your Region



 PD-GOV

U.S. Coast Guard, wikimedia commons



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hankplanj, flickr

# Hybrid Disasters

In some situations, it is difficult to classify a disaster on the basis of whether it is natural or technological

***WHERE DO EPIDEMICS FALL?***

# Public Health Consequences of Disasters

Before we discuss the consequences of disasters, let us do Group Activity 1.1 in your manual

# Public Health Consequences of Disasters

- Death
- Injuries
- Loss of clean water
- Loss of shelter
- Loss of personal household goods
- Major population movements
- Loss of sanitation
- Loss of routine hygiene
- Disruption of solid waste management
- Public concern for safety
- Panic
- Increased pests & vectors
- Damage to health care system
- Worsening of chronic illnesses
- Loss of electricity
- Toxic/ hazardous exposure
- Loss of food supply
- Standing surface water



# Illustration: Consequences of Drought and Famine



 Bert Kaufmann, flickr



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 United Nations Photo, flickr,



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 Bread for the World, flickr



 IFRC, flickr



# Illustration: Effects of Flash Floods



 The Advocacy Project, flickr



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# Illustration: Effects of Slow Onset Floods



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# Illustration: Effects of Land Slides



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# The Hyogo Framework for Disaster Management

- This international framework emphasizes the following at all levels (Including districts)
  - Early warning systems
  - Capacity building
  - Emphasizing safety and resilience of communities
  - Reducing risk factors
  - Strengthening disaster preparedness

# Pre Disaster Definitions

- Preparedness
  - Actions that result in persons knowing what to do and how to respond after disaster has occurred
- Prevention
  - Activities designed to provide permanent protection from disaster which include engineering and physical protective measures and legislation to control land use and urban planning
- Mitigation
  - Measures taken in advance of an event aimed at decreasing or eliminating its impact on society and environment

# Post Disaster Definitions

- Response
  - Decisions and actions taken during and after disaster. This includes immediate relief, rehabilitation and reconstruction
- Recovery
  - Activities that restore vital life support systems to normalize operating standards and long term activities that return life to normal



 International Humanitarian Relief Foundation, flickr

# Other Definitions

- Relief and Rescue
  - Time period immediately following the disaster period
  - Exceptional measures to save lives and care for survivors (meet basic needs)
  - Distinction between rescue and relief
    - rescue -> secure life
    - relief -> sustain life



 waterdotorg, flickr

# Other definitions

- Rehabilitation
  - After closure of the relief phase (no more dependency for basic need satisfaction)
  - Restoring mental and physical health and stability of a community
  - Instilling principles of sustainable livelihoods
  - Empowering victims/survivors
  - Should lead to BETTER developments

# Rehabilitation: Examples

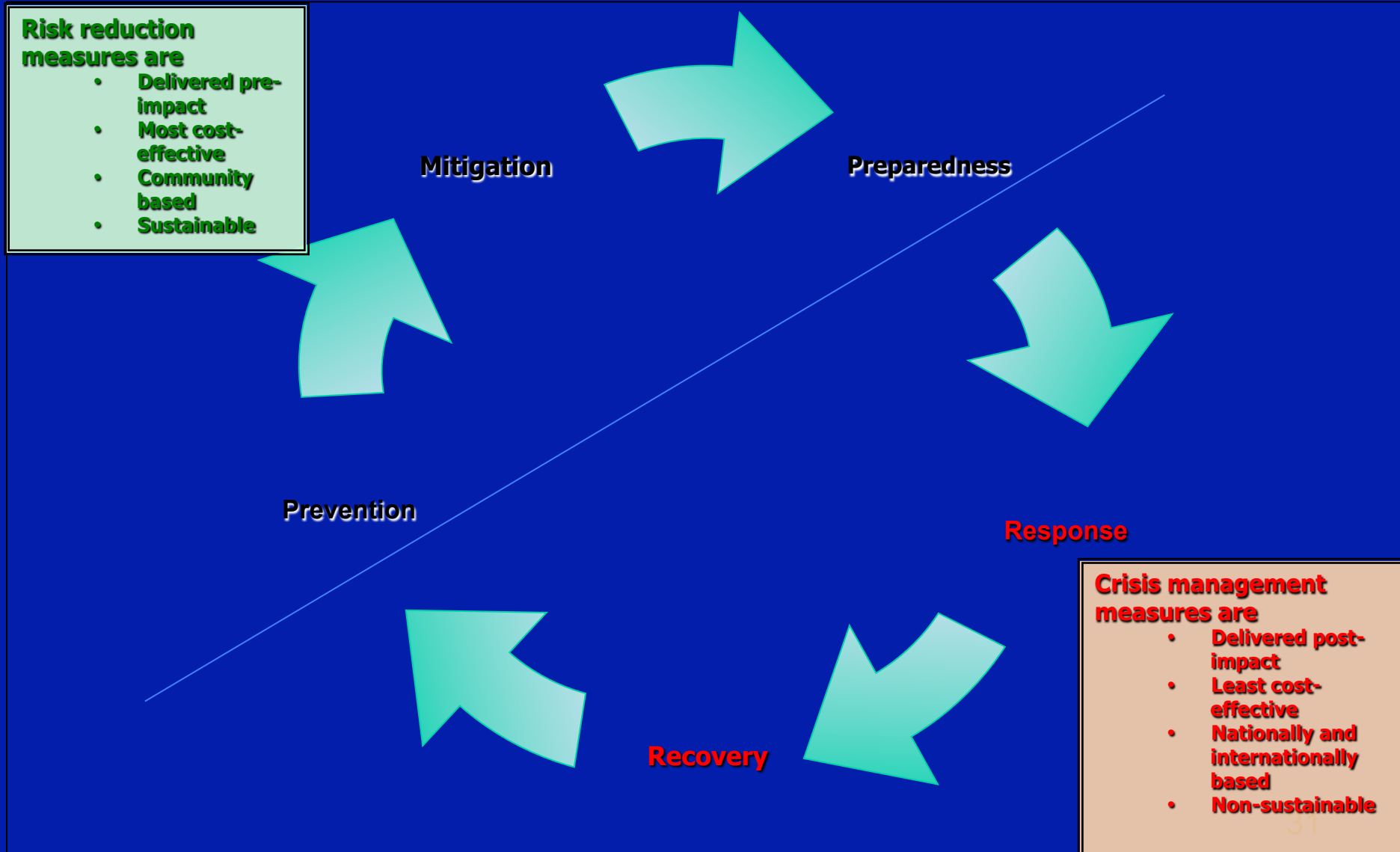
- Early Recovery Plans for IDPs
- Re-afforestation programmes
- Post Recovery Plans
- Emphasis: Restoration of Original status



# Recovery: Examples

- Physical infrastructure repair
- Enhancement of the pre-disaster state
- Build resilience
- Provide new structures/housing that will be able to withstand a similar disaster in future
  - Are we creating More/new vulnerability through reconstruction actions?
  - Involves systematic Integration of disasters and Long-term Development

# The Disaster Management Cycle



# An evolution in approach

- From Response and Relief



Church Mission Society (CMS), flickr

- To Risk Reduction



Sanofi Pasteur, flickr

# What mechanisms have you put in place.....

- To prevent disasters in your district?
- To reduce vulnerability to disasters
- To prepare for disasters in case they occurred?

# All disasters are local....

- All disasters occur locally in a particular community
- The earliest response to disasters often comes from the community itself
- The capacity of the community to respond to disasters should therefore be built



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# End!

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