

Climate Change 2013: The Physical Science Basis

Working Group I contribution to the IPCC Fifth Assessment Report

Climate extremes in Africa

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IPCC AR5 LA WG I Ch 14

The IPCC AR5: What Does it Mean For Africa

Outreach Event, Gallagher Convention Centre, Midrand, RSA

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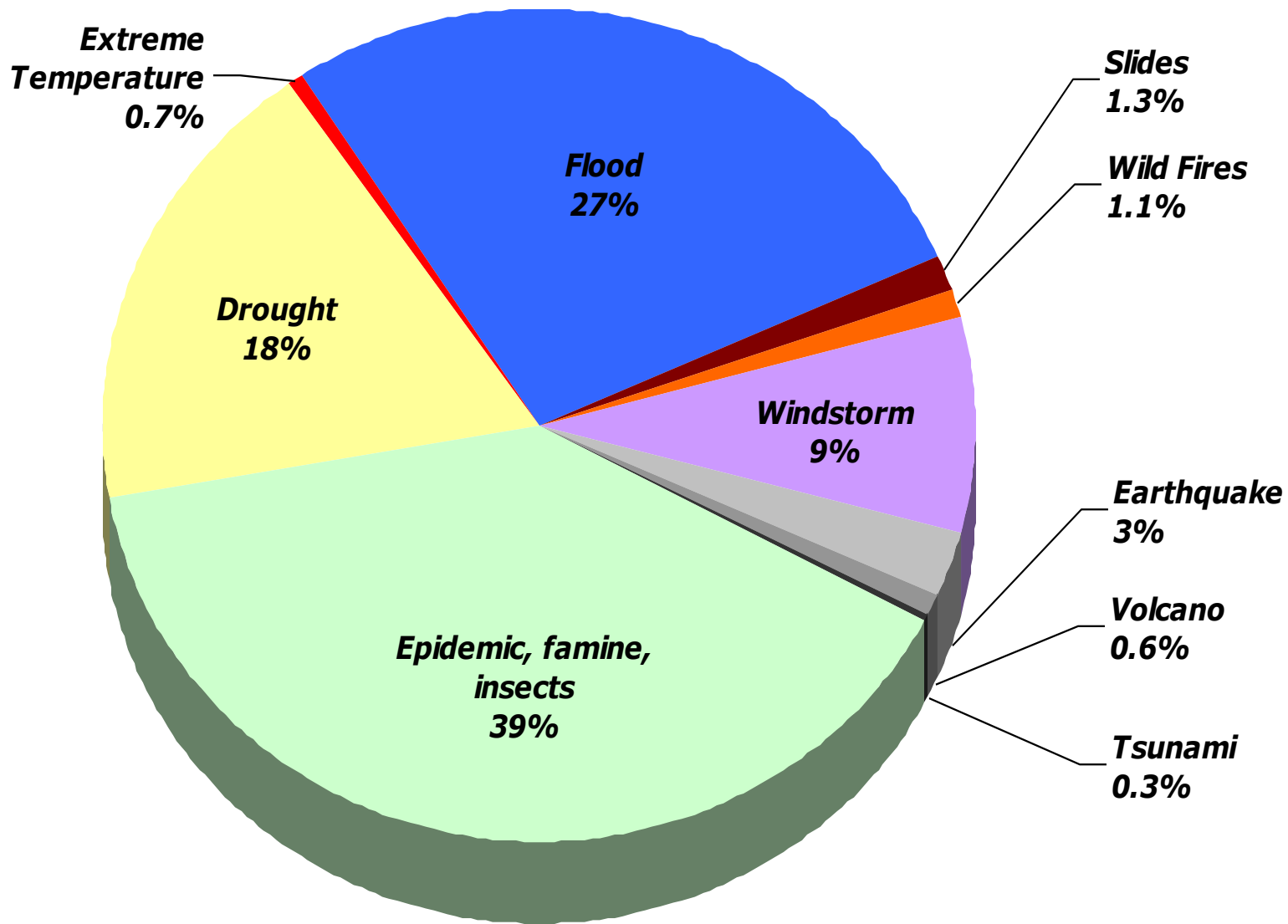
Outline

- Occurrence of Weather and Climate extremes
- Precipitation (Floods and Droughts)
- Temperature (heat waves & cold spells)
- Sea Level Rise (coastal areas & river banks)

Occurrence of Weather and Climate extremes

AR5 affirms that: generally, there has been an increased frequency and severity in the occurrence of weather and climate extremes; characterised by:

- Variations in Precipitation patterns (Floods and Droughts);
- Variations in Temperature patterns (heat waves & cold spells)
- Sea Level Rise (coastal areas & river banks)



• Heavy Precipitation (Floods)



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• Heavy Precipitation (Floods)

Gullies caused by Cyclone Eline induced Floods



12/12/2006

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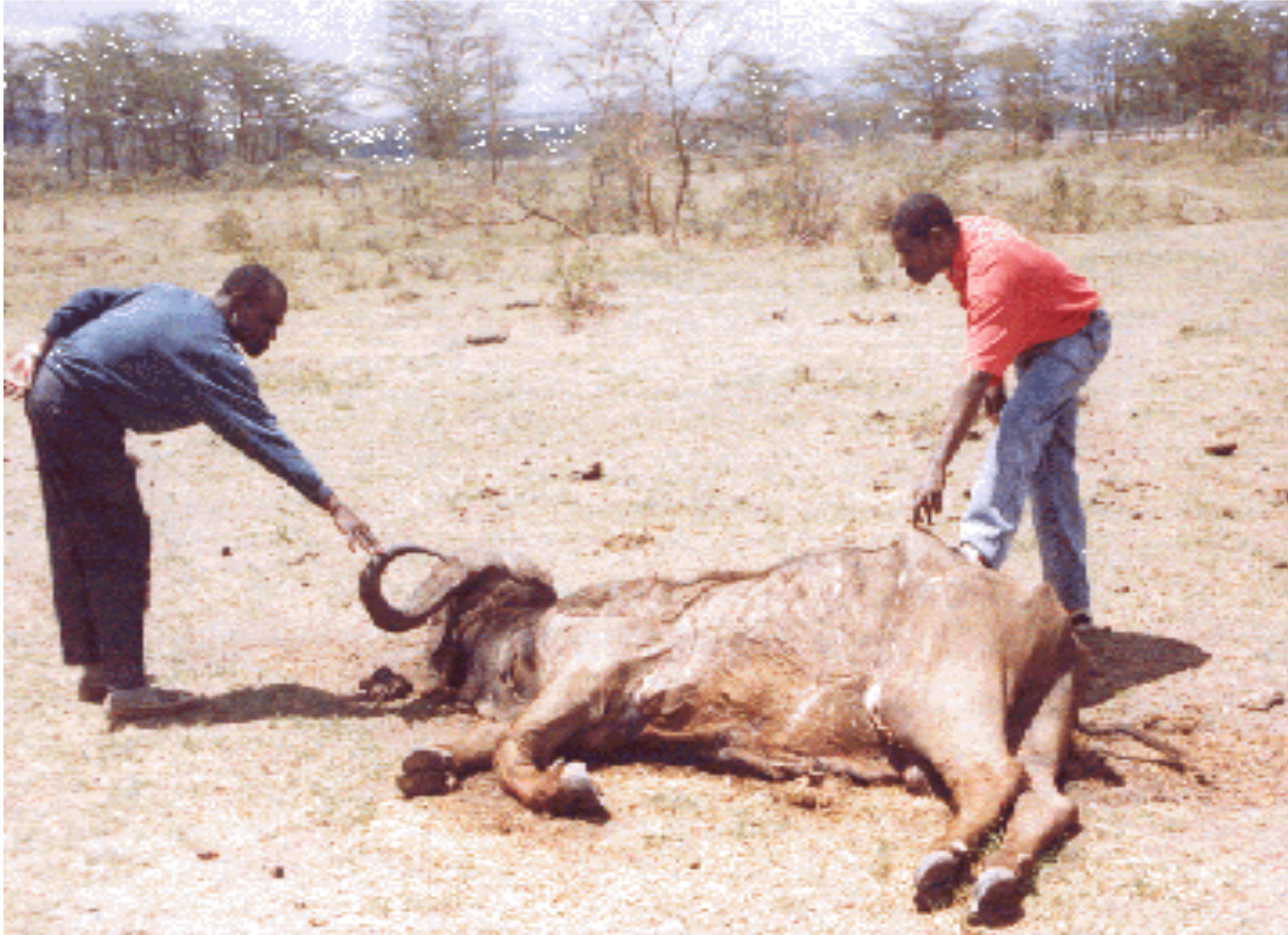
- Heavy Precipitation (Floods)



• Heavy Precipitation (Floods)



Low Precipitation (Droughts)



Low Precipitation (Droughts)



Low Precipitation (Droughts)



Temperature

AR5 reveals that general trend over most land areas characterised by: **General Increase**

1. Warmer and /or fewer **cold days** and **nights**;

2. Warmer and /or more frequent **hot days** and **nights**

Temperature

High temps increase the incidences of:

- Fires
- Earth worm invasions
- Locusts invasions
- Human exhaustion

Cold temps increase the incidences of:

- Frost episodes
- Snow episodes

Sea Level Rise

AR5 affirms:

1. Increased incidence and /or magnitude of extreme high sea level





