



بِسْمِ اللَّهِ الرَّحْمَنِ الرَّحِيمِ



# Disasters Risk Reduction & Sustainable Development

الحد من الكوارث والتنمية المستدامة

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**/.**



# Disasters Risk Reduction (DRR)

&

# Sustainable Development





## Disasters Risk Reduction & Sustainable Development

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### Major achievements in DRR by UN General Assembly

During last 50-years

- = 1960's: UN/GA adopted measures regarding severe disasters
- = 1970-1986: Assistance in cases of natural disaster
- = 1990-1999: The International Decade for Natural Disaster Reduction
- =1994: Yokohama Strategy
- = 2000: International Strategy for Disaster Reduction (UN-ISDR)
- =2002: The Johannesburg Plan of Action World Summit on Sustainable Development (WSSD)
- = 2005-2015: Hyogo Framework for Action (HFA)
- = 2015-2030): Sendai Framework for DRR



( )

(1999-1990) =

إستراتيجية يوكوهاما (1994) =

الإستراتيجية الدولية للحد من مخاطر الكوارث =

=

إطار عمل هيوجو (2015-2005) =

إطار عمل سينداي (2030-2015) =



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Nowadays, and after these UN-achievements.

الآن وبعد هذه الإنجازات الدولية

**Disasters continue to undermine efforts to  
achieve sustainable development.**

لا تزال الكوارث تقوض الجهود الرامية  
إلى تحقيق التنمية المستدامة



## Disasters Risk Reduction & Sustainable Development

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In the last 20 years the impact of disasters has been devastating

**4.4 billion**  
people affected

**1.3 million**  
people killed

**US\$2**  
**trillion**  
in economic losses



# Hazards

# المخاطر



**Hazard** is A potentially damaging physical event, phenomenon or human activity that may cause the loss of life or injury, property damage, social and economic disruption. (HFA ,2005-2015)

**حدث** أو ظاهرة طبيعية أو نشاط بشري يمكن أن يكون مضرًا ويؤدي إلى خسائر في الأرواح والإصابة بجروح وإلحاق

(HFA ,2005-2015)



# Hazards

# المخاطر



## إدارة المخاطر

لمواجهتها

تتبعها

## الحد من المخاطر

سلسلة من العمليات تهدف للتعرف علي المخاطر وتحليلها و التخطيط الشامل والمتكامل لتخفيف الآثار السلبية المصاحبة لها.

**Disaster risk reduction** (DRR) is a systematic approach to identifying, assessing and reducing the risks of disaster.

Hazards

المخاطر



Hazard Types

أنواع المخاطر

Man-Made

غير طبيعية

الحرائق  
حوادث الطرق  
حوادث القرصنة  
الحوادث النووية  
أخ...

Climate Changes

التغيرات المناخية

Natural

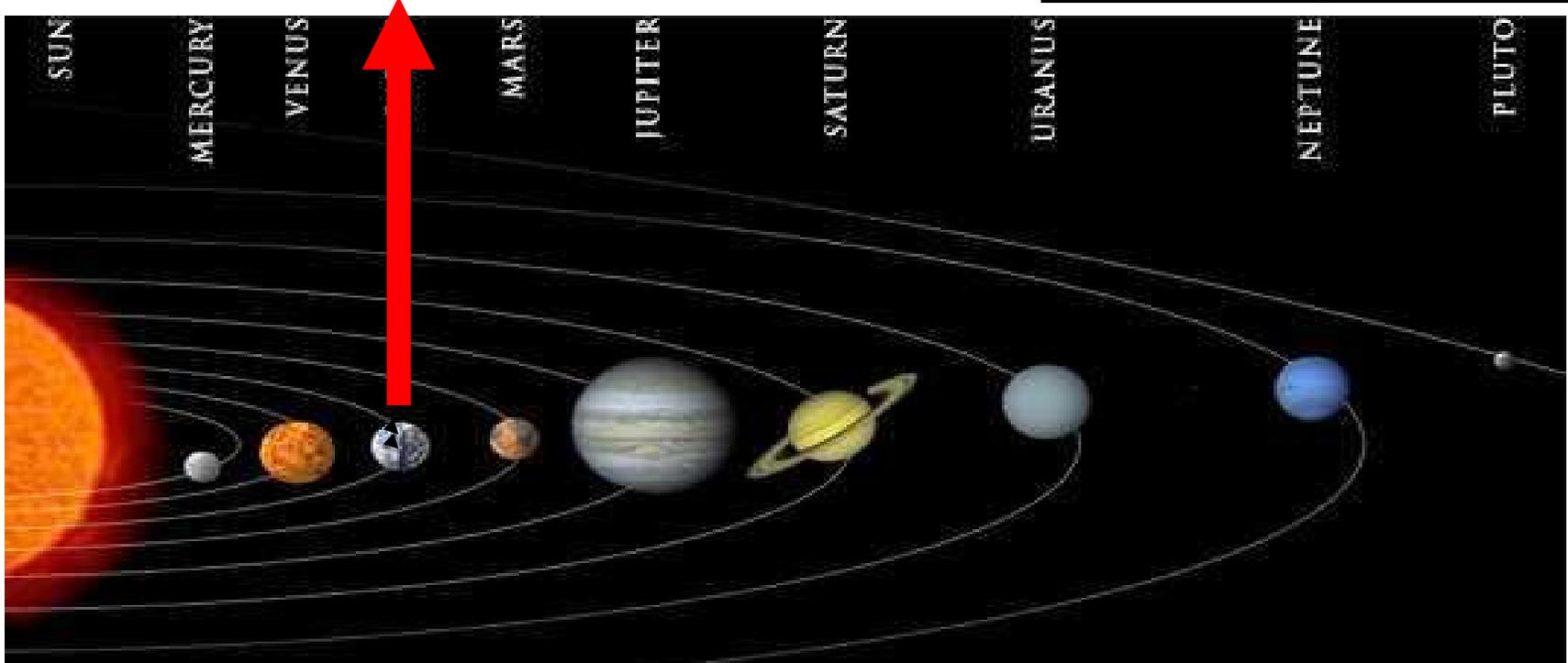
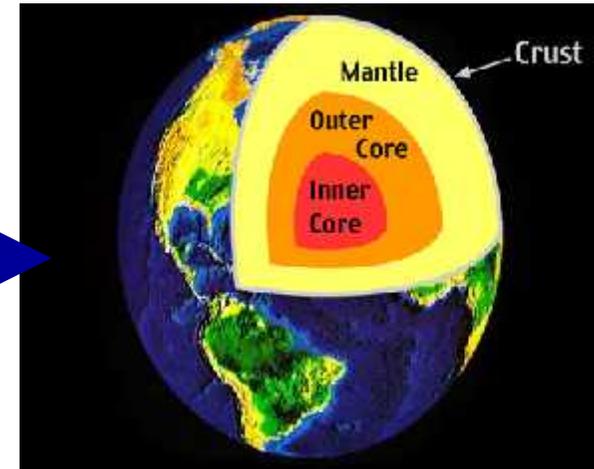
طبيعية

الزلازل & التسونامي  
السيول  
الإنهيارات أرضية  
العواصف  
أخ...



# Disasters Risk Reduction & Sustainable Development

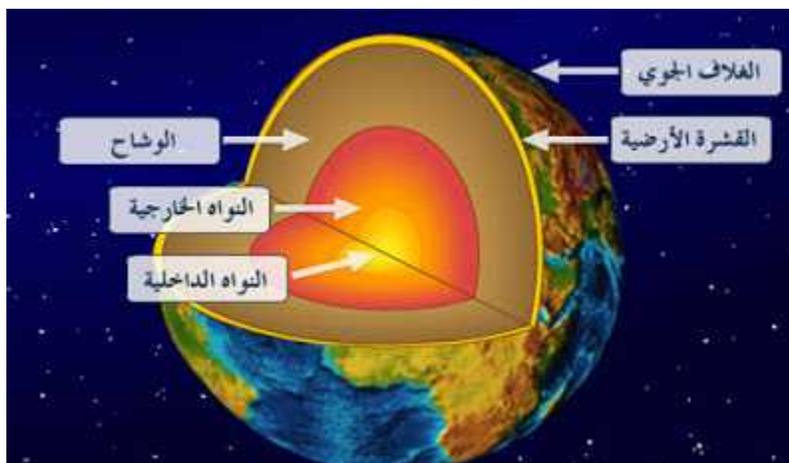
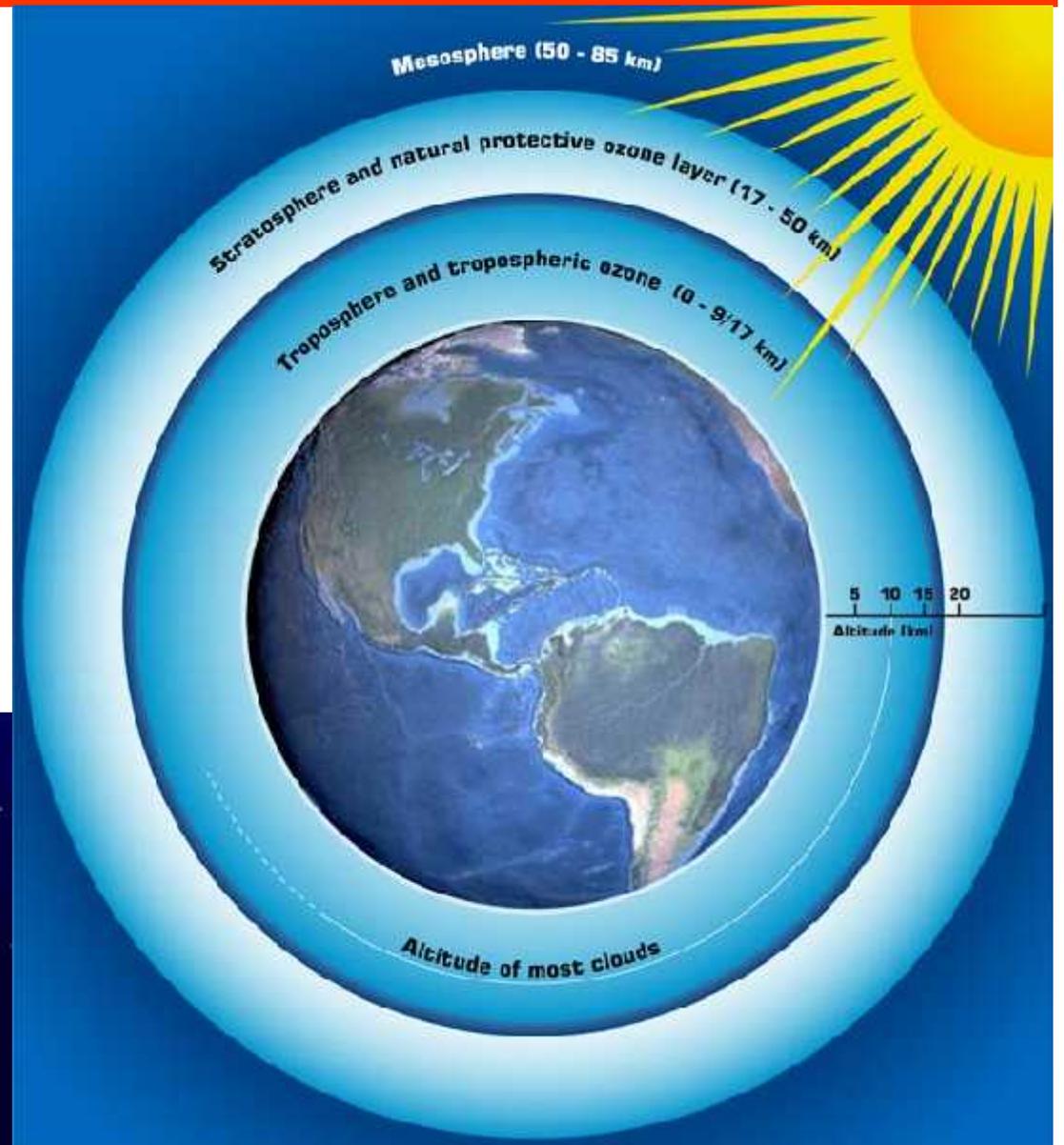
والتنمية المستدامة





# Disasters Risk Reduction & Sustainable Development

والتنمية المستدامة





## Disasters Risk Reduction & Sustainable Development

والتنمية المستدامة



### History of Humans on Planet Earth

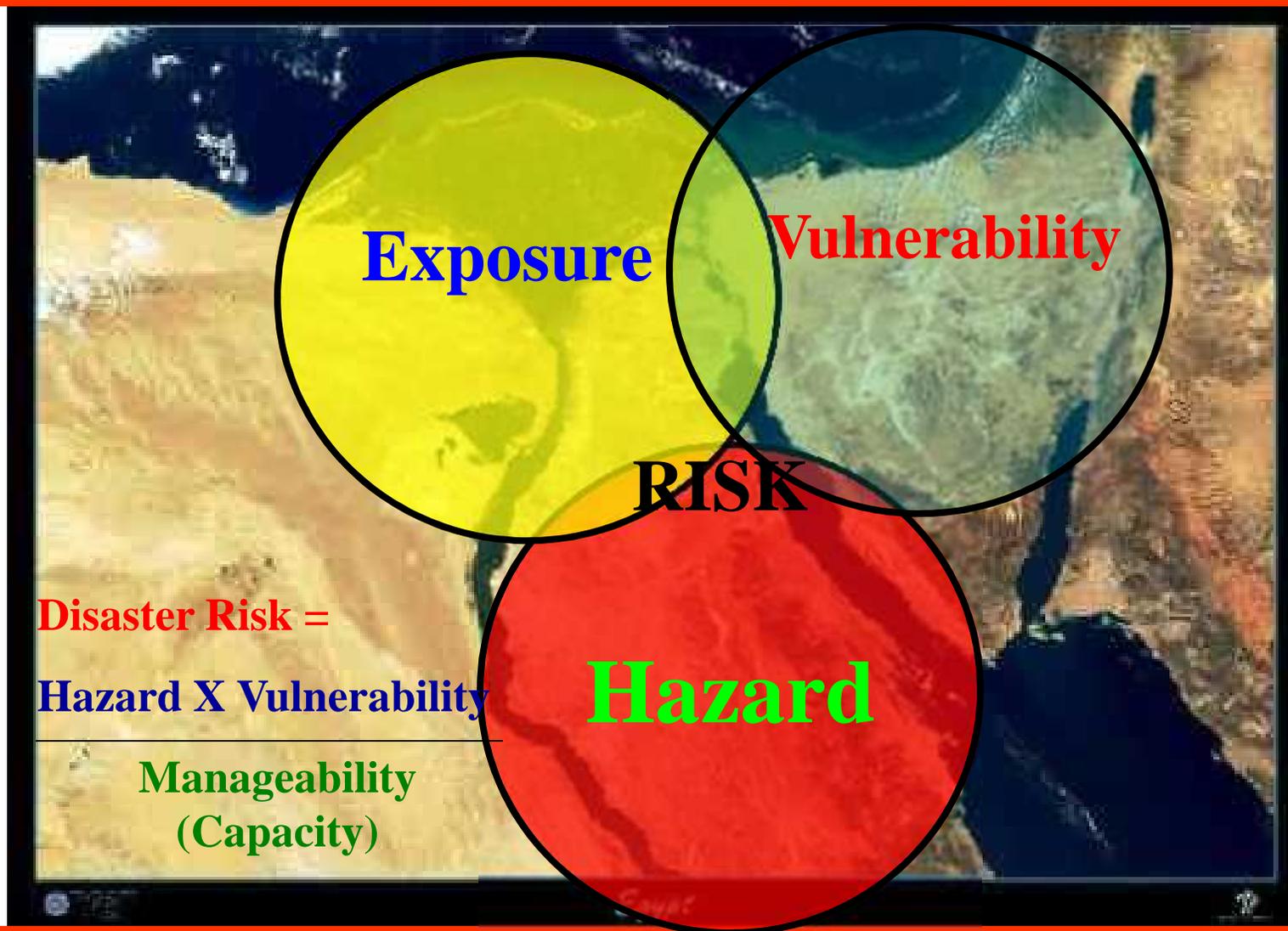
It began approximately 1 to 2.5 million years ago,



Age: 4.5 billion years



# What is the Risk?





# What is the Risk?



**Risk = Hazard x Vulnerability**

*While, loss depends on the value of the exposure at risk, given by*

**Loss = Hazard x Vulnerability x Exposure**



# Disaster Stages



**Pre-Disaster**

- Preparedness**
- Early Warning**
- Better Land Usage**
- Public Awareness**
- Evacuation Plans**
- Emergency Broadcasting**
- Building Materials & Codes**



**Pre-Disaster**

**Co-Disaster**  
**Post-Disaster**

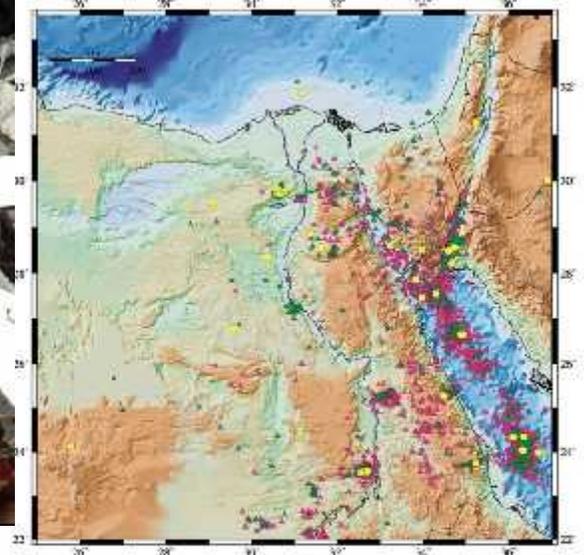
**Response & Relief Activities**

**Co-Disaster**  
**Post-Disaster**

**Recovery & Rehabilitation & Humanitarian Efforts**



# عناصر التحكم Controlling Elements



Local seismic activity recorded by ENSN through the period from Jun, 2007 to Dec, 2007 (no. of events=3944).

Safer Future

HUMAN  
البشر

Building Stone  
الحجر

HAZARD  
الخطر





**What we should do?**





# What we should do?



**Scientists**

**Decision-Makers**



**COMMON LANGUAGE BETWEEN SCIENTIFIC COMMUNITY  
AND DECISION-MAKERS.**



# Roadmap



**[1] Monitoring and Identification**

**[2] Analysis and Evaluation**

**[3] Site Selection**

**[4] Projects characteristics**

**[5] update and regular Maintains**

# Key-Messages



**(1) DRR and SD are two faces of the same coin**



**(2) DRR makes sustainable development.**

**(3) SDG's Should commit countries to measure risk and account for losses associated with disasters and other extreme events**



**Thank You**

Tuesday, October 31,  
2017