



Country Profile



REPUBLIC OF YEMEN



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1. General Information about Yemen



| | |
|---------------------------------------|---|
| Location: | Middle East, bordering the Arabian Sea, Gulf of Aden, and Red Sea, between Oman and Saudi Arabia |
| Geographic coordinates: | 15 00 N, 48 00 E |
| Area: | total: 527,970 sq km land: 527,970 sq km water: 0 sq km Note: includes Perim, Socotra, the former Yemen Arab Republic (YAR or North Yemen), and the former People's Democratic Republic of Yemen (PDRY or South Yemen) |
| Land boundaries: | total: 1,746 km border countries: Oman 288 km, Saudi Arabia 1,458 km |
| Coastline: | 2400km |
| Maritime claims: | territorial sea: 12 nm contiguous zone: 24 nm exclusive economic zone: 200 nm continental shelf: 200 nm or to the edge of the continental margin |
| Climate: | mostly desert; hot and humid along west coast; temperate in western mountains affected by seasonal monsoon; extraordinarily hot, dry, harsh desert in east |
| Terrain: | narrow coastal plain backed by flat-topped hills and rugged mountains; dissected upland desert plains in center slope into the desert interior of the Arabian Peninsula |
| Elevation extremes: | lowest point: Arabian Sea 0 m highest point: Jabal an Nabi Shu'ayb 3,760 m |
| Natural resources: | petroleum, fish, rock salt, marble, small deposits of coal, gold, lead, nickel, and copper, fertile soil in west |
| Land use: | arable land: 2.78%/ permanent crops: 0.24%/ other: 96.98% (2001) |
| Environment current issues: | - very limited natural fresh water resources; inadequate supplies of potable water; overgrazing; soil erosion; desertification |
| Environment international agreements: | - party to: Biodiversity, Climate Change, Climate Change-Kyoto Protocol, Desertification, Endangered Species, Environmental Modification, Hazardous Wastes, Law of the Sea, Ozone Layer Protection signed, but not ratified: none of the selected agreements |
| Geography - note: | strategic location on Babel Mandeb, the strait linking the Red Sea and the Gulf of Aden, one of world's most active shipping lanes |
| Population: | 20,727,063 (July 2005 est.) |
| Population growth rate: | 3.45% (2005 est.) |
| Religions: | Muslim |
| Languages: | Arabic |
| Country name: | conventional long form: Republic of Yemen conventional short form: Yemen |

local long form: Al Jumhuriyah al Yamaniyah
local short form: Al Yamani
former: Yemen Arab Republic [Yemen (Sana'a) or North Yemen] and
People's Democratic Republic of Yemen [Yemen (Aden) or South
Yemen]

Government type:
Capital:

republic
Sana'a



Sana'a



Yemen coffee tree

Administrative
divisions:
Independence:

19 governorates (muhafazat, singular - muhafazah)

22 May 1990 (Republic of Yemen established with the merger of the Yemen Arab Republic [Yemen (Sana'a) or North Yemen] and the Marxist-dominated People's Democratic Republic of Yemen [Yemen (Aden) or South Yemen]); note - previously North Yemen had become independent in November of 1918 (from the Ottoman Empire) and South Yemen had become independent on 30 November 1967 (from the UK)



History:

The history of Yemen dates back to the Minoan (1200–650 B.C.) and Sabaean (750–115 B.C.) kingdoms. Ancient Yemen (centered around the port of Aden) engaged in the lucrative myrrh and frankincense trade. It was invaded by the Romans (1st century A.D.) as well as the Ethiopians and Persians (6th century A.D.). In A.D. 628 it converted to Islam and in the 10th century came under the control of the Rassite dynasty of the Zaidi sect, which remained involved in North Yemeni politics until 1962. The Ottoman Turks nominally occupied the area from 1538 to the decline of their empire in 1918.

The northern portion of Yemen was ruled by imams until a pro-Egyptian military coup took place in 1962. The junta proclaimed the Yemen Arab Republic, and after a civil war in which Egypt's Nasser and the USSR supported the revolutionaries and King Saud of Saudi Arabia and King Hussein of Jordan supported the royalists, the royalists were finally defeated in mid-1969. The southern port of Aden, strategically located at the opening of the Red Sea, was colonized by Britain in 1839, and by 1937, with an expansion of its territory, it was known as the Aden Protectorate. In the 1960s the Nationalist Liberation Front (NLF) fought against British rule, which led to the establishment of the People's Republic of Southern Yemen on Nov. 30, 1967. In 1979, under strong Soviet influence, the country became the only Marxist state in the Arab world. The Republic of Yemen was established on May 22, 1990, when pro-Western Yemen and the Marxist Yemen Arab Republic merged after 300 years.

2. Natural Hazards in Yemen

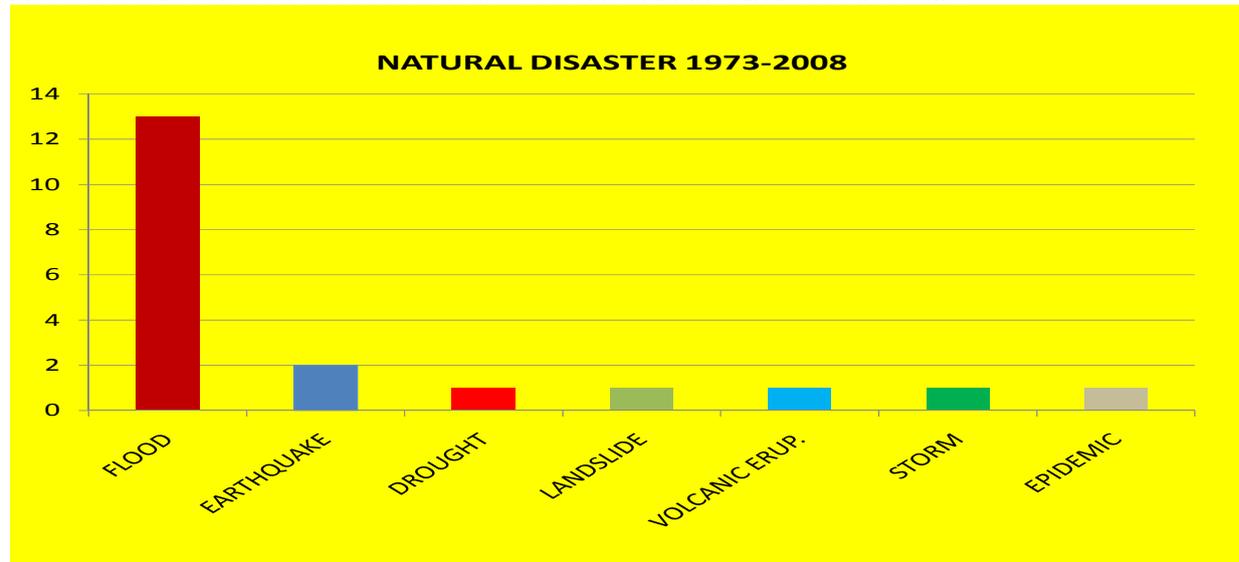
1) Disaster Profiles of Yemen

During the history, Yemen has struck by many disasters. Some of them we had information about, while the others we didn't have enough information about.

The disasters frequently occurred in Yemen are:

1) Flood, 2) Earthquake, 3) Landslide, 4) Epidemic, 5) Drought, and 6) Volcano

Also there are the other causes of disasters like famine and social conflict.



Three main factors that exacerbate Yemen's vulnerability to natural disasters

Climate change is expected to increase exposure to drought and flash floods, leading to a trend: While there is no international consensus on the impact of climate change on precipitation levels in Yemen, Global Climate Models (GCM) predict a three to four degree centigrade increase in mean temperatures by the 21st century. Climate change induced impacts may include a rise in sea levels, and increased exposure to droughts and flash floods in the country.

Depletion of water resources: The availability of water in Yemen stands at 150 cubic meters per capita, and is well below the threshold of 1000 cubic meters per capita established by the United Nations for classifying countries as water scarce countries. In fact, the availability of water in Yemen is much lower than the average figure for the Middle East and North Africa Region, which is about 1250 cubic meter per capita. This limited availability of water is further exacerbated by three factors:

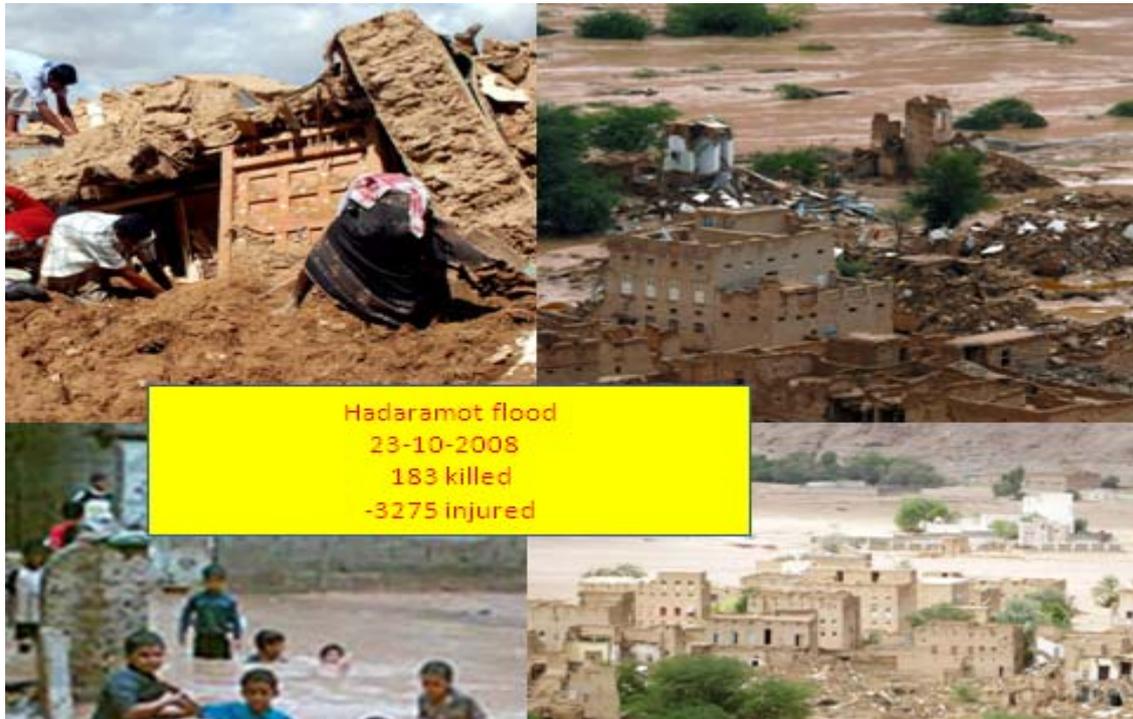
- (1) Seasonal and temporal changes in the pattern of rainfall that Yemen receives;
- (2) Both expansion of the area under cultivation as well as water intensive agricultural production;
- (3) Higher ground water extraction and reduced ground aquifer recharge as a result of increased urbanization which in turn has resulted in an expansion in built-up areas. The depletion of water resources is increasing aridity, which could lead to reduced economic prospects in the future, thereby making Yemen more vulnerable to natural disasters.

NAUTURAL DISASTER WHICH Struck YEMEN DURING1973_2008

| Type of disaster | date | Disasters casualties | Affected number |
|------------------|-----------------|----------------------|-----------------|
| Flood | August 1973 | 60 | 2862 |
| | August_1975 | 52 | 50000 |
| | MARCH_1982 | 482 | 350000 |
| | APRIL_1989 | 38 | 150000 |
| | December_1991 | – | 30000 |
| | FEBRUARY_1993 | 31 | 21500 |
| | JUNE_1996 | 338 | 238310 |
| | August_1999 | – | 19750 |
| | July_2001 | 31 | – |
| | April_2002 | 2 | 700 |
| | August_2002 | 28 | – |
| | April_2005 | 10 | 715 |
| | 23 October 2008 | 183 | 3275 |
| Epidemic | September_2000 | 32 | 298 |
| | February_2005 | – | 179 |
| Storms | Jun2001 | 13 | |
| | | | |
| Earthquake | December_1982 | 2800 | 41050 |
| | November_1991 | 70 | 4039 |
| Volcano | 2005 | 11 | 3 |
| Drought | 1961 | | 2020000 |
| Land slid | December_2005 | 65 | 11 |

2) Natural disasters in Yemen

(1) FLOOD

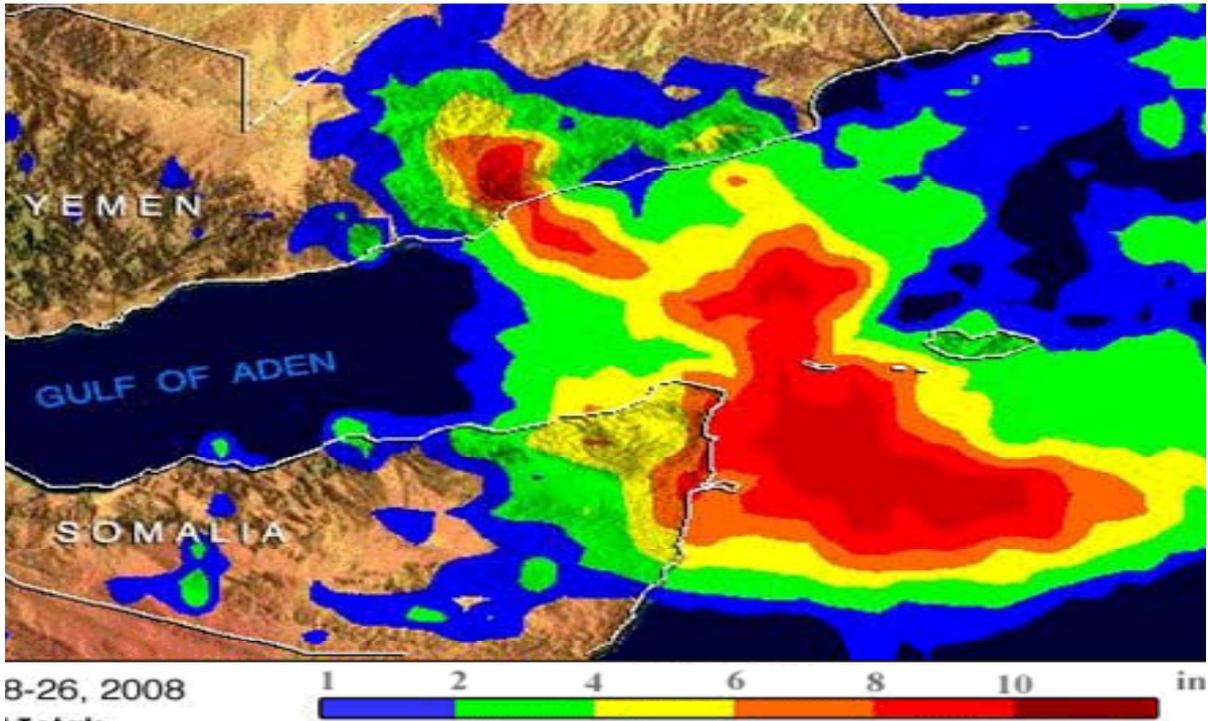


Floods are the major natural disaster in Yemen

Loss of human life has been the greatest from floods and the economic damage from the 2008 flood was very severe and. Floods occur almost every year in Yemen. Major floods reported in 1991, 1993, 1996, 1999, 2000, 2006, and 2008.

The 2008 flood affected two governorates in Yemen, which received 90 mm of rainfall in 30 hours, almost eighteen times greater than the normal rainfall of 5mm to 6mm. The rain fell over a catchment area of 2 million hectares, and the nearly 2 billion cubic meters of water caused severe flash floods in the valley, with water surges exceeding 10 meters in some areas.

The last flood was caused by a level-three tropical storm that affected the two eastern Governorates of Al-Mahara and Hadramout. 183 people were killed, over 25,000 people were displaced, and about half the population in these Governorates lost their livelihood. Consequently, the poverty rate in these two Governorates is expected to increase. The overall damage and loss assessment from this flood was estimated to be about US \$1,638 million, or about 2.8% of Yemen's GDP.



(2) Earthquake

The violent earthquake which struck Yemen on December 13th 1982 far 60 miles south of the Sana'a city caused more than 2800 death and more than and houses damage the earthquake was shallow 5kw meter depth.

1982 December Earthquake

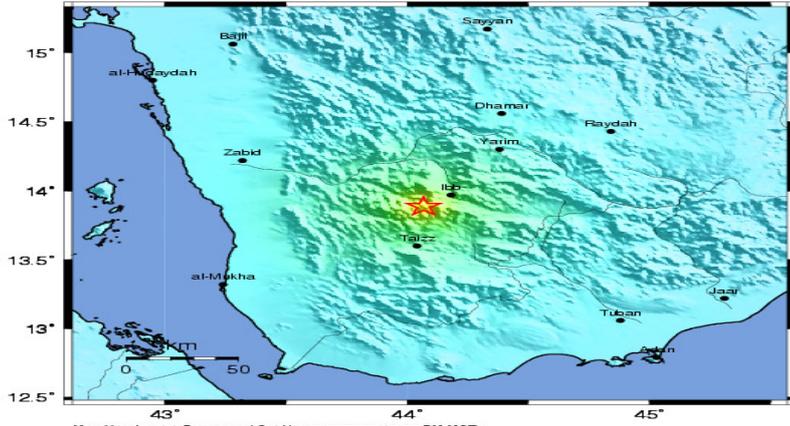
- **Location:** Yemen: Dhamar
- **Date and Time:** 12/13/1982 at Midnight, 13 minutes
- **Focal Depth:** 5 km
- **Latitude:** 14.701
- **Longitude:** 44.379
- **Magnitude:** 6
- **MMI Int:** 8
- **Deaths (Approx. Deaths):** 2800
- **Injured:** 1,500
- **Homeless:** 700,000

(Reference: USGS http://earthquake.usgs.gov/earthquakes/eqarchives/significant/sig_1982.php)

1991 November Earthquake

- **Location:** Yemen
- **Date and Time:** November 22
- **Latitude:** 13.887
- **Longitude:** 44.068
- **Magnitude:** 4.7
- **Deaths (Approx. Deaths):** 10
- **Injured:** 39
- **Destroyed Houses:** 17 houses

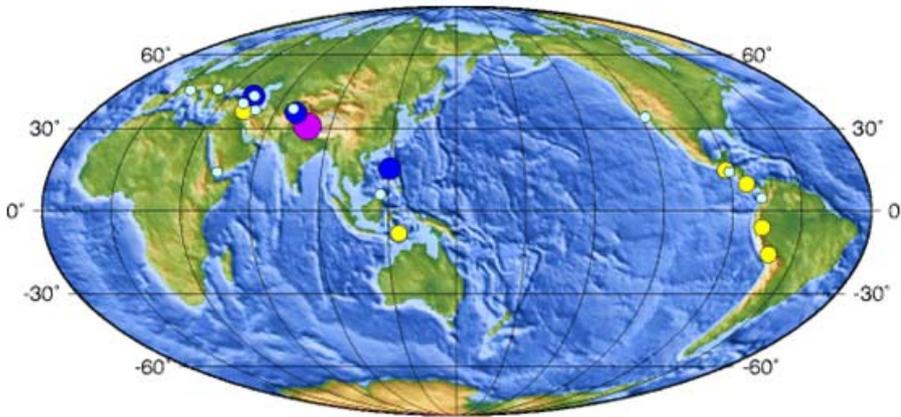
USGS ShakeMap : YEMEN
 Fri Nov 22, 1991 00:40:23 GMT M 4.7 N13.89 E44.07 Depth: 10.0km ID:199111220040



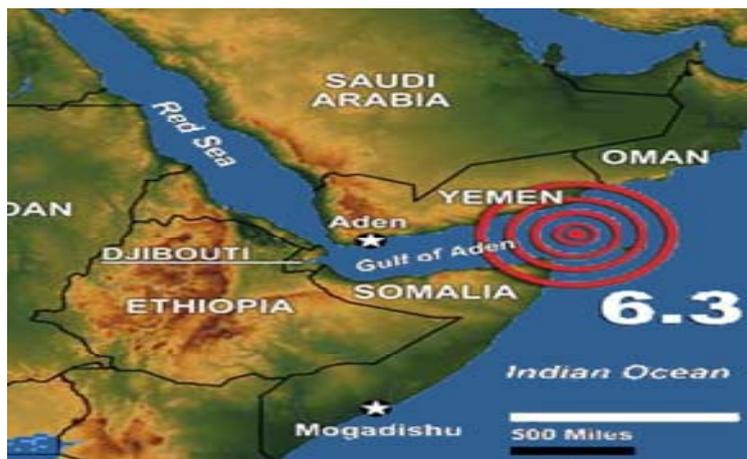
Map Version 1.1 Processed Sat Nov 8, 2008 03:16:57 PM MST

| PERCEIVED SHAKES POTENTIAL DAMAGE | Not felt | Weak | Light | Moderate | Strong | Very strong | Severe | Violent | Extreme |
|-----------------------------------|----------|---------|---------|----------|--------|-------------|--------|---------|---------|
| PEAK ACC (%g) | <.17 | .17-1.4 | 1.4-3.9 | 3.9-9.2 | 9.2-18 | 18-34 | 34-65 | 65-124 | >124 |
| PEAK VEL (g m/s) | <0.1 | 0.1-1.1 | 1.1-3.4 | 3.4-8.1 | 8.1-16 | 16-31 | 31-60 | 60-116 | >116 |
| INSTRUMENTAL INTENSITY | I | II-III | IV | V | VI | VII | VIII | IX | X+ |

Deaths from Earthquakes in 1991

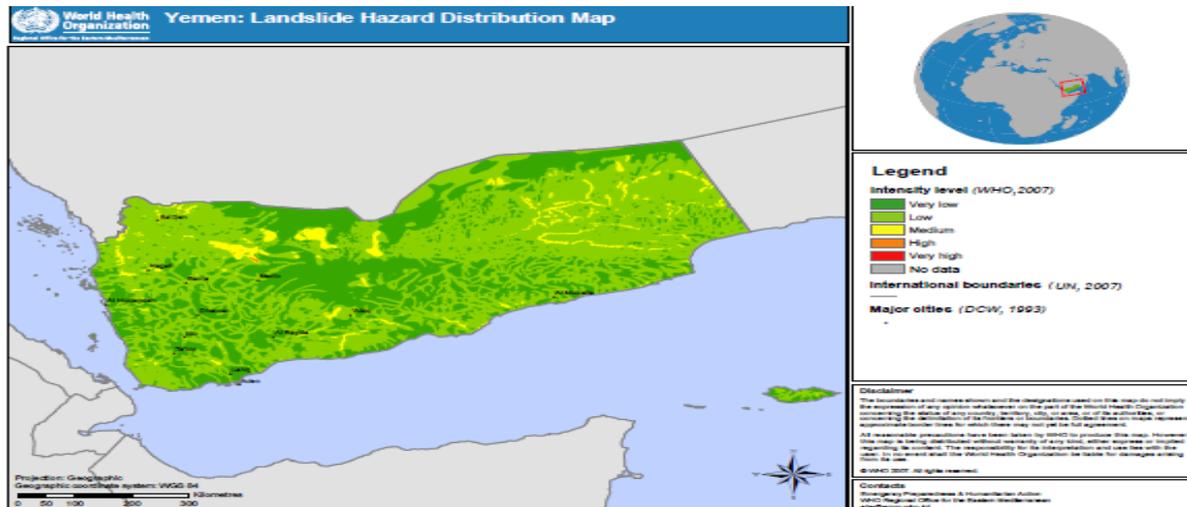


USGS National Earthquake Information Center



(3) Landslide

The following figure shows the landslide risk in Yemen.



On the night between 28 and 29 December, 2005, a devastating mountain landslide occurred in al-Dhafir village, Bani Matar District, Sana'a Governorate. The village is situated on a rocky slope about 40 kilometers west of the capital city of Sana'a with a population of some 270 people. It was about 9:00 p.m. when 27 out of the village's 31 houses were destroyed and buried under huge piles of rocks. As of Tuesday 3 January 2006, Yemeni rescue workers have recovered the bodies of 65 villagers killed in that landslide,

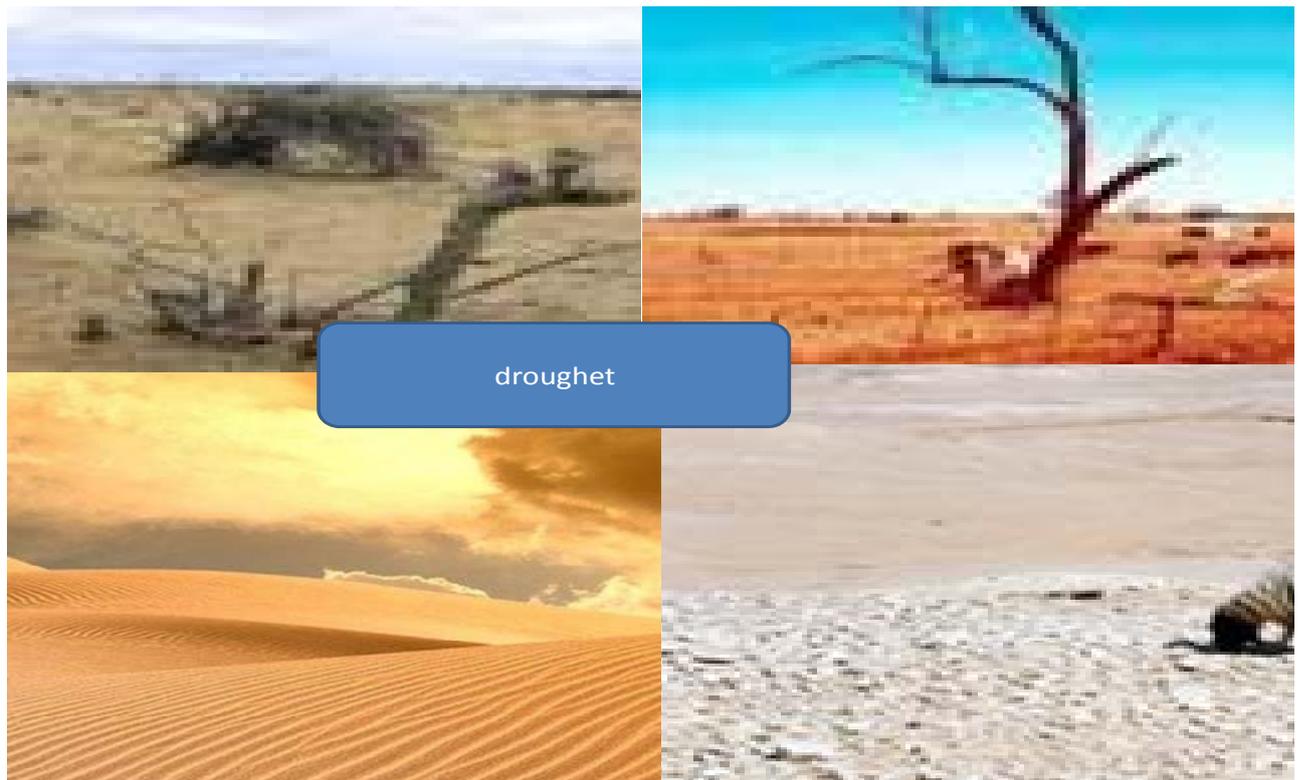


Location: far About 50km (31 miles) west of the capital Sana'a

Date and Time: -12-2005 at Midnight, 13 minutes

Deaths (Approx. Deaths65 people are dead): (More than 10ingured)

(4) Drought



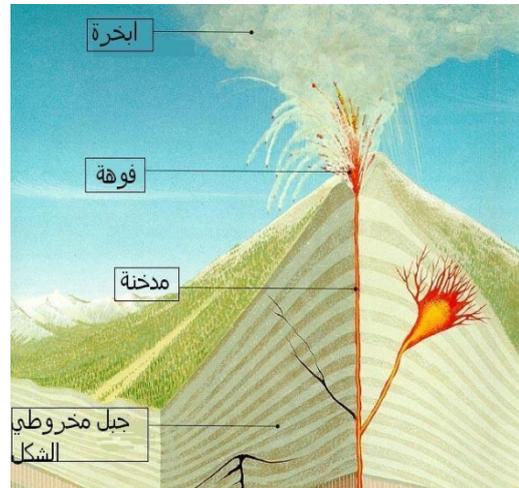
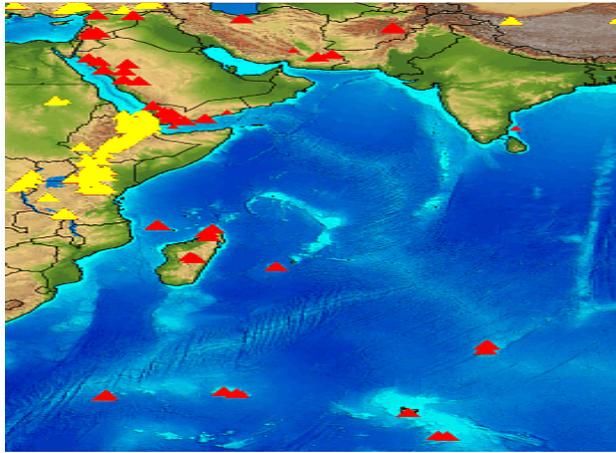
drought

Yemen is set to be the first country in the world to run out of water, providing a taste of the conflict and mass movement of populations that may spread across the world if population growth outstrips natural resources. Government and experts agree that the capital, Sana'a, has about ten years at current rates before its wells run dry but the city of two million continues to grow as people are forced to leave other areas because of water shortages

Drought has caused the displacement of thousands of people s from mountainous villages in 2009, the first time in Yemen; the Investment Authority in Yemen has called on the private sector to compete for projects to desalinate seawater in order to face the current issue of water scarcity in Yemen as well as the future fear of drought

(5) Volcano

Yemen is located in one of the most active plate boundaries of the World - the triple junction made up by the Gulf of Aden, the Red Sea and the Eastern African Rift System.



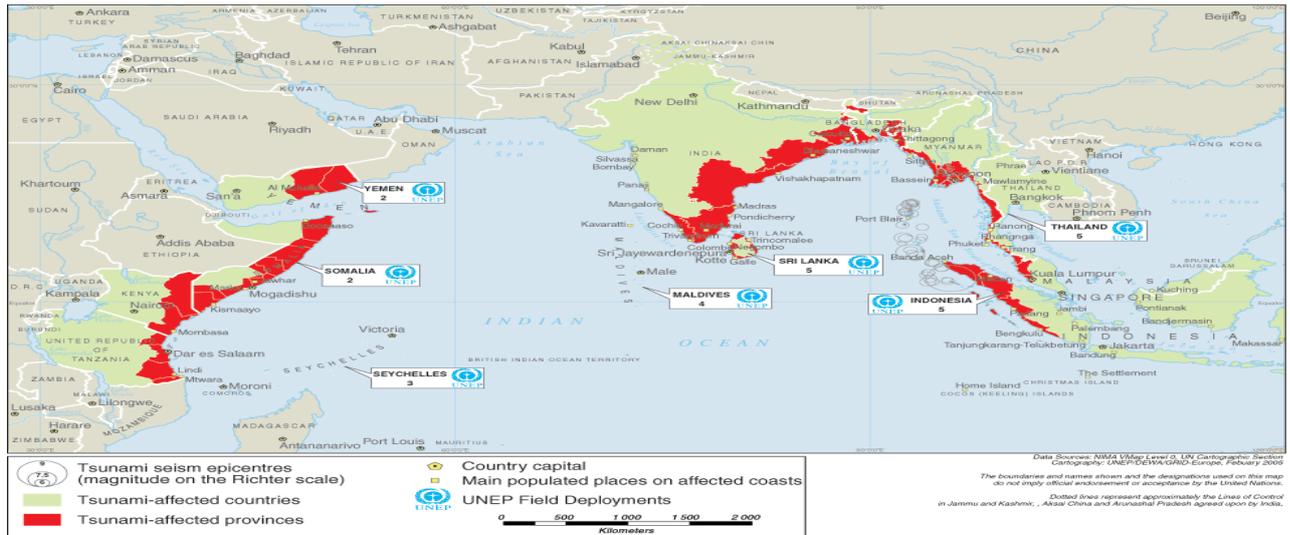
Jabal al-Tair Island (Jebel Teir, Jabal al-Tayr, Tair Island, Al-Tair Island, Jazirat at-Tair; Arabic: جزيرة جبل الطير *Jazīrat Jabal at-Ṭayr*, literally, "Bird Mountain Island") is a roughly oval volcanic island northwest of the constricted Bab al-Mandab passage at the mouth of the Red Sea, about half way between Yemen and Eritrea. Since 1996, Yemen has maintained two watchtowers and a small military base on the island.

After 124 years of dormancy, the volcano that created the island erupted on 30 September 2007



| Name | Elevation | | Location | Last eruption |
|-------------------|-----------|--------|--|---------------|
| | meters | feet | Coordinates | |
| Bir Borhut | - | - | 15°33'N 50°38'E / 15.55°N 50.63°E | 905 |
| Hanish | 422 | 1304 | 13°43'N 42°44'E / 13.72°N 42.73°E | Holocene |
| Harra es-Sawad | 1737 | 5699 | 13°35'N 46°07'E / 13.58°N 46.12°E | 1253 |
| Harra of Arhab | 3100 | 10,170 | 15°38'N 44°05'E / 15.63°N 44.08°E | 500 |
| Harra of Bal Haf | 233 | 764 | 14°03'N 48°20'E / 14.05°N 48.33°E | Holocene |
| Harras of Dhamar | 3500 | 11,483 | 14°34'N 44°40'E / 14.57°N 44.67°E | 1937 |
| Jabal el-Marha | 2650 | 8694 | 15°17'N 44°13'E / 15.28°N 44.22°E | Holocene |
| Jabal Hamman Demt | 1500 | 4921 | 14°03'N 44°45'E / 14.05°N 44.75°E | - |
| Jabal Haylan | 1550 | 5085 | 15°26'N 44°47'E / 15.43°N 44.78°E | 1200 BC |
| Jebel Tair | 244 | 801 | 15°42'00"N 41°44'31"E / 15.70°N 41.742°E | 1332 |
| Jebel at Tair | 244 | 801 | 15°33'N 41°49'E / 15.55°N 41.82°E | 2007 |
| Jebel Zubair | 191 | 627 | 15°03'N 42°11'E / 15.05°N 42.18°E | 1824 |
| Zukur | 624 | 2047 | 14°01'N 42°45'E / 14.02°N 42.75°E | Holocene |

LIST FOR ERUPTION VOLCANO IN YEMEN



Losses by Tsunami in Al Mahrah Socotra

- 1-7-injurd
- 2-Fishing boats 33 (totally destroyed) 16 boats
- Other equipment
- 3-Outboard engines 33 (totally destroyed) 36 engines
- 4-Fisheries Cooperative storage area
- 5-Vehicles 5 cars, motorcycles
- 6-Other buildings Masjid, gas station

3. Disaster Management System in Yemen

1) Legal frame

After the many flood disasters in the last decades, the latest having taken place in 1996, the issue of strengthening and establishing disaster management policy and entity received greater attention from the Government. In this direction, the Government took many significant steps such as follows:

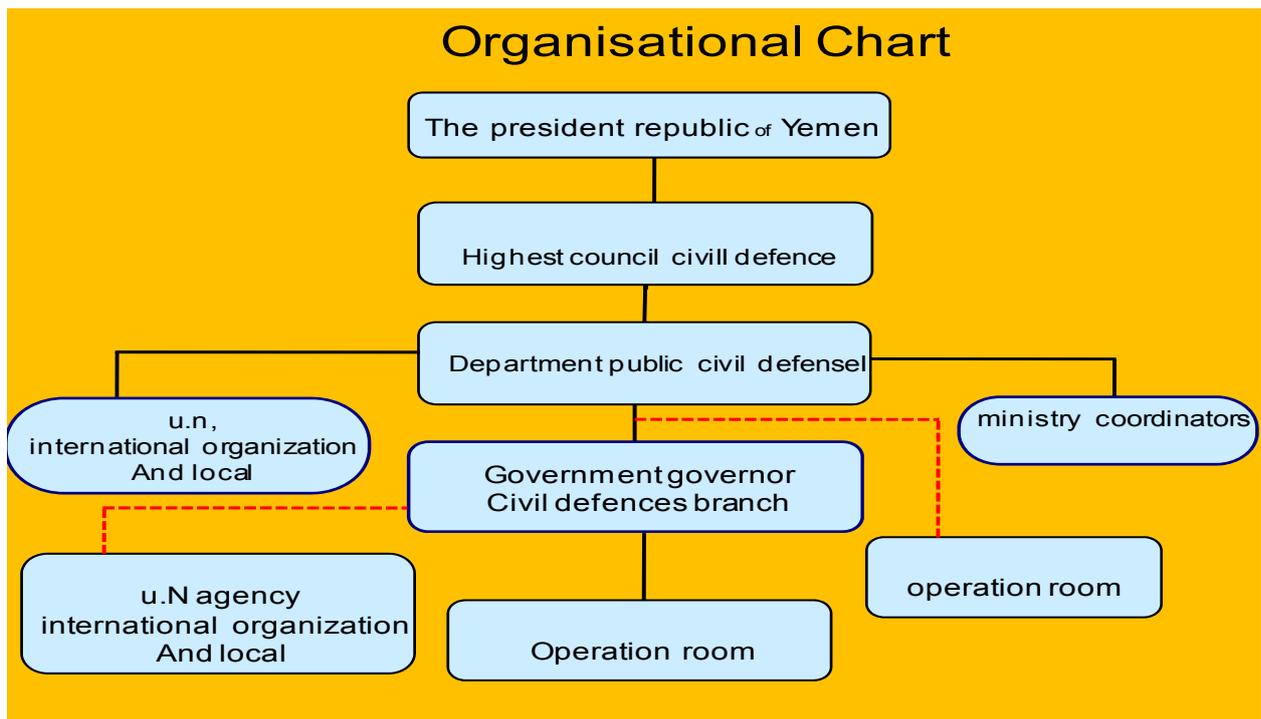
- Decree No. (24) on Civil Defense law (CD) on April 1997, supportive of effective disaster management. Articles under this decree outline Civil Defense procedures and the Composition of the Supreme Council of Civil Defense (SCCD), the temporary powers of the Civil Defense are also outlined in the Decree.
- Decree No (201) in 1997 issued the Civil Defense By law In 1998 the Republican Decree No. (7) 1998 was issued regarding the function of Civil Defense Councils in the governorates and districts
- In 1997 the Council of Ministers issued decree No. (52) to form a committee to prepare to approach for Disaster Management.
- The Minister of Planning and Development issued Decree No (123) on 7 October 1997 **to form a** committee to prepare a proposal to establish an institute for managing natural disasters.

The Minister of Water and Environment No (28) issued a decree in the year 2003 to establish an Environmental Emergency Unit to initiate and coordinate the implementation of institutional capacities to face all aspects of Environmental Emergencies and Disasters

In addition to the above mentioned decrees, there are a few other laws such as the Environmental Protection law, Water law, Civil Defense law but to implement these laws the Government needs to pay attention in establishing a national policy addressed only to disaster risk reduction.

- The water law no. **(33)** For Year **2002** allocate Chapters 6 and 7 for water pollution prevention and floods risk reduction.

2) Organizations



The Civil Defense Council (CDC) consists of the following governmental agencies:

- Ministry of Interiors, Supreme Council for Civil Defense (SCCD);
- Ministry of Public Health and Population (MHP)
- Ministry of Agriculture and Irrigation;
- Ministry of Water and Environment (MWE)
- Ministry of Information (MI)
- Ministry of Telecommunication and Information Technology (MTI).
- Ministry of Planning and International Cooperation (MPIC)
- Ministry of Local Administration (MLA).
- Ministry of Education (ME).
- Ministry of Justice (MJ).
- Ministry of Defenses (MD)
- General Authority for Survey and Land Registration (GASLR);
- Civil Defense Councils (CDC) /Committees at the Governorate level

The functions of the Civil Defense Council

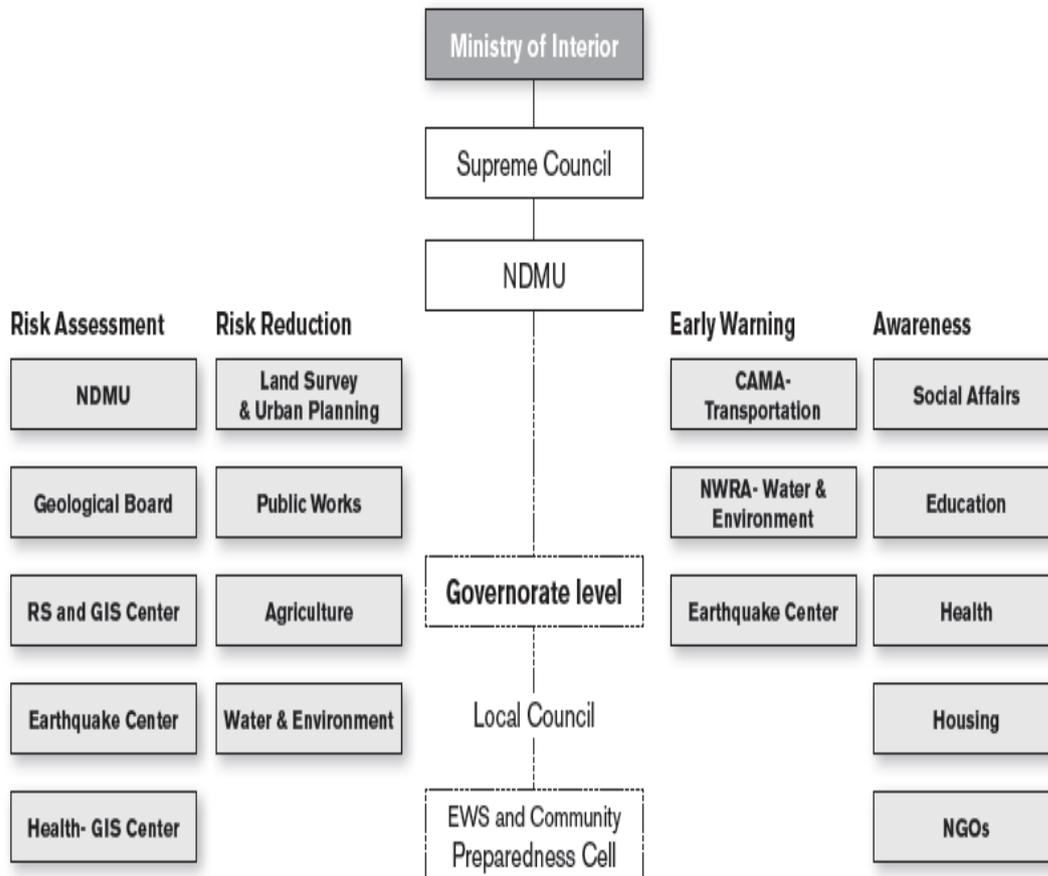
Have been obtained from the Civil Defense decree as follows:

- Use all financial and material available resources in the country during wars and Natural Disasters.
- Manage the Disasters response implementations procedures during the Emergency disasters.
- Monitor and control food, water, and power supply sources during war status and natural Disasters.
- Formulate and implement technical and professional groups to deal with disasters at the time of happening
- Indicate all procedures of civil defense
- Review responsibilities and tasks for every member of Civil Defense Council following the current political changes and needs In case of emergencies, the civil defense

council is to indicate the procedure, which should be followed by the commercial, educational, industrial, and real estate institutions.

- Assign the annual budgets to implement the plans civil defense departments in the capital and the branches

Figure 7. Organizational Map of Government agencies for disaster risk management in Yemen



NDMU: National Disaster Management Unit
CAMA: Civil Aviation & Meteorological Agency
NWRA: National Water Resources Authority

3) Annual budget for disaster risk reduction

This budget aims to respond to the national emergencies disasters only. The Prime minister gave order tall governmental agencies to allocate 1% of their annual budget for emergency situations. This budget will be under the order of the CDC.

In case of significantly important disasters, a high committee is to be formed from the President office and the Civil Defense Council in close cooperation with linked ministries to generate and manage the financing budgets.

4. Progress of the implementation of theHfA

Strategic goals 1

Area 1

The more effective integration of disaster risk considerations into sustainable development policies, planning and programming at all levels, with a special emphasis on disaster prevention, mitigation, preparedness and vulnerability reduction.

Strategic Goal Statement:

Despite the weakness of the DRR concept, Yemen has started to apply defiant policies that aimed to integrate the risk reduction practices into the development activities. Environmental Impact Assessment procedures of the development projects, Safety Standards, place safety and Labor Health regulations and other related principles are being institutionalized and applied as a component of the National development strategies.

Yemeni local authorities are increasingly embarking on formulating through public-private stakeholder participation of City Development Strategies (CDS) for economic growth, poverty alleviation and service delivery.

Area 2

The development and strengthening of institutions, mechanisms and capacities at all levels, in particular at the community level, that can systematically contribute to building resilience to hazards.

Strategic Goal Statement:

In 2008, Yemen has started developing a sound Disaster Risk Reduction and Recovery system using the funds made available by GFDRR/WB. The key components of this project are ; to 1. Strengthening the National System for Disaster Risk Reduction and Recovery.

Main activities under this component will include: National Disaster Risk Reduction & Recovery Strategy, including building political support across relevant central-government agencies, Institutional Strengthening and Legal framework, Management information System (including basic necessary equipment and staff training) and

Awareness Building and Education.

2. Developing Viable Models to Mainstream Disaster Risk Reduction into Local Development. Pilot activities to demonstrate integration of Disaster Risk Reduction into Local Development and to strengthen/create both horizontal and vertical links between central government agencies and local governments on issues of DRR. Based on a region-wide GFDRR Call for proposals launched on September 5, 2007, three pilot activities have been selected to be part of this component. They are as follows:

(a) Hazard Risk Management Institutional Mainstreaming Strategy and Priority Intervention Areas in Sana'a;

(2) Integrating Hazard Preparedness in the Yemen Social Fund; and

(3) Integration of hazard Management into the Public Works Program.

The MWE through the cooperation with GFDRR and IFRC has signed a Moue with the Yemen Red Crescent Society for implementing a project aimed develop and pilot a community-based disaster risk reduction program working with communities whose vulnerabilities are already identified through vulnerability-capacity assessments (VCAs) and the governmental references.

Area 3

The systematic incorporation of risk reduction approaches into the design and implementation of

Emergency preparedness, response and recovery programmers in the reconstruction of affected communities.

Strategic Goal Statement:

2006, The Ministry of Water and Environment (MWE) with the National Team (Platform) of Environmental Emergencies and Disaster Risk reduction (NTEDR) has developed a National Environmental Contingency

Plan and Rapid Environmental Assessment in Disaster Guidelines.

The Ministry of Interior through Support from UNDP developed a draft of the national Disaster

Management Plan. 2008, National Maritime Oil Spill Contingency plan has been declared by the Cabinet. In 2003; The Ministry of Interior with support from UNDP, Yemen office, has established a Disaster Management Unit (DMA) to coordinate the disaster response agenda. A draft of National Disaster Management Plan (NDMP) has been developed in 2005.

Priority for action 1

Ensure that disaster risk reduction is a national and a local priority with a strong institutional basis for implementation.

Core indicator 1

National policy and legal framework for disaster risk reduction exists with decentralized responsibilities and capacities at all levels.

Level of Progress achieved:

2: Some progress, but without systematic policy and/ or institutional commitment

Description:

In the last decades; the Government of Yemen as one of LCD countries, was focusing only in the infrastructure and other development activities. The MWE established the General Directorate of Environmental Emergencies (DGEE) as the 1st governmental institution specified to act on risk reduction aspects such as natural and man-made risks identification, mapping early warning system and so on (please see the legal documents on www.mweye.org).

2004, MWE started to introduce the concepts of risk reduction through multi-stakeholders approach establish the NTEDR as the 1st national platform act on DRR aspects.

Now the development of DRR national strategy and legal framework has been recognized by the government as one of the national priority.

The Government with support from GFDRR has started the primary steps of some key activities to develop a national strategy and enhance the legal framework of DRR in Yemen at the National level. In the same direction other MoU has been signed between DGEE /MWE and Yemeni Red Crescent Society (YRCS) to launch a DRR capacity building program at the community level that will be supported by GFDRR mechanism.

Context & Constraints:

The limited resources, the lacking of public and official awareness, lacking of expertise & knowledge, lacking of the risk information, weakness of the coordination mechanism and the limited capacity of DEE are the main impediment face the government. Additionally the mentioned obstacles, some international organizations create such disturbing problems between the local agencies through encouraging and feeding the clashes between local governmental agencies. Most of the clashes come either because of conceptual misunderstanding, mixing between the wide concepts of DRR and disaster response and/or the absence of the clear institutional framework. To enhance the existing efforts of the MWE, it is strongly recommended to;

1. Enhance the existing programs on DRR by providing more resources
2. Strengthen the information and knowledge sharing,
3. Give a clear identification and differentiations mandates between the concept of Disaster Reduction and Disaster Response,
4. And to develop clear coordination mechanisms, guidelines and rules in terms of RR between the UN organizations neither the international or their local branches where they sometimes playing oboist rules to DRR efforts by duplicating the same programs and creating a conflicts between the local governmental agencies.

Core indicator 2

Dedicated and adequate resources are available to implement disaster risk reduction plans and activities at all administrative levels

Level of Progress achieved:

3: Institutional commitment attained, but achievements are neither comprehensive nor substantial

Description:

Through support from the GFDRR up 1 million US\$ project allocated to enhance mainstreaming

Disaster and climate change risk reduction at the national level (National platform, national strategy and legal framework , that being implementing by GDEE/ MWE under GFDRR/WB supervision . Also up to

1.5 million US\$ now in the pipe (may be allocated next year) to mainstreaming community based management for disaster risk reduction which will be implemented by GDEE/MWE and Yemeni Red crescent Society with coordination and support from GFDRR/ WB and IFRC.

So, the Government of Yemen has recognized the this support and started the several step that present the government commitment such establishment of Disaster and Climate Change Risk Reduction Unit(DCRU) within MWE and planning to allocate local fund up to 500000 US\$ for DCRU in the ministry of finance as local contribution to cover running cost of DCRU and other DRR activities for the next 3years. Hopefully after 3 years, National Strategy and legal framework will be issued and declared.

Context & Constraints:

Several challenges and barriers emerges since the establishment of the general directorate of

Environmental emergencies within the MWE in 2003. This was th1st governmental body mandated formational and manmade risks reduction and prevention. This GD started to introduce the DRR concept and it is related aspects, and establish the National Platform.

The main challenges GDEE faces can be summarized as the following : 1. Lacking to the DRR knowledge and/with misunderstanding of the new concept. 2. Absent of the clear legislations in disaster response and disaster reduction. 3. Lacking for expertise 4.

Unconscious interventions that may be done by some international organization and/ or there offices in the country. These interventions sometimes create a coordination conflicts between the national agencies and affect on the coordination progress. 5. Lacking to the financial resources. this factor is the major key challenges. Because 6. The DRR concept is new concept in general and there is

a huge gap in awareness at the official and the public levels.

Core indicator 3

Community Participation and decentralization is ensured through the delegation of authority and

Resources to local levels

Level of Progress achieved:

2: Some progress, but without systematic policy and/ or institutional commitment

Description:

As mentioned previously , MWE with YRCS are planning to start some action in this regards with support and coordination from GFDRR and IFRC. This initiative aimed to build the capacity of the local administration and enhance the mainstreaming of D CCR community based management enhance the knowledge and DRR awareness.

Context & Constraints:

DRR awareness is almost missing among the public , policy makers even higher level all over the country lacking of the financial resources, appropriate educational materials and capacity are the main constrains face the existing efforts to develop Disaster and Climate

Change Risk Reduction vision at the local level. The local administrations are willing to work closely with the central government to address the DR agenda in their authorities but there is no available resources to handle this issues.

Core indicator 4

A national multi sectoral platform for disaster risk reduction is functioning.

Level of Progress achieved:

3: Institutional commitment attained, but achievements are neither comprehensive nor substantial

Description:

There are two forms of National platform deal with disaster aspects as follows:

1. In 1998, Supreme Civil Defines Council was declared by presidential decree as multi-stakeholders committee address the disaster response coordination and commitments. Despite its weakness it can improved in terms of institutional arrangements and capacity building.
2. In 2005, Notional Team for Environmental Emergencies and Disaster Risk Reduction (NTEDR) was established under supervision of the Minister of Water & Environment with guidance from UNISDR and Joint UNEP/OCHA Environmental Unit.

Context & Constraints:

The main constraints can be summarized as the following:

1. Lacking for the financial resources for the organizational purposes.
2. Absent of such the legal framework in Disaster Reduction that identify the tasks of the deferent agencies.
3. Lacking of the DCCRR awareness among the officials rather than the public.
4. The mixing in the concept of disaster reduction and response .
5. Other cultural aspects.

Priority for action 2

Identify, assess and monitor disaster risks and enhance early warning

Core indicator 1

National and local risk assessments based on hazard data and vulnerability information are available and include risk assessments for key sectors.

Level of Progress achieved:

1: Minor progress with few signs of forward action in plans or policy

Description:

The term of Early Warning System is not yet included in the majority of Disaster management legal framework system yet but several authorities are practicing the some tasks of some Early warning. These National bodies can be utilized ,if the suitable resources secured, within an appropriate coordination mechanism to act as Disaster and Climate Change National Early Warning system as follows:

1. For the geological Hazards; the National Center for Seismic and Volcanic Monitoring, under the Supervision of Ministry of Oil and Minerals.
2. For the Desert Locust attacks, the National Center for Desert Locust Fighting with the Ministry of Agriculture and Irrigation.
3. The National Center for Remote Sensing under the Ministry of Telecommunication and Informational Technology.
4. For the Climate and Meteorological Hazards, Environment Protection Authority under MWE, the National Meteorological Center under the Ministry of Transport, the National Water Resources Authority under MWE ,
5. The National Information Center under the Presidential Office...
 - The General Directorate of Environmental Emergencies within MWE is mandate to address the issues of EWS for the Environmental (Natural and Man-made) hazards including establishing the national Risk Maps

- Presidential Decree No, 218, year 2005 about the by-law of MWE assigned the Environmental Emergencies General Directorates (EEGD) mandates to direct the Emergencies and Disaster and Climate Change Risk Reduction.

Context & Constraints:

The main constrains are:

- Lacking for the National Strategies and legal framework.
- lacking for the financial and technical resources.
- Lacking for knowledge.
- Lacking for the public and official awareness .
- Other aspects.

Core indicator 2

Systems are in place to monitor, archive and disseminate data on key hazards and vulnerabilities

Level of Progress achieved:

1: Minor progress with few signs of forward action in plans or policy

Description:

The Ministry of Water and Environment (EEGD) through the NTEDR (the DRR National Platform) is committed by its mandates to develop and establish the appropriate arrangements for the NEWS, this will be achieved through the existing cooperation program with GFDRR/WB and UNISDR.2006, A coordination Unit for Disaster and climate change risk reduction has been established, with the WE, chaired by the DG of Environmental Emergencies. Under the NTEDR 5 technical committees from the stakeholders (Geological, Climate Change and Meteorological, Marine, Technical hazards and coordination) to address the required action on HFA and submit the outputs to the NTEDR.

Context & Constraints:

The main constrains are:

- Lacking for the National Strategies and legal framework.
- lacking for the financial and technical resources.
- Lacking for knowledge.
- Lacking for the public and official awareness.
- Lacking for the required equipments, capacity and experience.
- Absent of the historical data- bases.

Core indicator 3

Early warning systems are in place for all major hazards, with outreach to communities.

Level of Progress achieved:

1: Minor progress with few signs of forward action in plans or policy

Description:

Same issues as at the national level.

Context & Constraints:

- Lacking for the National Strategies and legal framework.
- lacking for the financial and technical resources.
- Lacking for knowledge.
- Lacking for the public and official awareness.
- Lacking for the required equipments, capacity and experience.
- Absent of the historical data- bases.

Core indicator 4

National and local risk assessments take account of regional / Trans boundary risks, with a view to regional cooperation on risk reduction.

Level of Progress achieved:

3: Institutional commitment attained, but achievements are neither comprehensive nor substantial

Description:

Risk assessment and mapping has been identified as a priority for Yemen to support the development of

The national strategy and legal framework for Disaster and Climate Change Risk Reduction. The MWE (GDEE) is working through support of GFDRR/WB in developing a National Risk Map covers the majority of hazards and risk in the country.

Context & Constraints:

- lacking of the experiences and knowledge.
- lacking for the financial and technical resources...
- Lacking for the public and official awareness.
- Lacking for the required equipments, capacity and experience.
- Absent of the historical data- bases.

Priority for action 3

Use knowledge, innovation and education to build a culture of safety and resilience at all levels

Core indicator 1

Relevant information on disasters is available and accessible at all levels, to all stakeholders (through networks, development of information sharing systems etc)

Level of Progress achieved:

1: Minor progress with few signs of forward action in plans or policy

Description:

Developing the Network and Information sharing system has a limited sources within the components of

The Project (Strengthen the National system of Disaster and Climate Change Risk Reduction and Recovery.2008-2011) which will secure the some basic needs of hazards (risk) management system.

The planned information system should include development of a National website, information

management system which and virtual network connect all members of the national platform agencies .the main inputs are; the outcomes of the national risk assessment and mapping, risk reduction safety standers and guidelines, the legal documents, the national strategies, warning messages ... and all relevant information. This system will be linked to the majority of relevant national and international organizations.

Yemen has received the DRR field library from UN/ISDR in 2008. A promotion program for utilizing this

valuable library has been designed. The main elements for this program include translation of some selected publication to Arabic language; distribute the list of the publication among universities and research institutions with enabling the references by the EEGD.

Context & Constraints:

Main challenges in this part are:

- The available resources are very limited hence it will take sometime to start the activities.
- The language barrier where most of the publication and information in DRR are only available in foreign languages which main the needs to a large translation process to Arabic.
- The lacking of experience and trained staff.
- The limited capacity of the governmental agencies.

Core indicator 2

School curricula, education material and relevant trainings include disaster risk reduction and recovery concepts and practices.

Level of Progress achieved:

1: Minor progress with few signs of forward action in plans or policy

Description:

- An awareness Campaign has been designed by EEGD in Disaster and Climate Change risk

Reduction targeting the official and public with special consideration for the schools and universities.

- Several campaigns in disaster response have achieved by the Civil Defense Authority considering their preventions safety, search and rescue, disaster response procedures targeted several schools in Sana'a City and few governorates.
- Several campaigns in health rescue providers in health emergencies have been developed by the Ministry of health and Yemen Red Crescent Society.

Context & Constraints:

- The available resources are very limited.
- The language barrier where most of the publication and information in DRR are only available in foreign languages which main the needs to a large translation process to Arabic.
- The lacking of experience and trained staff.
- The limited capacity of the governmental agencies.

Core indicator 3

Research methods and tools for multi-risk assessments and cost benefit analysis are developed and strengthened.

Level of Progress achieved:

1: Minor progress with few signs of forward action in plans or policy

Description:

This is an initiative between MWE and Research Associate (Disaster Vulnerability and emergency management, Asia) Northumbria UK) University, to establish a master degree program in Yemen in cooperation with the Water and Environment Center, Sana'a University)

Context & Constraints:

The main constraints are:

- Almost the absent of the research initiations in disaster risk reduction.
- Lacking to academic expertise.
- Lacking to resources

Core indicator 4

Countrywide public awareness strategy exists to stimulate a culture of disaster resilience, with outreach to urban and rural communities.

Level of Progress achieved:

3: Institutional commitment attained, but achievements are neither comprehensive nor substantial

Description:

The institutional commitments attained via several awareness departments that already part of the organizational chart of the following agencies with specific mandates and can be utilized in building their resilience:

- Environmental Awareness Dep. Within the Environment Protection Authority specified on building the public awareness related to the environmental hazards and other environmental aspects.
- Agricultural Information Dep. within the Ministry of Agriculture and Irrigation specified on building the public awareness related to the agriculture, flash flood and veteran hazards.
- Relations and Information Dep. Within the Ministry of Interior, specified of building the public resilience related to the crime, traffic, terrorist, and other related hazards
- The Nation Center of Health Information and Culture within the Ministry of Health and Population specified on building the public health culture and awareness and reducing the related hazards.

The EEGD mandated to build the resilience on reducing the environmental (natural and manmade) risks at the public and official levels.

An awareness campaign on Disasters and Climate Change Risk Reduction is already planned as one component of the MWE-GFDRR program that is already started this year (2008)

Context & Constraints:

The main constraints are

- The available resources are very limited.
- The language barrier where most of the publication and information in DRR are only available in foreign Languages which main the needs to a large translation process to Arabic.
- The lacking of experience and trained staff.
- The limited capacity of the governmental agencies

Priority for action 4

Reduce the underlying risk factors

Core indicator 1

Disaster risk reduction is an integral objective of environment related policies and plans, including for

land use natural resource management and adaptation to climate change.

Level of Progress achieved:

2: Some progress, but without systematic policy and/ or institutional commitment

Description:

2007, MWE has integrated several articles related to drought and flash flood risks reduction among the National Water Strategy through the coordination with EEGD .

More than 10 articles related to the disasters (natural and man-made hazards) and risk reduction, has-been added in the updated draft of the Environmental law No 96, 1995.

The infrastructure development is the main priority of the government (Yemen is one of LCD) that provides a good chance to introduce the term DRR as investment but , this need an extensive awareness and capacity building programs for the governmental agencies and NGOs.

Context & Constraints:

The Main constraints face EEGD and NTEDR to achieve this object are:

- Lacking to financial and human resources.
- Lacking to awareness at the official and public levels.
- Lacking for a clear legal framework.
- Other aspects

Core indicator 2

Social development policies and plans are being implemented to reduce the vulnerability of populations most at risk.

Level of Progress achieved:

1: Minor progress with few signs of forward action in plans or policy

Description:

The planned National Disaster and Climate Change Risk Assessment (MWE&GFDRR/WB project) will cover Vulnerability of the communities in the local administrations..

2007, The Yemeni Red Crescent Society (YRCS) has conducted a Community Base Vulnerability Assessment for 5 local administrations in Yemen . This assessment focused on the community adaptation abilities to adapt and recover during and after disaster.

Context & Constraints:

The Main constraints face EEGD and NTEDR to achieve this object are:

- Lacking to enough financial and human resources.
- Lacking to awareness at the official and public levels.

- Lacking for a clear legal framework.
- The tough geographical features of the Yemeni territories.

Core indicator 3

Economic and productive sectorial policies and plans have been implemented to reduce the vulnerability of economic activities

Level of Progress achieved:

1: Minor progress with few signs of forward action in plans or policy

Description:

October 2008, EEGD with cooperation with GFDRR/WB is organizing a training course on Damage and Loss Assessment for Disaster as starting point for the Capacity building at the national level. This training will introduce a national model for damage and losses assessment upon a comprehensive study

Was conducted earlier 2008, covers all national sectors categories.

Generally the situation in this regard is not clear yet and needs more resources and efforts to be focus at the national and local level.

Context & Constraints:

The Main constraints face EEGD and NTEDR to achieve this object are:

- Lacking to the financial resources.
- Lacking to awareness at the official and public levels.
- Lacking to the information, experience and knowledge.
- Lacking to the researches Institutes and studies.

Core indicator 4

Planning and management of human settlements incorporate disaster risk reduction elements, including Enforcement of building codes.

Level of Progress achieved:

3: Institutional commitment attained, but achievements are neither comprehensive nor substantial

Description:

Risk evaluation and URBAN PLANNING MUNICIPALITY OF SANA'A STUDY , HAS BEEN STARTED In the context of the City Development Strategy and make recommendations for the integration of the CDS and DRM information for the Urban Master Plan, and for potential institutional capacity building needs with regards to disaster risk management (c) prepare an integrated storm water master plan (ISWMP) for the city of Sana'a., as a pilot project conducted from MWE and GFDRR/WB project. This model will be replicated for the similar cities.

MWE through NTEDR where the members from relevant agencies will assure the integration of the DRR concepts and procedures through provide the appropriate capacity to the policy maker at the central and local levels.

Context & Constraints:

The Main constraints face EEGD and NTEDR to achieve this object are:

- Lacking to the clear regulations.
- Lacking to the financial resources.
- Lacking to awareness at the official and public levels.
- Lacking to the information , experience and knowledge.
- Lacking to the researches Institutes and studies.

Core indicator 5

Disaster risk reduction measures are integrated into post disaster recovery and rehabilitation processes

Level of Progress achieved:

3: Institutional commitment attained, but achievements are neither comprehensive nor substantial

Description:

2006, MEW (EEGD) with NTEDR has developed a guidelines for Rapid Environmental Assessment in Disaster that includes how to identify the post disaster needs.

2007, the Disaster Management Unit (DMU) with the Civil Defense Authority and through UNDP support developed a draft of National Disaster Management Plan included the role of DMU governmental members roles before , during and post disasters.

The training course on Damage and Loss Assessment for Disaster as starting point for the Capacity building at the national level.

Context & Constraints:

- Lacking to the clear regulations.
- Lacking to the financial resources.
- Lacking to awareness at the official and public levels.
- Lacking to the information, experience and knowledge.
- Lacking to the researches Institutes and studies.

Core indicator 6

Procedures are in place to assess the disaster risk impacts of major development projects, especially infrastructure.

Level of Progress achieved:

3: Institutional commitment attained, but achievements are neither comprehensive nor substantial

Description:

2006, MEW (EEGD) with NTEDR has developed a guidelines for Rapid Environmental Assessment in Disaster that include how to identify the post disaster needs.

Context & Constraints:

The Main Challenges are:

- Lacking to the clear regulations.
- Lacking to the financial resources.
- Lacking to awareness at the official and public levels.
- Lacking to the information, experience and knowledge.
- Lacking to the researches Institutes and studies

Priority for action 5

Strengthen disaster preparedness for effective response at all levels

Core indicator 1

Strong policy, technical and institutional capacities and mechanisms for disaster risk management, with

a disaster risk reduction perspective are in place.

Level of Progress achieved:

1: Minor progress with few signs of forward action in plans or policy

Description:

MWE (EEGD through NTEDR), has planed to start developing the National DRR Strategy with support from GFDRR/WB and should be started earlier 2009.

Context & Constraints:

The Main constraints face EEGD and NTEDR to achieve this object are:

- Lacking to enough financial and human resources.
- Lacking to awareness at the official and public levels.
- Lacking for a clear legal framework
- Others.

Core indicator 2

Disaster preparedness plans and contingency plans are in place at all administrative levels, and regular training drills and rehearsals are held to test and develop disaster response programmers.

Level of Progress achieved:

3: Institutional commitment attained, but achievements are neither comprehensive nor substantial

Description:

2007, the Disaster Management Unit (DMU) with the Civil Defense Authority and through UNDP support developed a draft of National Disaster Management Plan included the role of DMU governmental members roles before, during and post disasters. The next step should be developing the National Disaster Contingency Plan. A new project reach 1100000 US\$ has been approved by UNDP to Civil Defense Authority to strengthening the National response Capacity.

A draft of Environmental Contingency Plan was developed in 2006 by EEGD with support from Joint UNEP-OCHA environmental Unit.

A National Contingency Plan for Marine Oil Spell was declared in April 2008, under supervision of Maritime Affairs Authority.

Context & Constraints:

The main constraints are

- Lacking to the financial resources.
- Lacking to awareness at the official and public levels.
- Lacking to the information, experience and knowledge.
- Lacking to the researches Institutes and studies
- Lacking to risk and Vulnerability maps.

Core indicator 3

Financial reserves and contingency mechanisms are in place to support effective response and recovery when required.

Level of Progress achieved:

3: Institutional commitment attained, but achievements are neither comprehensive nor substantial

Description:

The Civil Defense law , identify 1% of the whole budget of all governmental agencies for contingencies but there is no clear mechanism of approach hoe the relevant agencies can use this sources. National Contingency Plan for Marine Oil Spell has put a mechanism that distributes the cost of implementing this plan among the stakeholders.

Context & Constraints:

The main challenges are:

- Lacking sufficient financial resources
- Lacking to the equipments and tools.
- Lacking to the information, experience and knowledge.
- Lacking to the researches Institutes and studies
- Lacking to risk and Vulnerability maps.

Core indicator 4

Procedures are in place to exchange relevant information during hazard events and disasters, and to Undertake post-event reviews

Level of Progress achieved:

2: Some progress, but without systematic policy and/ or institutional commitment

Description:

Just the classic and ordinary procedures. Most of the procedures depended on the situation

Context & Constraints:

The main challenges are:

Absents of enforced national contingency plans

Drivers of Progress

a) Multi-hazard integrated approach to disaster risk reduction and development

Levels of Reliance:

No/ little reliance: no acknowledgement of the issue in policy or practice; or, there is some Acknowledgement but nothing/ little done to address it

Do studies/ reports/ atlases on multi-hazard analyses exist in the country/ for the sub region?:

No

Description (Please provide evidence of where, how and who):

The environmental law No. 96, year 1995, allocate one chapter for Environmental Impact Assessment in

Development project. Most of this chapter focused in the ordinary environmental problems but no mention to DRR concept.

b) Gender perspectives on risk reduction and recovery adopted and institutionalized

Levels of Reliance:

No/ little reliance: no acknowledgement of the issue in policy or practice; or, there is some Acknowledgement but nothing/ little done to address it

Description (Please provide evidence of where, how and who):

To reach to the integration of multi-hazards in the development activities we should consider integration the DRR concepts in the following:

1. Update the EIA policies for the development.
2. Update the National Development Strategies.
3. Update the Nation 5 & 25 year's development plans.
4. Update the national poverty reduction strategy.
5. Update the relevant national and local plans

c) Capacities for risk reduction and recovery identified and strengthened

Levels of Reliance:

Significant and ongoing reliance: significant ongoing efforts to actualize commitments with coherent strategy in place; identified and engaged stakeholders.

Description (Please provide evidence of where, how and who):

The Ministry of Water and Environment with the guidance and support from GFDRR/WB and UN/ISDR has put this issue as a priority through establishing the NTEDR , strengthen the EEGD capacity and establishment of a Coordination Unit for Disaster and Climate Change Risk Reduction, that will play the coordination role and technical secretary for NTEDR.

d) Human security and social equity approaches integrated into disaster risk reduction and recovery activities

Levels of Reliance:

No/ little reliance: no acknowledgement of the issue in policy or practice; or, there is some Acknowledgement but nothing/ little done to address it

Description (Please provide evidence of where, how and who):

No action has been done Yet,

To include this aspect there is a need to address and prioritize the strategies .

e) Engagement and partnerships with non-governmental actors; civil society, private sector, amongst others, have been fostered at all levels

Levels of Reliance:

Significant and ongoing reliance: significant ongoing efforts to actualize commitments with coherent strategy in place; identified and engaged stakeholders.

Description (Please provide evidence of where, how and who):

Two Social societies has been a members of NTEDR ;.i.e. the Yemeni Society for Environmental Science and Yemen Red Crescent Society . There is a plan to involve the international NGOs that working in the field of DRR

f) Contextual Drivers of Progress

Levels of Reliance:

Significant and ongoing reliance: significant ongoing efforts to actualize commitments with coherent strategy in place; identified and engaged stakeholders.

Description (Please provide evidence of where, how and who):

Ongoing efforts to actualize commitments with a plan to develop a coherent strategy MWE has starting the procedure to actualize its willingness to coordinate the DRR efforts in the country with support of the Ministry of Planning and International Cooperation where the start point will the GFDRR/WB (Strengthen the National DRR System) with the guidance of UNISDR

Future outlook

Area 1

The more effective integration of disaster risk considerations into sustainable development policies, planning and programming at all levels, with a special emphasis on disaster prevention, mitigation, preparedness and vulnerability reduction.

Overall Challenges:

Republic of Yemen suffers from several Natural and man-made hazards with high level of, inconstant economy and quick, unorganized developing.

The government aims to implement HFA as clear and practical guidance tool. To achieve that

, because of the available limited resources, the government is seeking the suitable technical and financial support from the International Organizations and Donors to address:

Development of the National Strategy and Legal Framework which should be in place late 2010, with using the scientific approached and risk & vulnerability assessment outcomes.

Future Outlook Statement:

To strengthen the coordination mechanism and build the capacity of NTEDR (the DRR National

Platform) To build the public and official awareness and strengthen the Early warning systems and mechanisms.

Area 2

The development and strengthening of institutions, mechanisms and capacities at all levels, in particular at the community level, that can systematically contribute to building resilience to hazards.

Overall Challenges:

To build the capacity of the Central government and local administrations and strengthen the vulnerable communities against natural and man-made hazards.

Future Outlook Statement:

To integrate the conceptual of disaster and climate change risk reduction in the national strategies with special attention to gender and disaster aspects.

Area 3

The systematic incorporation of risk reduction approaches into the design and implementation of

Emergency preparedness, response and recovery programmers in the reconstruction of affected communities.

Overall Challenges:

To build and strengthen the disaster response and contingencies capacity with developing of a clear tools and polices for people and environmental resources.

Future Outlook Statement:

To develop a clear and practical coordination and enforcement mechanisms for DRR procedures and guidelines which should be developed ASAP?

5. Counterpart for ADRC

The Environmental Emergency Unit (**EEU**)
Ministry of Water and Environment