

Human Development Indicator : 0.367

Rank : 167/174

Annual Frequency of Large-scale Disasters : 1.21

Chad

GENERAL BACKGROUND

geography	area : 1.3 million sq km land use : arable land : 3%; permanent crops : 0%; permanent pastures : 36%; forest and woodlands : 26% annual deforestation (%change) : 0.8	
demography	population : 7.3 million (1999); density : 5.3 hab/km ² ; urban population : 23.5% population growth rate : 2.7% (1999)	
economy	economic-aid recipient : \$167 billion (1998) GNP : \$1.6 billion (1999) GNP-per capita : \$220 (1999) value-added (% of GDP) agriculture : 38% services : 48% industry : 14%	labour force by sector agriculture : 83% services : 14.5% industry : 2%

LARGE-SCALE DISASTERS

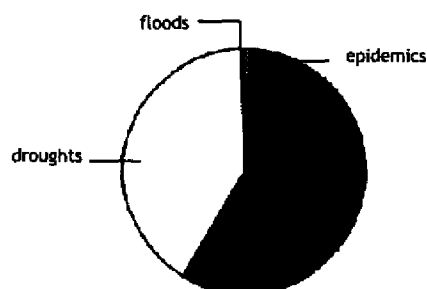
risk and vulnerability	Natural hazards include hot, dry, dusty harmattan winds in the north, periodic droughts and locust plagues. Apart from the far north, most regions are characterized by a cycle of alternating rainy and dry seasons. In any given year, the duration of each season is determined largely by the positions of two great air masses — the Atlantic Ocean maritime mass to the southwest and a much drier continental mass. During the rainy season, winds from the southwest push the moister maritime system north over the African continent. By the middle of the dry season, the inter-tropical convergence zone moves south of Chad, taking the rain with it. Investment in disaster prevention, mitigation and capacity building, especially to cope with recurrent droughts and the epidemics resulting from a deficient management of water supplies, will contribute to sustainable development in Chad.
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large-scale disasters : 1970-1998

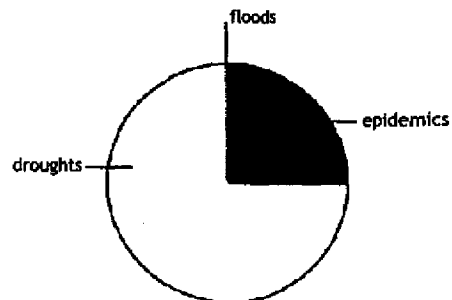
total events :	34
total killed :	7,243
total affected :	8,208,299
annual frequency since 1970 :	1.21

type of event	no. of events	killed	affected
tropical cyclone/hurricane/typhoon	2	24	1,300
floods	5	84	88,355
droughts/famines/food shortages	20	3,000	8,091,000
insect infestation	2	—	—
epidemics	5	4,135	27,644

people killed by disasters



people affected by disasters



Human Development Indicator : 0.510

Rank : 137/174

Annual Frequency of Large-scale Disasters : 0.36

Comoros

GENERAL BACKGROUND

geography

area : 2,230 sq km
 land use : arable land : 35%; permanent crops :10%; permanent pastures : 7%; forest and woodlands : 18%; other: 30%
 annual deforestation (%change) : NA

demography

population : 544,300 (1999); density : 220.6 hab/km2; urban population : 32.6%
 population growth rate : 2.5% (1999)

economy

economic-aid recipient : \$22.9 million (1999)
 GNP : \$190 million (1999)
 GNP-per capita : \$350 (1999)
 value-added (% of GDP)
 agriculture : 39.4%
 services : 47.5%
 industry : 13.1%

labour force by sector
 agriculture : 80%

LARGE-SCALE DISASTERS

hazards

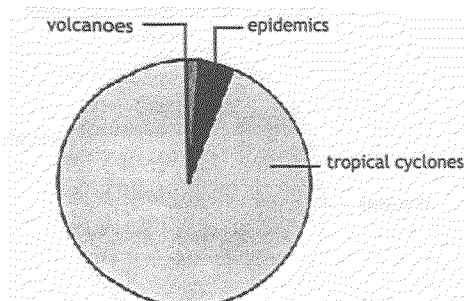
cyclones possible during rainy season (December to April); Le Kartala on Grand Comore is an active volcano.

large-scale disasters : 1970-1998

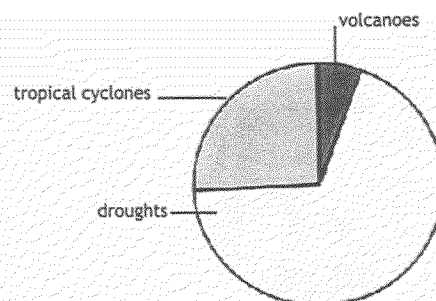
total events : 10
 total killed : 63
 total affected : 440,702
 annual frequency since 1970 : 0.36
 since 1985 : 0.38

type of event	no. of events	killed	affected
tropical cyclone/hurricane/typhoon	4	59	115,052
floods	—	—	—
droughts/famines/food shortages	3	—	300,000
volcanoes	2	1	25,200
epidemics	1	3	450

people killed by disasters



people affected by disasters



Human Development Indicator : 0.430
 Rank : 152/174
 Annual Frequency of Large-scale Disasters : 0.82

Democratic Republic of the Congo

GENERAL BACKGROUND

geography	area : 2.3 million sq km land use : arable land : 3%; permanent crops : 0%; permanent pastures : 7%; forest and woodlands : 77%; other: 13% annual deforestation (%change) : NA								
demography	population : 52.099 million (2000); density : 22.2 hab/km ² ; urban population : 30.0% population growth rate : 3.2% (1999)								
economy	economic-aid recipient : \$194.7 million (1999) GNP : \$5.4 billion (1998) GNP-per capita : \$110 (1998) value-added (% of GDP) <table border="0" style="width: 100%;"> <tr> <td style="width: 50%;">agriculture : 56.5%</td> <td style="width: 50%;">labour force by sector</td> </tr> <tr> <td>services : 26.6%</td> <td>agriculture : 65%</td> </tr> <tr> <td>industry : 16.9%</td> <td>services : 19%</td> </tr> <tr> <td></td> <td>industry : 16%</td> </tr> </table>	agriculture : 56.5%	labour force by sector	services : 26.6%	agriculture : 65%	industry : 16.9%	services : 19%		industry : 16%
agriculture : 56.5%	labour force by sector								
services : 26.6%	agriculture : 65%								
industry : 16.9%	services : 19%								
	industry : 16%								

LARGE-SCALE DISASTERS

risk and vulnerability	Periodic droughts in the south, frequent epidemics and floods, and infrequent volcanic activity are the hazards in the DRC. Therefore, sustainable development in the Democratic Republic of the Congo will not be achieved without investment in disaster prevention, mitigation and capacity building, especially to cope with periodic droughts and epidemics.	
large-scale disasters 1970-1998	total events :	23
	total killed :	2,795
	total affected :	881,728
	annual frequency since 1970 :	0.82
	since 1985 :	1.38

type of event	no. of events	killed	affected
tropical cyclone/hurricane/typhoon	1	200	—
floods	3	112	63,056
droughts/famines/food shortages	2	—	800,000
landslides	1	—	148
epidemics	14	2,413	10,453
volcanoes	1	61	8,010
earthquakes	1	9	61

people killed by disasters



Human Development Indicator : 0.447
 Rank : 149/174
 Annual Frequency of Large-scale Disasters : 0.53

Djibouti

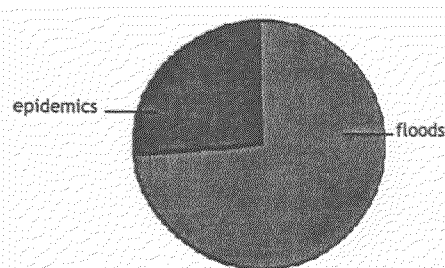
GENERAL BACKGROUND

geography	area : 23,200 sq km land use : arable land : 0.3%; permanent crops : 11%; permanent pastures : 0.1%; forest and woodlands : 0% annual deforestation (%change) : NA								
demography	population : 647,800 (1999); density : 25.9 hab/km ² ; urban population : 76.6% population growth rate : 3% (1999)								
economy	economic-aid recipient : \$106.3 million (1995) GNP : \$460 million (1999) GNP-per capita : \$761 (1999) value-added (% of GDP) <table border="0" style="display: inline-table; vertical-align: top; margin-left: 20px;"> <tr> <td>agriculture : 3.3%</td> <td>labour force by sector</td> </tr> <tr> <td>services : 81%</td> <td>agriculture : 7%</td> </tr> <tr> <td>industry : 15%</td> <td>services : 68%</td> </tr> <tr> <td></td> <td>industry : 25%</td> </tr> </table>	agriculture : 3.3%	labour force by sector	services : 81%	agriculture : 7%	industry : 15%	services : 68%		industry : 25%
agriculture : 3.3%	labour force by sector								
services : 81%	agriculture : 7%								
industry : 15%	services : 68%								
	industry : 25%								

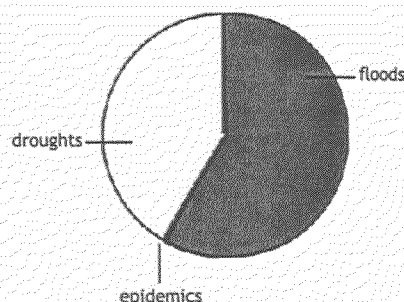
LARGE-SCALE DISASTERS

risk and vulnerability	Major natural hazards include earthquakes, droughts, and occasional cyclonic disturbances from the Indian Ocean bringing heavy rains and flash floods. Investment in disaster prevention, mitigation and capacity building, especially to cope with flash floods can contribute to sustainable development in Djibouti.		
large-scale disasters 1970-1998	total events :	17	
	total killed :	245	
	total affected :	848,016	
	annual frequency since 1970 :	0.53	
	since 1985 :	0.69	
	type of event	no. of events	killed
	tropical cyclone/hurricane/typhoon	4	—
	floods	6	180
	droughts/famines/food shortages	4	—
	epidemics	3	65
			affected
			775
			489,000
			355,000
			3,241

people killed by disasters



people affected by disasters



Human Development Indicator : 0.555
Rank : 131/174
Annual Frequency of Large-scale Disasters : NA

Equatorial Guinea

GENERAL BACKGROUND

geography	area : 28,050 sq km land use : arable land : 5%; permanent crops : 4%; permanent pastures : 4%; forest and woodlands : 46% annual deforestation (%change) : NA
demography	population : 447,700 (1999); density : 14.2 hab/km2; urban population : 47% population growth rate : 2.6% (1999)
economy	economic-aid recipient : \$33.8 million (1995) GNP : \$516.4 million (1999) GNP-per capita : \$1,170 (1999) value-added (% of GDP) agriculture : 23.2% services : 9.7% industry : 67.2%

LARGE-SCALE DISASTERS

hazards	violent windstorms, flash floods
large-scale disasters : 1970-1998	
total events :	NA
total killed :	NA
total affected :	NA
annual frequency since 1970 :	NA
since 1985 :	NA

Human Development Indicator : 0.408
 Rank : 159/174
 Annual Frequency of Large-scale Disasters : 0.6

Eritrea

GENERAL BACKGROUND

geography	area : 117,600 sq km land use : arable land : 12%; permanent crops : 1%; permanent pastures : 49%; forest and woodlands : 6%; other: 32% annual deforestation (%change) : 0.0	
demography	population : 3.2 million (1999); density : 35.4 hab/km2; urban population : 18.4% population growth rate : 2.8% (1999)	
economy	economic-aid recipient : \$150.6 million (1999) GNP : \$802.2 million (1999) GNP-per capita : \$200 (1999) value-added (% of GDP)	labour force by sector agriculture : 75% services : 14% industry : 11%
	agriculture : 9.3% services : 61.2% industry : 29.5%	

LARGE-SCALE DISASTERS

risk and vulnerability	Eritrea obtained independence in May 1993, hence prior to that all natural disaster data in that area are included under Ethiopia. Eritrea has recently been in a state of civil warfare. Therefore few records are available for analysis. Droughts, locust infestation and occasional wind-storms are the common hazards.
large-scale disasters 1993-1998	

type of event	no. of events	killed	affected
droughts/famines	NA	NA	NA
insect infestation	NA	NA	NA
epidemics	NA	NA	NA

Human Development Indicator : 0.394

Rank : 162/174

Annual Frequency of Large-scale Disasters : 0.29

Guinea

GENERAL BACKGROUND

geography

area : 245,900 sq km
land use : arable land : 2%; permanent crops : 0%; permanent pastures : 22%; forest and woodlands : 59%; other: 17%
annual deforestation (%change) : 1.1

demography

population : 7.2 million (1999); density : 26.8 hab/km2; urban population : 32.1%
population growth rate : 2.3% (1999)

economy

economic-aid recipient : \$344.3 million (1998)
GNP : \$3.7 billion (1999)
GNP-per capita : \$510 (1999)
value-added (% of GDP)
agriculture : 23.1%
services : 40.9%
industry : 36.0%

labour force by sector
agriculture : 80%
services : 9%
industry : 11%

LARGE-SCALE DISASTERS

hazards

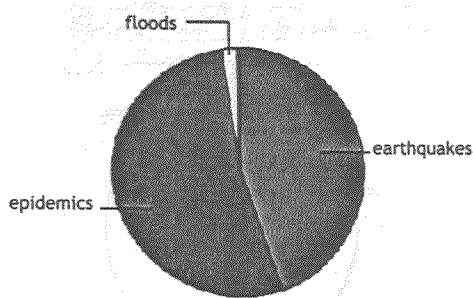
hot, dry, dusty harmattan haze may reduce visibility during dry season

large-scale disasters : 1970-1998

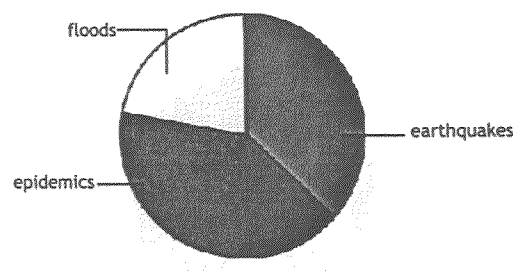
total events : 8
total killed : 616
total affected : 58,532
annual frequency since 1970 : 0.29
since 1985 : 0.30

type of disaster	no. of events	killed	affected
earthquakes	1	275	21,436
floods	2	—	13,066
droughts/famines/food shortages	3	12	—
epidemics	2	329	24,030

people killed by disasters



people affected by disasters



Human Development Indicator : 0.331

Rank : 169/174

Annual Frequency of Large-scale Disasters : 0.64

Guinea-Bissau

GENERAL BACKGROUND

geography	area : 36,120 sq km land use : arable land : 10%; permanent crops : 1%; permanent pastures : 39%; forest and woodlands : 38%; other: 12% annual deforestation (%change) : 0.4
demography	population : 1.2 million (1999); density : 38.6 hab/km ² ; urban population : 23.3% population growth rate : 2.0% (1999)
economy	economic-aid recipient : \$115.4 million (1995) GNP : \$195.1 million (1999) GNP-per capita : value-added (% of GDP) labour force by sector agriculture : 63.6% agriculture : 78% services : 24.2% industry : 12.3%

LARGE-SCALE DISASTERS

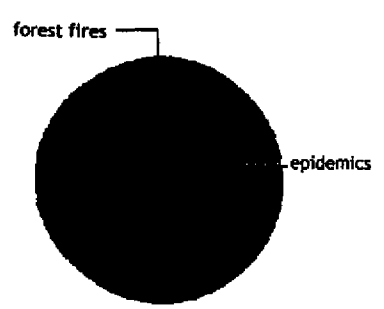
hazards	Hot, dry, dusty harmattan haze may reduce visibility during dry season; brush fires.
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large-scale disasters : 1970-1998

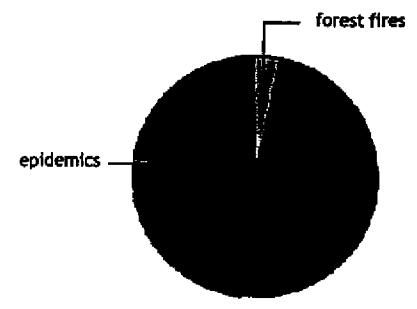
total events :	18
total killed :	1,083
total affected :	47,581
annual frequency since 1970 :	0.64
since 1985 :	0.77

type of event	no. of events	killed	affected
forest/scrub fire	8	3	1,500
cold waves/tsunami/insect infestation	3	-	-
droughts/famines/food shortages	8	-	-
epidemics	4	1,079	40,656

people killed by disasters



people affected by disasters



Human Development Indicator : 0.440
 Rank : 150/174
 Annual Frequency of Large-scale Disasters : 1.07

Haiti

GENERAL BACKGROUND

geography	area : 27,750 sq km land use : arable land : 80% (out of the 62% agro. land); permanent pastures : 18%; forest and woodlands : 5% annual deforestation (%change) : 3.4								
demography	population : 8 million (2001); density : 265 hab/km ² ; urban population : 42.9% population growth rate : 2.08% (1999)								
economy	economic-aid recipient : \$280 million (1997) GNP : \$1.4 billion (1999) GNP-per capita : \$350 (1999) value-added (% of GDP) <table border="0"> <tr> <td>agriculture : 52.6%</td> <td>labour force by sector</td> </tr> <tr> <td>services : 25.4%</td> <td>agriculture : 44%</td> </tr> <tr> <td>industry : 22.0%</td> <td>services : 52.6%</td> </tr> <tr> <td></td> <td>industry : 2.8%</td> </tr> </table>	agriculture : 52.6%	labour force by sector	services : 25.4%	agriculture : 44%	industry : 22.0%	services : 52.6%		industry : 2.8%
agriculture : 52.6%	labour force by sector								
services : 25.4%	agriculture : 44%								
industry : 22.0%	services : 52.6%								
	industry : 2.8%								

LARGE-SCALE DISASTERS

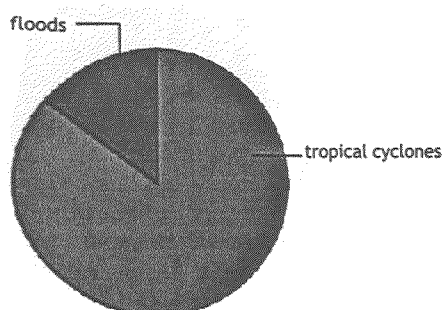
risk and vulnerability
 Haiti lies in the middle of the hurricane belt and is subject to severe storms from July to October. The island is also exposed to floods, occasional earthquakes and periodic droughts. Depletion of clean water sources has become a vector for water-borne diseases, contributing to the already high rate of infant mortality and morbidity. The production of corn and coffee has decreased with unsustainable agricultural practices and the devastating effects of cyclone George (1998). The irrigation system in the valley of Artibonite, where most of the rice is produced, has also been severely damaged. Some concrete steps have been taken for better government management of crucial environmental issues affecting the country. A National Plan on Disaster and Risk Management has already been approved and a risk mapping is currently being prepared. Further investment in disaster prevention, mitigation and capacity building, especially to cope with hurricanes, floods and periodic droughts can contribute to sustainable development in Haiti.

large-scale disasters 1970-1998

total events :	30
total killed :	4,718
total affected :	5,282,851
annual frequency since 1970 :	1.07
since 1985 :	1.53

type of event	no. of events	killed	affected
tropical cyclone/hurricane/typhoon	7	1,714	3,000,254
floods	15	2,999	222,507
droughts/famines/food shortages	6	—	2,060,000
avalanches/landslides	2	5	1,090

people killed by disasters



people affected by disasters

