Rank: 167/174

Annual Frequency of Large-scale Disasters: 1.21

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/km2; 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.

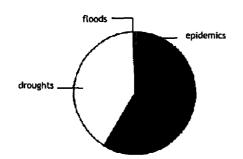
large-scale disasters: 1970-1998

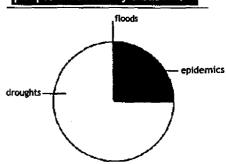
total events: 34
total killed: 7,243
total affected: 8,208,299

annual frequency since 1970: 1.21

हेरुम्बर्क श्रिप्रवर्गः -	1848 183 12 JAN STREET	ार्जीक्षरम्(A STANKEY.
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





Rank: 137/174

Annual Frequency of Large-scale Disasters: 0.36

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%

agriculture: 80%

labour force by sector

services: 47.5% industry: 13.1%

LARGE-SCALE DISASTERS

hazards

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

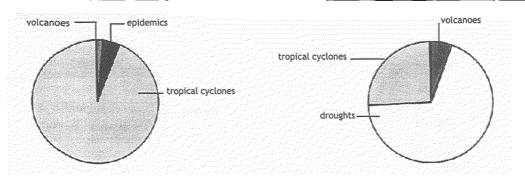
large-scale disasters: 1970-1998

total events: 10 total killed: 63 total affected: 440,702

annual frequency since 1970: 0.36 since 1985: 0.38

প্রের্জন প্রথমন in of Amage Pelle: *स*र्वेशन्। tropical cyclone/hurricane/typhoon 4 59 115,052 floods droughts/famines/food shortages 300,000 3 volcanoes 25,200 1 2 epidemics

people killed by disasters



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/km2; 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)

labour force by sector agriculture: 65%

agriculture: 56.5% services: 26.6% 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

001,

annual frequency since 1970: 0.82

since 1985: 1.38

(देश्वतः नी (देशका)	तिक सं विश्वताहर	[4][EV	त्रें वं€्द्र
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



Rank: 149/174

Annual Frequency of Large-scale Disasters: 0.53

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/km2; 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)

labour force by sector agriculture : 7%

agriculture : 3.3% services : 81% 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.

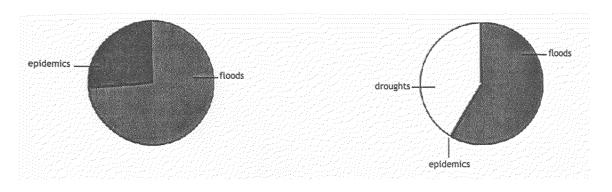
large-scale disasters 1970-1998 total events: 17
total killed: 245
total affected: 848,016

annual frequency since 1970: 0.53

since 1985: 0.69

্যিত র্লিক্সন্ত	of a cycles	द्वार्थः	नु र् दानुद्दर
tropical cyclone/hurricane/typhoon	4	_	775
floods	6	180	489,000
droughts/famines/food shortages	4	_	355,000
epidemics	3	65	3,241

people killed by disasters



Rank: 131/174

Annual Frequency of Large-scale Disasters: NA

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

Rank: 159/174

Annual Frequency of Large-scale Disasters: 0.6

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)
agriculture: 9.3%
services: 61.2%
industry: 29.5%
labour force by sector
agriculture: 75%
services: 14%
industry: 11%

LARGE-SCALE DISASTERS

risk and vulnerability

Entrea 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

Rank: 171/174

Annual Frequency of Large-scale Disasters: 2

GENERAL BACKGROUND

geography

area: 1.1339 million sq km

land use: arable land: 12%; permanent crops: 1%; permanent pastures: 40%; forest and

woodlands: 25%

annual deforestation (%change): 0.5

demography

population: 62.8 million (1999); density: 56.5 hab/km2; urban population: 17.2%

population growth rate: 2.4% (1999)

economy

economic-aid recipient: \$596.4 million (1995)

GNP: \$6.6 billion (1999) GNP-per capita : \$100 (1999) value-added (% of GDP)

agriculture: 55.5% services: 37.9% industry: 6.7%

LARGE-SCALE DISASTERS

and vulnerability

Frequent droughts, epidemics and recent devastating caterpillar infestation are the key hazards. Geologically active Great Rift Valley is susceptible to earthquakes and volcanic eruptions. Country's agricultural economy accounts for half of GDP, 90% of exports and 80% of total employment. The agricultural sector suffers from frequent periods of drought and poor cultivation practices with significant impact on the population and national economy. As many as 4.6 million people need food assistance annually. Most of the population suffers from malnutrition, lack of access to proper health services and potable water which significantly increases vulnerability to epidemics. The war with Eritrea further increased vulnerability to disasters as well as preventing serious investment in mitigation of droughts and epidemics.

large-scale disasters 1970-1998

total events:

total killed:

total affected:

56 1,211,263 66,738,870

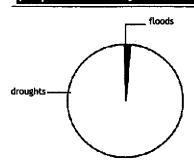
annual frequency since 1970: 7

since 1985; 2.8

(New June	1070 p. 1071 127/27076	} (4 (1)}	ा है में है जो को बे जिल्ह
floods	16	470	858,951
droughts/famines/food shortages	25	1,200,367	60,880,064
avalanches/landslides	2	35	29
epidemics	6	10,326	103,688
insect infestation	5	_	_
earthquakes/volcanoes	2	66	2

people killed by disasters

epidemics : droughts



Rank: 161/174

Annual Frequency of Large-scale Disasters: 0.76

GENERAL BACKGROUND

geography

area: 10,700 sq km

land use: arable land: 18%; permanent crops: 0%; permanent pastures: 9%; forest and

woodlands: 28%; other: 45%

annual deforestation (%change): 0.9

demography

population: 1.3 million (1999); density: 111.1 hab/km2; urban population: 31.8%

population growth rate: 2.8% (1999)

economy

economic-aid recipient: \$596.4 million (1995)

GNP: \$430.1 million (1999)

GNP-per capita: \$340 (1999) value-added (% of GDP)

agriculture: 33.2% services: 54.1% industry: 12.7% labour force by sector agriculture: 75%

LARGE-SCALE DISASTERS

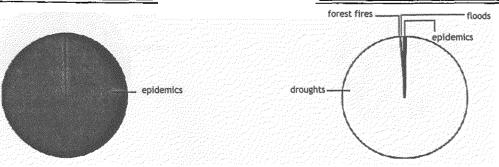
risk and vulnerability Rainfall has dropped by 30% in the last 30 years causing severe droughts. Agriculture accounts for more than one-fourth of the GNP and employs more than three-fourths of the work force, largely in subsistence-level farming. The Gambia is nearly self-sufficient in the production of grains. Peanuts occupy almost all suitable land, and fluctuations in their production due to drought or pest infestations and in world peanut prices have tremendous impact on the country's economy. Natural disasters can, therefore, have a serious impact on people's assets.

large-scale disasters 1970-1998 total events: 22
total killed: 439
total affected: 661,769

annual frequency since 1970: 0.76 since 1985: 0.69

(পুরুত্ত ক্রেন্স)	म्रोक ज्लेक्क्स्	ामित्य ः	Alter (ii)
forest/scrub fires	1		5,000
floods	1	_	4,000
droughts/famines/food shortages	13	_	651,000
cold waves/tsunami/insect infestation	4	_	·
epidemics	3	439	1.769

people killed by disasters



Rank: 162/174

Annual Frequency of Large-scale Disasters: 0.29

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

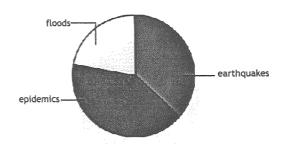
total events: 8 total killed: 616 total affected: 58,532

annual frequency since 1970: 0.29 since 1985: 0.30

শুনুক্তর অপুর্	Tree (Free Tree)	guma	ची वेहें म् राहरण
earthquakes	1	275	21,436
floods	2		13,066
droughts/famines/food shortages	3	12	· -
epidemics	2	329	24,030

people killed by disasters

earthquakes



Rank: 169/174

Annual Frequency of Large-scale Disasters: 0.64

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/km2; 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.

large-scale disasters: 1970-1998

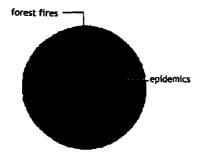
total events: 18
total killed: 1,083
total affected: 47,581

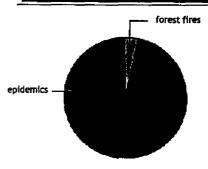
annual frequency since 1970: 0.64

since 1985: 0.77

type of event	no of events	- killed	୍ଷୀରଙ୍କ
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





Rank: 150/174

Annual Frequency of Large-scale Disasters: 1.07

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/km2; 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)

agriculture : 52.6%

services : 25.4%

industry : 22.0%

labour force by sector
agriculture : 44%
services : 52.6%
industry : 22.8%

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

	(Miles) (Extell)	्रोंकेन (ब्रोस सिम्बोरीक	:MICE	નાં (દેશન જેવ
	tropical cyclone/hurricane/typhoon	7	1,714	3,000,254
	floods	15	2,999	222,507
	droughts/famines/food shortages	6	· 	2,060,000
ļ	avalanches/landslides	2	5	1,090

people killed by disasters

