

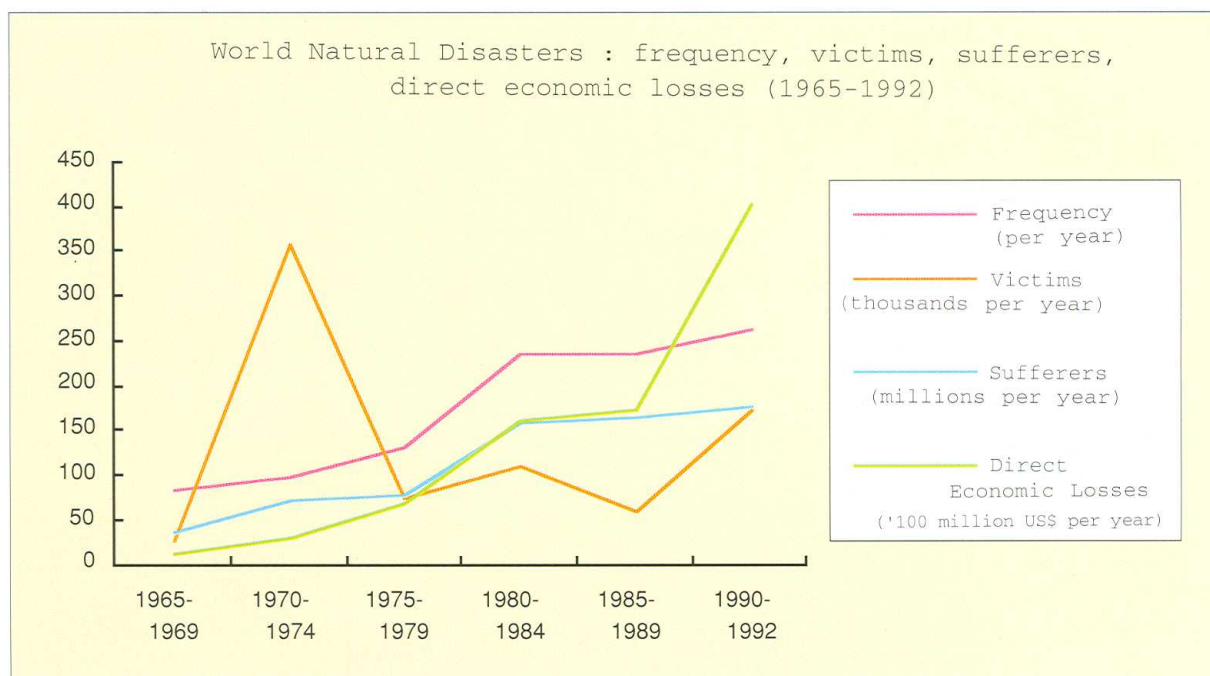
WORSENING WORLD NATURAL DISASTERS

According to the latest statistics on natural disasters in the world^{*1}, from 1965 to 1992, 4,653 natural disasters causing more than 10 victims or more than 100 sufferers were recorded. The total number of sufferers and victims during this period reached 3 billion and 3.6 million respectively. Total direct economic losses amounted to US\$ 340 billion.

There has been a constantly increasing trend over the past three decades of the frequency of natural disasters and the number of sufferers, as well as the amount of direct economic losses. The number of victims recorded a high peak in the first half of the 1970s due to the drought in Africa which caused more than 1 million deaths, and has been increasing since the late 1980's.

Damages from natural disasters are becoming more serious in the 1990s. Compared with 25 years ago, the frequency and severity of natural disasters from 1990 to 1992 have increased significantly. The frequency of natural disasters has increased by 3.2 times, and annual sufferers and victims have increased by 5.2 times and 6.9 times respectively, and annual direct economic losses in nominal term have increased by 38 times. It is calculated that from 1990 to 1992 one in thirty-one people suffered, and one in thirty-one thousands were killed annually, and 0.2 % of the GNP of the world was lost due to natural disasters.

Note^{*1} Most of the statistical figures here are made based on the data provided by the Center for Research on Epidemiology of Disasters (CRED), Belgium. Please refer to the last page for more details.



Major Natural Disasters in the World (1965-1992)

(Natural disasters with more than 10 victims or more than 2,000 sufferers, source:OFDA)

Date	Country	Type	No.of Victims	No.of Sufferers (thousands)	
Jan 66	India	Drought	0	100,000	(a)
Nov 70	Bangladesh	Cyclone	300,000	3,648	
Jan 73	India	Drought	0	200,000	
Jan 73	Sahel (b)	Drought	100,000	n.a.	(c)
Dec 73	Ethiopia	Drought	100,000	3,000	(d)(e)
Jul 74	Bangladesh	Flood	28,700	36,000	
Jul 75	India	Flood	350	27,000	
Jul 76	China	Earthquake	242,000	n.a.	
Jul 78	India	Flood	3,800	32,000	
Aug 80	India	Flood	1,600	30,000	
Jun 82	India	Drought	0	100,000	
Jun 82	India	Drought	0	100,000	
Aug 82	India	Flood	932	33,500	
Sep 83	Brazil	Drought	0	20,000	
May 84	Bangladesh	Flood	1,200	30,000	
Oct 84	Ethiopia	Drought	300,000	7,750	
Nov 84	Sudan	Drought	150,000	8,400	
Jan 85	Mozambique	Drought	100,000	2,466	
87	India	Drought	0	300,000	
Jul 87	Bangladesh	Flood	2,055	29,700	
Apr 88	China	Flood	577	22,000	
Jun 88	China	Drought	1,400	49,000	
Aug 88	Bangladesh	Flood	2,379	45,000	
Aug 88	India	Earthquake	382	20,000	
Apr 89	China	Typhoon	154	30,000	
Jun 89	China	Flood	2,000	100,000	
Jun 90	China	Flood	363	26,000	
May 91	China	Flood	2,470	320,000	

(Natural disasters with more than 10 victims or more than 2,000 sufferers, source : ODA)

- (a) According to the World Map of Natural Hazards (Munich Reinsurance Co.), number of victims was 1.5 million.
- (b) Senegal, Mauritania, Mali, Burkina Faso, Niger, Chad
- (c) According to the World Map of Natural Hazards, number of victims was 250,000.
- (d) According to CRED's data base, number of victims was 900,000.
- (e) CRED's data base also recorded another drought in Africa from 1970 to 1974 which brought about 250,000 deaths.

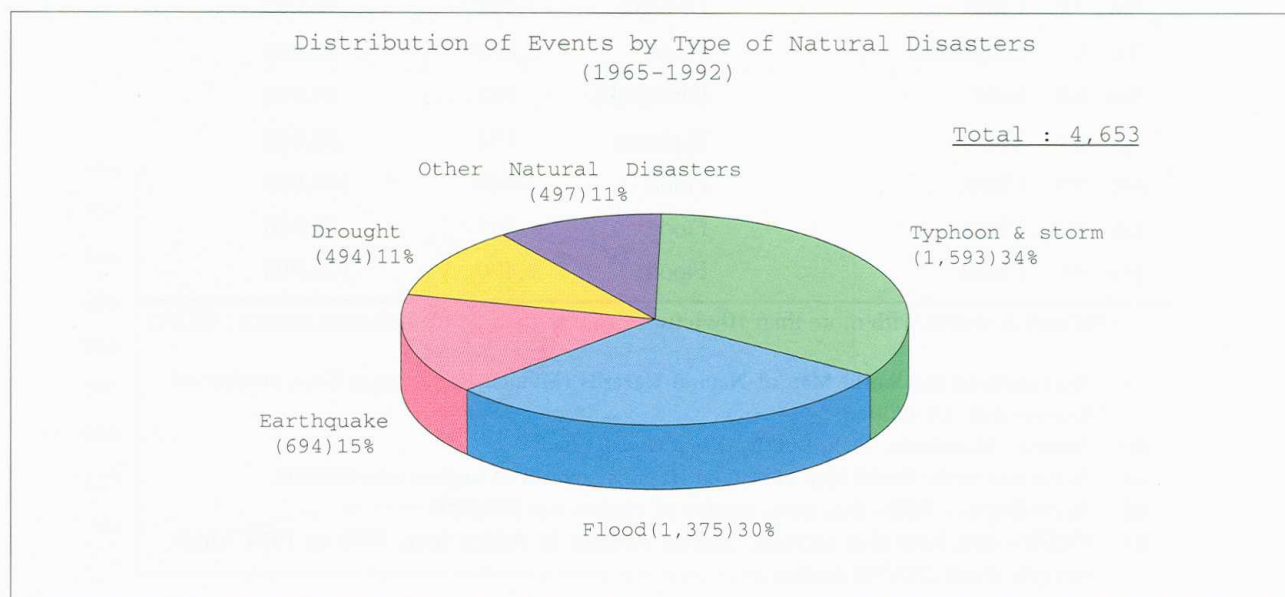
DAMAGES CAUSED BY VARIOUS NATURAL DISASTERS

The pattern of damages varies according to the type of natural disaster.

Drought is the most serious disaster in terms of casualties. More than half of the sufferers and victims from 1965 to 1992 were caused by drought. The average number of sufferers and victims per disaster is also the largest for droughts. Though the share of direct economic losses by drought amounts to only 6 % of the total, drought is regarded as the disaster which causes mainly human damages.

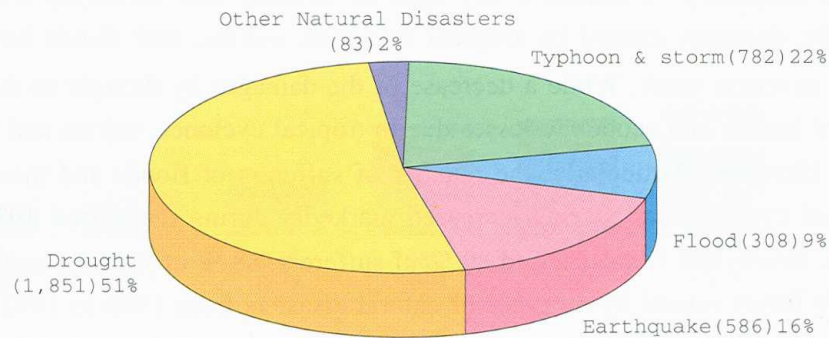
On the other hand, tropical cyclones and storms have caused the most serious economic losses. More than 40 % of direct economic losses were caused by tropical cyclones and storms. The number of occurrences is also largest for tropical cyclones and storms. Floods affected the second largest number of population after drought. 36 % of the total sufferers from natural hazards from 1965 to 1992 were brought about by floods. However, floods have caused relatively few deaths amounting to only 9 % of the total victims.

Earthquakes have caused the second largest direct economic losses after tropical cyclones and storms. The average amount of direct economic losses per disaster is largest for earthquakes. Although earthquakes brought about only 1 % of total sufferers, they took a relatively large number of lives, amounting to 16 % of the total.



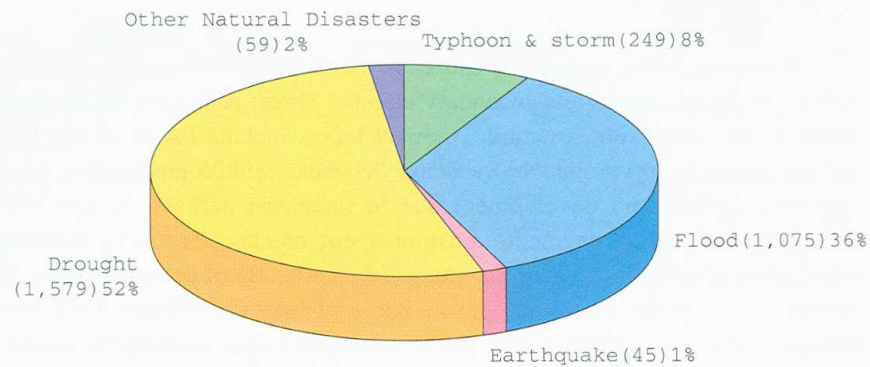
Distribution of Victims by Type of Natural Disasters
(1965-1992, thousands)

Total : 3,610 thousand persons



Distribution of Sufferers by Type of Natural Disasters
(1965-1992, millions)

Total : 3,008 million persons



Distribution of Direct Economic Losses by Type of Natural Disasters
(1965-1992, billion US\$)

Total : US\$ 340 billion

