

Natural Disasters in 2007: An Analytical Overview

Chapter 1: Impact of Natural Disasters

This chapter deals with the overall trends in natural disasters and their impacts for the year 2007. It also addresses regional perspectives on disasters based on disaster types and discusses the vulnerability to natural disasters, especially in the Asian region.

1.1 Trends in Natural Disaster Damage and Characteristics

The following figures (Figures 1, 2, and 3) and summary tables (Tables 1A, 1B, 2A, 2B, 3A, and 3B) indicate an increasing trend in the occurrence of natural disasters over the last three decades. This might be attributed to various factors, such as global climate change, environmental and ecological imbalances, increasing population density, ad-hoc urbanization, deforestation, and desertification. Compounded by these factors, natural disasters are resulting in an increased level of human suffering, loss of life, and economic losses. It is noteworthy to mention that the worldwide *total*¹ affected population in the year 2007 was about 3.0% of the world population (an increase of 43% over 2006) and the total worldwide economic damage in the year 2007 exceeded the GDP (purchasing power parity)² of certain developing countries in the Asia-Pacific and Africa, underscoring the importance of natural disaster mitigation strategies in these regions. For instance, the total amount of damage worldwide caused by natural disasters in the year 2007 was 11 times the annual GDP (PPP, 2007 estimate) of Mongolia and Swaziland, 6 times that of Tajikistan, Kyrgyz and Fiji, 5 times that of Papua New Guinea, Laos and Niger, and 4 times that of Armenia. This is quite a notable increase when compared against 2006. There were also considerable decreases in the number of disasters that occurred (6%) and the number of killed people (20%). But the number of total affected people in 2007 increased by 47% over the 2006 figure, and the amount of economic damage incurred registered an alarming increase of 217% over the year 2006. In recent years, 2005 damages were mainly due to the South Asian Earthquake in Pakistan and India, the event responsible for a significant portion of the human losses in Asia, while last year (2006) was quite a calm year regarding disaster occurrences and the monetary and human damages caused. But in 2007, due to the Japan (Niigata) earthquake, floods in China, Australia and UK; wildfires in USA, windstorms in Germany

¹ According to CRED, Belgium, the *total* affected population includes the number of people injured; number of people became homeless and number of people affected by various other means due to disasters.

and Bangladesh contributed to the severe monetary damage. Further windstorms and floods in Bangladesh, China and India also contributed to the severe human sufferings and loss. This year's (2007) statistics show that almost 60% of the people killed, 91% of total affected people and 47% of the damage worldwide are in Asia. This once again clearly underscores the vulnerability of the region. This regional trend is quite alarming and represents a considerable obstacle to any development activities in the affected countries from the perspective of sustainable development and recovery efforts.

Table 1A: Summary of Natural Disasters, 1975-2007

	Count of DisNo	Sum of Killed	Sum of TotAff	Sum of Damage US\$ ('000s)
Asia	3,438	1,281,189	5,047,632,951	594,334,344
	37.34%	57.24%	88.94%	44.57%
World	9,207	2,238,319	5,675,595,783	1,333,357,184

Source: CRED-EMDAT, Université Catholique de Louvain, Brussels, Belgium, 2007

Table 1B: Summary of Natural Disasters, 2007

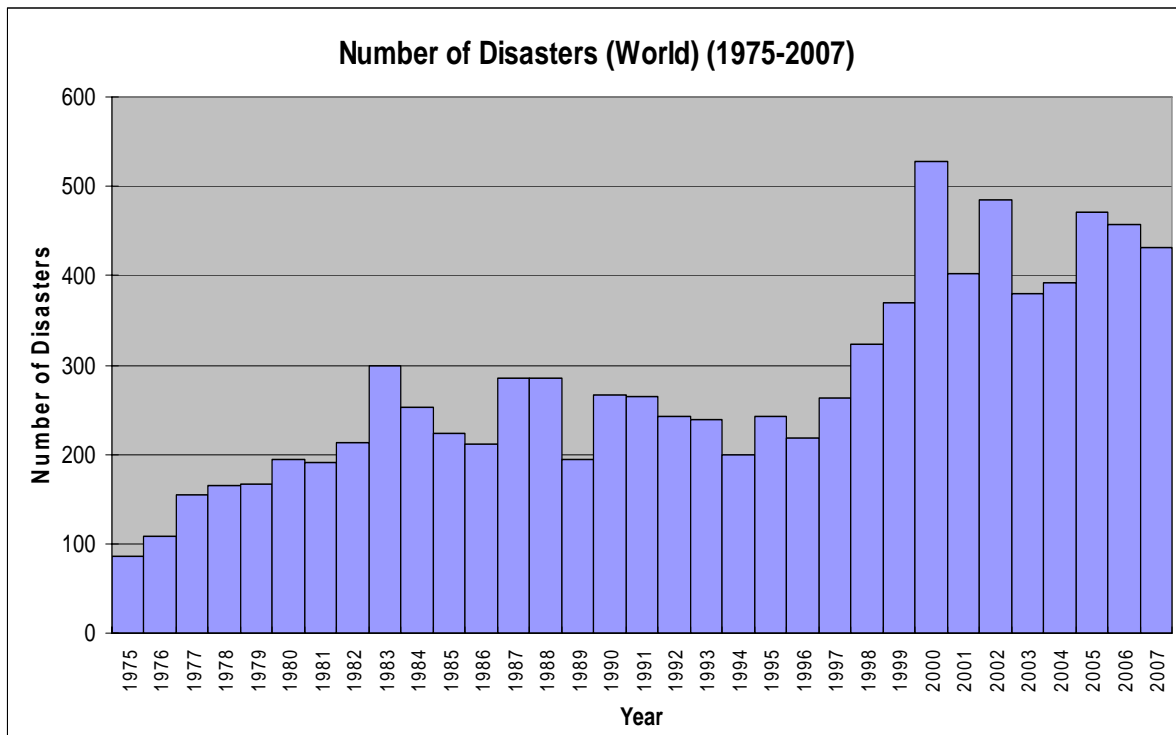
	Number of Disasters	Sum of Killed	Sum of TotAff	Sum of Damage US\$ ('000s)
Asia	149	13,130	179,803,097	29,634,403
	34.57%	59.92%	90.72%	47.24%
World	431	21,911	198,203,774	62,726,300

Source: CRED-EMDAT, Université Catholique de Louvain , Brussels, Belgium, 2007

The following figures show the increasing trend in natural disasters, the number of total affected people, and the amount of damage from 1975 to 2007.

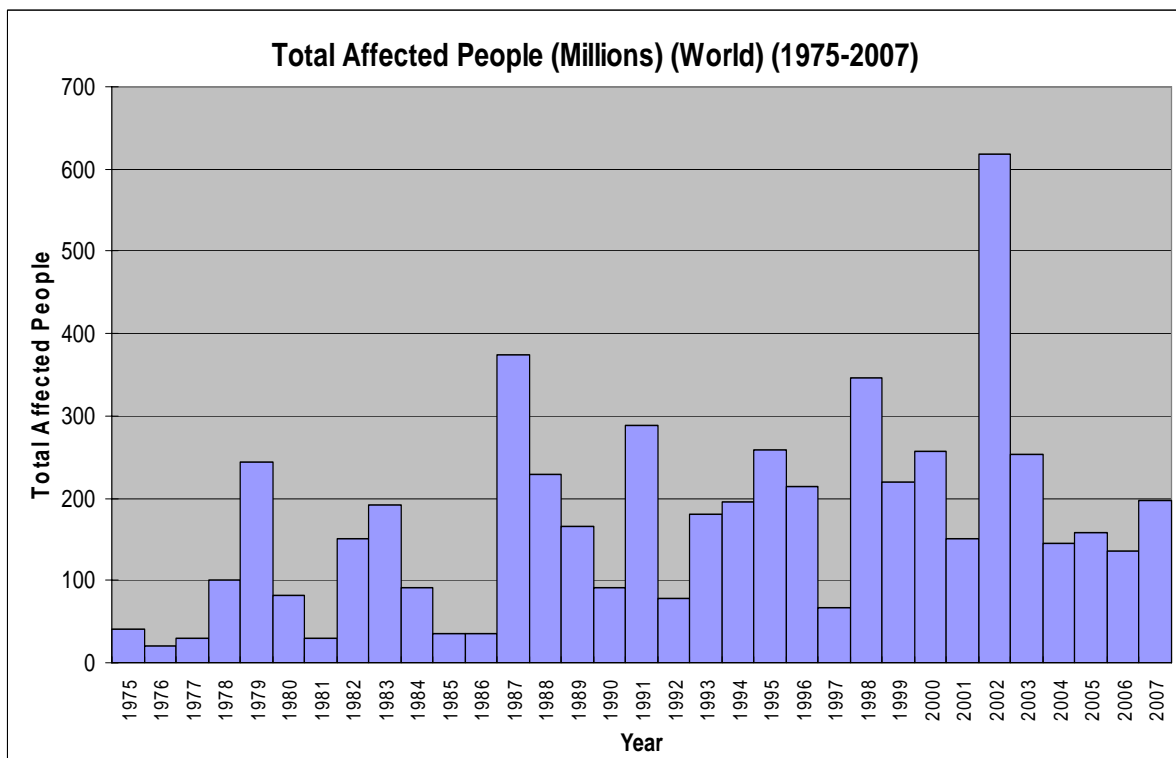
² We used GDP (PPP) 2007 estimate data from the World Fact Book.

Figure 1

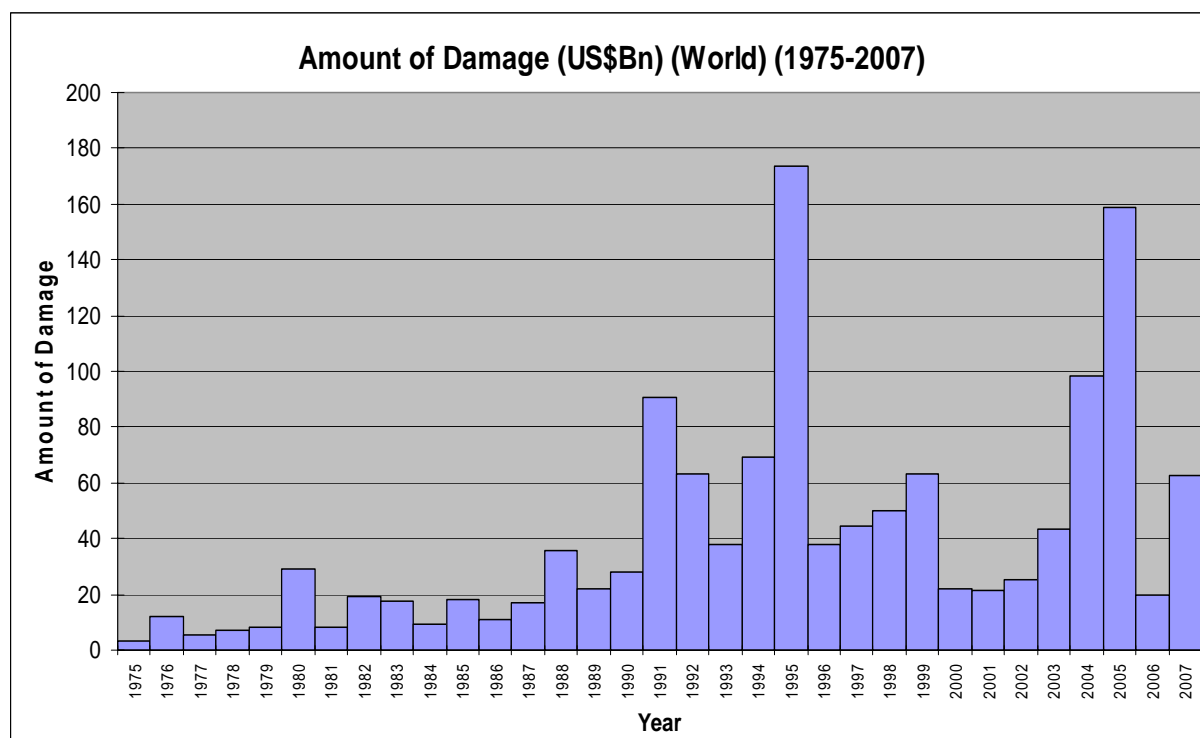


Source: CRED-EMDAT, Université Catholique de Louvain, Brussels, Belgium, 2007

Figure 2



Source: CRED-EMDAT, Université Catholique de Louvain, Brussels, Belgium, 2007

Figure 3

Source: CRED-EMDAT, Université Catholique de Louvain, Brussels, Belgium, 2007

The following tables show regional disaster characteristics in relation to various types of disaster for the periods 1975-2007. Tables 2A and 3A in particular show this trend for the 33 years from 1975-2007 while Tables 2B and 3B show figures for 2007 only.

Table 2A: Summary of Natural Disasters by Region, 1975-2007

Continent	DisType	Count of DisNo	Sum of Killed	Sum of TotAff	Sum of Damage US\$ ('000s)
Africa	Drought	334	560,640	311,379,799	4,051,193
	Earthquake	55	6,719	1,516,616	8,725,608
	Epidemic	575	116,478	10,742,661	4,730
	Extreme Temperature	11	231	1,000,218	47,809
	Famine (natural)	34	6,087	31,607,592	89,000
	Flood	571	16,510	40,762,262	3,536,316
	Insect infestation	68		446,000	5,200
	Slide	25	572	20,310	
	Volcano	14	2,157	463,160	
	Wild fire	18	156	20,215	3,500
Wind storm	150	3,469	11,587,644	3,038,073	
Wave / Surge	5	324	109,913	30,000	
Africa Total		1,860	713,343	409,656,390	19,531,429
Americas	Drought	100	79	51,069,164	13,057,539
	Earthquake	161	43,843	12,230,548	56,720,010
	Epidemic	73	14,347	1,626,638	
	Extreme Temperature	72	5,485	4,974,040	13,911,250
	Famine (natural)	2		1,003,000	
	Flood	684	51,337	47,353,328	57,306,219
	Insect infestation	3		2,000	104,000
	Slide	114	5,226	1,168,028	1,085,200
	Volcano	55	22,010	1,553,175	2,029,022
	Wild fire	105	182	1,140,071	8,212,700
Wind storm	718	39,457	44,186,489	312,010,487	
Wave / Surge	5	1,274	8,844		
Americas Total		2,092	183,240	166,315,325	464,436,427
Asia	Drought	139	3,928	1,425,115,138	14,379,391
	Earthquake	412	557,229	75,169,546	264,243,140
	Epidemic	250	45,727	7,200,142	
	Extreme Temperature	111	19,802	50,815,738	5,042,887
	Famine (natural)	10	760	8,670,000	4,399
	Flood	1,189	141,713	2,812,830,959	169,784,208
	Insect infestation	9		200	925
	Slide	246	16,898	5,873,434	477,034
	Volcano	62	1,430	2,240,626	579,149
	Wild fire	61	451	3,246,135	19,249,500
Wind storm	925	260,580	654,062,924	112,789,314	
Wave / Surge	24	232,671	2,408,109	7,784,397	
Asia Total		3,438	1,281,189	5,047,632,951	594,334,344
Europe	Drought	31		7,062,575	14,416,309
	Earthquake	159	8,706	2,842,476	34,404,776
	Epidemic	30	648	186,508	
	Extreme Temperature	162	39,157	849,919	3,316,088
	Famine (natural)	2		3,210,000	
	Flood	386	3,211	7,946,103	132,080,842
	Insect infestation	1			
	Slide	48	1,177	39,458	1,669,389
	Volcano	16	9	7,024	19,600
	Wild fire	90	419	1,138,093	4,066,853
Wind storm	321	2,049	8,651,954	37,333,948	
Wave / Surge	1	11	2		
Europe Total		1,247	55,387	31,934,112	227,307,805
Oceania	Drought	25	98	8,653,635	11,006,000
	Earthquake	87	586	81,387	2,507,400
	Epidemic	7	288	4,850	
	Extreme Temperature	4	23	4,600,784	
	Flood	152	264	539,046	3,848,937
	Insect infestation	1			120,000
	Slide	18	444	10,615	2,466
	Volcano	14	9	227,722	400,000
	Wild fire	34	134	76,310	1,182,006
	Wind storm	225	880	5,850,405	8,680,370
Wave / Surge	3	2,434	12,251		
Oceania Total		570	5,160	20,057,005	27,747,179
Grand Total		9,207	2,238,319	5,675,595,783	1,333,357,184

Source: CRED-EMDAT, Université Catholique de Louvain, Brussels, Belgium, 2007

Table 2B: Summary of Natural Disasters by Region, 2007

Continent	DisType	Count of DisNo	Sum of Killed	Sum of TotAff	Sum of Damage US\$ ('000s)
Africa	Drought	6		4,067,750	
	Epidemic	19	4,433	110,237	
	Flood	59	857	4,713,456	343,241
	Slide	1	20	6	
	Volcano	1	5	2,000	
	Wild fire	4	36	3,505	
	Wind storm	9	111	389,000	241,200
	Extreme temp	1	13		
	Wave / Surge	1	12		
Africa Total		101	5,487	9,285,954	584,441
Americas	Drought	3		1,000,000	
	Earthquake	8	532	507,455	
	Epidemic	1	1	228	
	Flood	38	666	3,415,533	3,444,322
	Slide	2	16	5,000	
	Volcano	1		3,000	
	Wild fire	4	17	775,759	2,530,000
	Wind storm	37	699	942,071	6,164,126
	Extreme temp	5	82	884,572	
Americas Total		99	2,013	7,533,618	12,138,448
Asia	Drought	1			
	Earthquake	9	119	701,034	12,974,000
	Epidemic	10	798	332,579	
	Flood	83	6,749	156,114,983	7,569,423
	Slide	7	228	3,993	
	Volcano	4	6	45,963	
	Wild fire	1	1	50	
	Wind storm	29	4,918	22,467,924	9,090,980
	Extreme temp	4	311	103,000	
	Wave / Surge	1		33,571	
	Asia Total		149	13,130	179,803,097
Europe	Earthquake	1	2	167	
	Epidemic	2	172	419	
	Flood	23	95	412,903	8,606,752
	Wild fire	9	97	1,005,506	948,604
	Wind storm	22	75	9,634	8,776,000
	Extreme temp	14	605	491	
Europe Total		71	1,046	1,429,120	18,331,356
Oceania	Earthquake	1	1	100	
	Flood	3	15	5,900	1,737,000
	Wind storm	6	167	143,601	300,652
	Wave / Surge	1	52	2,384	
Oceania Total		11	235	151,985	2,037,652
Grand Total		431	21,911	198,203,774	62,726,300

Source: CRED-EMDAT, Université Catholique de Louvain, Brussels, Belgium, 2007

Table 3A: Summary of Natural Disasters by Disaster Type, 1975-2007

DisType	Continent	Count of DisNo	Sum of Killed	Sum of TotAff	Sum of Damage US\$ ('000s)
Drought	Africa	334	560,640	311,379,799	4,051,193
	Americas	100	79	51,069,164	13,057,539
	Asia	139	3,928	1,425,115,138	14,379,391
	Europe	31		7,062,575	14,416,309
	Oceania	25	98	8,653,635	11,006,000
Drought Total		629	564,745	1,803,280,311	56,910,432
Earthquake	Africa	55	6,719	1,516,616	8,725,608
	Americas	161	43,843	12,230,548	56,720,010
	Asia	412	557,229	75,169,546	264,243,140
	Europe	159	8,706	2,842,476	34,404,776
	Oceania	87	586	81,387	2,507,400
Earthquake Total		874	617,083	91,840,573	366,600,934
Epidemic	Africa	575	116,478	10,742,661	4,730
	Americas	73	14,347	1,626,638	
	Asia	250	45,727	7,200,142	
	Europe	30	648	186,508	
	Oceania	7	288	4,850	
Epidemic Total		935	177,488	19,760,799	4,730
Extreme Temperature	Africa	11	231	1,000,218	47,809
	Americas	72	5,485	4,974,040	13,911,250
	Asia	111	19,802	50,815,738	5,042,887
	Europe	162	39,157	849,919	3,316,088
	Oceania	4	23	4,600,784	
Extreme Temperature Total		360	64,698	62,240,699	22,318,034
Famine (natural)	Africa	34	6,087	31,607,592	89,000
	Americas	2		1,003,000	
	Asia	10	760	8,670,000	4,399
	Europe	2		3,210,000	
Famine (natural) Total		48	6,847	44,490,592	93,399
Flood	Africa	571	16,510	40,762,262	3,536,316
	Americas	684	51,337	47,353,328	57,306,219
	Asia	1,189	141,713	2,812,830,959	169,784,208
	Europe	386	3,211	7,946,103	132,080,842
	Oceania	152	264	539,046	3,848,937
Flood Total		2,982	213,035	2,909,431,698	366,556,522
Insect infestation	Africa	68		446,000	5,200
	Americas	3		2,000	104,000
	Asia	9		200	925
	Europe	1			
	Oceania	1			120,000
Insect infestation Total		82		448,200	230,125
Slide	Africa	25	572	20,310	
	Americas	114	5,226	1,168,028	1,085,200
	Asia	246	16,898	5,873,434	477,034
	Europe	48	1,177	39,458	1,669,389
	Oceania	18	444	10,615	2,466
Slide Total		451	24,317	7,111,845	3,234,089
Volcano	Africa	14	2,157	463,160	
	Americas	55	22,010	1,553,175	2,029,022
	Asia	62	1,430	2,240,626	579,149
	Europe	16	9	7,024	19,600
	Oceania	14	9	227,722	400,000
Volcano Total		161	25,615	4,491,707	3,027,771
Wild fire	Africa	18	156	20,215	3,500
	Americas	105	182	1,140,071	8,212,700
	Asia	61	451	3,246,135	19,249,500
	Europe	90	419	1,138,093	4,066,853
	Oceania	34	134	76,310	1,182,006
Wild fire Total		308	1,342	5,620,824	32,714,559
Wind storm	Africa	150	3,469	11,587,644	3,038,073
	Americas	718	39,457	44,186,489	312,010,487
	Asia	925	260,580	654,062,924	112,789,314
	Europe	321	2,049	8,651,954	37,333,948
	Oceania	225	880	5,850,405	8,680,370
Wind storm Total		2,339	306,435	724,339,416	473,852,192
Wave / Surge	Africa	5	324	109,913	30,000
	Americas	5	1,274	8,844	
	Asia	24	232,671	2,408,109	7,784,397
	Europe	1	11	2	
	Oceania	3	2,434	12,251	
Wave / Surge Total		38	236,714	2,539,119	7,814,397
Grand Total		9,207	2,238,319	5,675,595,783	1,333,357,184

Source: CRED-EMDAT, Université Catholique de Louvain, Brussels, Belgium, 2007

Table 3B: Summary of Natural Disasters by Disaster Type, 2007

DisType	Continent	Count of DisNo	Sum of Killed	Sum of TotAff	Sum of Damage US\$ ('000s)
Drought	Africa	6		4,067,750	
	Americas	3		1,000,000	
	Asia	1			
Drought Total		10		5,067,750	
Earthquake	Americas	8	532	507,455	
	Asia	9	119	701,034	12,974,000
	Europe	1	2	167	
	Oceania	1	1	100	
Earthquake Total		19	654	1,208,756	12,974,000
Epidemic	Africa	19	4,433	110,237	
	Americas	1	1	228	
	Asia	10	798	332,579	
	Europe	2	172	419	
Epidemic Total		32	5,404	443,463	
Flood	Africa	59	857	4,713,456	343,241
	Americas	38	666	3,415,533	3,444,322
	Asia	83	6,749	156,114,983	7,569,423
	Europe	23	95	412,903	8,606,752
	Oceania	3	15	5,900	1,737,000
Flood Total		206	8,382	164,662,775	21,700,738
Slide	Africa	1	20	6	
	Americas	2	16	5,000	
	Asia	7	228	3,993	
Slide Total		10	264	8,999	
Volcano	Africa	1	5	2,000	
	Americas	1		3,000	
	Asia	4	6	45,963	
Volcano Total		6	11	50,963	
Wild fire	Africa	4	36	3,505	
	Americas	4	17	775,759	2,530,000
	Asia	1	1	50	
	Europe	9	97	1,005,506	948,604
Wild fire Total		18	151	1,784,820	3,478,604
Wind storm	Africa	9	111	389,000	241,200
	Americas	37	699	942,071	6,164,126
	Asia	29	4,918	22,467,924	9,090,980
	Europe	22	75	9,634	8,776,000
	Oceania	6	167	143,601	300,652
Wind storm Total		103	5,970	23,952,230	24,572,958
Extreme temp	Africa	1	13		
	Americas	5	82	884,572	
	Asia	4	311	103,000	
	Europe	14	605	491	
Extreme temp Total		24	1,011	988,063	
Wave / Surge	Africa	1	12		
	Asia	1		33,571	
	Oceania	1	52	2,384	
Wave / Surge Total		3	64	35,955	
Grand Total		431	21,911	198,203,774	62,726,300

Source: CRED-EMDAT, Université Catholique de Louvain, Brussels, Belgium, 2007

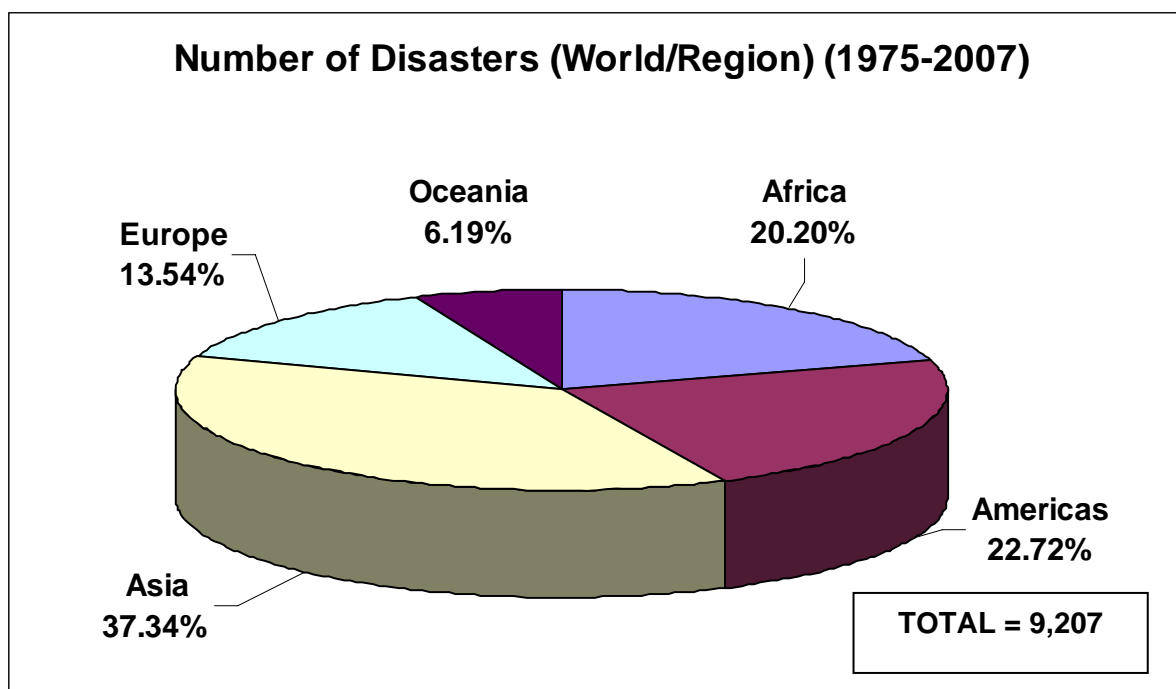
1.2 Regional Vulnerability: Disaster-Prone Asia

The years 2004 and 2005 were particularly disastrous years for Asia due to the Indian Ocean Tsunami, South Asian Earthquake as well as other earthquakes, wind storms, and floods. The year 2006 was likewise disastrous as a result of the earthquake plus tsunami in Indonesia, flood in China and India and Cyclone and landslide in Philippines, which accounted for almost 59% of the disaster-related human losses in the world. Similarly the year 2007 was also heavily disastrous in Asia. Floods in China, Bangladesh and India; windstorms in Bangladesh heavily contributed to the human loss and sufferings in Asia while an earthquake in Japan, floods in China and Bangladesh also contributed to the heavy monetary losses. The statistics make the region's vulnerability to natural disasters quite evident. The majority of human losses and suffering and noticeably considerable share of economic losses, were reported in this region in 2007, as had been the case in previous years. Specifically, nearly 91% (up 2% from 2006) of the total affected people and 60% (up 1% from 2006) of the human losses were reported in Asia. Further 47% of the reported economic damage also came from Asia followed by Europe, Americas, Oceania, and Africa . These losses were due to the natural disasters that hit China, India, Bangladesh, and Korea (windstorms and flood) in addition to Japan's Niigata earthquake caused the biggest economic damage in the year. These disasters once again highlighted for the world the region's vulnerability to such a disaster.

Outside of Asia, disaster damages were also reported from the Germany, UK, USA, and Australia. This year also, Africa was subjected to epidemics, floods, and droughts which affected millions of people in the region. Like last year, Europe again experienced extreme temperatures, floods, and wind storms which caused considerable human and economic losses.

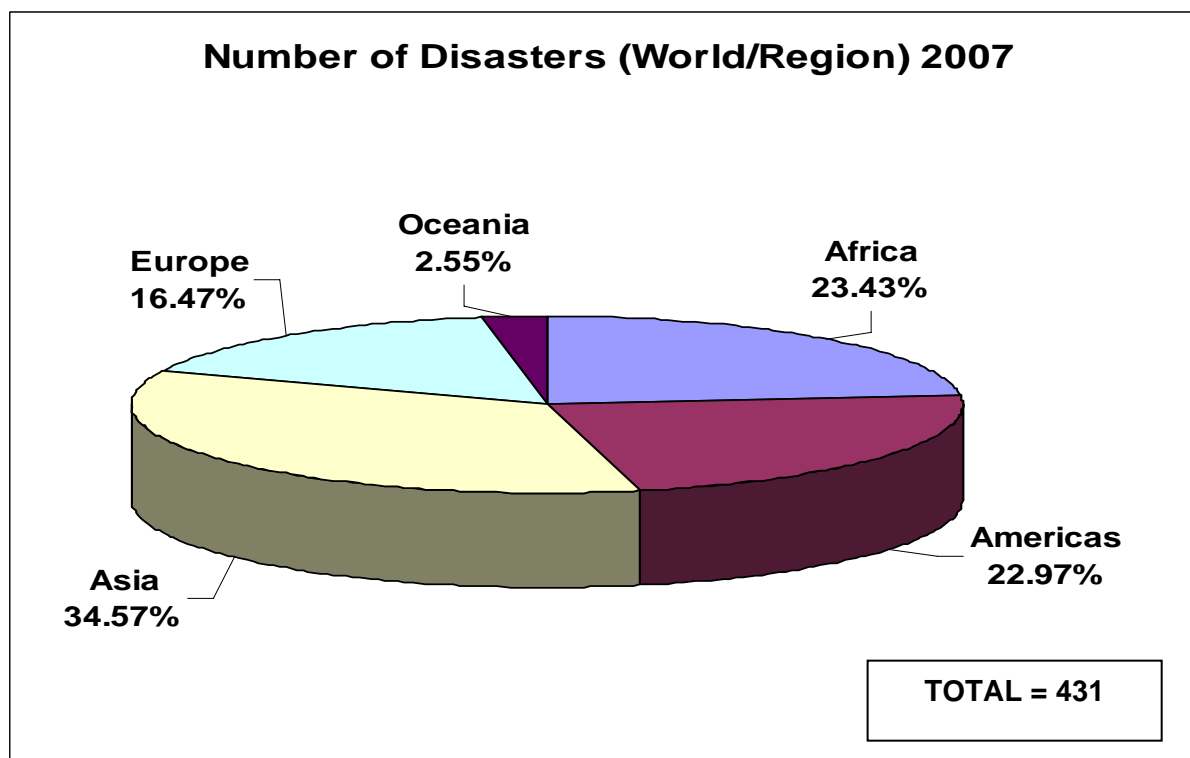
The following figures from 4A to 7B show the regional trends for 2007 as well as for the period 1975-2007. Figures 8A to 11C show trends by disaster type for 2007 and for the 1975-2007 period, for the world and the Asian region. We have included figures not only for the year 2007, but also for the 33-year period from 1975 to 2007. This will provide a better understanding of the situation and a useful basis for comparison.

Figure 4A



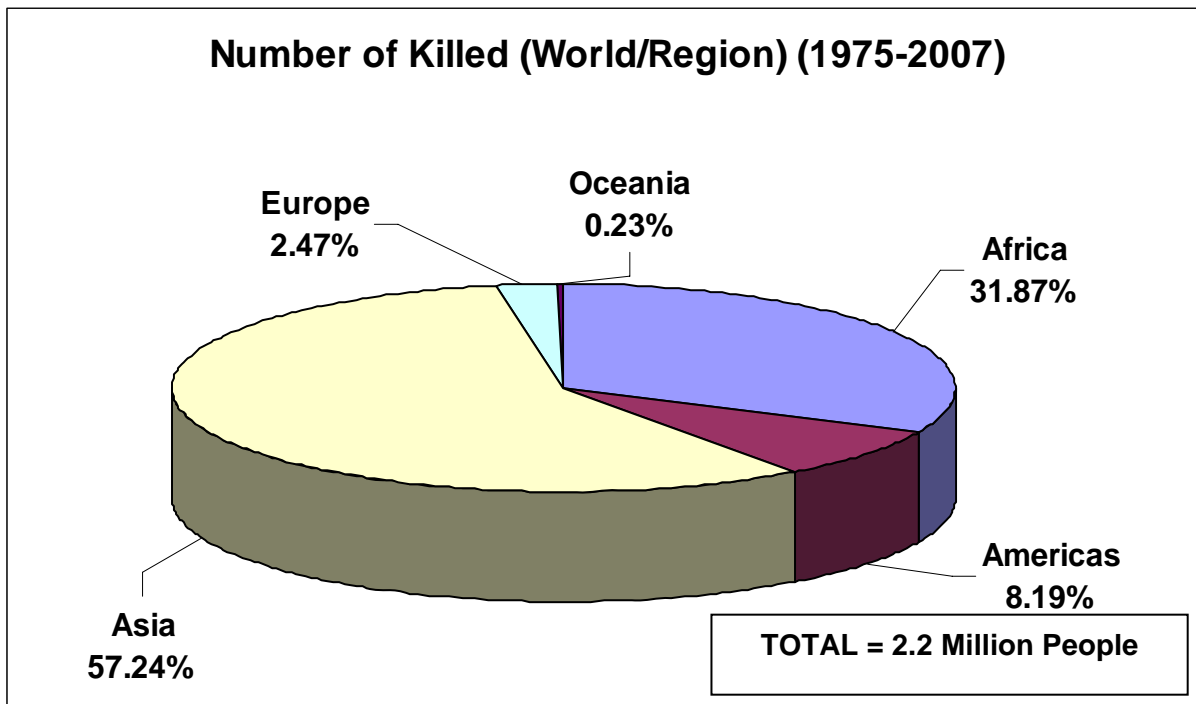
Source: CRED-EMDAT, Université Catholique de Louvain, Brussels, Belgium, 2007

Figure 4B



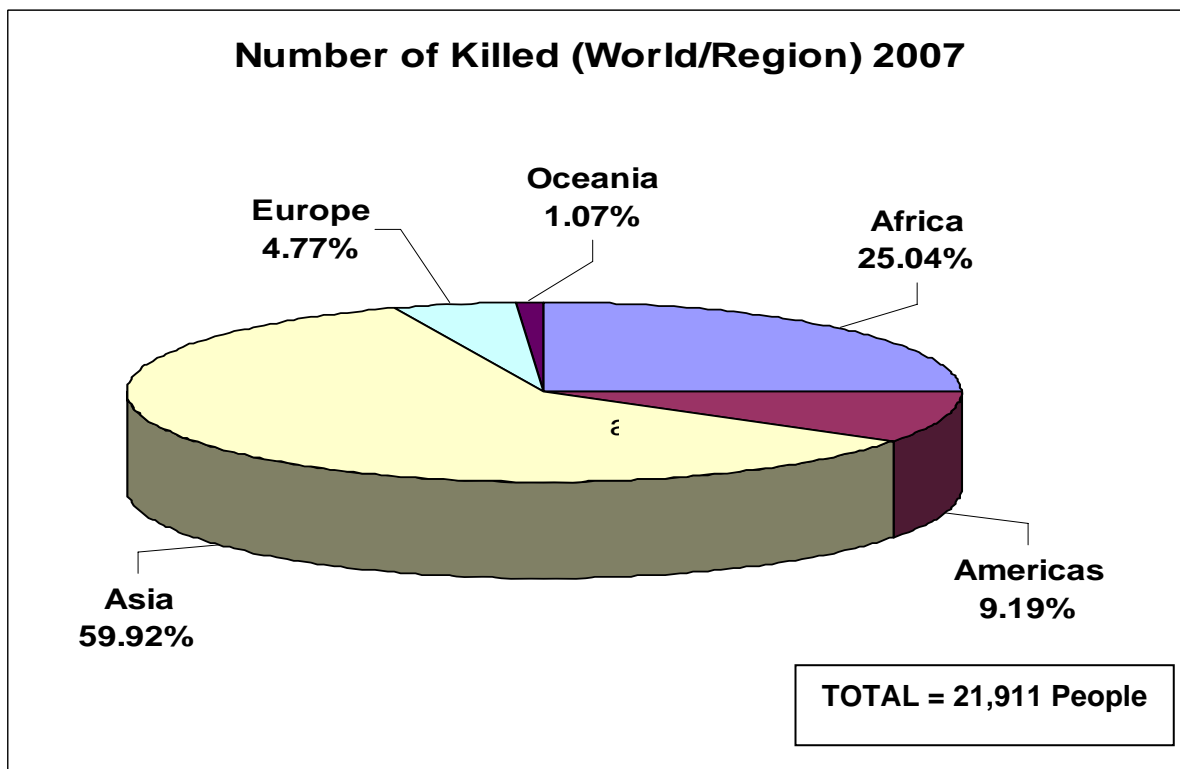
Source: CRED-EMDAT, Université Catholique de Louvain, Brussels, Belgium, 2007

Figure 5A



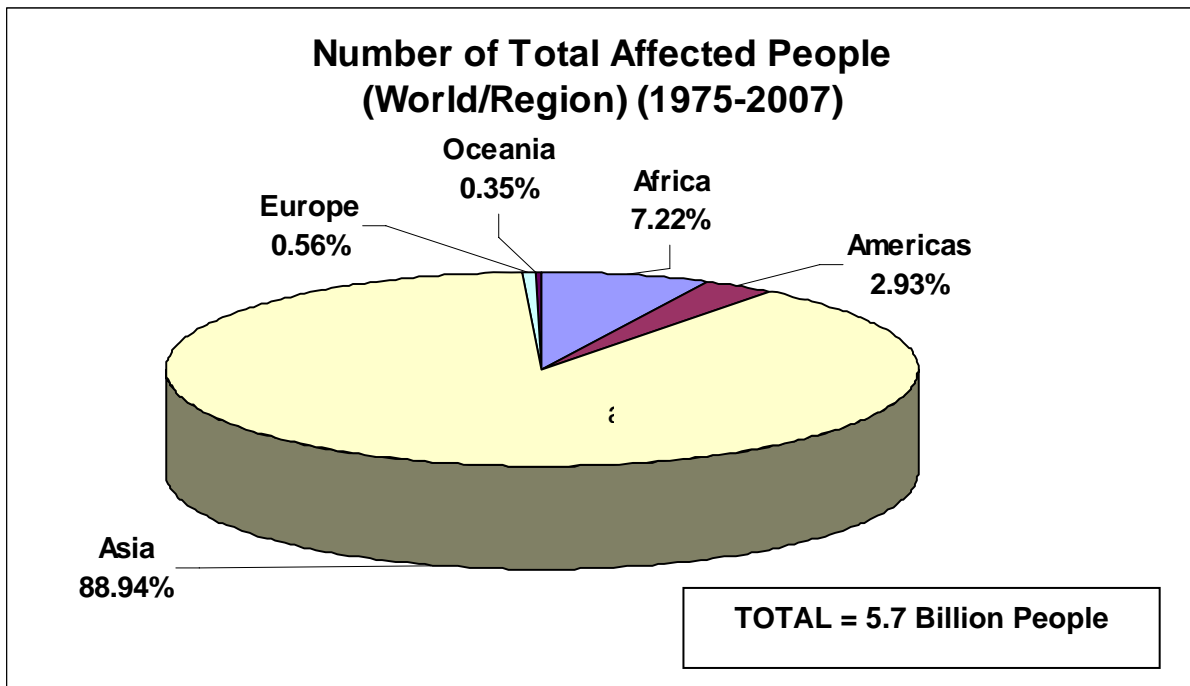
Source: CRED-EMDAT, Université Catholique de Louvain, Brussels, Belgium, 2007

Figure 5B



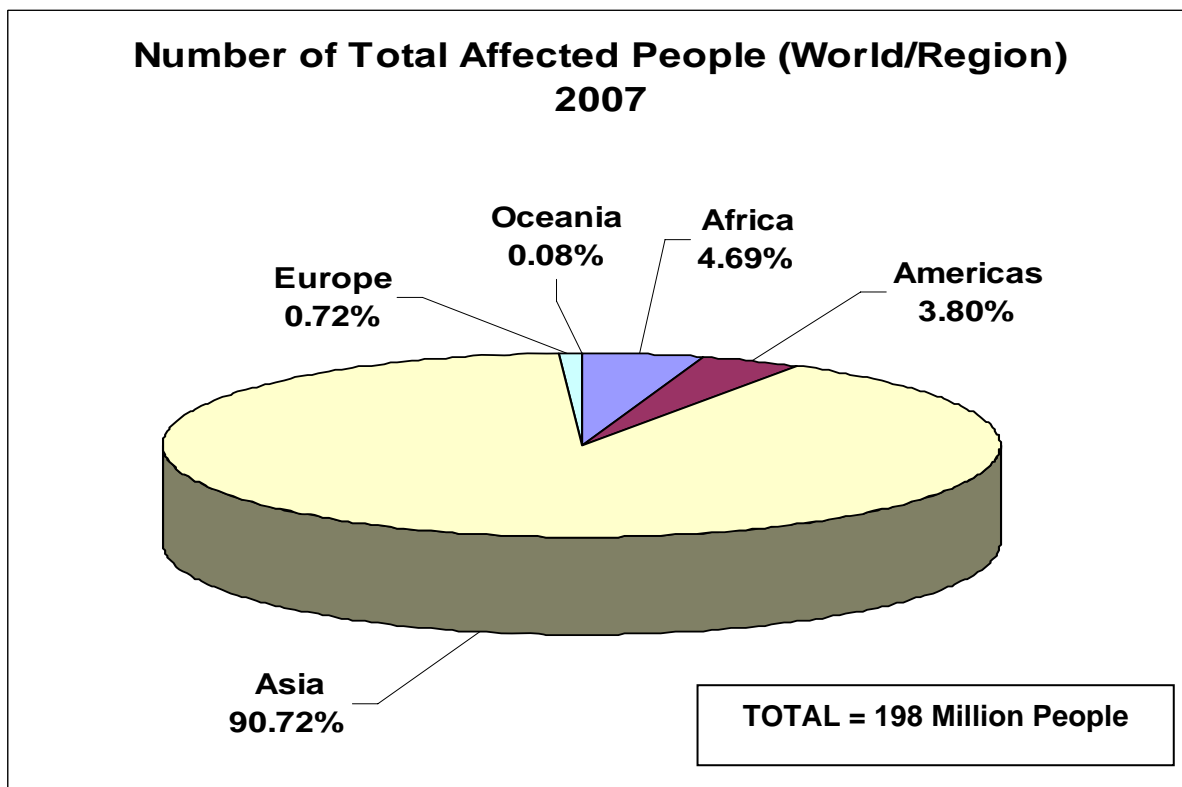
Source: CRED-EMDAT, Université Catholique de Louvain, Brussels, Belgium, 2007

Figure 6A



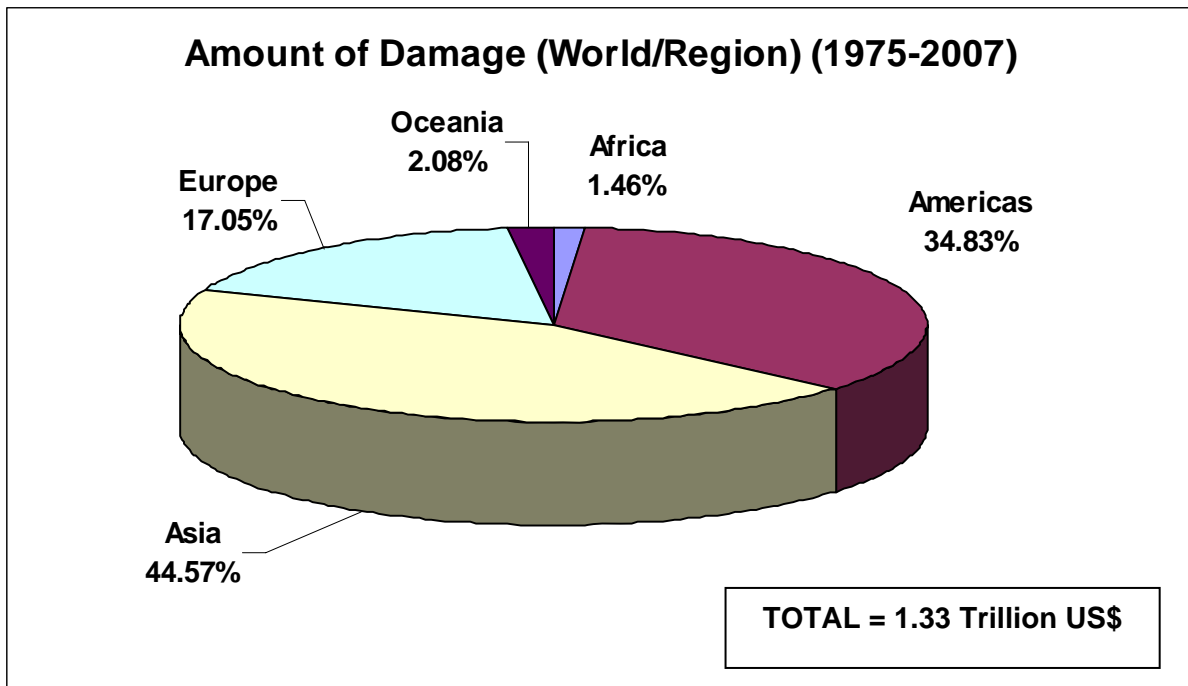
Source: CRED-EMDAT, Université Catholique de Louvain, Brussels, Belgium, 2007

Figure 6B



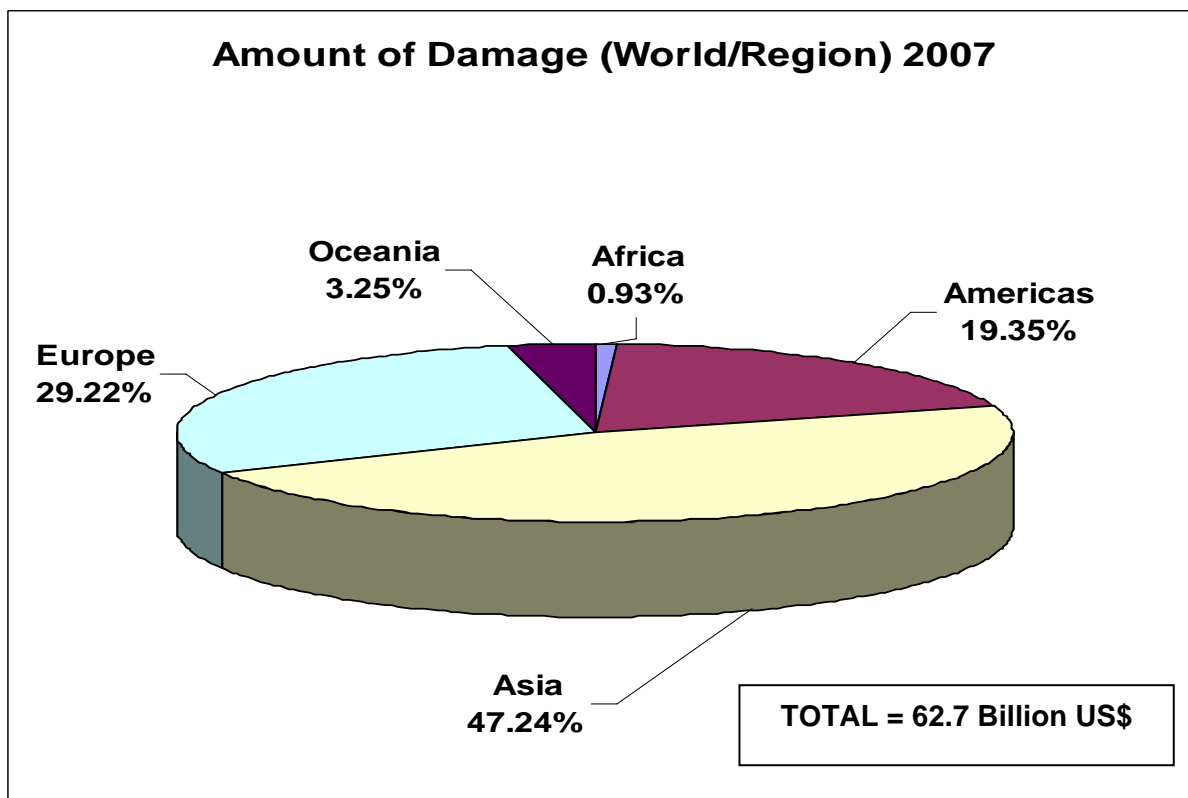
Source: CRED-EMDAT, Université Catholique de Louvain, Brussels, Belgium, 2007

Figure 7A



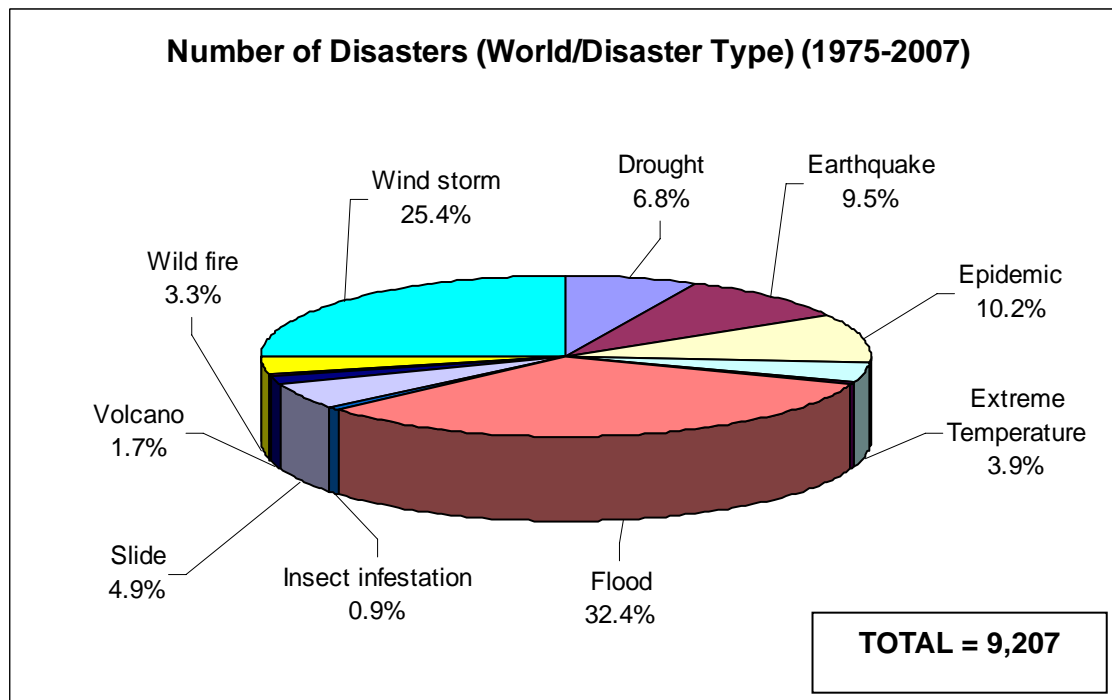
Source: CRED-EMDAT, Université Catholique de Louvain, Brussels, Belgium, 2007

Figure 7B



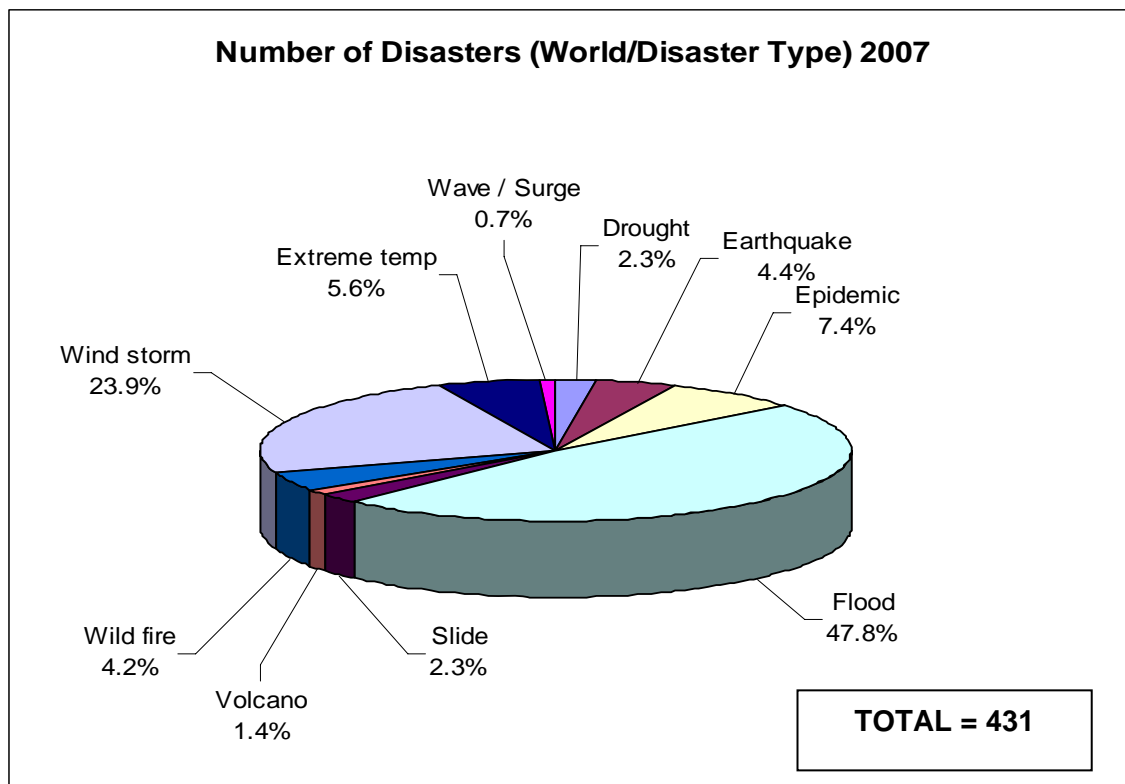
Source: CRED-EMDAT, Université Catholique de Louvain, Brussels, Belgium, 2007

Figure 8A



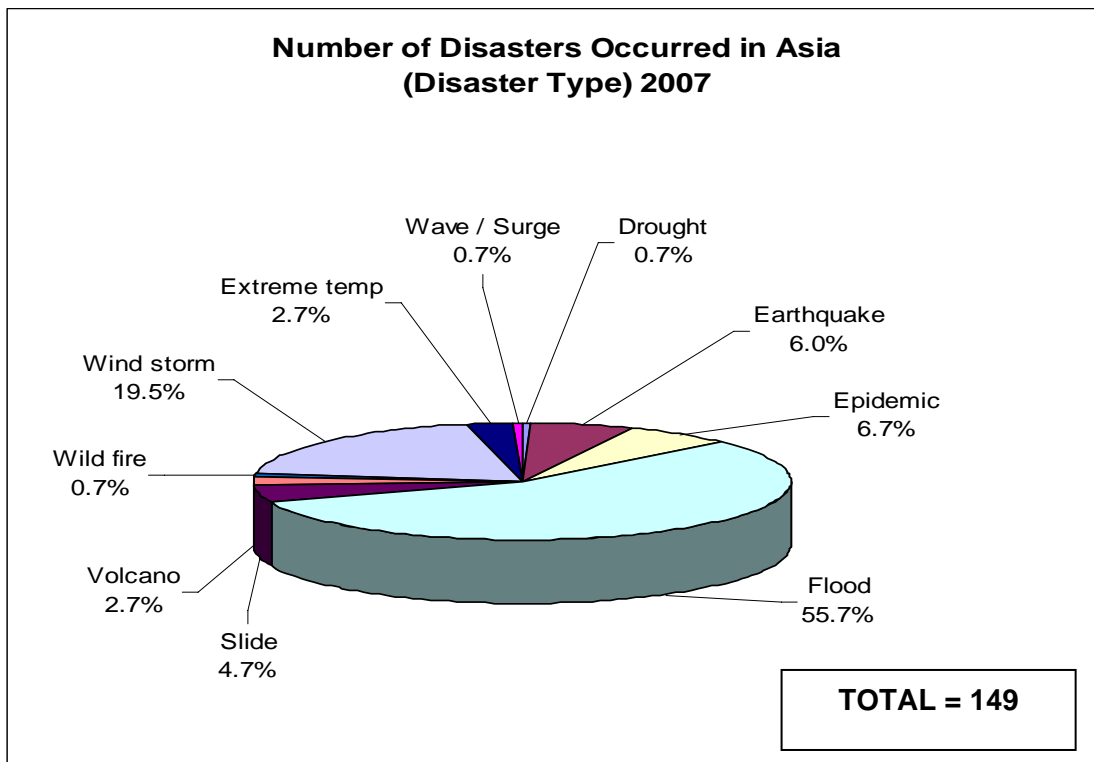
Source: CRED-EMDAT, Université Catholique de Louvain, Brussels, Belgium, 2007

Figure 8B



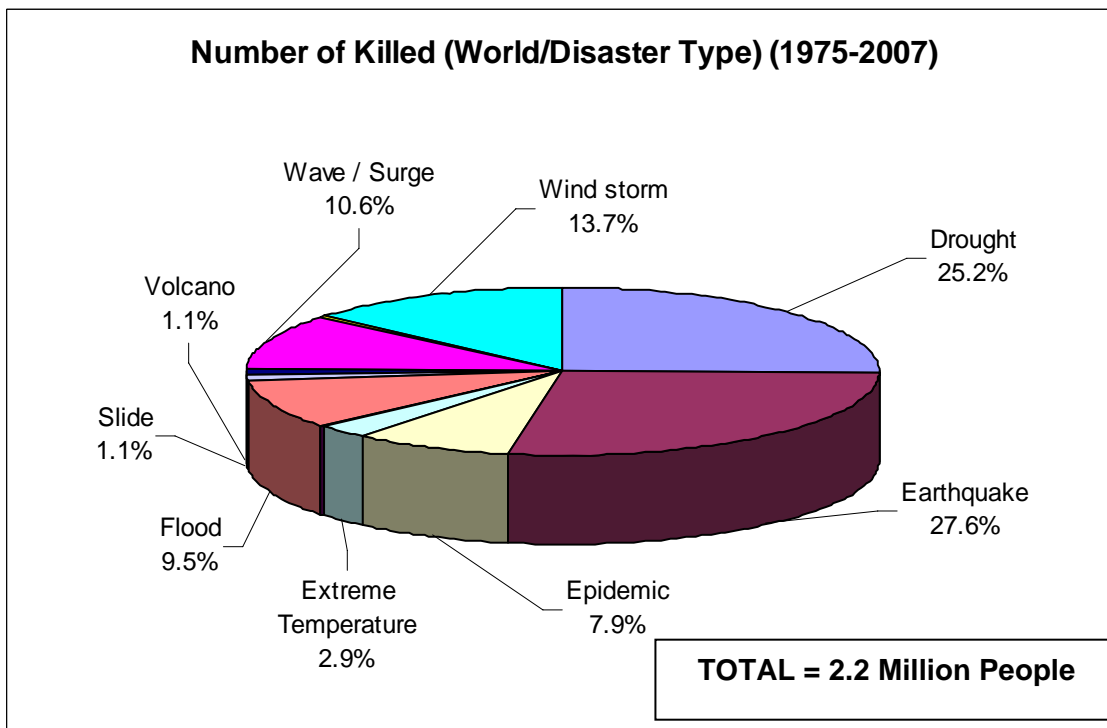
Source: CRED-EMDAT, Université Catholique de Louvain, Brussels, Belgium, 2007

Figure 8C



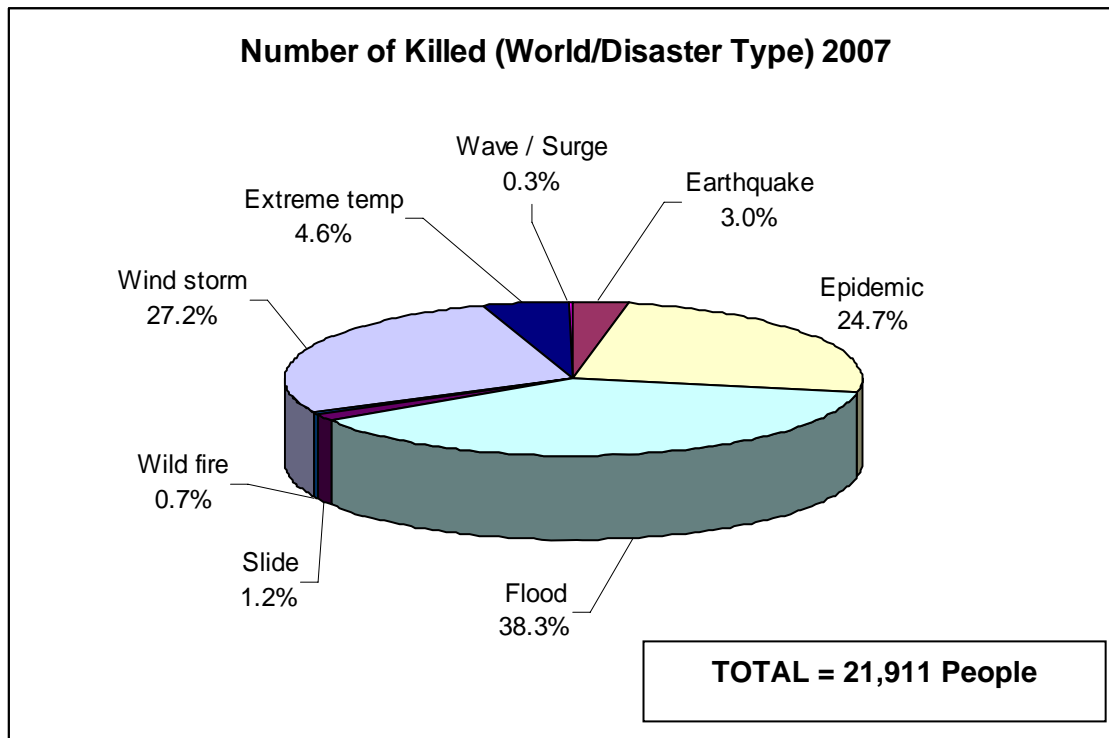
Source: CRED-EMDAT, Université Catholique de Louvain, Brussels, Belgium, 2007

Figure 9A



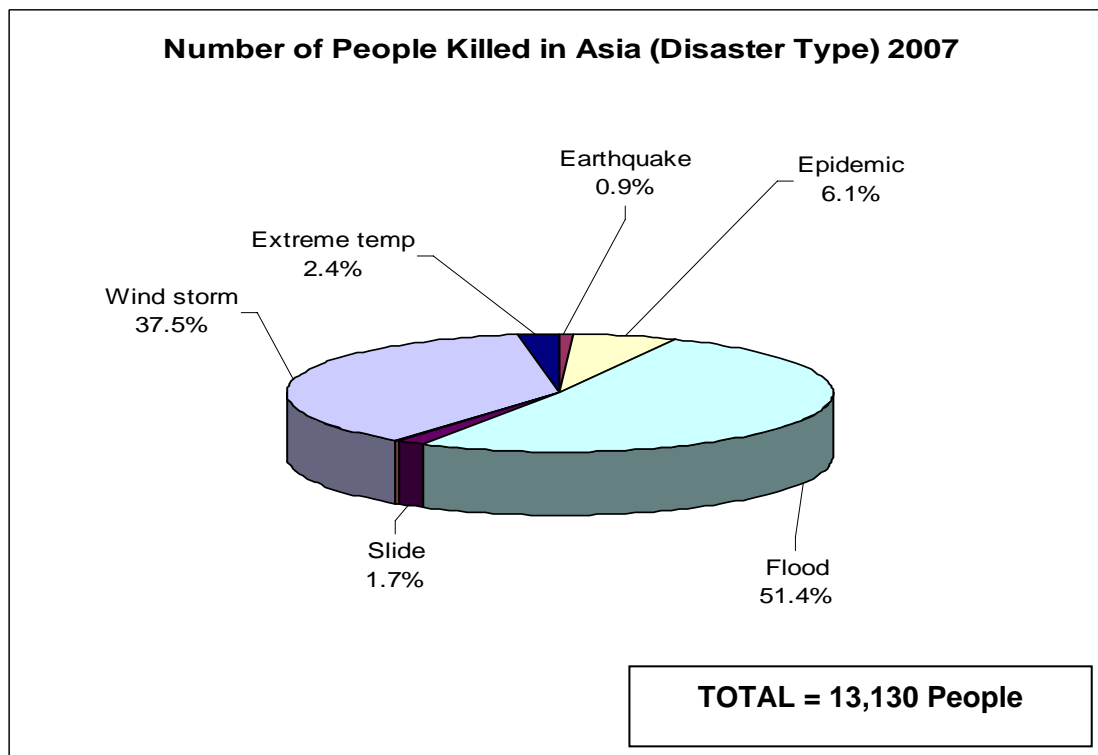
Source: CRED-EMDAT, Université Catholique de Louvain, Brussels, Belgium, 2007

Figure 9B



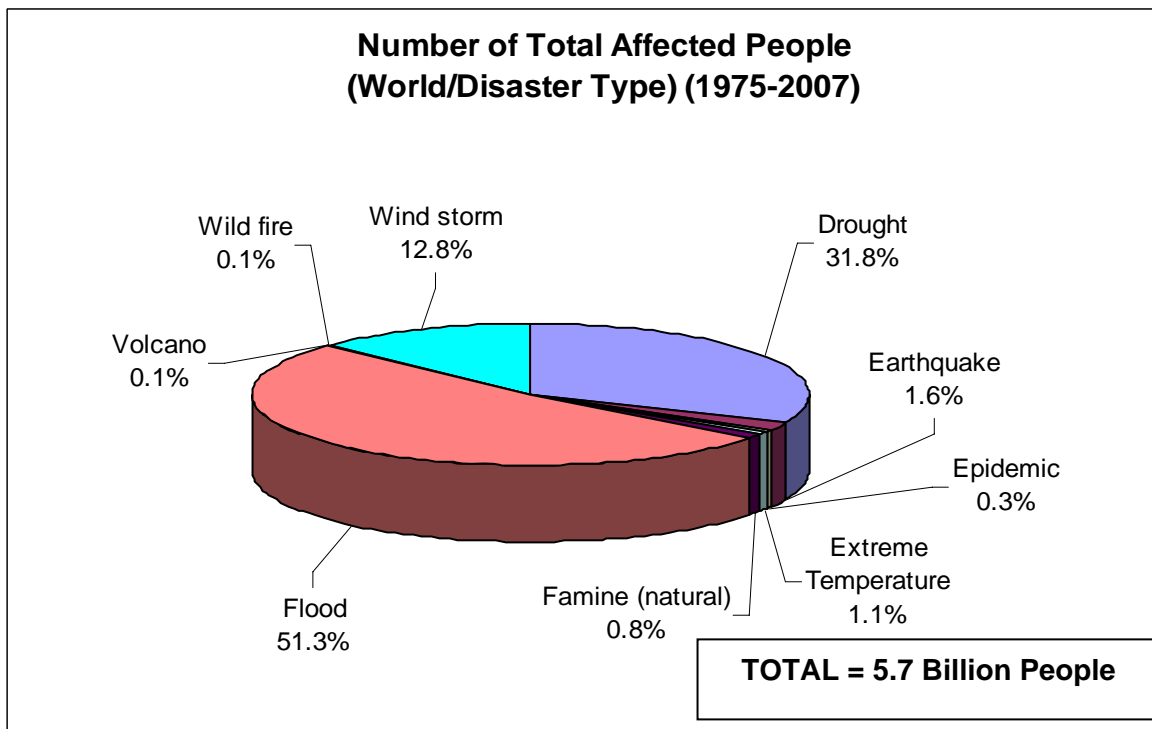
Source: CRED-EMDAT, Université Catholique de Louvain, Brussels, Belgium, 2007

Figure 9C



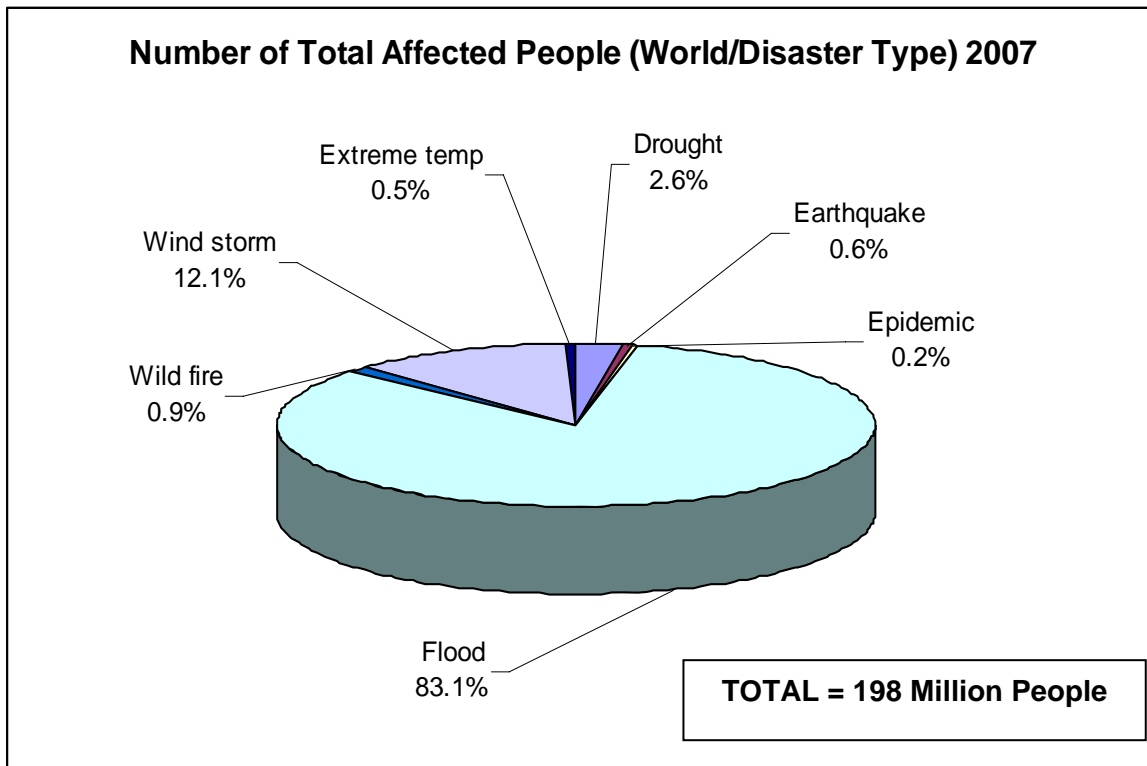
Source: CRED-EMDAT, Université Catholique de Louvain, Brussels, Belgium, 2007

Figure 10A



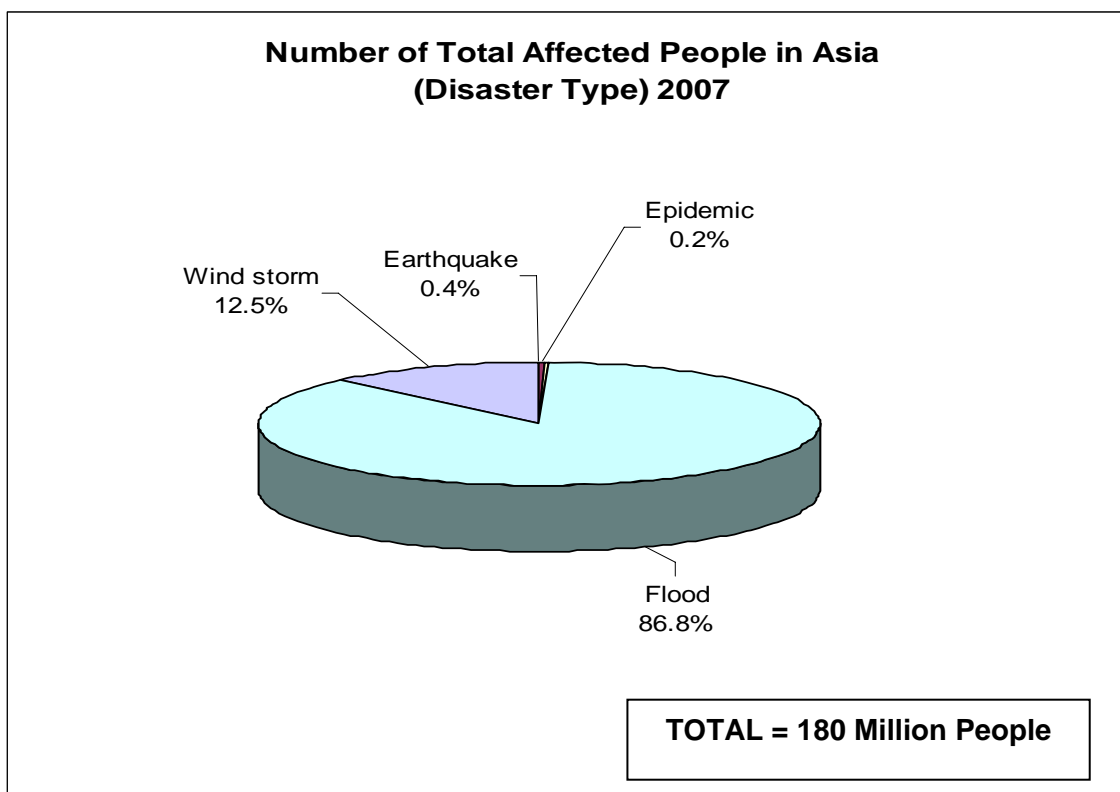
Source: CRED-EMDAT, Université Catholique de Louvain, Brussels, Belgium, 2007

Figure 10B



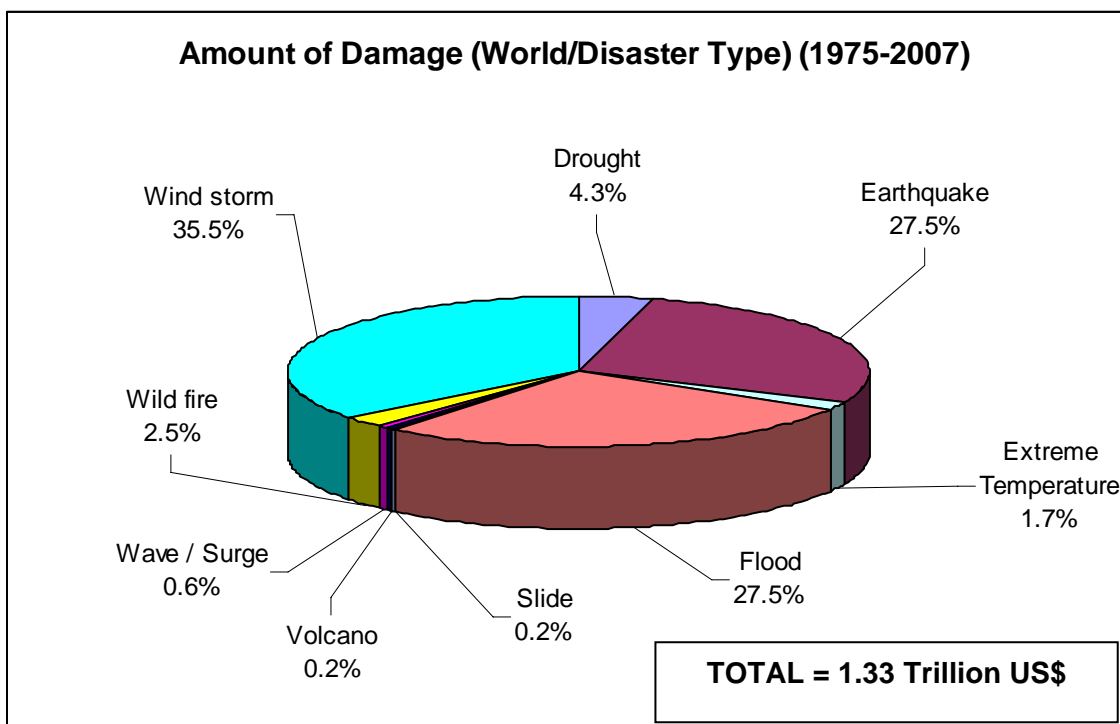
Source: CRED-EMDAT, Université Catholique de Louvain, Brussels, Belgium, 2007

Figure 10C



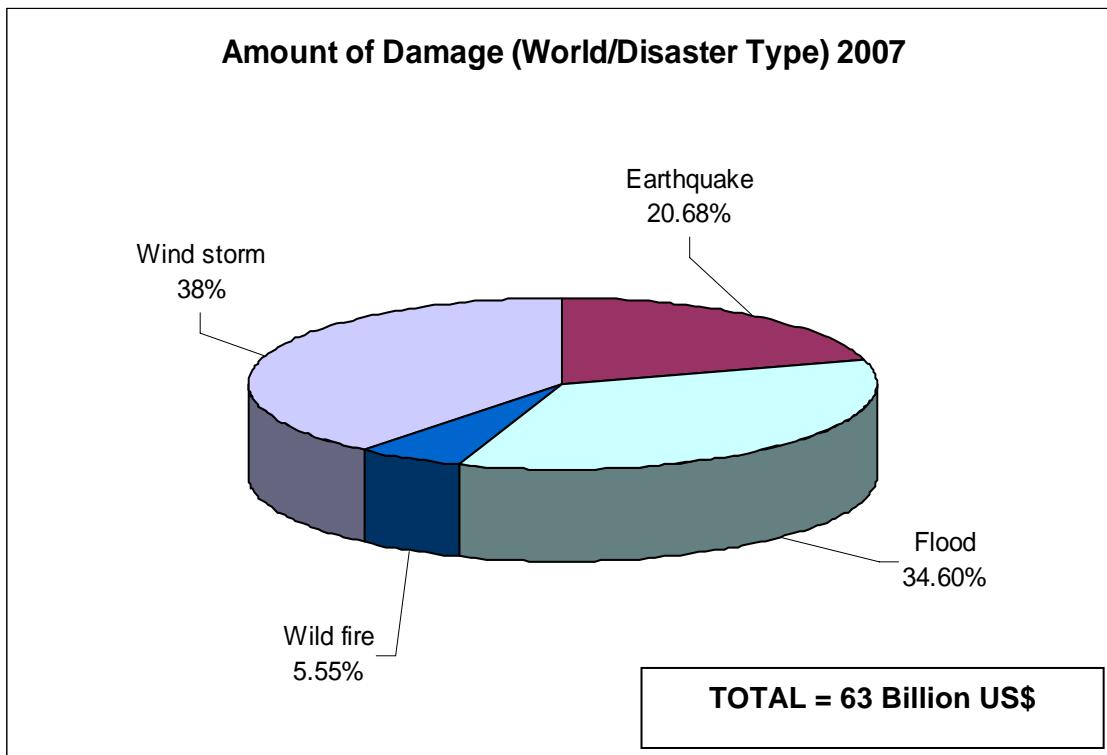
Source: CRED-EMDAT, Université Catholique de Louvain, Brussels, Belgium, 2007

Figure 11A



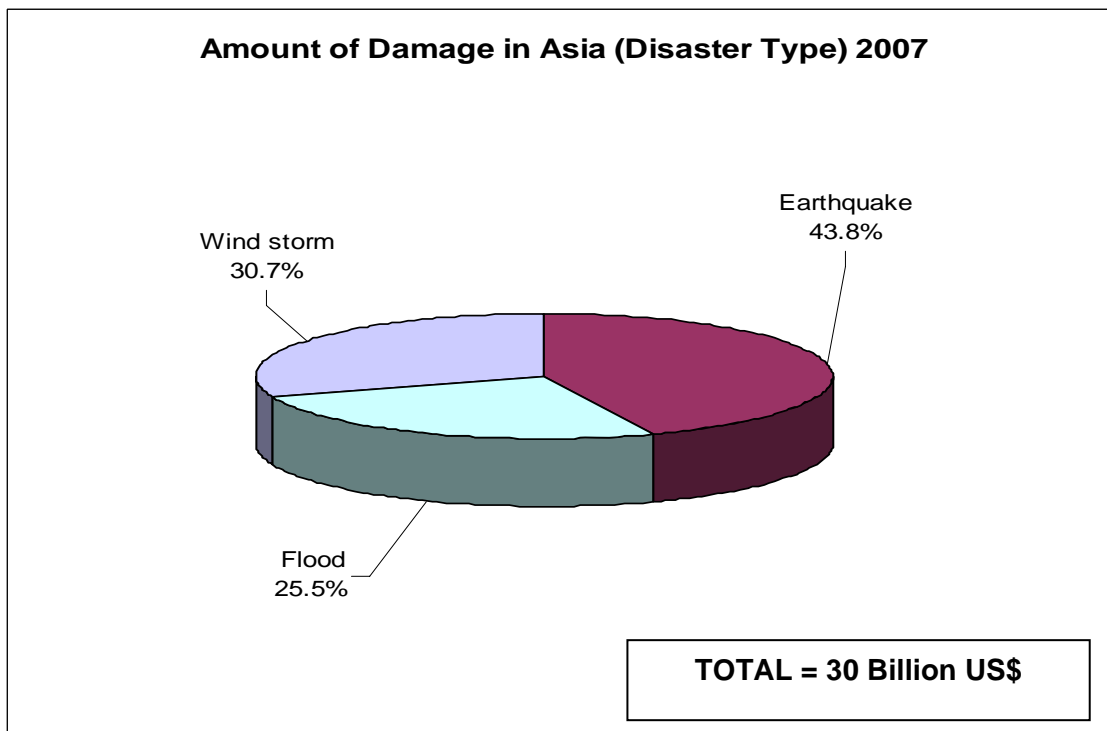
Source: CRED-EMDAT, Université Catholique de Louvain, Brussels, Belgium, 2007

Figure 11B



Source: CRED-EMDAT, Université Catholique de Louvain, Brussels, Belgium, 2007

Figure 11C



Source: CRED-EMDAT, Université Catholique de Louvain, Brussels, Belgium, 2007

Based on data related to disaster types and their impact on societies and economies in 2007, we can conclude that the Asian region has been deeply affected by both geo-physical disasters like earthquakes, as well as hydro-meteorological disasters like floods and wind storms. Similar to previous years, in 2007 also, Asia mainly experienced earthquake, windstorms, and floods, and these were really harmful to the development in the region. A comparative analysis can be made from past analytical studies of disasters and the ADRC's "20th Century Asian Natural Disasters Data Book." Socio-economic and cultural dimensions specific to the Asian region provide some explanation of the large number of affected people in spite of a relatively small amount of real economic damage as compared to previous years. But the 2004 Indian Ocean Tsunami, the 2005 South Asian Earthquake, 2006 disasters in China, Indonesia and Philippines, and 2007 floods and windstorms in China, India, Bangladesh, and Japan earthquake changed this perception and prompted the Asian region to adopt appropriate countermeasures. The great amount of human suffering and related financial losses in this region substantially hinders development activities. The above figures clearly illustrate this trend by disaster type for Asia and the rest of the world. The following chapters will also help us better understand regional differences in the characteristics of various types of disasters.

1.3 Vulnerabilities of Countries with Small Economies and Populations

It is obvious that countries with small economies and populations suffer more, even when only minor disasters occur. The following tables show the ranks of actual disasters in terms of the number of people killed, the number of people affected, and the amount of damage, as well as the change in the actual (real) rank when compared to the population and GNI (Gross National Income-Atlas method).³

Tables 4 to 9 show that while the actual damage in terms of human and economic losses are small, the effects on the population and the country's economy can be large in comparison with the population and GNI of these countries. Accordingly, this comparison reveals that countries with smaller economies and populations can not bear heavy damage in terms of loss share to population and GNI. For example, Table 4 ranks disaster events according to the number of people killed. Table 5 ranks those events according to the ratio of people killed to the total population. In Table 5, we can see African countries with smaller populations account for a larger share of human losses. While the Dominica ranked at 285, Comoros at 100, Togo at 78, Solomon Islands at 70, Greece at 56, Guinea at 43, and Haiti at 42 in Table 4 (the actual number of people killed), they all were ranked within the top 25 in Table 5 based on the share of their human loss to their total population. Also, Tables 8 and 9 indicate the economic vulnerability of the small economies to natural disasters. Even the smallest real economic damage is impacting heavily on the economy in the small economies as we see in the Table 9 where we compared the damage to the GNI of that country. Thus observations made from Tables 6, 7, 8, and 9 in terms of affected people and economic damage underscore the vulnerability of small states.

³ Here we used the values from World Bank, 2007 GNI data and definition on atlas method GNI calculation.

Table 4: Top 25 Natural Disasters by Number of People Killed, 2007

Rank	Country	Region	DisType	DisSubset	DisName	Month	Day	Killed	Injured	Homeless	Affected	TotAff	Damage US\$ ('000s)	Location
1	Bangladesh	South Asia	Wind storm	Cyclone	Sidr	11	15	4234	55282		8923259	8978541	2300000	Khulna-Banisal coast, Bagerhat, Patuakhali, Barguna, Proppur, Banisal, Jhalkhati, Bhola, Mandaripur, Gopalganj, Ouargaye, Banfora, Bati?, Boulsa, Dano, Hound?, Sapouy, Nanoro, Titao, Kombissni, Fada, Bousse, Leo, Yako, Sapone, Pama, Ouaga, Tengodogo
2	Burkina Faso	West Africa	Epidemic	Meningitis	meningococcal dise	1	1	1490			20765	20765		
3	Somalia	East Africa	Epidemic	Diarrhoeal/Enteric	Cholera	7		1133			35687	35687		
4	Bangladesh	South Asia	Flood	--		7	21	1110			13771380	13771380	100000	Bandarban Hill, Feni, Comilla, Sirajganj, Anicha, Gosalundo, Bhagyakul, Rangpur region
5	India	South Asia	Flood	--		7	3	1103			18700000	18700000		Bihar, Uttar Pradesh, Assam, Orissa, West Bengal
6	Korea Dem P Rep	East Asia	Flood	--		8	7	610	518	170000	1000000	1170518		Kangwon, North Hwanghae, South Hamgyong
7	China, P Rep	East Asia	Flood	--		6	15	535			105000000	105000000	4425655	Sichuan, Anhui, Hubei provinces
8	Peru	South America	Earthquake	Earthquake		8	15	519	1366	176070	302519	479955		Pisco, Ica, Chincha, Canete
9	Angola	Central Africa	Epidemic	Diarrhoeal/Enteric	Cholera	1	1	515			17875	17875		Luanda, Cabinda, Benguela, Kwanza Norte, Bengo, Huambo, Malanje, Zaire, Huila, Kwanza Sul, B? Uige, Luanda-
10	Hungary	Rest of Europe	Extreme temp	Heat wave		7		500						
11	Sudan	North Africa	Epidemic	Meningitis	meningococcal dise	1	1	430			6516	6516		Awail West, Juba, Mundri East, Rumbek, Tonj South, Wuba, Yrol
12	Indonesia	South-east Asia	Epidemic	Arbovirus	Dengue	7	0	365						
13	Pakistan	South Asia	Wind storm	Cyclone	Yemyin	6	26	242			1650000	1650000		Baluchistan, Sindh provinces
14	Pakistan	South Asia	Flood	--		6	23	230						Karachi, Gadab town
15	India	South Asia	Flood	--		7	1	225			63000	63000		Saurashtra region (Gujarat), Rajasthan, Madhya Pradesh
16	Nepal	South Asia	Flood	--		7	23	214	48		640658	640706	80000	Mahottari district (Souther Nepal), Terai, Jhapa, Sunsari, Nawalparasi, Sindhuli, Dang, Dhanusha, Chitwi, Solikhumbu
17	Nigeria	West Africa	Epidemic	Measles		12		200						Sokoto and Kaduna
18	Nicaragua	Central America	Wind storm	Hurricane	Felix	9	4	188			188726	188726		Puerto Cabezas, Waspm, Siuna, Bonaza, Rosita (Nothem Atlantic region)
19	Cambodia	South-east Asia	Epidemic	Arbovirus	Dengue	7		182			17000	17000		Kandal, Kampong Cham, Siem Riep, Takeo, Phnom Penh, Kampong Speu, Prey Veng
20	China, P Rep	East Asia	Flood	--		7	18	170			386000	386000	40000	Tengchong, Puer and Dehong, Yungjiang (Yunnan Province)
21	Zaire/Congo Dem Rep	Rest of Europe	Epidemic	Arbovirus	Haemorrhagic	6		166			372	372		Mkewa, Luebo, Kampungu, Lahamba (Western Kasai)
22	Papua New Guinea	Oceania	Wind storm	Cyclone	Guba	11	12	164			143000	143000		Sakarina, Afore, Mamba, Kamusi, Grua (Oro Province), Rabaraba district (Milne Bay Province)
23	Colombia	South America	Flood	--		3	6	159			443000	443000		Monteria, Ceret?, Chima, San Pelayo, Cotorra, Lonic, Momal, Buena Vista, La Apartada, Canetele, PUISIMA, Ayapel, San Bernardo del Viento, Puerto Libertador, Valencia, Cienaga de Oro, Tierra Alta
24	Sudan	North Africa	Flood	--		7	3	150	335	200000	365000	565335	300000	White Nile, Khartoum, Nile River, Blue Nile, Red Sea, North Kordofan, Southern Kordofan, Sennar, Al-Jazirah, Port Sudan,
25	Zambia	East Africa	Epidemic	Diarrhoeal/Enteric	Cholera	2		143			414	414		Lusaka

Source: CRED-EMDAT, Université Catholique de Louvain, Brussels, Belgium, 2007

Table 5: Top 25 Natural Disasters by the Ratio of People Killed to the Total Population, 2007

Rank (Killed/Popln)	Rank (Killed)	Country	Region	DisType	DisSubset	Month	Day	Killed	Injured	Homeless	Affected	TotAff	Population (World Fact Book)	Kill/Popln	Damage US\$ ('000s)	Location
1	3	Somalia	East Africa	Epidemic	rthoeal/Ent	7		1133			35687	35687	8863338	0.000128		
2	2	Burkina Faso	West Africa	Epidemic	Meningitis	1	1	1490			20765	20765	13902972	0.000107		Ouargaye, Banifora, Bati?, Boulsa, Dano, Hound?, Sapouy, Nanoro, Titao, Kombissin, Pada, Bousse, Leo, Yako, Sapone, Pama, Ouaga, Tengodogo
3	70	Solomon Is	Oceania	Wave / Surge	Tsunami	4	2	52	9		2375	2384	552438	0.000094		Gizo, Simbo, Ranogga, Shortland Isl., Munda, Noro, Vella la Vella, Kolombangarra, Choiseul, Posarae, Sasamunga areas
4	10	Hungary	Rest of Europe	Extreme temp	Heat wave	7		500					9981334	0.000050		
5	9	Angola	Central Africa	Epidemic	rthoeal/Ent	1	1	515			17875	17875	12127071	0.000042		Luanda, Cabinda, Benguela, Kwanza Norte, Bengo, Huambo, Malanje, Zaire, Huila, Kuanza Sul, B? , Uige, Luanda-Norte, Namibe, Kuando Kubango provinces
6	100	Comoros	East Africa	Epidemic	rthoeal/Ent	3		29			1490	1490	690948	0.000042		Moroni, Fombouni, Fombouni, Ouzioni, Mitsamouli, Oichih, Mbeni, Mitsoudje (Grande Comore Isl.), Fomboni, Wanani, Nioumachioi (Moheli), Anjouan Isl.
7	18	Nicaragua	Central America	Wind storm	Hurricane	9	4	188			188726	188726	5570129	0.000034		Puerto Cabezas, Waspan, Sina, Bonaza, Rosita (Northern Atlantic region)
8	285	Dominica	Caribbean	Wind storm	Hurricane	8	21	2	30		7500	7530	68910	0.000029	20000	
9	22	Papua New Guinea	Oceania	Wind storm	Cyclone	11	12	164			143000	143000	5670544	0.000029		Sakarua, Afore, Mamba, Kamusi, Gisu (Cro Province), Rabaraba district (Milne Bay Province)
10	1	Bangladesh	South Asia	Wind storm	Cyclone	11	15	4234	55282		8923239	8978541	147365352	0.000029	2300000	Khulna-Bansal coast, Bagerhat, Patuakhali, Barguna, Pirojpur, Barisal, Jhalakati, Bhola, Mandanpur, Gopalganj, Shariatpur, Khulna, Satkhira
11	6	Korea Dem P Rep	East Asia	Flood	--	8	7	610	518	170000	1000000	1170518	23113019	0.000026		Kangwon, North Hwanghae, South Hamgyong
12	49	Oman	West Asia	Wind storm	Cyclone	6	6	76			20000	20000	3102229	0.000024	3900000	Muscat
13	8	Peru	South America	Earthquake	Earthquake	8	15	519	1366	176070	302519	479955	28302603	0.000018		Pisco, Ica, Chincha, Canete
14	33	Tanzania Uni Rep	East Africa	Epidemic	Arbovirus	1	13	109			264	264	7320815	0.000015		Anusha, Tanga, Manyara, Dodoma, Singida, Morogoro, Dar Es Salaam, Iringa, Pwani regions
15	28	Dominican Rep	Caribbean	Wind storm	tropical stor	10	28	129			79728	79728	9183984	0.000014	77700	Santo Domingo, Distrito Nacional, San Cristobal, Peravia, Azua, Barahona, Pedernales, Independencia, Bahoruco, San Juan de la Maguana, Santiago, Puerto Plata, Espa?at, Salcedo, Duarte, La Vega, Monte Plata, Mosenor Nouel, Hato Mayor, El Seibo, Dajabon, Montecristi, Santiago Rodriguez, La Altagracia, San Pedro de Macoris
16	19	Cambodia	South-east Asia	Epidemic	Arbovirus	7		182			17000	17000	13881427	0.000013		Kandal, Kampong Cham, Siem Reap, Takeo, Phnom Penh, Kampong Speu, Prey Veng
17	25	Zambia	East Africa	Epidemic	rthoeal/Ent	2		143			414	414	11502010	0.000012		Lusaka
18	42	Haiti	Caribbean	Wind storm	tropical stor	10	28	90	133		108630	108763	8308504	0.000011		Port-au-Prince region
19	11	Sudan	North Africa	Epidemic	Meningitis	1	1	430			6516	6516	41236378	0.000010		Awel West, Juba, Mundi East, Rumbek, Tonj South, Wuha, Yrol
20	43	Guinea	West Africa	Epidemic	rthoeal/Ent	1		90			2410	2410	9690222	0.000009		
21	34	Angola	Central Africa	Flood	--	1	17	105			40000	40000	12127071	0.000009		Luanda city (Cacuaco municipality, Benguela province), Bengo, Huambo, Lunda Norte
22	16	Nepal	South Asia	Flood	--	7	23	214	48		640658	640706	28287147	0.000008	80000	Mahottan district (Southern Nepal), Terai, Jhapa, Sunsari, Nawalparasi, Sindhuli, Dang, Dhanusha, Gulmi, Solukhumbu districts, Janakpur area
23	4	Bangladesh	South Asia	Flood	--	7	21	1110			13771380	13771380	147365352	0.000008	100000	Bandarban Hill, Feri, Comilla, Siriganj, Aricha, Goabundo, Bhagyakul, Rangpur region
24	78	Togo	West Africa	Flood	--	8		41	77	13374	127880	141331	5548702	0.000007		Kpendjal, Oti, Tone, Tandjouare, Sinkasse prefectures (Savanes region) and Maritime region
25	56	Greece	European Union	Wild fire	Forest	8	24	67	64	3735	1593	5392	10688058	0.000006	946150	Mess?mie, Laconia (Peloponese), Eubee Isl.

Source: CRED-EMDAT, Université Catholique de Louvain, Brussels, Belgium, 2007

Table 6: Top 25 Natural Disasters by the Number of Total Affected People, 2007

Rank	Country	Region	DisType	DisSubset	DisName	Month	Day	Killed	Injured	Homeless	Affected	TotAff	Damage US\$ ('000s)	Location
1	China, P Rep	East Asia	Flood	--		6	15	535			105000000	105000000	4425655	Sichuan, Anhui, Hubei provinces
2	India	South Asia	Flood	--		7	3	1103			18700000	18700000		Bihar, Uttar Pradesh, Assam, Orissa, West Bengal
3	Bangladesh	South Asia	Flood	--		7	21	1110			13771380	13771380	100000	Bandarban Hill, Feri, Comilla, Sirajganj, Aricha, Goalundo, Bhagyakul, Rangpur region, Khulna-Bansal coast, Bagherhat, Patuakhali, Barguna, Pirojpur, Barisal, Ishkhathi, Bhola
4	Bangladesh	South Asia	Wind storm	Cyclone	Sidr	11	15	4234	55282		8923259	8978541	2300000	
5	China, P Rep	East Asia	Wind storm	Typhoon	Sepat	8	18	39			8000000	8000000	890555	Hunan, Jiangxi, Fujian, Zhejiang, Guangdong provinces
6	India	South Asia	Flood	--		9	22	80			7200000	7200000	275000	Balasure, Kendrapara, Mayurbhanj, Rajanagar, Patamunda, Bhadrak, Baricada, Jagatsinghpour, Jaispur
7	China, P Rep	East Asia	Flood	--		8	9	26			2430000	2430000		Shandong province
8	China, P Rep	East Asia	Flood	Flash Flood		5	24	43			2300000	2300000	73500	Sichuan province
9	Zimbabwe	East Africa	Drought	Drought		1	0	0			2100000	2100000		
10	Pakistan	South Asia	Wind storm	Cyclone	Yemyin	6	26	242			1650000	1650000		Baluchistan, Sindh provinces
11	Mexico	Central America	Flood	--		10	28	22			1600000	1600000	3000000	Chiapas, Tabasco
12	Zambia	East Africa	Flood	--		1	10	4			1400000	1400000		North-Western, Copperbelt, Western, Central provinces
13	Korea Dem P Rep	East Asia	Flood	--		8	7	610	518	170000	1000000	1170518		Kangwon, North Hwanghae, South Hamgyong
14	China, P Rep	East Asia	Wind storm	Storm		4	1	13			1000000	1000000	26000	Chongqing, Xuanhan regions
15	Macedonia FRY	European Union	Wild fire	Forest		7		1			1000000	1000000		Bitola, Tetovo, Bucin, Sveta, Knusevo, Suvoil
16	Brazil	South America	Drought	Drought		10					1000000	1000000		Ceara, Aiuaba, Inhamuns, Piaui, Maranhao, Tocantins, Minas Gerais
17	Philippines	South-east Asia	Wind storm	Typhoon	Chedeng and Dodong	8	8	7	7		921455	921462	492	Metro Manila, Luzon provinces
18	Peru	South America	Extreme temp	Cold Wave		4		67			884572	884572		Andes
19	Uganda	East Africa	Flood	--		8	15	29		282975	435070	718045	71	Amuria, Bukedea, Kaberamoido, Katakwi, KULI, Soroti (Teso sub-Quang Binh, Ha Tinh, Quang Tri, Quang Ngai, Quang Nam, Son La, Yen Bai, Hoa Binh, Thai Binh)
20	Viet Nam	South-east Asia	Wind storm	Typhoon	Lekima	9	29	96	150	47525	637755	685430	191000	Mahottari district (Southern Nepal), Terai, Jhapa, Sunsari, Nawalparasi, Sindhuli, Dang, Dharusha, Gulmi
21	Nepal	South Asia	Flood	--		7	23	214	48		640658	640706	80000	Los Angeles, Orange, Riverside, San Bernardino, San Diego, Santa Barbara, Ventura (California)
22	United States	North America	Wild fire	Scrub		10	21	9			640000	640000	2500000	
23	Sudan	North Africa	Flood	--		7	3	150	335	200000	365000	565335	300000	White Nile, Khartoum, Nile River, Blue Nile, Red Sea, North Kordofan, Southern Kordofan, Sennar, Al-Jazirah, Port Sudan, Jonglei states
24	Mozambique	East Africa	Drought	Drought		8					520000	520000		
25	Malawi	East Africa	Drought	Drought		10					520000	520000		Karonga, Mzimba (North), Ntchisi Centre), Mulanje (South)

Source: CRED-EMDAT, Université Catholique de Louvain, Brussels, Belgium, 2007

Table 7: Top 25 Natural Disasters by the Ratio of Total Affected People to the Total Population, 2007

Rank (TotAff/Popln)	Rank (TotAff)	Country	Region	Dis Type	DisSubset	DisName	Month	Day	Killed	Injured	Homeless	Affected	TotAff	Population (World Fact Book)	TotAff/Popln	Damage US\$ ('000s)	Location
1	15	Macedonia FRY	European Union	Wild fire	Forest		7		1			1000000	1000000	2050554	0.487673		Bitola, Tetovo, Bucin, Sveta, Krusevo, Suvoil
2	33	Swaziland	Southern Africa	Drought	Drought		7					410000	410000	1136334	0.360809		
3	28	Lesotho	Southern Africa	Drought	Drought		7					475000	475000	2022331	0.234877		
4	9	Zimbabwe	East Africa	Drought	Drought		1					2100000	2100000	12236805	0.171613		
5	12	Zambia	East Africa	Flood	--		1	10	4			1400000	1400000	11502010	0.121718		North-Western, Copperbelt, Western, Central provinces
6	167	Domínica	Caribbean	Wind storm	Hurricane	Dean	8	21	2	30		7500	7530	68910	0.109273	20000	
7	3	Bangladesh	South Asia	Flood	--		7	21	1110			13771380	13771380	147365352	0.093451	100000	Bandarban Hill, Feni, Comilla, Sirajganj, Anicha, Goshundo, Bhagyakul, Rangpur region
8	95	Djibouti	East Africa	Drought	Drought		1					42730	42730	486530	0.087867		
9	1	China, P Rep	East Asia	Flood	--		6	15	535			105000000	105000000	1320914145	0.079490	4425655	Sichuan, Anhui, Hubei provinces
10	131	Belize	Central America	Wind storm	Hurricane	Dean	8	21				20000	20000	287730	0.069510	14847	Corozal city, Sarteneja, Consejo (North of Corozal district)
11	4	Bangladesh	South Asia	Wind storm	Cyclone	Sidr	11	15	4234	55282		8923259	8978541	147365352	0.060927	2300000	Khulna-Bansal coast, Bagerhat, Patuakhali, Barguna, Pirajpur, Bansal, Jhalidhati, Ekhola, Mandaripur, Gopalganj,
12	13	Korea Dem P Rep	East Asia	Flood	--		8	7	610	518	170000	1000000	1170518	23113019	0.050643		Kangwon, North Hwanghae, South Hamgyong
13	25	Malawi	East Africa	Drought	Drought		10					520000	520000	13013926	0.039957		Karonga, Mzimba (North), Ntchasi Centre, Mulanje (South)
14	38	Bolivia	South America	Flood	--		1	10	40			339495	339495	8989046	0.037768	90000	Santa Cruz, Tarija, Cochabamba, Potosi, Chuquisaca, Beni, La Paz, Oruro, Colbamba, Pando
15	67	Uruguay	South America	Flood	--		5	4	2	0	9200	110000	119200	3431932	0.034733	45000	Durazno, Treinta y Tres, Soriano, Tacuarembó, Rio Negro, Florida, Rocha, Cerro Largo, 25 de Agosto, Melo, Nohia, Rio Branco, Cebollari, Montevideo Mercedes, vila Soriano departments
16	54	Nicaragua	Central America	Wind storm	Hurricane	Felix	9	4	188			188726	188726	5570129	0.033882		Puerto Cabezas, Waspan, Sina, Bonaza, Rosita (Northern Atlantic region)
17	18	Peru	South America	Extreme temp	Cold Wave		4		67			884572	884572	28302603	0.031254		Andes
18	24	Mozambique	East Africa	Drought	Drought		8					520000	520000	19686505	0.026414		
19	60	Togo	West Africa	Flood	--		8		41	77	13374	127880	141331	5548702	0.025471		Kpendjal, Oti, Tone, Tandjouare, Sinkesse prefectures (Savanes region) and Maritime region
20	19	Uganda	East Africa	Flood	--		8	15	29		282975	435070	718045	28195754	0.025466	71	Amuria, Buladea, Kaberamaido, Katakwi, KULI, Soroti (Teso sub-region), Amuru, Gulu, Kitgum, Paer (Acholi region), Amolatar.
21	59	Papua New Guinea	Oceania	Wind storm	Cyclone	Guba	11	12	164			143000	143000	5670544	0.025218		Sakanina, Afore, Mamba, Kamusi, Gura (Oro Province), Rabaraba district (Milne Bay Province)
22	170	Bahamas	Caribbean	Wind storm	Tropical storm	Noel	10	28	1			7000	7000	303770	0.023044		Abaco, Long Island, Exuma, Cat Island, Andros, New Providence
23	21	Nepal	South Asia	Flood	--		7	23	214	48		640638	640706	28287147	0.022650	80000	Mahottari district (Southern Nepal), Terai, Jhapa, Sunsari, Nawalparasi, Sindhuli, Dang, Dhanusha, Gulmi, Sankhumbaru districts, Janakpur area
24	64	Paraguay	South America	Wild fire	Forest		9		8			125000	125000	6506464	0.019212	30000	San Pedro, Concepcion, Presidente Hayes, Caunideyu, Amambay departments
25	55	Chad	Central Africa	Flood	--		8	25	12			170000	170000	9944201	0.017095		Salamat region

Source: CRED-EMDAT, Université Catholique de Louvain, Brussels, Belgium, 2007

Table 8: Top 25 Natural Disasters by the Amount of Damage, 2007

Rank	Country	Region	DisType	DisSubset	DisName	Month	Day	Killed	Injured	Homeless	Affected	TotAff	Damage US\$ ('000s)	Location
1	Japan	East Asia	Earthquake	Earthquake		7	16	9	1000	10000	13000	24000	12500000	Niigata prefecture
2	Germany	European Union	Wind storm	Storm	Kyrill	1	18	11	130			130	5500000	
3	China, P Rep	East Asia	Flood	--		6	15	535			105000000	105000000	4425655	Sichuan, Anhui, Hubei provinces
4	United Kingdom	European Union	Flood	--		7	20	7			340000	340000	4000000	Gloucestershire, Worcestershire, Oxfordshire, Berkshire, Bedfordshire, Herefordshire, Warwickshire,
5	United Kingdom	European Union	Flood	--		6	25	6		30000		30000	4000000	Yorkshire, Lincolnshire, Worcestershire, South Yorkshire, Gloucestershire, (Northern England)
6	Oman	West Asia	Wind storm	Cyclone	Gonu	6	6	76			20000	20000	3900000	Muscat
7	Mexico	Central America	Flood	--		10	28	22			1600000	1600000	3000000	Chiapas, Tabasco
8	United States	North America	Wild fire	Scrub		10	21	9			640000	640000	2500000	Los Angeles, Orange, Riverside, San Bernardino, San Diego, Santa Barbara, Ventura (California)
9	Bangladesh	South Asia	Wind storm	Cyclone	Sidr	11	15	4234	55282		8923259	8978541	2300000	Khulna-Bansal coast, Bagerhat, Patuakhali, Barguna, Pirojpur, Barisal, Jhalakati, Bhola, Mandaipur, Gopalganj,
10	United States	North America	Wind storm	Winter		4	13	23					2000000	Midwest
11	Australia	Oceania	Flood	Flash Flood		6	8	9			5000	5000	1700000	Central Coast, Hunter (East Coast)
12	United Kingdom	European Union	Wind storm	Storm	Kyrill	1	18	13					1200000	
13	Japan	East Asia	Wind storm	Typhoon	Fitow	9	6	4	82		900	982	1000000	Tokyo
14	United States	North America	Wind storm	Storm		12	3	2			1100	1100	1000000	Washington, Oregon states
15	Greece	European Union	Wild fire	Forest		8	24	67	64	3735	1593	5392	946150	Mess'nie, Laconie (Peloponese), Eubee Isl.
16	China, P Rep	East Asia	Wind storm	Typhoon	Sepat	8	18	39			8000000	8000000	890555	Hunan, Jiangxi, Fujian, Zhejiang, Guangdong provinces
17	Indonesia	South-east Asia	Flood	--		1	31	68	1		217086	217087	879000	Jakarta, Tangerang, Bekasi, Bogor
18	China, P Rep	East Asia	Wind storm	Typhoon	Wipha	9	20	9					638000	Zhejiang province
19	United States	North America	Wind Storm	Tomado		3	1	22	20			20	600000	Alabama, Missouri, Georgia, Minnesota
20	Mexico	Central America	Wind storm	Hurricane	Dean	8	21	9			140000	140000	600000	Yucatan Peninsula, Veracruz, Hidalgo, Puebla states
21	Netherlands	European Union	Wind storm	Storm	Kyrill	1	18	7					550000	
22	Cuba	Caribbean	Wind storm	Tropical storm	Noel	10	28	1			192488	192488	500000	Granma, Holguin, Las Tunas
23	Belgium	European Union	Wind storm	Storm	Kyrill	1	18	2	2			2	450000	
24	Austria	European Union	Wind storm	Storm	Kyrill	1	17						400000	
25	Malaysia	South-east Asia	Flood	--		1	11	17			137533	137533	385568	Johor, Pahang

Source: CRED-EMDAT, Université Catholique de Louvain, Brussels, Belgium, 2007

Table 9: Top 25 Natural Disasters by the Ratio of Damage to GNI, 2007

Rank (Damage/GNI)	Rank (Damage)	Country	Region	DisType	DisSubset	DisName	Month	Day	Killed	Injured	Homeless	Affected	TotAff	GNI (Bn US\$) (World Bank)	DamageUS ('000s)	Dam/GNI	Location
1	34	Guadeloupe	Caribbean	Wind storm	Hurricane	Dean	8	29						0.40	300000	0.7500000	
2	33	Martinique	Oceania	Wind storm	Hurricane	Dean	8	16	1	6			6	1.57	300000	0.1910828	
3	6	Oman	West Asia	Wind storm	Cyclone	Gonu	6	6	76			20000	20000	22.99	3900000	0.1696390	Muscat
4	75	Dominica	Caribbean	Wind storm	Hurricane	Dean	8	21	2	30		7500	7530	0.26	20000	0.0769231	
5	61	St Lucia	Caribbean	Wind storm	Hurricane	Dean	8	17	1					0.68	40000	0.0588235	North areas, Castries
6	39	Madagascar	East Africa	Wind storm	Cyclone	Indhala	3	15	80		12000	203182	215182	5.19	240000	0.0462428	Diana, Sava, Sofia, Analajirofo
7	9	Bangladesh	South Asia	Wind storm	Cyclone	Sidr	11	15	4234	55282		8923259	8978541	61.32	2300000	0.0375082	Khulna-Bansal coast, Baghat, Patuakhali, Barguna, Pirojpur, Banisal, Jhalakati, Bhola, Mandaripur, Charenor, ST Thomas, St James, Kingston, St Andrew
8	32	Jamaica	Caribbean	Wind storm	Hurricane	Dean	8	20	4		1188	32000	33188	8.72	300000	0.0344037	
9	31	Sudan	North Africa	Flood	--		7	3	150	335	200000	365000	565335	18.72	300000	0.0160256	White Nile, Khartoum, Nile River, Blue Nile, Red Sea, North Kordofan, Southern Kordofan, Sennar, Al-Jazirah, Port Sudan, Jonglei states
10	22	Cuba	Caribbean	Wind storm	Tropical storm	Noel	10	28	1			192488	192488	32.83	500000	0.0152300	Granma, Holguin, Las Tunas
11	76	Belize	Central America	Wind storm	Hurricane	Dean	8	21	0			20000	20000	1.11	14847	0.0133757	Corozal city, Sarteneja, Consejo (North of Corozal district)
12	66	Fiji	Oceania	Flood	--		2	3	1			900	900	2.29	30000	0.0131004	Vanua Levu, Viti Levu
13	51	Nepal	South Asia	Flood	--		7	23	214	48		640638	640706	6.57	80000	0.0121766	Mahottari district (Southern Nepal), Terai, Jhapa, Sunsari, Nawalparasi, Sindhuli, Dang, Dhanusha, Gulmi, Sookchumbu districts, Janakpur area
14	50	Bolivia	South America	Flood	--		1	10	40			339495	339495	8.64	90000	0.0104167	Santa Cruz, Tarija, Cochabamba, Potosi, Chuquisaca, Beni, La Paz, Oruro, Co/bamba, Pando
15	35	Slovenia	Rest of Europe	Wind storm	Storm		9	18	6		1050		1050	29.49	276000	0.0093391	Gorenjska and Celje regions
16	26	Viet Nam	South-east Asia	Flood	--		11	10	55			150000	150000	44.63	350000	0.0078423	Khanh Hoa, Quang Ngai, Binh Dinh, Quang Nam, Thua Thien-Hue, Ninh Thuan, Quang Tri, Da Nang,
17	15	Greece	European Union	Wild fire	Forest		8	24	67	64	3735	1593	5392	184.97	946150	0.0051152	Mess'onia, Laccorie (Peloponnese), Eubee Isl.
18	64	Paraguay	South America	Wild fire	Forest		9		8			125000	125000	6.87	30000	0.0043668	San Pedro, Concepcion, Presidente Hayes, Carandevu,
19	41	Viet Nam	South-east Asia	Wind storm	Typhoon	Lekima	9	29	96	150	47525	637755	685430	44.63	191000	0.0042796	Quang Binh, Ha Tinh, Quang Tri, Quang Ngai, Quang Nam, Son La, Yen Bai, Hoa Binh, Thai Binh, Thanh Hoa, Nghe An, Ninh Binh, Hoa Binh, Son
20	7	Mexico	Central America	Flood	--		10	28	22			1600000	1600000	704.91	3000000	0.0042559	Chiapas, Tabasco
21	54	Dominican Rep	Caribbean	Wind storm	Tropical storm	Noel	10	28	129			79728	79728	18.44	77700	0.0042137	Santo Domingo, Distrito Nacional, San Cristobal, Peravia, Azua, Barahona, Pedernales, Independencia, Bahoruco, San Juan de la Maguana, Santiago, Puerto
22	53	Costa Rica	Central America	Flood	--		10	12	19			12000	12000	19.00	80000	0.0042105	Atenas, Guanacaste, Parrita, San Jose?, Puntarenas provinces
23	29	Pakistan	South Asia	Flood	--		8	10	35					90.66	327118	0.0036082	Karachi, Sind province
24	17	Indonesia	South-east Asia	Flood	--		1	31	68	1		217086	217087	248.01	879000	0.0035442	Jakarta, Tangerang, Bekasi, Bogor
25	25	Malaysia	South-east Asia	Flood	--		1	11	17			137533	137533	112.58	385568	0.0034248	Johor, Pahang

Source: CRED-EMDAT, Université Catholique de Louvain, Brussels, Belgium, 2007

The above tables and figures clearly show the trends in natural disasters in Asia and around the world, as well as the impacts and characteristics of those disasters in 2007. This chapter also analyzed the vulnerability of the small states due to the small size of their populations and economies. It is equally important to analyze the impact of disasters on economic development and efforts to achieve sustainable development in order to stimulate the development of effective disaster risk management approaches. The following chapters will illustrate these issues in detail.