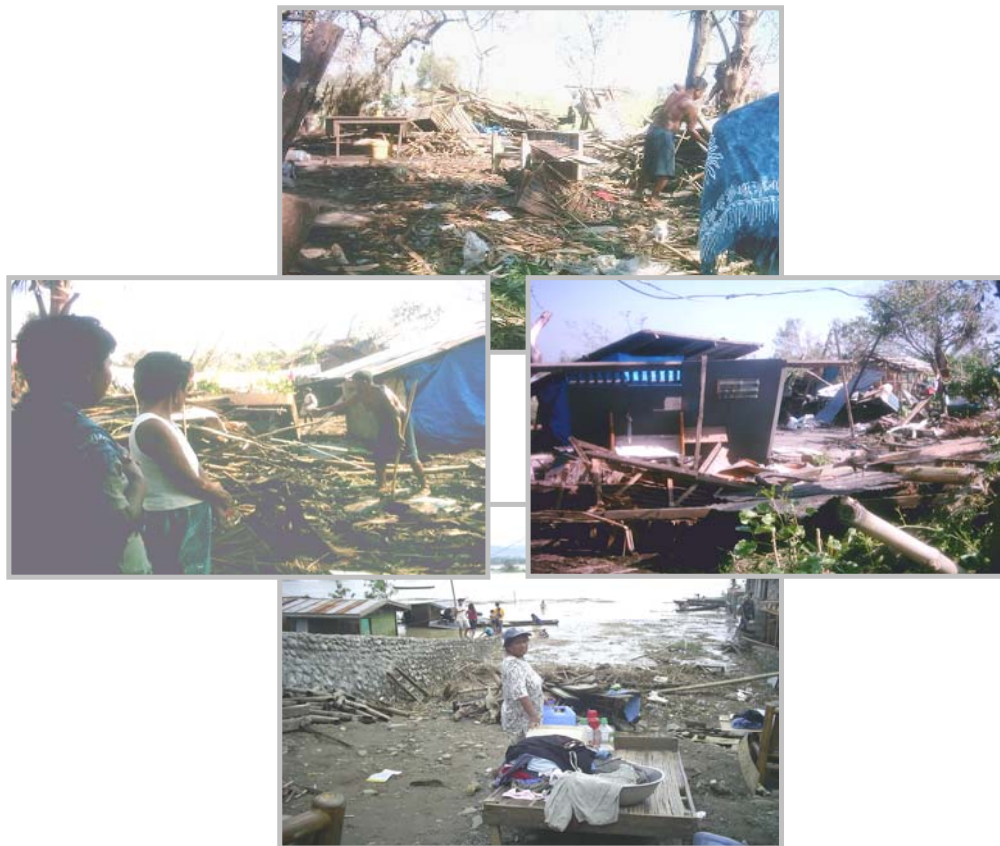


2007

CHANGING TIMES, CHANGING CLIMATE

DISASTERS IN THE PHILIPPINES 2007



CITIZENS' DISASTER RESPONSE CENTER

Introduction

2007, Changing Times, Changing Climate is a summary of disasters that occurred in the year 2007. The report carries information on disasters in that year and the extent of their effects to population and areas affected, as well as the frequency of their occurrence. Where available, direct economic costs to agriculture and infrastructure are also reported, although not tabulated due to data gaps. A review on the major disasters that battered the Philippine islands within the past decade is also presented. Much effort has been made to ensure that this statistical and narrative report be presented in a simple yet substantial form.

The data generated from the CDRC's disaster monitoring system are based on reports from the Citizens' Disaster Response Network (CDRN). Figures from the Disaster Response Operations Monitoring and Information Center - Department of Social Work and Development (DROMIC-DSWD), National Disaster Coordinating Council - Office of the Civil Defense (NDCC-OCD), and news clippings from major broadsheets were also used. The data published here has been verified through various sources to ensure their accuracy. CDRC uses the triangulation method by comparing and contrasting credible sources of data.



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2007

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Disasters in the Philippines 2007

2007

Changing Times, Changing Climate

The year 2007 proved once again how prone the Philippines is when it comes to disasters both natural and human-induced. The country has yet to recover from the impacts of 2006's disasters like the effects of Typhoon Reming in the Bicol Region, when once again it had to go through numerous floods, fires typhoons, landslides and internal displacements. A total of 236 disaster events happened in the country throughout the year affecting 1.1 M families or 4.2 M persons, and damaging 28,893 houses. Aside from these, increasing threat of climate change is also slowly being felt through erratic weather changes.

Table 1. Consolidated Disaster Statistical Data

DISASTER STATISTICAL DATA 2007			
DISASTER	FREQ	TOTAL AFFECTED	
		FAMILIES	PERSONS
DEVELOPMENT AGGRESSION	1	750	42,000
DROUGHT	2	41,240	197,827
EPIDEMIC/OUTBREAK	5	2,254	3,197
FIRE	138	22,426	112,716
FISHKILL	1	50	300
FLOOD	24	107,684	504,365
INFESTATION	0	0	0
LAHAR	0	0	0
LANDSLIDE	7	1,355	6,256
ARMED CONFLICT	26	39,057	209,652
REDTIDE	0	0	0
STORM SURGE	7	15,846	76,895
TORNADO	7	1,732	8,324
TROPICAL CYCLONE	13	890,629	3,027,226
VOLCANIC ERUPTION	3	13,798	66,330
EARTHQUAKE	2	4,956	27,675
GRAND TOTAL	236	1,141,777	4,282,763

Top Five Disasters

Table 2. Top 5 Disasters in Terms of Frequency, 2007

TOP 5 DISASTERS IN TERMS OF FREQUENCY 2007				
RANK	DISASTER	FREQUENCY	TOTAL AFFECTED	
			FAMILIES	PERSONS
1	FIRE	138	22,426	112,716
2	ARMED CONFLICT	26	39,057	209,652
3	FLOOD	24	107,684	504,365
4	TROPICAL CYCLONE	13	890,629	3,027,226
5	LANDSLIDE	7	1,355	6,256
	STORM SURGE	7	15,846	76,895
	TORNADO	7	1,732	8,324
	GRAND TOTAL	222	1,578,229	3,945,434

Fire incidents once again dominated the disaster scene for 2007 being the disaster event with the highest frequency for the year. The total number of fire incidents for 2007 account for 138 out of the 236 disaster events monitored for 2007 or roughly 58.5% of all disaster occurrences. The 138 total is 18% lower from last year's fire incidents of 169. Fire incidents affected a total of 22,426 families or 112,716 individuals all over the country. Despite a lower frequency for this year, the affected families increased by 4,250 or 23% from last year's total. A total of 8,665 houses were totally damaged while 174 others were partially destroyed. Major fire incidents in 2007 include the fire incident in Mandaluyong City where 13,997 residents were left homeless by a fire that occurred in April which lasted for 6 hours. A similar fire incident of great magnitude occurred in November when 7,000 families were affected by fire in Sulu.

Several communities were again caught in the middle of crossfire as armed confrontations abound between government forces and armed and rebel groups. Twenty six (26) armed conflict incidents were recorded which affected 39,057 families or 209,652 residents in rural areas where such conflicts occurred. Armed conflict incidents for 2007 was slightly lower than 2006 occurrences in terms of frequency, but the number of affected individuals have increased by 84% or 95,607 additional affected individuals. The Moro Islamic Liberation Front (MILF), New People's Army (NPA) and the Moro National Liberation Front (MNLF) are the rebel groups that the Armed Forces

of the Philippines (AFP) are usually engaged with in terms of armed confrontations. The armed group, Abu Sayyaf is also engaged in armed conflict with the AFP.

Maguindanao, North Cotabato, Sulu and Basilan were the areas greatly affected by armed conflicts. In April for instance, 21 people died and 42,000 others were forced to flee their homes when fighting ensued between the MNLF and soldiers from the AFP. Another 1,000 families were forced to evacuate in the following month. The affected villagers were from the areas of Caluang, Indanan, Jolo, Tongkil, Talipao, Luuk, Panglima Estino and Panamao. Ironically, these are the same areas that were also affected when armed confrontations between the same groups (AFP and MNLF) happened in early 2005. Some residents of the affected areas were the same people who escaped from similar fighting incidents in Basilan when an all-out-war policy was implemented in the area and in the rest of Mindanao back in 2000.

There were cases that counter insurgency campaigns or heightened military presence in an area led to internal displacement such as the case of Brgy. Dicapinisan in San Luis, Aurora. In July, some 1,700 individuals evacuated for fear of being caught in the crossfire after military presence was increased as a result of an earlier encounter with the NPA. A similar case was also documented by Leyte Center for Development, Inc. (LCDE) in Brgy. Huknan, Giporlos, Eastern Samar in April, where 438 were accounted for as internally-displaced persons due to AFP counter- insurgency campaigns. Abuses such as physical assault, threats and harassments were allegedly committed by soldiers. But such allegations were subsequently denied by the AFP.

Table 3. Top 5 Disasters in Terms of Affected Population

TOP 5 DISASTERS IN TERMS OF AFFECTED POPULATION 2007			
DISASTER	FREQ	TOTAL AFFECTED	
		FAMILIES	PERSONS
TROPICAL CYCLONE	13	890,629	3,027,226
FLOOD	24	107,684	504,365
ARMED CONFLICT	26	39,057	209,652
DROUGHT	2	41,240	197,827
FIRE	138	22,426	112,716
GRAND TOTAL	203	1,101,036	4,051,786

Flooding incidents recorded for this year is lower by 7 in terms of frequency compared to last year's 31. In addition, this year's affected population is lesser by more than 1.4 million compared to last year's data. Floods affected 107,684 families or 504,365 individuals. Apart from tropical cyclones and/or typhoons, incessant rains ranging from moderate to heavy that lasted for days, were the causes of floods. In January, week-long continuous rains caused the displacement and evacuation of 6,000 families or more than 33,000 persons in Northern and Eastern Samar. Likewise, floods along with landslides caused some 6,000 families or close to 30,000 persons to flee to safer grounds in the CARAGA Region and Southern Leyte. Other areas in Regions VI, VII, VIII, XI, XII, ARMM and CARAGA were also affected, increasing the number of affected to 415,618 persons or more than 89,000 families.

Normally, at least 20 typhoons visit the country each year. For 2007, however, only 13 typhoons entered the Philippine Area of Responsibility (PAR) or 35% less than the annual average. While the number of typhoons was relatively low, the impacts were nevertheless destructive. Typhoons/ tropical cyclones affected 890,629 families or 3,027,226 persons all throughout the country. These also caused severe damages to agriculture and infrastructure amounting to Php 1.4 Billion.

Landslide incidents for 2007 decreased by 53% from last year's occurrences as only 7 incidents happened. Landslides affected 1,355 families or a total of 6,256 persons, down from 5,525 families or 24,144 individuals based on 2006 data. The occurrences were caused by continuous rains and typhoons.

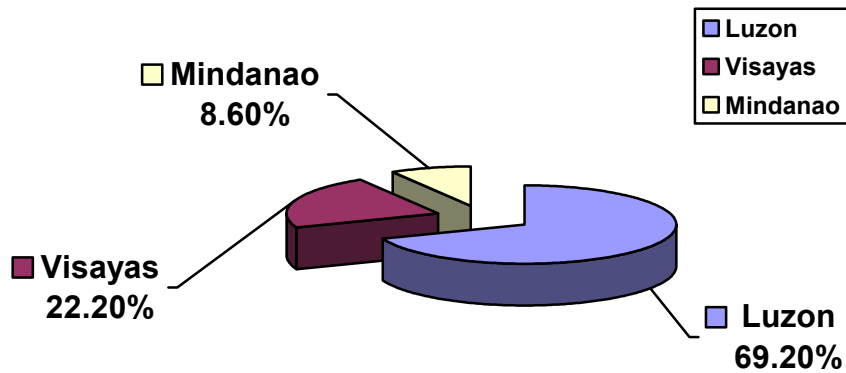
The number of storm surges and tornado occurrences were the same but the number of affected population by the two hazards have increased. The 15,846 families affected by storm surges were 18% higher than 2006 records while the population affected by tornadoes has increased by 752.6% or close to 8 times the number from last year's data.

Geographical Distribution

The 236 disaster incidents were spread out all over the country with Luzon having the greatest number of total affected population followed by the Visayas and lastly by Mindanao. Luzon also accounted for the most number of affected population by natural disasters, while Mindanao for human-induced disasters particularly those affected by armed conflicts.

Luzon accounted for 2,962,062 out of the 4,282,763 totally affected population for 2007 disasters. This is 69.2% of the total number of persons affected by both natural and manmade disasters while the Visayas accounted for 22.2% with the remainder accounted for by Mindanao.

Figure 1. Geographical Distribution of Affected Population



Natural disaster events for the year greatly affected Luzon, with 79% of affected families coming from the island. The Visayas accounted for 19% and Mindanao, 2%, of the 1,101,970 families affected by natural disasters. The greatest number of affected families for human induced disasters came from Mindanao with 94.4% or 37,561 families out of the 39,807 families affected by human-made disasters like armed conflicts and development aggressions. Luzon and Visayas accounted for a combined 5.6% of the total number of families affected.

Figure 2. Geographical Distribution of Families Affected by Natural Disasters

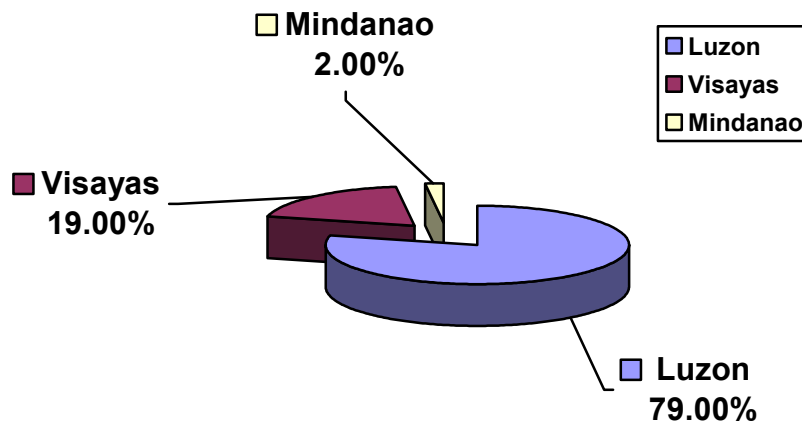
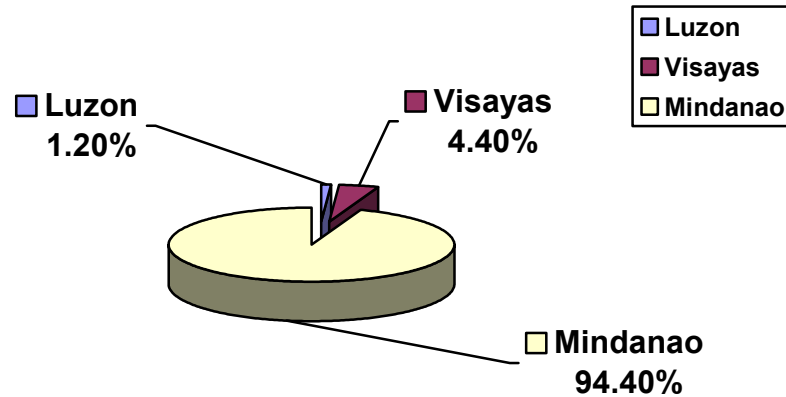


Figure 3. Geographical Distribution of Families Affected by Human-made Disasters



Highlights

While there have been a relatively few typhoon events for this year, it should be noted that incessant rains have been frequent even during months where rains should be scarce. Such rains, with strengths ranging from moderate to heavy, lasted usually at least a week and have caused massive flooding and have induced landslides in the affected areas.

It is also interesting to note the two drought or dry spell incidents for the year. Such dry spell came or occurred during the months of July and August which are considered as rainy and typhoon months.

These events could be interpreted as manifestations of climate change, as noted in the Intergovernmental Panel on Climate Change (IPCC) Report in 2007. These have been projected to increase in frequency and magnitude along with subsequent effects in the coming years and decades. These events have caused considerable damage and effects on the affected populations and areas.

Another highlight for 2007 is the increase in the number of affected population by armed conflicts. The affected population is nearly the same people who have been affected the previous years and nearly the same areas where such conflicts have happened some decades ago. This vicious cycle of internal displacements will continue to haunt and affect more and more people in the coming years if the social causes of such conflicts are not rooted out and objectively and sincerely resolved. Thus, the road to a long and just peace is still far in sight.

Table 4. Comparative Table of Disasters (2006-2007)

COMPARATIVE TABLE OF DISASTER EVENTS							
2006				2007			
DISASTER TYPE	FREQUENCY	TOTAL AFFECTED		DISASTER TYPE	FREQUENCY	TOTAL AFFECTED	
		FAMILIES	PERSONS			FAMILIES	PERSONS
FIRE	169	18,176	87,876	FIRE	138	22,426	112,716
ARMED CONFLICT	27	22,431	114,045	ARMED CONFLICT	26	39,057	209,652
FLOOD	31	356,042	1,916,187	FLOOD	24	107,684	504,365
TROPICAL CYCLONE	11	2,487,409	12,030,904	TROPICAL CYCLONE	13	890,629	3,027,226
LANDSLIDE	15	5,525	24,144	LANDSLIDE	7	1,355	6,256
STORM SURGE	7	12,957	69,396	STORM SURGE	7	15,846	76,895
TORNADO	7	212	1,106	TORNADO	7	1,732	8,324
REDTIDE	1	0	0	REDTIDE	0	0	0
VOLCANIC ERUPTION	2	13,090	66,709	VOLCANIC ERUPTION	3	13,798	66,330
EARTHQUAKE	0	0	0	EARTHQUAKE	2	4,956	27,675
LAHAR	3	12	55	LAHAR	0	0	0
INFESTATION	3	2,718	11,918	INFESTATION	0	0	0
FISHKILL	13	773	4,359	FISHKILL	1	50	300
EPIDEMIC/OUTBREAK	12	15,877	88,686	EPIDEMIC/OUTBREAK	5	2,254	3,197
DEVELOPMENT AGGRESSION	18	16,694	91,342	DEVELOPMENT AGGRESSION	1	750	42,000
DROUGHT	0	0	0	DROUGHT	2	41,240	197,827
GRAND TOTAL	317	2,951,916	14,506,790	GRAND TOTAL	236	1,141,777	4,282,763

Table 5. Disasters in the Philippines (1997-2007)

DISASTERS IN THE PHILIPPINES AFFECTED POPULATION (1997-2007)												
TYPE OF DISASTER	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	GRAND TOTAL
Armed Conflict	158,652	56,419	231,695	743,035	303,253	100,082	585,107	63,036	180,503	114,045	209,652	2,745,479
Development Aggression	141,286	220,344	139,147	32,815	26,846	49,487	87,895	1165	131,313	91,342	42,000	963,640
Drought	7,400,223	18,455,493			653	185,385	55,212		280		197827	26,097,246
Earthquake		606	61,182	15,769		71,757	7,965	1500			27675	158,779
Epidemic	15,868	12,831	12,608	4,770	8,152	2,685	17,108	10,062	91,244	88,686	3,197	267,211
Fire		27,323	44,629	58,787	95,555	96,138	111,160	102,468	97,349	87,876	112,716	834,001
Fishkill	16,430	30,470	17,174	8,568		128			248	4359	300	73,018
Flood	1,043,559	1,224,185	5,763,650	1,115,344	714,204	3,285,749	1,426,318	3,166,915	964,927	1,916,187	504,365	19,699,085
Industry Related	11	4,374	33,616	93	235	25,370						63,699
Infestation	248,406	219,715	173,208	317,890	18,579	4,233	575	69,276		11981		1,051,882
Lahar					36,760	1,521				55		38,281
Landslide	150	10,211	285,396	9,516	3,890	83	19,563	25,948	116,747	24,144	6,256	501,904
Redtide	172,544	62,685	6	13,221		17	3,853					252,326
Storm Surge			10,937	4,003	22,796	488	357	220	8,535	69,396	76,895	193,627
Tornado	8,623	582	761	4,764	6,479	630	882	58,051	1,276	1,106	8,324	82,048
Toxic Waste			30	1,014			423					1,467
Tropical Cyclones	2,301,740	7,322,133	2,299,126	8,681,040	4,612,624	783,605	3,362,991	6,966,136	1,019,646	12,030,904	3,027,226	52,407,171
Volcanic Eruption	401		98,029	92,743	56,808					66709	66330	247,981
TOTAL	11,507,893	27,647,371	9,171,194	11,103,372	5,906,834	4,607,358	4,253,091	10,464,777	2,612,068	14,506,790	4,282,763	106,063,511

Government Response

In its *2007:Annual Disaster Occurrences Statistical Consolidation by Region*, the Department of Social Welfare and Development (DSWD) reports of having served a total of 2,073,989 persons rendering a total cost of assistance worth Php 212, 244,411.33 sourced out from the DSWD fund, Local Government Units (LGU's), Non-governmental Organizations (NGO's) and other government agencies. This translates to Php 102.34 worth of assistance for every person served.

CDRC and CDRN Response

CDRC was able to serve 10,631 families for the whole of 2007. Majority of the families served were those affected by typhoons (8,821 families) and fire (782 families). The bulk of the relief delivery operation took place in the National Capital Region, where 4 out of the 12 Relief Delivery Operations (RDO) happened.

CDRN RESPONSE				
ORGANIZATION	DISASTER TYPE	TYPE OF RESPONSE	AREAS SERVED	NO. OF FAMILIES
EMERGENCY RESPONSE				
CDRC	Fire	RDO	NCR Areas	582
CRRC			Cebu	120
IRDC		Medical-Dental Mission	Ilocos Norte & Laoag City	450
LCDE	Armed Conflict	RDO	Eastern Samar	83
CPRS			Negros Occidental	175
KADAIT			Sulu	150
CDRC	Dev't Aggression	RDO	Pasay City	50
CDRC	Fire	RDO	NCR Areas	200
CDRC	Typhoon	RDO	NCR & Rizal	1,900
IRDC	Typhoon	RDO	Ilocos Sur, Norte & La Union	670
ABI	Typhoon	RDO	Bataan, Bulacan & Pampanga	670
TABI	Typhoon	RDO		2,845
CRRS	Typhoon	RDO		1,745
PANDAY BULIG	Typhoon	RDO		500
CPRS	Typhoon	RDO		426
BREAD	Typhoon	RDO		65
			Total	10,631

TRAININGS				
CDRC		Earthquake Drills	NCR Areas	362
CDRC		First Aid & First Responders	NCR Areas	117
CDRC		CBDM	NCR Areas	124
CDRC		DMO	NCR Areas	40
CDRC & LCDE		Landslide Drill	Palo, Leyte	280
CDRC		Earthquake & Fire Orientatid	NCR Areas	200
			Total	1,123

Aside from food and clothing, materials for shelter were also provided, especially for those whose homes were destroyed by fire or strong typhoons.

Damage, Needs, and Capacities Assessment (DNCA) were conducted in the affected communities to serve as concrete basis for relief and rehabilitation responses.

Trainings on First Aid, Community-Based Disaster Management (CBDM), and Emergency Drills were conducted as well in the communities.

For 2007, CDRC and its regional centers, through the support of local and international donors, were able to respond to communities affected by typhoons, floods, fire, armed conflict and development aggression in all three island groups: Luzon, Visayas and Mindanao. Livelihood assistance in the form of seeds and farm machineries dispersal was also undertaken in Marinduque as part of the rehabilitation project after the destructive Typhoon Reming in 2006. A total of 367 families were organized and made beneficiaries of the vegetable farming project.

The success of the emergency relief assistance and rehabilitation efforts was achieved through the assistance of CDRC's regional partners or the Citizens' Disaster Response Network (CDRN).

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CDRC databank

www.dswd.gov.ph

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