

**COUNTRY REPORT OF THE PHILIPPINES**  
**IDNDR-ESCAP Regional Meeting for Asia:**  
**Risk Reduction and Society in the 21<sup>st</sup> Century**  
**Bangkok, Thailand**  
**23-26 February 1999**

**I. Philippine Exposure to Disasters**

The Pacific Rim is not only a community of the fastest growing and most dynamic nations in the world. It is also the area exposed to a wide range of natural disasters. The Philippine archipelago, consisted of more than 7,000 islands and islets, is located near the western edge of the Pacific Ocean, a direct path of seasonal typhoons and monsoon rains which bring floods, storms, storm surges, and their attendant landslides and other forms of devastation. It also sits on the "ring of fire" where the continental plates collide and thus experience periodic earthquakes and volcanic eruptions. The Philippine exposure to natural disasters may be characterized as frequent, varied, and severe; a combination which has made the country particularly attentive to disaster reduction.

Data shows an uptrend of disasters as the decade of the 90's loomed. Impact of which exact tremendous toll on lives and properties, notwithstanding rollback gains in the economy out of proportion. Coinciding with the inception year of the IDNDR, the Philippines was hit by a 7.8 magnitude earthquake on July 16, 1990 killing 1,283 people and leaving three (3) cities in Luzon: Cabanatuan City, Dagupan City and Baguio City devastated at about P12.2 Billion estimated damages. In the same year, eight (8) strong typhoons hit the country, claiming 670 lives but registered a P12.68 Billion high in damages.

Not to be outdone, 1991 was the year when Mount Pinatubo erupted after 400 years of slumber where 850 people died. Dubbed as a disaster of global magnitude, it altered climatic conditions worldwide, and continues to reconfigure the terrain and landscape of the central plain of Luzon through the flows of lahar (Lahar I, II and III) brought about by the eruption. The geological changes caused by this volcanic eruption continues to bring

disasters in Central Luzon with every rainy season. Cities of Olongapo and Angeles, where Clark Air Base and Subic Bay economic zones situated were greatly affected. On the other hand, though the smaller in damages amounting to P1 Billion, the tragic Ormoc City flashflood left 5,101 people dead. So short a time, and with thin forest cover to serve as breakers, rain water brought about by tropical storm "Uring" gushed downstream, washed out and drown city folks into the sea.

Destructive typhoon, crossed the country, thirteen (13) in 1993 with 794 people dead and an estimated P20 Billion damages. Again, in 1995, nine (9) of them killed 1,204 and destroyed P15 Billion worth of damages. Floods and landslides have also hit the country. In 1995, floods and landslides affected the islands of Mindanao and Negros.

The recent destructive natural phenomena that afflicted the Philippines in 1998, is the impact of the El Niño Phenomenon. Around 985,000 families have suffered from starvation due to the severe lack of water affecting mostly farmers which subsequently reduced their income unable to purchase food at the household level in critical areas.

## **II. Milestone Developments on RP's Disaster Management**

Counter-disaster mechanism in the Philippines utilizes the disaster coordinating council (DCC) approach in order to maximize all available resources in the country, both from the public and private sectors, devoted for preparedness, response and recovering from emergencies of grave character. However, evolution and paradigm shifts have overtaken, broadened and refocused existing policies, plans, systems and other management techniques on disaster response and mitigation due to the frequency, variety and severity of natural disasters.

### **A. Framework of Disaster Response**

The National Disaster Coordinating Council (NDCC) had been active as the premier disaster management system in the country in coping with disasters. During the inception of the Decade, the NDCC

was officially designated to be the focal point in implementing disaster reduction efforts. It is replicated in the regional, provincial, city or municipal and barangay (village) levels.

At the National level, the NDCC acts as the top coordinator of all disaster management efforts, as the highest policy-making body, and as the highest allocator of resources in the country to support the efforts of the lower level councils in the system. By Decree, the NDCC is headed by a Chairman in the person of the Secretary of National Defense. Its composition includes other Department Secretaries, the Director-General of the Philippine National Red Cross, the Chief of Staff of the Armed Forces of the Philippines, and some other key officials of the Philippine Government. The Civil Defense Administrator is a member and serves as the Executive Officer of the Council. The Office of Civil Defense becomes the executive arm of the NDCC with the National Disaster Management Center as the operating facility of multi-sectoral coordination, response and policy development.

Non-governmental organizations are incorporated at all levels in the system.

At whatever scale of disaster, whether national, regional, provincial, municipal village or any levels in between, an appropriate disaster coordinating council is established, organized and trained to respond.

## **B. Decade Mainstream and Accomplishments**

Four sub-committees of the NDCC were created in support of the IDNDR with the following lead agencies: (1) Committee on Non-Structural Measures - Office of Civil Defense; (2) Committee on Structural Measures - DPWH; (3) Committee on Legislation - DOJ, and (4) Committee on Research - DOST.

Under the foregoing institutional infrastructure and framework of action, the following major accomplishments were achieved since the inception of the Decade in 1990:

1. *Disaster Reduction as a National Policy*

- a. Presidential Proclamation No. 296 declaring the first week of July of every year as Natural Disaster Consciousness Week.
- b. Presidential Proclamation No. 705 declaring December 6, 1995 and every year thereafter as National Health Emergency Preparedness Day.
- c. Integration of a Disaster Mitigation Component in the Development Administration Sector of the Philippine Medium-Term Development Plan (1993-1998).
- d. Inclusion of Pre-Disaster Activities within the purview of Calamity Fund Use (1994 GAA).
- e. Inclusion of section 31 of the General Appropriation Act CY 1998 and onwards that authorizes the use of regular funds by national government agencies (NGAs) for disaster management concerns.

2. *Local/Community Empowerment Towards Disaster Reduction*

- a. Devolution of Emergency Response and Health Management Functions to LGUs in keeping with the Local Autonomy and People Empowerment (Republic Act No. 7160)
- b. Passage of Republic Act 8185 amending section 324 (d) of RA 7160 regarding the utilization of the 5% local calamity fund.

### 3. *Military Assets Enhancement for Quick Response*

- a. Creation of the AFP Disaster Response Task Force composed of highly skilled military personnel on SAR collapsed building, inland water rescue, etc. for rapid deployment to affected areas.
- b. Employment of AFP reservists during disasters through the implementation of OPLAN "KAHANDAAN".

### 4. *Stronger International Cooperation*

Chairmanship for 2 years (1996-1998) and hosting the 9<sup>th</sup> Asean Experts Group on Disaster Management (AEGDM) in Manila on February 6-9, 1996. Four (4) issues of the AEGDM Newsletter were published.

### 5. *Counter-Disaster Infrastructure and Mitigation Measures*

Construction of sabo dams and mega dikes along the slopes and peripheries of Mt. Pinatubo and Mt. Mayon in view of its eruption in 1991 and onwards. Vetiver grasses were also grown extensively on unstable slopes and riverbanks as natural and indigenous measure of erosion control.

### 6. *GO-NGO Initiatives on Medical Emergency Management*

- a. STOP D.E.A.T.H. (Strategic, Tactical Operations for Disasters, Epidemics, and Trauma for Health). A hospital-based program led by the Department of Health to include among others, the conduct of BLS, First-Aid trainings, and other life saving techniques to address the unnecessary loss of lives by mishandling injured victims and the like.
- b. Project A.L.E.R.T. (Alliance for Emergency Response Training). An NGO, "Kapwa Ko, Mahal Ko" Foundation initiated this project and forged partnership with the

government in advancing health emergency preparedness and life preservation through public health education, training and information dissemination via multi-sectoral efforts at the national level.

### III. Current Efforts on Disaster Reduction

The NDCC through the Office of Civil Defense has taken new directions in the field of disaster reduction. This is in accordance with the thrust of the new NDCC Chairman, Defense Secretary Orlando S. Mercado for excellence in disaster prevention and control which shall implement developmental and impact programs in four major areas, namely: (1) emergency management; (2) vulnerability reduction and risk management; (3) human resource development, and (4) advocacy for civil protection.

Along these framework of action that the NDCC has been pursuing program components and impact activities in partnership with the non-government organizations and the local disaster coordinating councils (LDCCs), to wit:

#### A. Risk Control Impact Programs

1. **Brigada Kontra Baha**. This is a concerted multisectoral initiative to declog critical esteros and waterways, drainage system and tributaries floods and to mitigate their effects on the people and communities. Initially, this project has been launched in key cities of Metro Manila, Cebu City and Davao City to be sustained by the local residents through advocacy and community mobilization.
2. **Risk Maps and Technical Surveys**. These are inter-agency efforts to improve baseline maps specifically for use of disaster managers by superimposed plotting of communities and lifelines at risk to floods, lahar, storm surge and other disaster related hazards
3. **Laban La Nina**. With the anticipated impact of La Nina Phenomenon, War Plans of vulnerable regions and communities

were being formulated and simulated in pilot areas. This contingency plan has four (4) major components: (1) hazard and risk maps for flood/lahar, (2) communities and lifelines at risk (3) capacity and vulnerability assessment, and (4) strategic interventions.

## **B. Advocacy for Civil Protection**

1. **"Linis Bayan" Program**. As embodied in Administrative Order No. 32 by the President of the Philippines, this is the institutionalization of a nationwide clean-up campaign to encourage the promotion and practice of cleanliness in all government offices, schools, communities and homes aimed at declogging of critical esteros, elimination of mosquito larvae (kiti-kiti) and breeding sites, and cleaning of offices, schools, public grounds and roads, among others.

## **C. Developmental Shift from Reactive to Proactive Disaster Reduction**

1. **Oplan Bangun Mindanaw**. Around 985,000 families have suffered from situation in Southern and Central Mindanaw due to the impact of the El Niño Phenomenon. In response, the government launched this coherent and integrated multisectoral rehabilitation program for El Niño-affected areas. It has five strategies: (1) generating livelihood and household income, (2) enhancing health and nutrition services, (3) protecting vulnerable communities from the anticipated impact of La Niña, (4) agricultural development and modernization, (5) reinforcement of DCCs.
2. **Oplan Bangon Bayan**. A developmental framework for the rehabilitation of the provinces of Cagayan, Isabela, Pangasinan and Catanduanes which were heavily devastated by four supertyphoons in the last quarter of 1998.

3. **Watershed Rehabilitation**. The Philippine watershed areas are already in critical condition. Deforestation contributes a lot in the degradation of almost 2.6 million hectares of identified critical watershed areas of the country. In this regard, reforestation of denuded forest areas was undertaken not only by non-government organization (NGO) but also by community and family members. Hence by virtue of Executive Order (EO) No. 263 issued in July 1995, the Philippines adopted community-based forest management as the national strategy to ensure sustainable development of the country's forestland resources. Another bill that is pending approval in the Lower House is the Sustainable Management of Forest Resources Act of 1996. The salient feature of which is the sustainable forest management and development, which, focuses on the protection, conservation, utilization and development of forest resources.

#### **D. Initiatives for International Cooperation**

1. **"SAGIP 99"**. The Philippines hosted the first RP-AS-US Trilateral Seminar Game on Disaster Relief codenamed "SAGIP 99" on 16-19 February 1999. The purpose of the game is for the three countries, Philippines, Australia and the United States, to develop common understanding and procedures for cooperative multilateral relief operations in the event of a major disaster as a means to enhance regional defense relationship.
2. **Establishment of Emergency Management Institute of the Philippines (EMIP)**. A Memorandum of Understanding on Cooperation in Disaster and Risk Management among the National Defense College of the Philippines, The Asia Pacific Disaster Management Centre and the Office of Civil Defense. It is envisioned to be the country's center of excellence for education, training and research in disaster and risk management and premier training resource for technical cooperation among developing countries; recognizing the benefits that can be derived by communities from reducing the risks and vulnerabilities to disasters.



#### **IV. Priorities for Future International Cooperation**

New horizons and opportunities on disaster reduction are in the offing as the Decade comes to a close. However, at the turn of the new millenium, certain areas which offer good prospects for international cooperation have to be harnessed and tapped by the Philippines to sustain the gains of the Decade.

1. **Resource Sharing for Capability Building:** UN and funding institutions has to harness and empower regional and national cooperation by strengthening and broadening capabilities in terms of advanced specialized training equipage and more exposure to varied real-life rescue operations.
2. **Mobilizing information technologies for disaster management:** A broad class of information technologies such as geographic information systems, database management systems, database management systems and other rapid analysis and presentation systems are currently available and useful for disaster management . The hardware, software and model uses of such technologies that can be made available to the Philippine disaster organizations will provide tremendous boost in its disaster preparedness and disaster reduction endeavors.
3. **Systematic disaster capabilities planning:** Current knowledge about the nature of disaster risks in various communities and areas of the Philippines could be matched by a set of appropriate disaster management capabilities that may need to be developed in those areas or communities. This could serve as the basis for upgrading current disaster preparedness plans. Such a systematic effort could be undertaken with international cooperation and a special support program so that a better matching of risks and capabilities is achieved.

These are just a few of the current priorities of Philippine disaster management authorities for possible international

cooperation. Filipinos have learned that disasters do happen, but their destructive force can be mitigated with good planning, prompt action, and constant preparation. International cooperation and support has helped improve Philippine response in all these fronts. It is hoped that such cooperation will continue to be satisfying to all its participants, and that all nations gain by helping each other.

Republic of the Philippines  
National Disaster Coordinating Council  
OFFICE OF CIVIL DEFENSE  
Camp General Emilio Aguinaldo, Quezon City

MAJOR DISASTER FROM 1987 TO 1998

YEAR	TYPE OF DISASTERS & NO. OF OCCURRENCES	CASUALTIES		AFFECTED		HOUSES DAMAGED		COST OF DAMAGE IN BILLION PESOS		
		DEAD	INJURED	MISSING	FAMILIES	PERSONS	TOTALLY		PARTIALLY	
1987	TYPHOONS (6)	1,020	1,415	213	668,628	3,882,534	242,336	345,370	P	4.083
	DROUGHT (1)				203,345	1,002,100				0.707
	STORM SURGE (1)				540	2,700				0.045
	<b>TOTAL</b>	<b>1,020</b>	<b>1,415</b>	<b>213</b>	<b>872,513</b>	<b>4,887,334</b>	<b>242,336</b>	<b>345,370</b>	<b>P</b>	<b>4.835</b>
1988	TYPHOONS (5)	429	468	195	1,173,994	6,081,566	134,344	355,459		8.676
	EARTHQUAKE (MIN OCC)				650	2,600				0.835
	<b>TOTAL</b>	<b>429</b>	<b>468</b>	<b>195</b>	<b>1,174,644</b>	<b>6,084,166</b>	<b>134,344</b>	<b>355,459</b>	<b>P</b>	<b>9.511</b>
1989	FLOODING (1)	101	79		81,152	459,730	1,826	22,355		0.392
	TYPHOONS (7)	382	1,087	89	502,600	2,582,822	56,473	104,584		4.494
	<b>TOTAL</b>	<b>483</b>	<b>1,166</b>	<b>89</b>	<b>583,752</b>	<b>3,042,552</b>	<b>58,299</b>	<b>126,939</b>	<b>P</b>	<b>4.886</b>
	<b>SUB-TOTAL</b>	<b>1,932</b>	<b>3,049</b>	<b>497</b>	<b>2,630,909</b>	<b>14,074,052</b>	<b>434,979</b>	<b>827,758</b>		<b>19.232</b>
1990	DROUGHT (1)	670	1,392	262	220,269	1,189,309	223,535	636,742		3.386
	TYPHOONS (8)	1,283	2,786		1,265,652	6,661,474	25,207	77,249		12.678
	JULY 16 EARTHQUAKE				227,918	1,255,248				12.200
	<b>TOTAL</b>	<b>1,953</b>	<b>4,178</b>	<b>262</b>	<b>1,713,839</b>	<b>9,106,031</b>	<b>248,742</b>	<b>713,991</b>	<b>P</b>	<b>28.264</b>
1991	DROUGHT (1)	850	184		47,987	254,282	40,867	67,862		1.631
	MT PINATUBO ERUPTION	5,101	292		249,371	1,180,132	5,232	25,272		10.424
	ORMOC CITY DISASTER	16	9	2	43,397	223,985	2,378	444		1.044
	LAHAR I	82	55	22	33,497	161,541	8,070	58,305		0.494
	TYPHOONS (2)				105,317	524,307				3.469
	<b>TOTAL</b>	<b>6,049</b>	<b>540</b>	<b>24</b>	<b>479,569</b>	<b>2,344,247</b>	<b>56,547</b>	<b>151,883</b>	<b>P</b>	<b>17.062</b>
1992	DROUGHT (1)	6	7		209,255	1,027,103	1,712			4.094
	LAHAR II	39			19,932	96,102	1,586	3,157		0.551
	FLASHFLOOD	117	95	53	155,906	765,963	3,314	8,006		0.815
	TYPHOONS (7)				352,944	1,755,811				5.071
	<b>TOTAL</b>	<b>162</b>	<b>102</b>	<b>53</b>	<b>738,037</b>	<b>3,644,979</b>	<b>6,612</b>	<b>11,163</b>	<b>P</b>	<b>10.531</b>
1993	TYPHOONS (13)	794	1,634	200	1,446,031	7,465,711	164,174	444,909		19.987
	MT MAYON	80	9		21,600	106,917	158	336		0.073
	FLOODING (4)	27			66,010	340,988		336		1.075
	RED TIDE				24,598	11,743				
	<b>TOTAL</b>	<b>901</b>	<b>1,643</b>	<b>200</b>	<b>1,558,239</b>	<b>7,925,359</b>	<b>164,332</b>	<b>445,581</b>	<b>P</b>	<b>21.135</b>

YEAR	TYPE OF DISASTERS & NO. OF OCCURRENCES	CASUALTIES			AFFECTED			HOUSES DAMAGED		COST OF DAMAGE IN BILLION PESOS
		DEAD	INJURED	MISSING	FAMILIES	PERSONS	TOTALLY	PARTIALLY		
1994	LAFAR III	20	1		11,805	55,951	1,648	37		0.414
	TYPHOONS (14)	242	247	48	617,228	3,056,232	58,567	223,358		3.198
	EARTHQUAKE (OR. MIN)	83	430	8	22,452	134,712	1,530	6,036		0.515
	<b>TOTAL</b>	<b>345</b>	<b>678</b>	<b>56</b>	<b>651,485</b>	<b>3,246,895</b>	<b>61,745</b>	<b>229,431</b>		<b>4.127</b>
1995	TYPHOONS (9)	1,204	3,025	642	1,561,334	7,693,526	294,147	719,124		15.256
	MOUNT PARKER	34		23	12,381	60,853	410	287		0.72
	<b>TOTAL</b>	<b>1,238</b>	<b>3,025</b>	<b>665</b>	<b>1,573,715</b>	<b>7,754,379</b>	<b>294,557</b>	<b>719,411</b>		<b>15.976</b>
1996	TYPHOONS (10)	124	90	50	260,581	1,255,289	287	17,559		2.834
	<b>TOTAL</b>	<b>124</b>	<b>90</b>	<b>50</b>	<b>260,581</b>	<b>1,255,289</b>	<b>287</b>	<b>17,559</b>		<b>2.834</b>
	TYPHOONS (5)	77	36	6	391,250	1,965,867	546	6,775		0.596
1997	TRAIN ACCIDENT	10	36							
	OZONE DISCO FIRE	160	52							
	ARMED CONFLICT	8	9		13,176	76,431				
	<b>TOTAL</b>	<b>255</b>	<b>133</b>	<b>6</b>	<b>404,426</b>	<b>2,042,298</b>	<b>546</b>	<b>6,775</b>		<b>0.596</b>
1998	EL NINO PHENOMENON									
	PALAWAN FOREST FIRES	2			162	468				7.970
	CEBU PACIFIC CRASH	99								0.441
	<b>TOTAL</b>	<b>101</b>			<b>162</b>	<b>468</b>				<b>8.411</b>
	<b>SUB-TOTAL</b>	<b>11,126</b>	<b>10,389</b>	<b>1,316</b>	<b>7,350,053</b>	<b>37,319,945</b>	<b>833,365</b>	<b>2,295,794</b>		<b>108.936</b>
	<b>GRAND TOTAL</b>	<b>13,050</b>	<b>11,528</b>	<b>1,985</b>	<b>10,010,972</b>	<b>53,333,997</b>	<b>1,683,921</b>	<b>3,123,582</b>		<b>128.168</b>