



DISASTER CASE REPORT

Agency for
International
Development

Washington D.C.
20523

PHILIPPINES - Volcanic Eruption

Date: September-October 1984

Location: Albay Province, 320 km southeast of Manila; towns affected included Daraga, Legaspi City, Tabaco

No. Dead: Not reported

No. Affected: 53,000 evacuated

Damage: In Legaspi City, 98% of the crops were damaged, water springs were destroyed, and roads were washed out. A large portion of the coconut plantations were totally covered by mud flows in Santo Domingo. Considerable damage to crop lands occurred and incidences of respiratory and intestinal diseases increased among the population in the area.

The Disaster

While the Philippines was still reeling from the effects of Typhoons June and Ike, the 2,476-m high Mayon Volcano on September 10, 1984 exploded for the first time in six years. An ash column affected an area about 100 meters down the western slope. Strong eruptions continued over the next two days, disgorging lava toward the southwest and northwest. These eruptions produced heavy ash fall, mostly to the southwest. Volcanic activity continued through September 20, causing heavy ash flows both southwest and northwest of Mayon. Significant amounts of ash and other pyroclastic deposits accumulated around the volcano's upper slope and contributed to serious mud flows during subsequent heavy rains.

Mayon's activity abated to weak steaming and lava trickles from September 19 to 23. On September 24, however, Mayon erupted with its greatest strength since September 10, hurling columns of fire, ash, and steam 15 km high and sending lava cascading down the slopes. The ash-laden steam clouds drifted toward the northwest, northeast, and east. Pyroclastic flows rushed down the northwest, north, northeast, and east slopes of

Mayon. Also on September 24, mud flows overran part of the highway of Padong, making it impassable by vehicles. Several weeks later, in mid-October, another mudflow effectively dammed the Kabilugan River. As a result, 40 houses were submerged by water.

Action Taken by the Government of the Philippines (GOP)

The force of Mayon's first eruption on September 10, had been predicted by the Philippine Institute of Volcanology (PHIVOLC), which recommended immediate evacuation of both the entire area within an 8 km radius, and all barrios lying on the northern half of Mayon. After a strong eruption on September 11, the areas to the southwest of Mayon were also evacuated.

Eighteen evacuation centers were set up by the Provincial Disaster Coordinating Committee (PDCC). The Ministry of Social Services and Development, the Philippine National Red Cross, the Armed Forces of the Philippines, and the Ministry of Public Works and Highways coordinated their efforts to bring emergency relief to the evacuated families. When Mayon erupted on September 24, the PDCC widened the radius of the danger zone from 8 to 10 km, thus increasing the number of evacuees by 25,000 for a total of over 50,000 people. The value of GOP relief assistance totaled more than \$66,000.

On September 13, PHIVOLC asked the United States to provide the services of two U.S. Geological Survey (USGS) volcanologists and six types of equipment.

Assistance Provided by the United States Government (USG)

On September 17, Ambassador Bosworth issued a disaster declaration and donated \$25,000 to the Philippine National Red Cross.

PHIVOLC requested that the USG provide volcanologists and scientific equipment. OFDA therefore arranged for the services of three USGS volcanologists, whose expenses (travel allowance, per diem, and vehicle rental) totaled \$17,500. OFDA also paid for 50 reflectors, which cost \$2,858, and monitoring and surveying equipment, which cost \$24,582 (FY 85 funds).

OFDA also agreed to guarantee insurance for USGS equipment against loss from a volcanic eruption (\$10,000 worth of equipment in high risk zones and \$50,000 worth in relatively low risk areas). The equipment was insured at approximate replacement value.

The USGS volcanologists requested helicopter support for observations and for placing equipment on the flanks of Mayon. OFDA increased the Ambassador's authority by \$5,000 to fund this logistical support.

Total funds FY 84.....	\$50,358
Total funds FY 85.....	\$24,582
	TOTAL
	\$74,940

Assistance Provided by U.S. Voluntary Agencies

None reported.

Assistance Provided by the International Community

None reported.