

## DSWD DROMIC Final Preparedness for Response Report on the Kanlaon Volcano Seismic Activity

27 October 2022, 6PM

### I. Brief Background on Kanlaon Volcano

- A stratovolcano (conical volcano built-up by many layers of hardened lava and tephra).
- Mount Kanlaon also known as Kanlaon Volcano covers 24,557.60 hectares of land area with rainforests and verdant vegetation cutting through the political boundaries of Cities of Bago, La Carlota, San Carlos, and Canlaon, and the towns of Murcia and La Castellana within the park and having 169 hectares as Buffer Zone. Mt. Kanlaon is a complex and active volcano surrounded by several craters and volcanic peaks. Volcanic features in the area include the cinder cone of the active center and craters at the summit. It is underlain by tropical volcanic materials composed of sheeted lava flows, lahar deposits, airfall tephra and apron pyroclastic materials.<sup>1</sup>
- Its last eruption was reported on 20 December 2017 characterized by small volcanic earthquakes with moderate emissions of white steam-laden plumes that rose to 400 meters from the summit.<sup>2</sup>
- Areas under the four (4)-kilometer (km) Permanent Danger Zone (PDZ) are 13 barangays of Canlaon City (Lumapao, Malaiba, Masulog and Pula), La Castellana (Biaknabato, Cabagnaan, Mansalanao, and Sag-ang), La Carlota City (Ara-al and Yubo), Bago City (Ilijan and Mailum), and San Carlos City with a combined population count of 76,656. A massive eruption may directly affect a total of 528,838<sup>3</sup> persons covering all barangays of the said one (1) municipality and four (4) cities.

### II. Situation Overview

- Kanlaon Volcano is at **Alert Level 1**, which means that it is at low-level volcanic unrest.<sup>4</sup>
- Alert Level 1 indicates slight increase in volcanic earthquake and steam/gas activity. Sporadic explosions from the summit crater or new vents. Notable increase in the temperature, acidity and volcanic gas concentrations of monitored springs and fumaroles. Slight inflation or swelling of the edifice.
- The local government units (LGUs) and the public are strongly reminded that entry into the 4-km radius PDZ is strictly prohibited due to the further possibilities of sudden and hazardous steam-driven or phreatic eruptions.

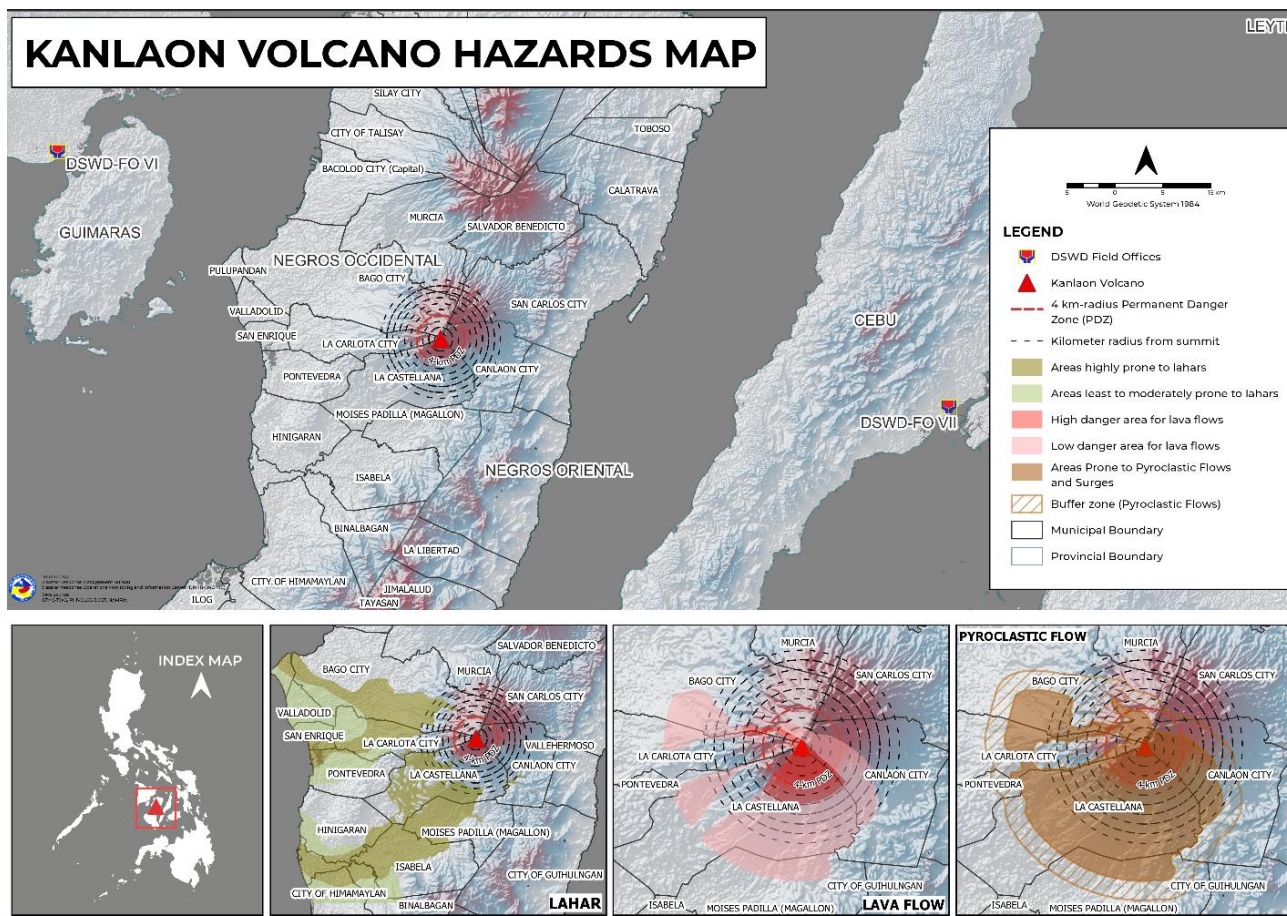
<sup>1</sup> Canlaon City Official website ([www.canlaoncity.gov.ph](http://www.canlaoncity.gov.ph))

<sup>2</sup> Department of Science and Technology - Philippine Institute of Volcanology and Seismology (DOST-PHIVOLCS)

<sup>3</sup> Philippine Statistics Authority (PSA), May 2020

<sup>4</sup> Based on the latest DOST-PHIVOLCS Advisory issued on 27 October 2022, 5AM

- Civil aviation authorities must also advise pilots to avoid flying close to the volcano's summit as ejecta from any sudden phreatic eruption can be hazardous to aircraft.
- DOST-PHIVOLCS is closely monitoring Kanlaon Volcano's activity and any new development will be relayed to all concerned.



### III. Predictive Analytics for Humanitarian Response (PAHR)

A total of **15,331 families** or **76,656 persons** in **13 barangays** in **Regions VI** and **VII** lying within the 4- km PDZ are at high risk on Kanlaon's eruption. A massive eruption would directly affect **105,767 families** or **528,838 persons** spanning one (1) town and four (4) cities in Negros Occidental and Negros Oriental (see Table 1).

**Table 1. Projected Affected Population**

Affected Areas	4-km PDZ			Total Population		
	Barangays	Families	Persons	Barangays	Families	Persons
<b>TOTAL</b>	<b>13</b>	<b>15,331</b>	<b>76,656</b>	<b>149</b>	<b>105,767</b>	<b>528,838</b>
<b>Region VI (Negros Occidental)</b>	<b>9</b>	<b>11,513</b>	<b>57,565</b>	<b>137</b>	<b>94,003</b>	<b>470,016</b>
Bago City	2	2,683	13,416	24	38,242	191,210
La Castellana	4	4,914	24,570	13	15,898	79,492

Affected Areas	4-km PDZ			Total Population		
	Barangays	Families	Persons	Barangays	Families	Persons
La Carlota City	2	1,069	5,345	14	13,333	66,664
San Carlos City	1	2,847	14,234	86	26,530	132,650
<b>Region VII (Negros Oriental)</b>	<b>4</b>	<b>3,818</b>	<b>19,091</b>	<b>12</b>	<b>11,764</b>	<b>58,822</b>
Canlaon City	4	3,818	19,091	12	11,764	58,822

A total of **₱9,965,150.00** worth of **family food packs (FFPs)** is projected to be provided to **15,331 families** in **Regions VI and VII** based on the 4-km PDZ. A massive eruption would require **105,767 FFPs** for the same number of families that would be directly affected, costing **₱68,748,550.00** for a two (2)-day food requirement for a family of five (5) members (see Table 2).

**Table 2. Projected FFPs Requirement**

Affected Areas	4-km PDZ		PSA 2020	
	Families	FFP Cost	Families	FFP Cost
<b>TOTAL</b>	<b>15,331</b>	<b>9,965,150.00</b>	<b>105,767</b>	<b>68,748,550.00</b>
<b>Region VI (Negros Occidental)</b>	<b>11,513</b>	<b>7,483,450.00</b>	<b>94,003</b>	<b>61,101,950.00</b>
Bago City	2,683	1,743,950.00	38,242	24,857,300.00
La Castellana	4,914	3,194,100.00	15,898	10,333,700.00
La Carlota City	1,069	694,850.00	13,333	8,666,450.00
San Carlos City	2,847	1,850,550.00	26,530	17,244,500.00
<b>Region VII (Negros Oriental)</b>	<b>3,818</b>	<b>2,481,700.00</b>	<b>11,764</b>	<b>7,646,600.00</b>
Canlaon City	3,818	2,481,700.00	11,764	7,646,600.00

## IV. Response Actions and Interventions

### a. Standby Funds and Prepositioned Relief Stockpile

OFFICE	STANDBY FUNDS	STOCKPILE			TOTAL STANDBY FUNDS & STOCKPILE
		FAMILY FOOD PACKS		OTHER FOOD AND NON-FOOD ITEMS (FNIs)	
		QUANTITY	TOTAL COST		
TOTAL	450,291,995.05	562,252	353,548,615.38	680,643,113.52	1,484,483,723.95
DSWD CO	372,572,034.48	-	-	-	372,572,034.48
NRLMB NROC	-	45,031	34,410,860.00	143,995,298.06	178,406,158.06
NRLMB VDRC	-	31,329	19,725,765.00	30,590,360.00	50,316,125.00
DSWD FO VI	-	46,388	25,019,479.00	27,373,069.00	52,392,548.00
DSWD FO VII	5,000,000.00	34,128	20,212,360.00	49,676,523.42	74,888,883.42
Other FOs	72,719,960.57	405,376	254,180,151.38	429,007,863.04	755,907,974.99

Note: The Inventory Summary is as of 27 October 2022, 4PM. Replenishment of standby funds for DSWD FO VI is being processed.

Sources: DSWD-DRMB and DSWD-NRLMB

#### 1. Standby Funds

- ₱372.57 million Quick Response Fund (QRF) at the DSWD Central Office.
- ₱5 million available at DSWD FO VII.

- ₱72.72 million in other DSWD FOs which may support the relief needs through inter-FO augmentation.

## **2. Prepositioned FFPs and Other Relief Items**

- 76,360 FFPs available in Disaster Response Centers; of which, 45,031 FFPs are at the National Resource Operations Center (NROC), Pasay City and 31,329 FFPs are at the Visayas Disaster Resource Center (VDRC), Mandaue City.
- 80,516 FFPs available at DSWD FOs VI and VII.
- 405,376 FFPs in other DSWD FOs which may support the relief needs through inter-FO augmentation.
- ₱680.64 million worth of other FNIs at NROC, VDRC, and DSWD FO warehouses.

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*This is the final preparedness for response report on the Kanlaon Volcano Seismic Activity. The Disaster Response Operations Monitoring and Information Center (DROMIC) of DSWD-DRMB continues to closely coordinate with DSWD FOs VI and VII for the monitoring of Kanlaon Volcano and any request of Technical Assistance and Resource Augmentation (TARA).*

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