

Indonesia: Floods, landslides to dominate 2019 amid continuing environmental damage

Monday 7 January 2019, by [ARBI Ivany Atina](#), [TEHUSIJARANA Karina](#) (Date first published: 6 January 2019).

Flooding and landslides will remain the predominant type of disasters in Indonesia in 2019, a repeat of what happened in 2018 when thousands of natural disasters happened, a government disaster office has projected.

The last day of 2018 saw a fatal landslide in Sukabumi, West Java, which killed at least 15 as of the first day of 2019.

“We predict that in 2019, over 2,500 natural disaster will occur across Indonesia,” National Disaster Mitigation Agency (BNPB) spokesperson Sutopo Purwo Nugroho told reporters on Monday.

“Hydrometeorological disasters such as floods, landslides and puting beliung [small tornadoes] will continue to dominate and make up about 95 percent of total disasters.”

[Hydrometeorological hazards rule: figure not reproduced here.]

Hydrometeorological disasters are among the three major types of disaster across the world. The other two according to a 2013 paper written by AW Jayawardena from the University of Hong Kong are geological (earthquakes) and biological (such as those caused by pathogenic microorganisms). Jayawardena wrote in his conference paper that hydrometeorological disasters, which are primarily caused by water and wind, account for more than 75 percent in terms of damage, including casualties and economic loss, in the world.

Critical land

[Map not reproduced here.]

Sutopo said deforestation and damage to watersheds had contributed to the increasing number of hydrometeorological disasters over the years. The high level of critical land, which the Forestry and Environment Ministry defines as land that has ecologically reduced function, was also a contributing factor.

[Water and wind wreak havoc: graph not reproduced here.]

He added that Indonesia was unlikely to be affected by the El Niño or La Niña phenomena in 2019, which means that the dry and rainy seasons are not expected to increase in intensity.

The Meteorology, Climatology and Geophysics Agency (BMKG) predicts that the rainy season will peak in January 2019, posing a high potential for floods, landslides and tornadoes across the country.

“Almost all of Sumatra, Java, Kalimantan and Nusa Tenggara is vulnerable,” he said.

But while geological disasters like earthquakes and subsequent tsunamis made up only 3.2 percent of the natural disasters that hit the country last year, they were responsible for 92.9 percent of the total death toll of 3,349 people.

[Graph not reproduced here.]

The earthquakes that hit West Nusa Tenggara in August, the quake and ensuing tsunami that hit Central Sulawesi in September and the volcano-triggered tsunami that struck Banten and Lampung in December accounted for most of the deaths and damage that occurred in 2018.

[Graph not reproduced here.]

Sutopo said that on average, about 500 earthquakes occurred in Indonesia every month, although only a few were strong enough to cause significant damage. He said that while the locations, timing and strength of earthquakes were unpredictable, the eastern parts of Indonesia could be more prone to strong tremors.

"We should be alert to earthquakes in the eastern part of Indonesia because its seismic and geological conditions are more complicated, making it more vulnerable," he said.

Indonesia is also home to 127 active volcanoes, the eruptions of which are similarly unpredictable. According to the Energy and Mineral Resources Ministry's Volcanology and Geological Disaster Mitigation Center (PVMBG), one volcano is on the highest alert level (Mount Sinabung in North Sumatra), while four are on the second highest, including Mt. Anak Krakatau, the eruption of which is suspected to have caused the tsunami that hit Banten and Lampung in December. Sixteen other volcanoes are at alert level II (advisory), while the remaining 106 are at alert level I (normal).

Sutopo said that most regional administrations and Indonesians in general were not yet equipped to face major natural disasters.

"A 2012 study on the readiness index of every regency and city in Indonesia shows that every region has a very low readiness level," he said. "Knowledge about disasters has increased since then, but policies, emergency response plans, early warnings and resource mobilization remain minimal."

He added that the early warning system in particular had to be designed from "end-to-end" in order to increase its effectiveness.

"The early warning system has to be comprehensive," he said. "A comprehensive system that consists of a group of subsystems including equipment, familiarization, education, local wisdom, public participation, local politics, public policies and so on."

"This is what many people do not understand so that when a disaster strikes, [institutions] start blaming each other because they feel that they have installed early warning tools, but they are not connected in a comprehensive system." (evi)

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• The Jakarta Post, Jakarta / Wed, January 2, 2019 / 03:38 pm:
<https://www.thejakartapost.com/news/2019/01/02/floods-landslides-to-dominate-2019-amid-continuing-environmental-damage.html>

More bodies retrieved from site of landslides in Sukabumi

Thirty-one bodies have been retrieved from the site of a landslide in Sirnaresmi village, Sukabumi regency in West Java seven days after the disaster hit the area last Monday at around 5 p.m., authorities have reported.

Of the 100 people affected by the landslide, 64 people had been deemed safe, 31 people died and three others sustained mild to severe injuries. Meanwhile, two people were still missing as of Monday morning.

“The search and rescue team [SAR] is intensifying its efforts today to find the missing persons,” National Disaster Mitigation Agency (BNPB) spokesperson Sutopo Purwo Nugroho said in a statement on Sunday.

The rescue team comprises personnel from, among others, the Indonesian Military (TNI), the National Police, regional disaster mitigation agencies (BPBD) and the Indonesian Red Cross (PMI).

“The sunny weather has helped the search,” Sutopo added.

According to the agency’s data, 132 landslides had struck Sukabumi in the past decade—most of which had resulted in casualties and residential damage.

A landslide occurred on March 28 in 2015, for example, affecting 293 people, while damaging 11 houses. Twelve of the affected residents passed away in the calamity.

The Meteorology, Climatology and Geophysics Agency (BMKG) said the peak of the rainy season will be from January to February, which will increase the risk of disasters in landslide-prone points in Central Java province and several cities in West Java: Bandung, Sumedang, Cianjur, Bogor and Sukabumi.

Therefore, residents living in the mountainous area are asked to stay alert.

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The BNPB stated that hydrometeorological hazards such as landslides, floods and tropical cyclones would dominate this year’s disasters as the result of environmental damage.

According to the agency’s records, 14.1 million hectares of the watershed has been damaged, which would trigger flooding due to rapid surface changes, including in mountainous areas that were turning into residential areas.

BNPB head Willem Rampangilei said earlier that despite the large amount of resources needed to secure legislative and presidential elections in April, Willem ensured that the disaster mitigation agency was prepared to minimize the impact of any natural events, particularly during key dates.

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• The Jakarta Post, Jakarta / Sun, January 6, 2019 / 06:16 pm:

<https://www.thejakartapost.com/news/2019/01/06/more-bodies-retrieved-from-site-of-landslides-in-sukabumi.html>
