

7. Natural Disaster Databook 2024

ADRC publishes the Natural Disaster Databook annually to provide statistical and analytical overview of disaster data. For 2024, ADRC downloaded the datasets from the Emergency Event Database (EM-DAT) created on [2 June 2025](#) and utilized them for this analytical overview. This Databook provides an overview of the trends in occurrences, number of deaths, people affected, and economic losses by focusing on seven disaster types: drought, earthquake, extreme temperature, flood, storm, volcanic activity, and wildfire.

Basic analysis is presented by comparing the 2024 data with the 30-year average (1994–2023) data. General comparisons are provided for the following:

- Comparison of the natural disaster data of 2024 with the 30-year (1994–2023) average data
- Comparison of the climate-related disaster data of 2024 with the 30-year (1994–2023) average data

Note that this Databook only presents general trend data (i.e., occurrence, deaths, people affected, and economic losses). It does not present detailed disaggregated data, such as analysis by gender, location, or sector. In other words, this Databook will not tell you how many of the total deaths are male or female or how many of the houses destroyed are in the rural or urban areas. Instead, this Databook will simply show whether the trend in 2024 is increasing or decreasing compared to the 30-year average (1994–2023).

At the outset, three observations can be highlighted in this Databook. First, disaster occurrences have been increasing but the number of deaths and the number of people affected are decreasing. This trend is observed globally and in Asia. Second, there is an increasing trend of climate-related disasters both globally and in Asia. Third, while the amount of economic losses from disasters is increasing globally, there seems to be a decreasing trend in Asia.

Globally, the number of disaster occurrence in 2024 is higher (360 events) than the 30-year average (332 events), indicating an increasing trend. Also, as shown in Table 7.1, the numbers of deaths and people affected indicate a decreasing trend while the amounts of economic losses indicate an increasing trend.

Table 7.1 Trend of Natural Disasters (Global)

Global	30-Year Average (1994–2023)	2024	Trend
Occurrence	332	360	↑
Death	54,626	14,496	↓
People Affected	195.2M	163.4M	↓
Economic Losses	USD132.0B	USD241.6B	↑

If we look at Asia, it is notable that the economic losses from disasters showed a decreasing trend in 2024 (USD31.9 billion) than the 30-year average (USD55.8 billion). A decreasing trend in economic losses is a positive indication of effective disaster risk reduction efforts. However, this trend observed in Asia does not necessarily mean a definitive decrease, as there are no 2024 data on economic losses for three of the disaster types (i.e., extreme temperature, volcanic activity, and wildfire) covered in this analysis. This has led to a decreasing trend when we compared the 2024 data with the 30-year average (1993–2023) data. Also, it should be noted that there were huge disasters in 2023 (e.g., Türkiye-Syria earthquakes and South Asia flooding) that could have inflated the 30-year average of economic losses. Other trends, as shown in Table 7.2, the numbers

of deaths and people affected indicate a decreasing trend while the number of occurrences indicate an increasing trend.

Table 7.2 Trend of Natural Disasters (Asia)

Asia	30-Year Average (1994–2023)	2024	Trend
Occurrence	132	148	↑
Death	31,853	8,916	↓
People Affected	163.4M	109.7M	↓
Economic Losses	USD 55.8B	USD 31.9B	↓

Climate change is attributed to cause many hazards to become more intense and frequent. In 2024, wildfires, floods, and droughts impacted millions of people across the globe. Severe drought affected millions of people in Zambia, Malawi, and Zimbabwe. Droughts in the Amazon fueled record wildfires in Brazil and Bolivia. Record heatwaves were experienced in Japan, India, Pakistan, Mexico, and across Europe. Devastating floods were experienced across central and eastern Europe. Destructive storms (e.g., Hurricane Helene and Hurricane Milton) made landfall in the United States while super typhoon Yagi caused severe flooding and displacement in Southeast Asia.

Globally, the occurrence of climate-related disasters in 2024 is higher (340 events) than the 30-year average (301 events). As shown in Table 7.3, the number of people affected by climate-related disaster is decreasing while the amount of economic losses is increasing.

Table 7.3 Trend of Climate-Related Disasters (Global)

Global	30-Year Average (1994–2023)	2024	Trend
Occurrence	301	340	↑
People Affected	189.8M	162.7M	↓
Economic Losses	USD103.5B	USD223.4B	↑

In 2024, Asia experienced a wide spectrum of climate-related disasters, including extreme temperature, storms, flooding, and drought. As shown in Table 7.4, the occurrence of climate-related disasters in 2024 in Asia is higher (133 events) than the 30-year average (113 events). The data also indicates that the number of people affected and the economic losses are decreasing.

Table 7.4 Trend of Climate-Related Disasters (Asia)

Asia	30-Year Average (1994–2023)	2024	Trend
Occurrence	113	133	↑
People Affected	158.8M	108.8M	↓
Economic Losses	USD33.5B	USD13.9B	↓

7.1 Natural Disaster Data

In this section, we look at the trends (whether increasing or decreasing) of natural disaster data in terms of occurrence, death tolls, people affected, and economic losses. We compare the natural disaster data of 2024 with the 30-year average (1994–2023) data to examine the trends of only seven disaster types (i.e., drought, earthquake, extreme temperature, flood, storm, volcanic activity, and wildfire) at the global level and in Asia.

7.1.1 Global Disaster Data

Records from 1900 to 2024 indicate an increasing trend in global disaster occurrence with a noticeable leap that began in the 1960s (Figure 7.1). The end of 20th century (i.e., 2000) shows by far the highest number of disaster occurrence (871 events) since 1900. Year 2000 experienced widespread flooding in various locations of Mekong, Bangladesh, India, and Mozambique. Devastating earthquakes struck in Indonesia and El Salvador. There were destructive cyclones in South Asia, and eruption of Mayon Volcano in the Philippines.

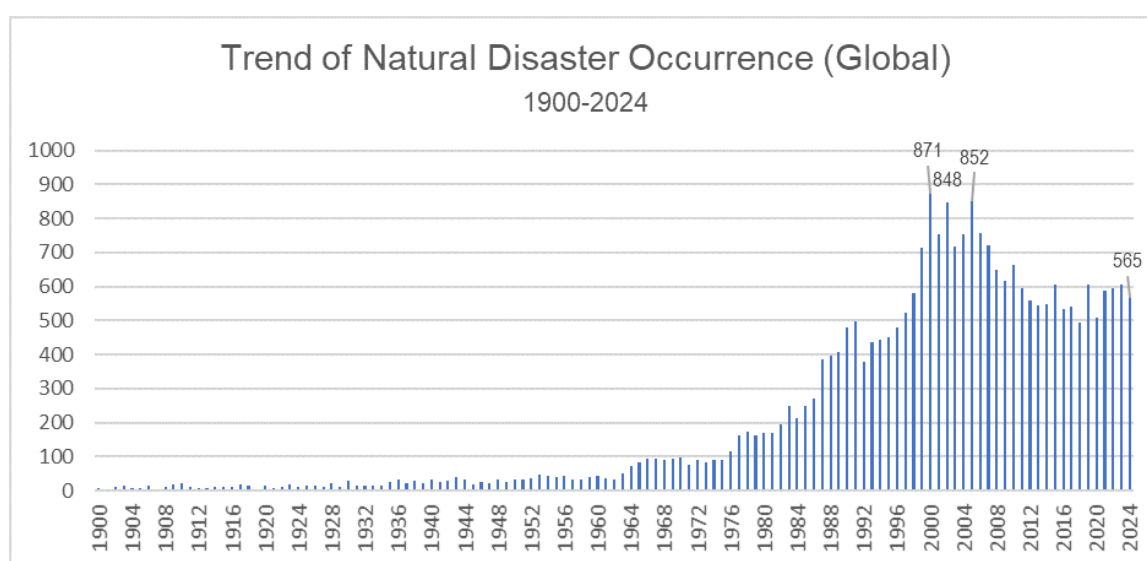


Figure 7.1 Global trend of natural disaster occurrence: 1900–2024 (EM-DAT/CRED, 2025)

Insights: Entering 21st century (i.e., 2001), the trend of disaster occurrences becomes significantly higher compared with the 20th century. This implies that the 21st century (defined by rapid economic development and accelerated by urbanization, globalization, and information technology) creates increasing conditions for disaster risks—such as high population density in hazard-prone areas, unsustainable practices that deplete natural resources, and inadequate building standards. It is therefore crucial to integrate disaster risk reduction (DRR) into development strategies.

(1) Occurrence (Global)

INCREASING TREND. As shown in Figure 7.2, disaster occurrence in 2024 is higher (360 events) compared with the 30-year average (332 events). Like in the previous years, most disasters in 2024 were triggered by storms (147 events) and floods (142 events).

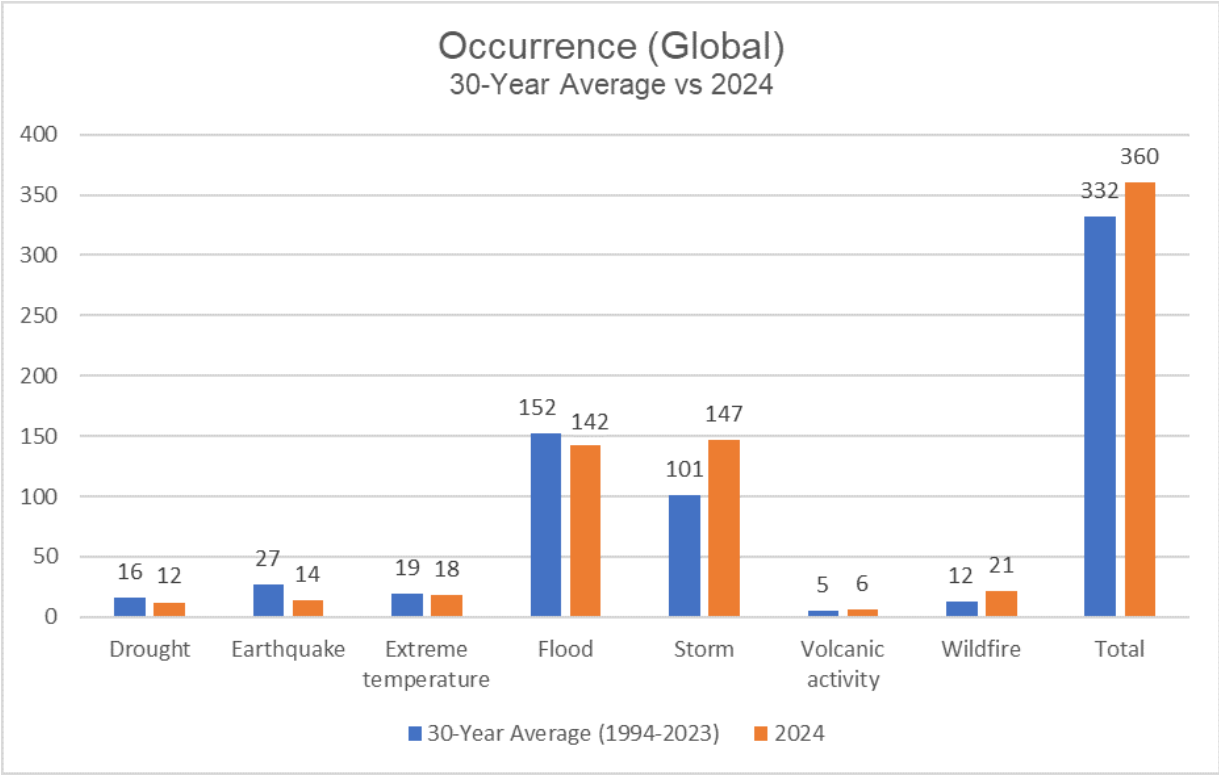


Figure 7.2 Number of occurrences by disaster type (globally): 30-Year Average vs 2024 (EM-DAT/CRED, 2025)

Looking at the data by disaster type, we can observe the following:

- Number of flood occurrences is lower in 2024 than the 30-year average.
- Number of storm occurrences is higher in 2024 than the 30-year average, indicating an increasing frequency.
- Number of wildfire occurrences has almost doubled in 2024 compared with the 30-year average

Insights: Floods and storms continue to trigger disasters in many parts of the world. Continuous improvement of disaster risk reduction efforts for these disaster types needs to be pursued relentlessly by governments and key stakeholders.

(2) Death (Global)

DECREASING TREND. As shown in Figure 7.3, the number of people killed by disasters in 2024 is lower (14,496 people) compared with the 30-year average (54,626 people). The disaster types that account for the highest number of deaths in 2024 are: flood (5,885 deaths), extreme temperature (5,247 deaths), and storms (2,582 deaths). Among the major incidents of flooding that caused high number of casualties in 2024 were in Niger, Spain, Afghanistan, Indonesia, India, and Myanmar.

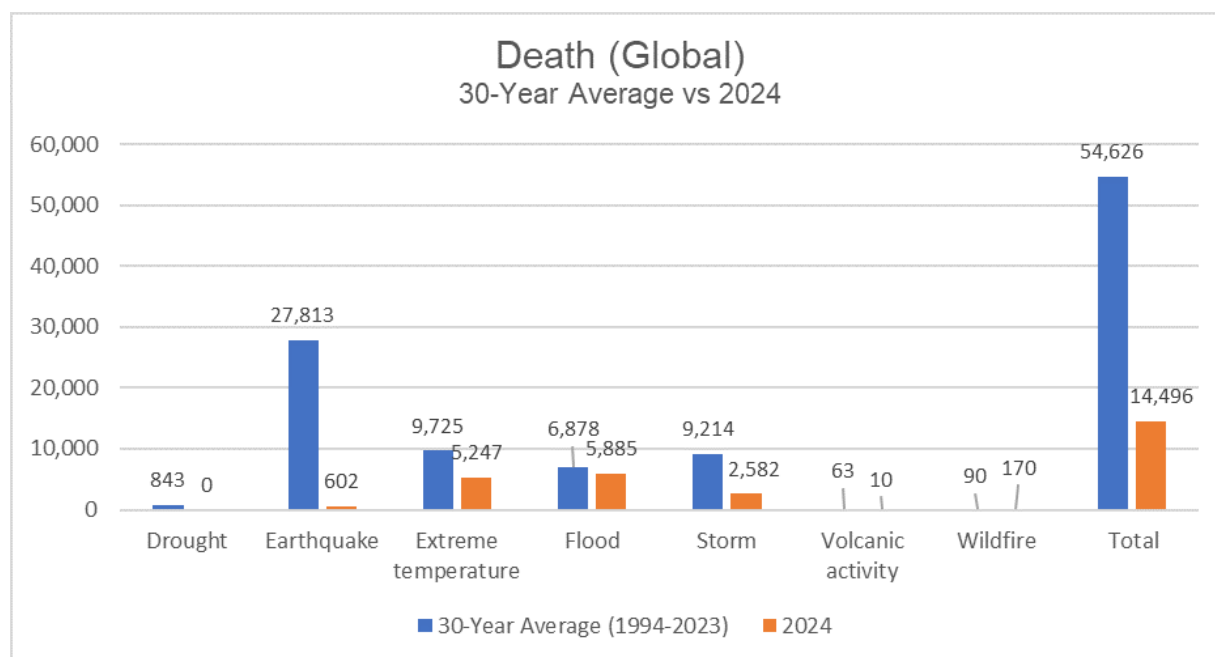


Figure 7.3 Number of people killed by disaster type (globally): 30-Year Average vs 2024 (EM-DAT/CRED, 2025)

Looking at the data by disaster type, we can observe the following:

- The number of deaths by disaster type has decreased in 2024 compared with the 30-year average, with the exception of deaths caused by wildfires.
- Although the occurrence of storms has increased in 2024, the number of deaths has decreased significantly. As observed, there were 2,582 deaths in 2024 compared with annual average of 9,214 deaths in the past 30 years (1994–2023).

Insights: There is a good reason to believe that disaster risk reduction efforts by governments and stakeholders (e.g., evacuation drills and flood control measures) have contributed to the decreasing number of deaths from floods and storms.

(3) People Affected (Global)

DECREASING TREND. As shown in Figure 7.4, the number of people affected by disasters in 2024 is lower (163.4 million people) compared with the 30-year average (195.2 million people). Floods accounts for the highest number of people affected. Among the large-scale typhoons that affected millions of people are super typhoon Yagi (largely affecting the communities in the Philippines, Viet Nam, Thailand, and Myanmar); Hurricane Helene that affected the states of Florida and North Carolina of the United States; and Hurricane Milton affecting over 3 million homes in Florida.

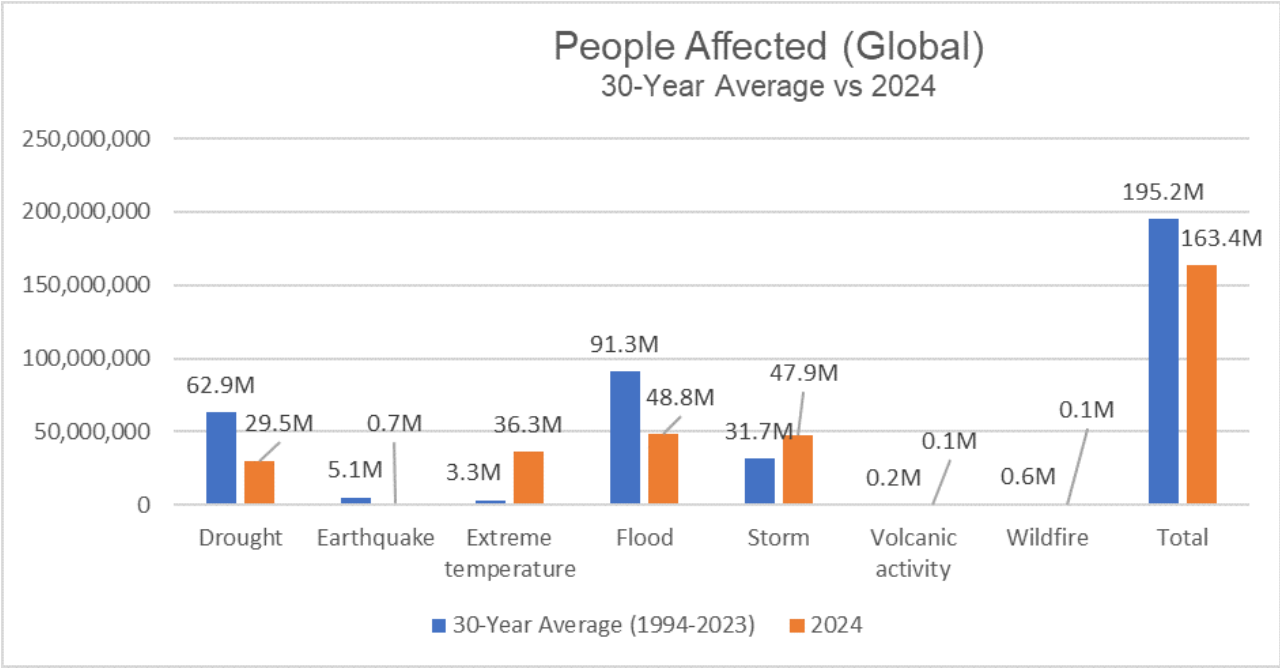


Figure 7.4 Number of people affected by disaster type (globally): 30-Year Average vs 2024 (EM-DAT/CRED, 2025)

Looking at the data by disaster type, we can observe the following:

- The number of people affected by floods is decreasing in 2024 compared with the 30-year average.
- Similarly, the number of people affected by drought, earthquake, volcanic activity, and wildfire are all decreasing in 2024 compared with the 30-year average.

Insights: In 2024, the number of people affected by extreme temperature is significantly higher compared with the 30-year average. This indicates that the countermeasures for extreme temperature need to be enhanced.

(4) Economic Losses (Global)

INCREASING TREND. As shown in Figure 7.5, the economic losses from disasters in 2024 is much higher (USD245 billion) compared with the 30-year average (USD132 billion). This increasing trend of economic losses could be attributed to a combination of multiple factors; increased frequency and intensity of extreme weather events, higher exposure of people and assets to these hazards, and more people living in vulnerable areas.

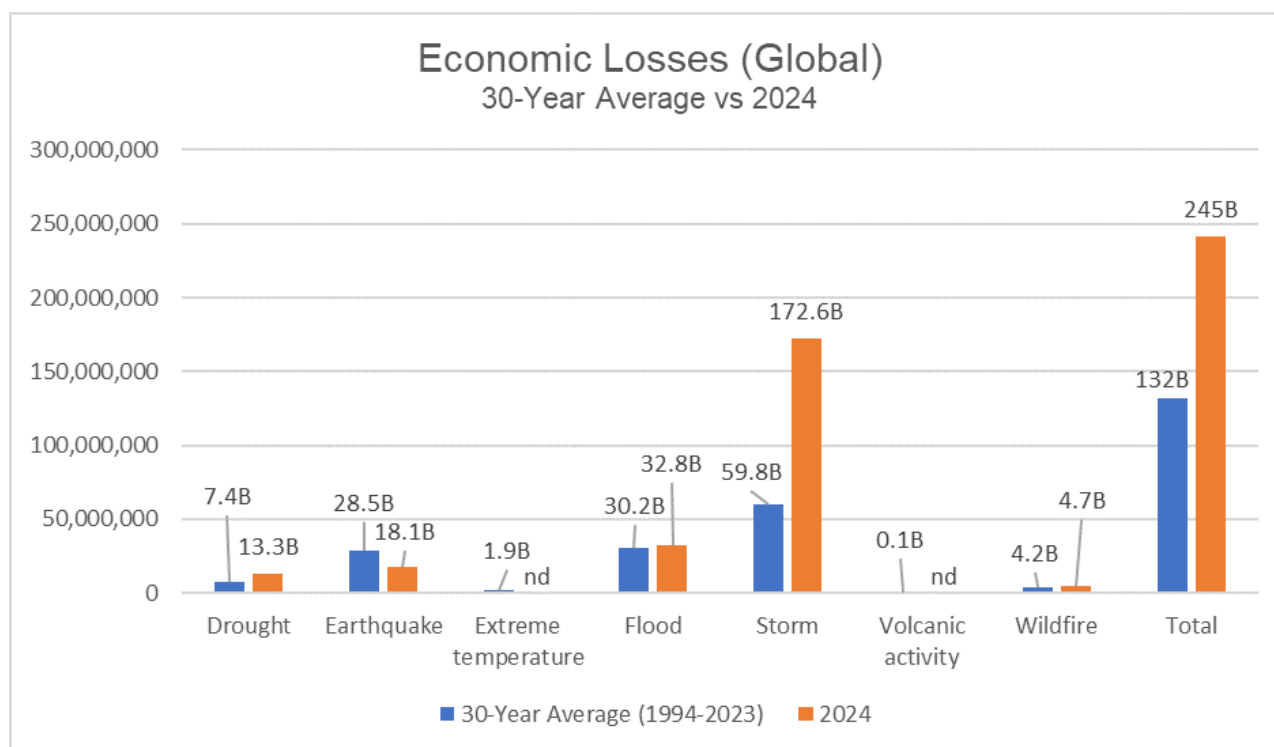


Figure 7.5 Economic losses by disaster type (globally): 30-Year Average vs 2024 (EM-DAT/CRED, 2025)

Looking at the data by disaster type, we can observe the following:

- Economic losses from storms are significantly higher (USD172.6 billion) in 2024 compared with the 30-year average (USD59.8 billion)—almost tripled.
- Economic losses from flood are also higher (USD32.8 billion) in 2024 compared with the 30-year average (USD30.2 billion).

Insights: The huge economic losses from storms and flood disasters imply that many people and assets are not only exposed to these risks, but are also vulnerable in terms of location and limitations of mitigation practices.

7.1.2 Asian Disaster Data

Similar to the global trend, disaster occurrence in Asia has been increasing during the period 1900–2024 (Figure 7.6). Year 2005 accounts for the highest number (382 events) of disaster occurrence in Asia since 1900. Among the most devastating natural disasters in 2005 were the magnitude 7.6 Kashmir earthquake on 8 October killing of 80,000 people, the magnitude 8.6 earthquake in Nias-Simeulue in March, and super typhoons and prolonged flooding in South and Southeast Asia. All together, these disasters killed tens of thousands and impacted millions of people in the region.

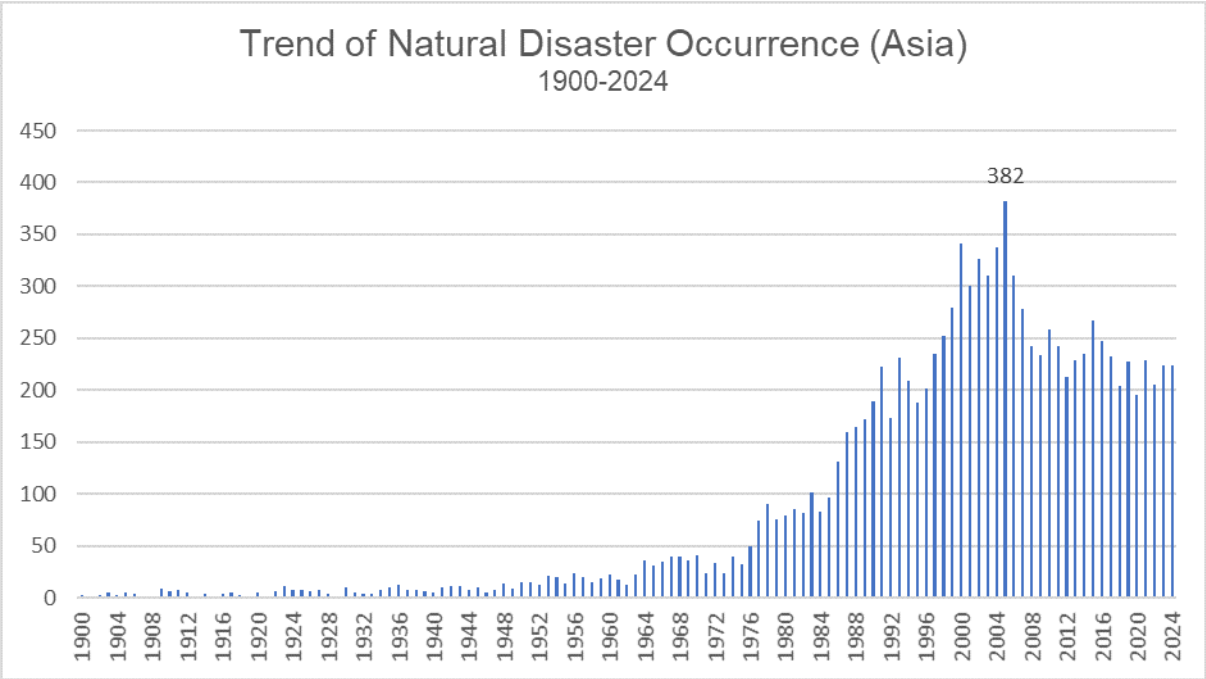


Figure 7.6 Asian trend of natural disaster occurrence: 1900–2024 (EM-DAT/CRED, 2025)

Insights: The devastating natural disasters in 2005 offered critical lessons for improving DRR, including: 1) the establishment of institutional structure and governance framework for disaster management; 2) improvement and enforcement of building codes for resilient infrastructure; and 3) enhancement of disaster preparedness and early warning systems. These were integrated in the Hyogo Framework for Action.

(1) Occurrence (Asia)

INCREASING TREND. As shown in Figure 7.7, disaster occurrence in 2024 in Asia is higher (148 events) compared with the 30-year average (132 events). Among the most devastating disasters in Asia in 2024 included super typhoon Yagi, a catastrophic landslide in Papua New Guinea, and severe flooding across South and Southeast Asia. Typhoon Yagi caused catastrophic flooding and landslides resulting in over 844 deaths across the region with Viet Nam as the hardest hit accounting for at least 300 deaths. Over 670 people killed and 1,680 residents displaced by the Papua New Guinea landslide. The flooding in South and Southeast Asia affected multiple countries. In India, it compounded with deadly landslides in Wayanad, Kerala, killing at least 392 people. In Indonesia, Malaysia, and Sri Lanka, the torrential rainfall caused dozens of deaths and extensive damage to infrastructure and crops. In Bangladesh, Nepal, and Pakistan, heavy flooding throughout the monsoon season killed hundreds, displaced thousands, and impacted millions of people. It should also be noted that on the New Year's Day of 2024, a magnitude 7.6 earthquake struck the Noto Peninsula in Japan. Reportedly, 634 people were killed, including deaths occurring in evacuation centers. The earthquake also caused a tsunami and landslides, destroying nearly 6,532 houses.

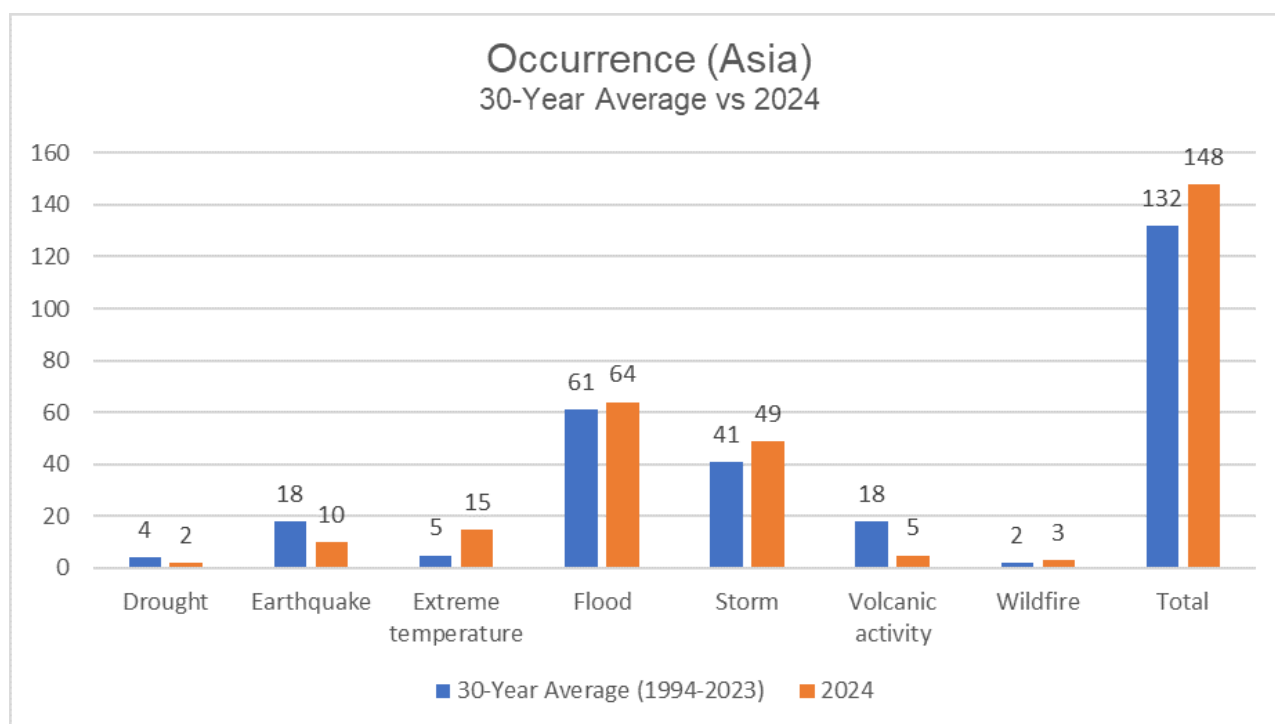


Figure 7.7 Number of occurrences by disaster type in Asia: 30-Year Average vs 2024 (EM-DAT/CRED, 2025)

Looking at the data by disaster type, we can observe the following:

- Number of occurrences of extreme temperature, floods, and storms is higher in 2024 compared with the 30-year average.
- Number of occurrences of earthquake is lower in 2024 compared with the 30-year average/

Insights: Unlike the global trend (where the occurrence of flood is lower in 2024 than the 30-year average), Asia continually shows an increasing trend of flood occurrence.

TOP 10 COUNTRIES WITH HIGH
DISASTER OCCURRENCE IN 2024

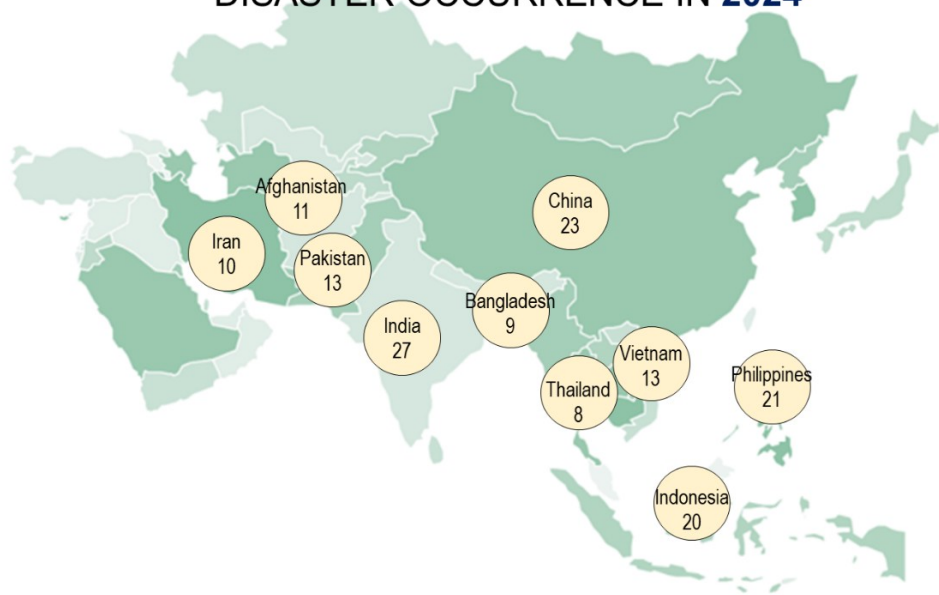


Figure 7.8 Top ten countries in Asia with the highest number of disaster occurrence in 2024 (EM-DAT/CRED, 2025)

Figure 7.8 shows the top ten countries in Asia with the highest number of disaster occurrence in 2024 are: India (27 events), China (23 events), Philippines (21 events), Indonesia (20 events), Pakistan (13 events), Viet Nam, (13 events), Afghanistan (11 events), Iran (10 events), Bangladesh (9 events), and Thailand (8 events).

(2) Deaths (Asia)

DECREASING TREND. As shown in Figure 7.9, the number of people killed by disasters in 2024 in Asia is lower (8,916 deaths) than the 30-year average (31,853 deaths).

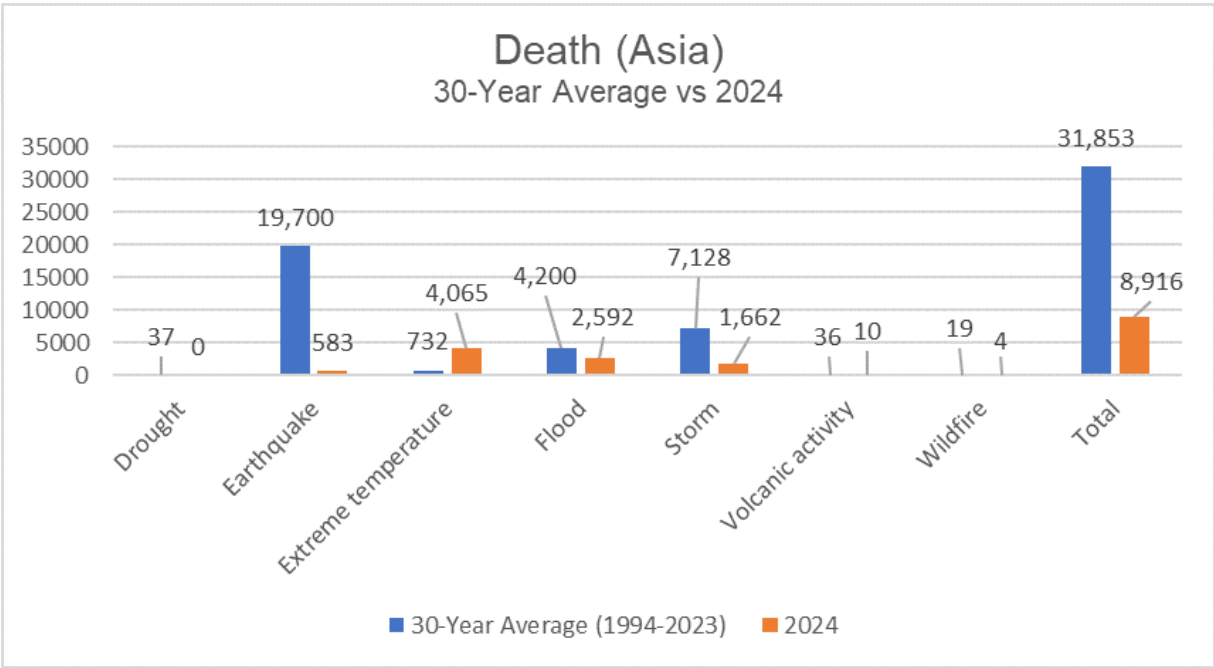


Figure 7.9 Number of people killed by disaster type in Asia: 30-Year Average vs 2024 (EM-DAT/CRED, 2025)

Looking at the data by disaster type, we can observe the following:

- While the number of deaths is generally decreasing, this trend does not apply to extreme temperature, where in 2024, more people died (4,065 deaths) than the 30-year average (732 deaths).

Insights: Disaster preparedness measures (e.g., awareness-raising and drills) and improved disaster management systems may reduce the number of deaths. It is also crucial to regularly monitor and assess the risk of other disaster types, such as extreme temperature, as deaths from this disaster is higher in 2024 than the 30-year average.

(3) People Affected (Asia)

DECREASING TREND. As shown in Figure 7.10, the number of people affected by disasters in 2024 in Asia is lower (109.7 million people) than the 30-year average (163.4 million people).

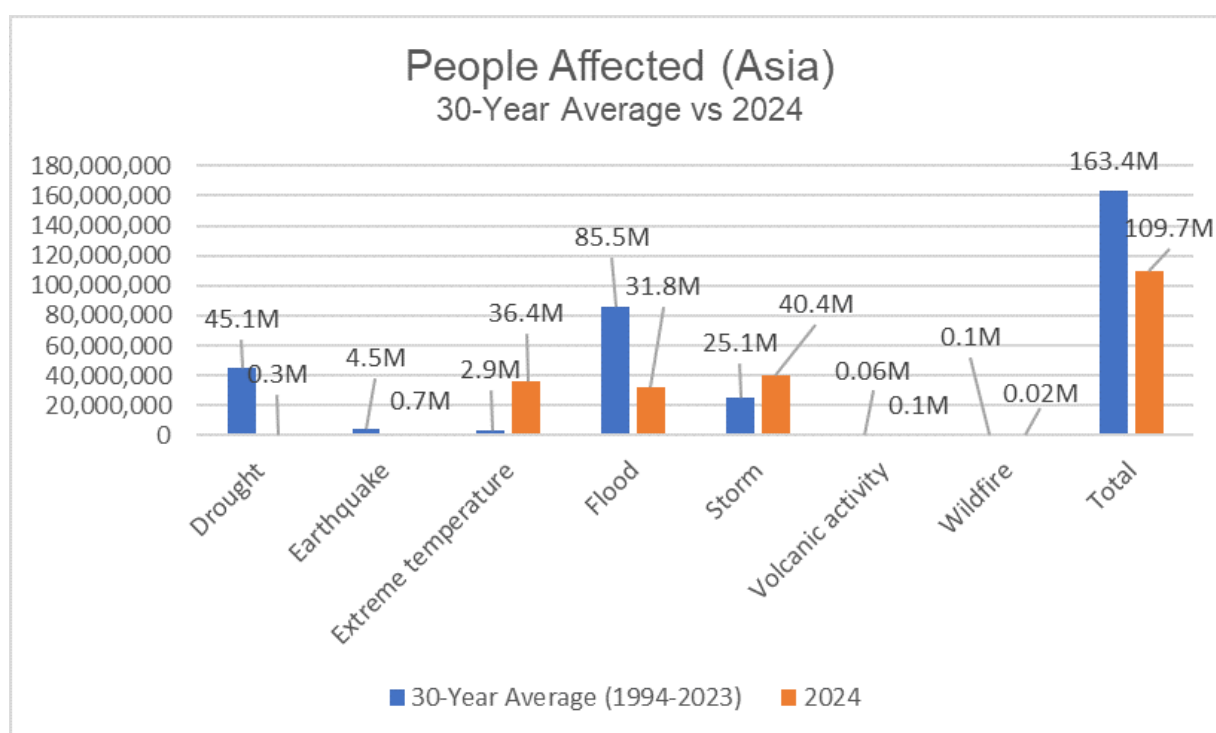


Figure 7.10 Number of people affected by disaster type in Asia: 30-Year Average vs 2024 (EM-DAT/CRED, 2025)

Looking at the data by disaster type, we can observe the following:

- Overall, the number of people affected by disaster in 2024 decreased than the 30-year average, however, this trend does not hold for storms. 40.4 million people were affected by storms in 2024, which is higher than 30-year average of 25.1 million people.
- The same is true with extreme temperature. People affected by extreme temperature in 2024 is 36.4 million people, higher than 30-year average of 2.9 million people.

Insights: The observations above imply that many people in Asia are exposed and vulnerable to extreme heat and storms. Countermeasures to reduce the number of people affected by these disaster types can be further improved, such as through knowledge exchange and technology transfer.

(4) Economic Losses (Asia)

DECREASING TREND. As shown in Figure 7.11, the economic losses from disasters in 2024 in Asia is lower (USD31.9 billion) compared with the 30-year average (USD55.8 billion). This is opposite of the global trend, where the economic losses from disasters show an increasing trend. At a glance, this trend looks promising. However, before inferring that it might be due to the improvement in disaster risk management or on better early warning systems, it is necessary to look at the details of the source data. Firstly, there are no 2024 data on economic losses for three of the disaster types that are covered in this analysis (i.e., extreme temperature, volcanic activity, and wildfire). On the contrary, the 30-year average includes all data for these three disaster types for the past 30 years (1994–2023). Secondly, it should be recalled that there were huge disasters in 2023 (e.g., Türkiye-Syria earthquakes and South Asia flooding) that could have affected the 30-year average economic losses.

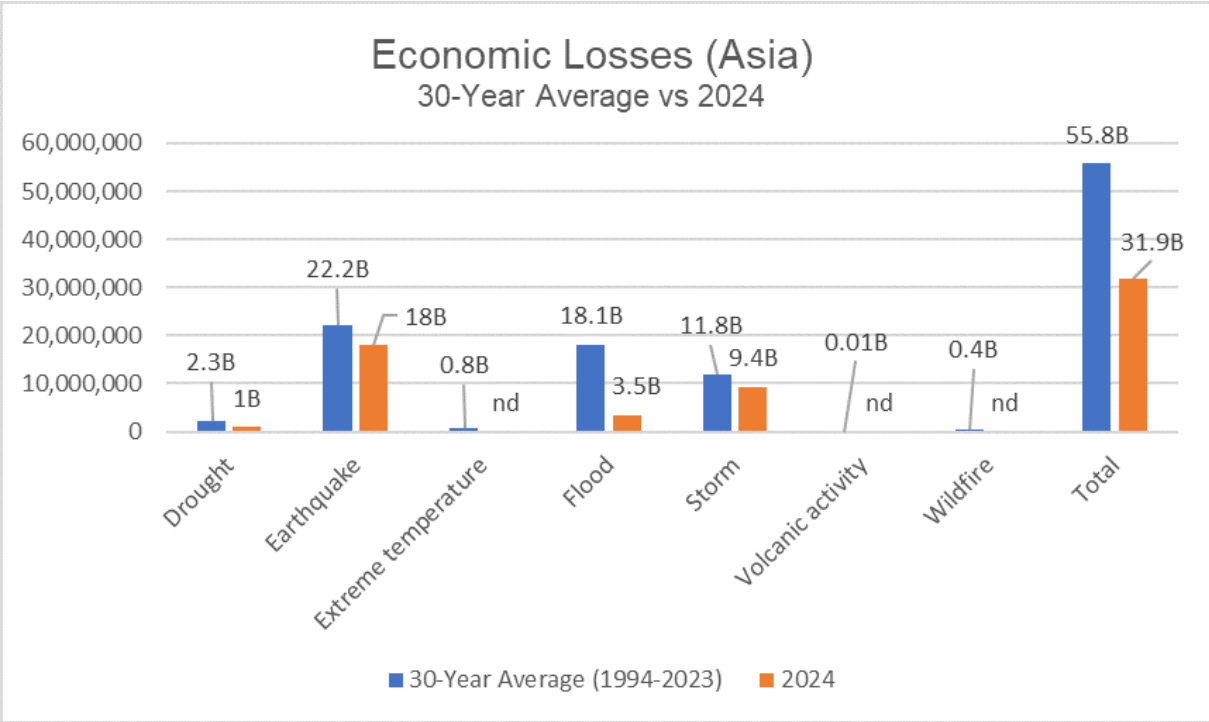


Figure 7.11 Economic losses by disaster type in Asia: 30-Year Average vs 2024 (EM-DAT/CRED, 2025)

Looking at the data by disaster type, we can observe the following:

- There are no 2024 data on economic losses for three specific disaster types: extreme temperature, volcanic activity, and wildfire.
- The other four disaster types: drought, earthquake, flood, and storm—where data is available, there is a decreasing trend of economic losses in 2024 in Asia compared with the 30-year average.

Insights: Since there is no data in three of the seven disaster types covered in this analysis, a disclaimer is emphasized in this Databook.

7.2 Climate-Related Disasters

Climate change is attributed as one of the reasons for higher occurrences of disaster each year. Extreme temperature, frequent floods, and intense storms are often attributed to climate change. According to the Intergovernmental Panel on Climate Change (IPCC) Sixth Assessment Report (AR6), the frequency and intensity are expected to further increase with every additional increment of global warming. To understand the trends of climate-related disasters, this Databook reviews five disaster types (i.e., drought, extreme temperature, flood, storm, and wildfire) in terms of occurrence, people affected, and economic losses.

7.2.1 Global Trend in Climate-related Disasters

In 2024, wildfires, floods, and droughts impacted millions of people across the globe. Severe drought affected millions of people in Zambia, Malawi, and Zimbabwe. Droughts in the Amazon fueled record wildfires in Brazil and Bolivia. Record heatwaves were experienced in Japan, India, Pakistan, Mexico, and across Europe. Devastating floods were experience across central and eastern Europe. Destructive storms (e.g., Hurricane Helene and Hurricane Milton) made landfall in the United States while super typhoon Yagi caused severe flooding and displacement in Southeast Asia. Climate change is making many hazards more intense and frequent.

(1) Occurrence (Global)

INCREASING TREND. As shown in Figure 7.12, the occurrence of climate-related disasters in 2024 is higher (340 events) than the 30-year average (301 events). Storms and wildfires have increased in frequency.

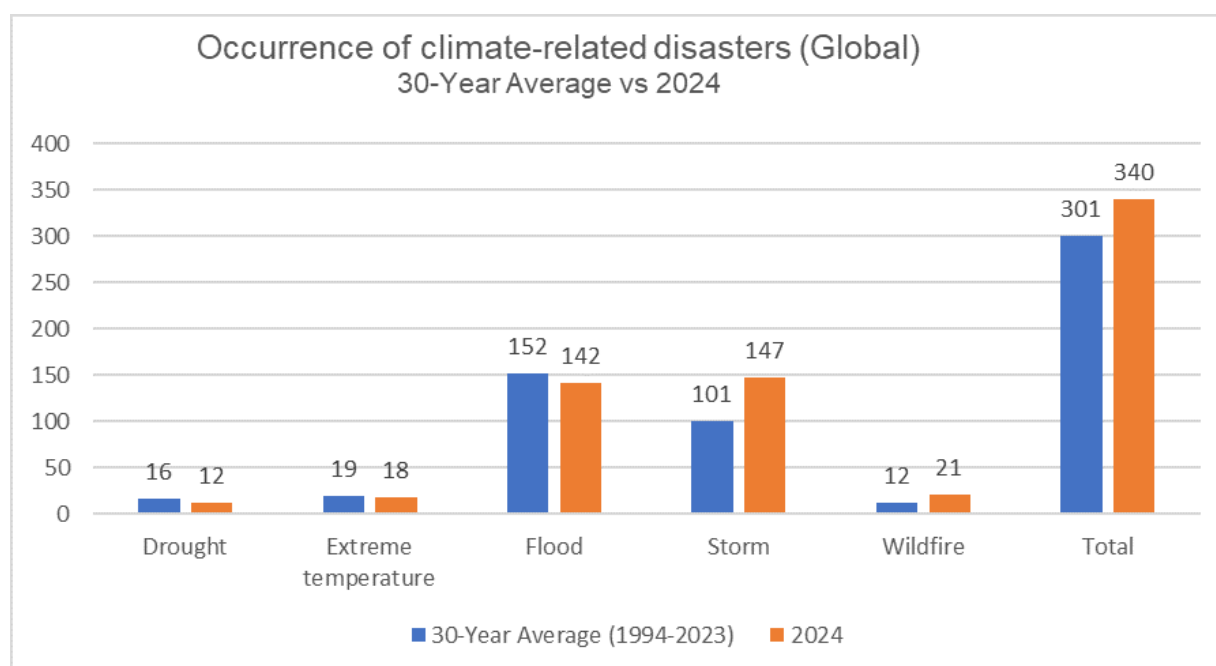


Figure 7.12 Global occurrence of climate-related disasters: 30-Year Average vs 2024 (EM-DAT/CRED, 2025)

(2) People Affected (Global)

DECREASING TREND. Figure 7.13 shows that the number of people affected by climate-related disasters in 2024 is lower (162.7 million people) than the 30-year average (189.8 million people). However, storms and extreme temperature remain an exception. In 2024, the number of people affected by storm is higher (47.9 million people) than the 30-year average (31.7 million people). Also, in 2024, the number of people affected by extreme temperature is higher (36.4 million people) than the 30-year average (3.3 million people).

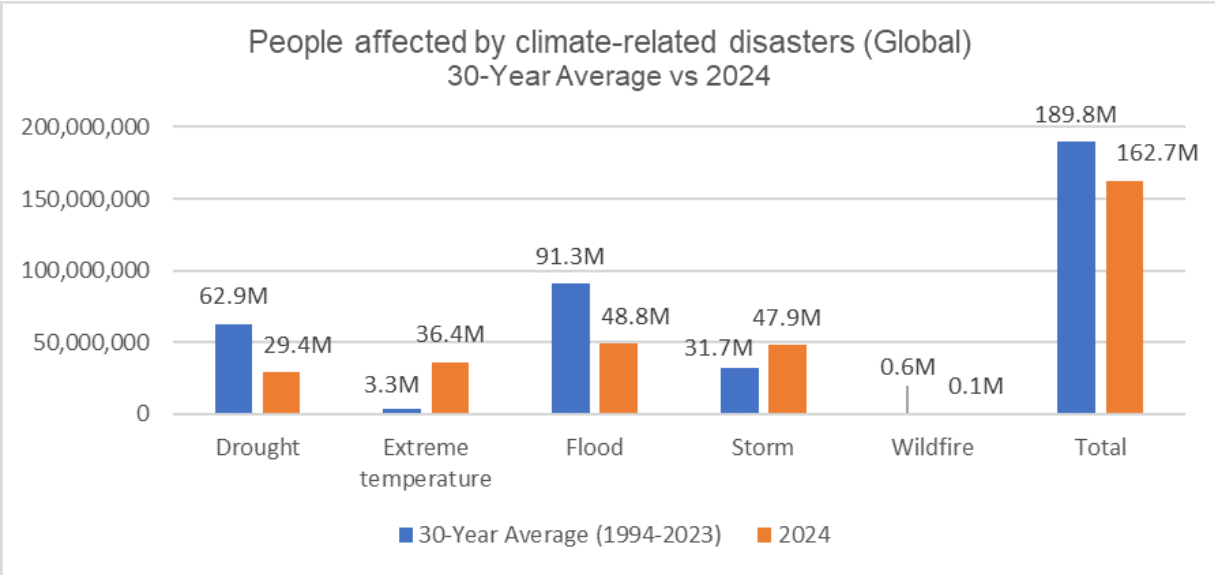


Figure 7.13 People affected by climate-related disasters (globally): 30-Year Average vs 2024 (EM-DAT/CRED, 2025)

(3) Economic Losses (Global)

INCREASING TREND. Figure 7.14 indicates the economic losses from climate-related disasters in 2024 is higher (USD223.4 billion) than the 30-year average. This increasing trend can be observed across all disaster types (except for extreme temperature, where data is not available for 2024).

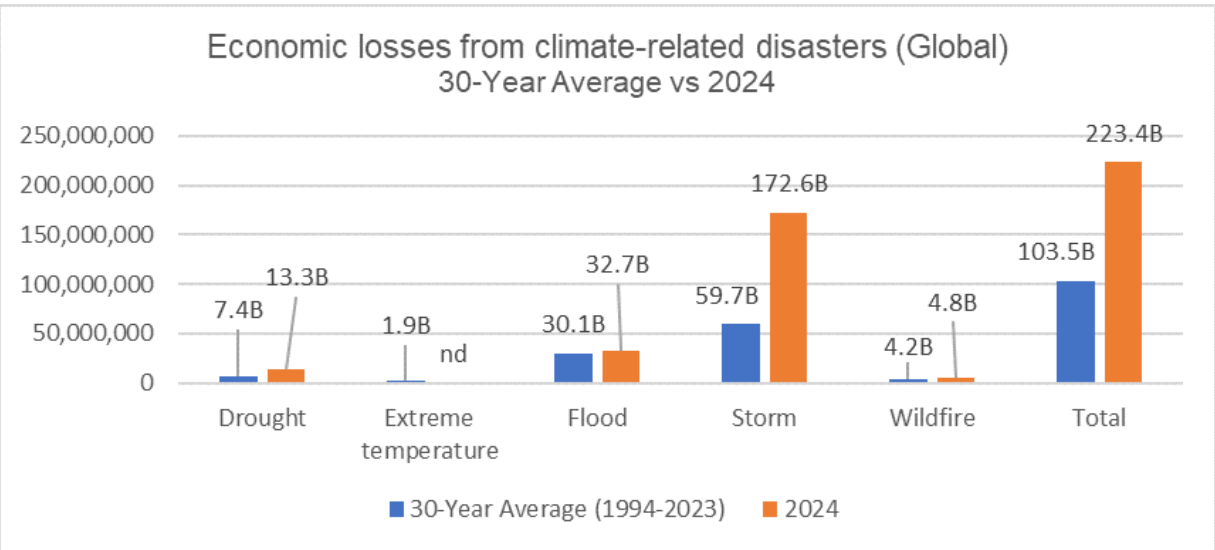


Figure 7.14 Global economic losses from climate-related disasters: 30-Year Average vs 2024 (EM-DAT/CRED, 2025)

7.2.2 Asian Tend in Climate-related Disasters

In 2024, Asia experienced a wide spectrum of climate-related disasters, including extreme temperature, storms, flooding, and drought. China experienced widespread flooding due to heavy monsoon rains. India and Pakistan were impacted by flash floods and heavy rains. United Arab Emirates, Oman, Iran, and Bahrain were also impacted by severe flooding. Most significantly, Viet Nam, Philippines, Lao PDR, and Myanmar were hit by super typhoon Yagi, one of the six unprecedented typhoons in just a month. These trends underscore the urgent need for enhanced adaptation, early warning systems, and climate resilience across the region.

(1) Occurrence (Asia)

INCREASING TREND. As shown in Figure 7.15, the occurrence of climate-related disasters in 2024 in Asia is higher (133 events) than the 30-year average (113 events). Except for drought, all other climate-related disaster types are increasing in 2024.

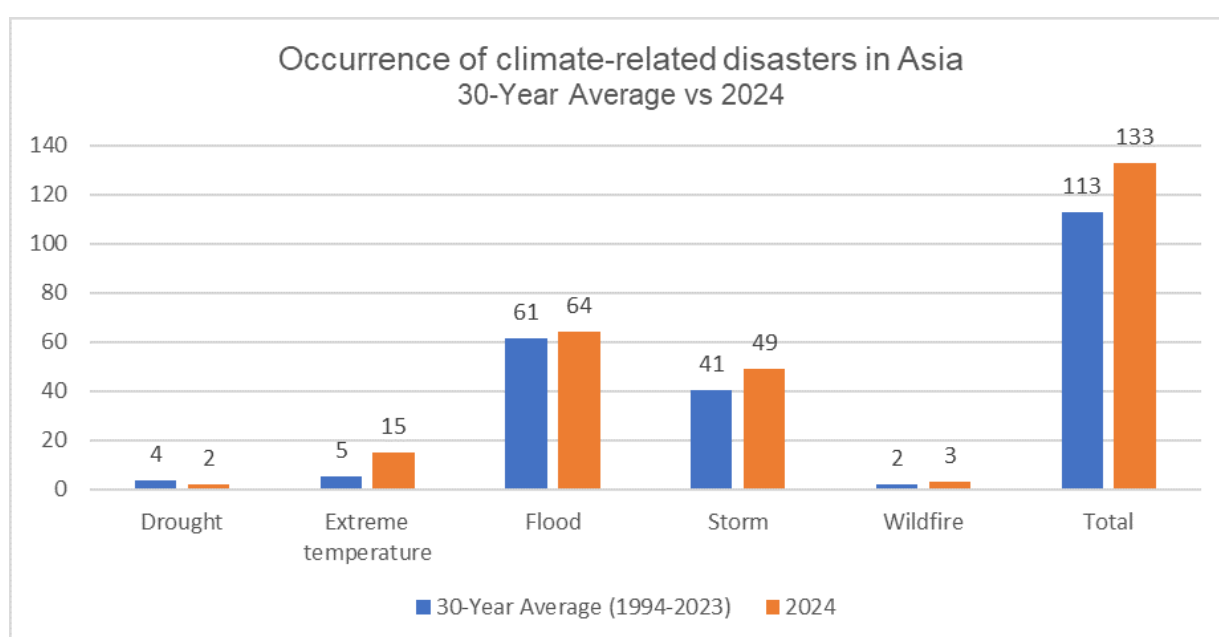


Figure 7.15 Occurrence of climate-related disasters in Asia: 30-Year Average vs 2024 (EM-DAT/CRED, 2025)

(2) People Affected (Asia)

DECREASING TREND. Figure 7.16 indicates that the number of people affected by climate-related disasters in 2024 in Asia is lower (108.8 million people) than the 30-year average (158.8 million people). Like the global trend, this does not hold for storms and extreme temperature. In 2024, the number of people affected by storm is higher (40.4 million people) than the 30-year average (25.1 million people). Also, in 2024, the number of people affected by extreme temperature is higher (36.3 million people) than the 30-year average (2.9 million people).

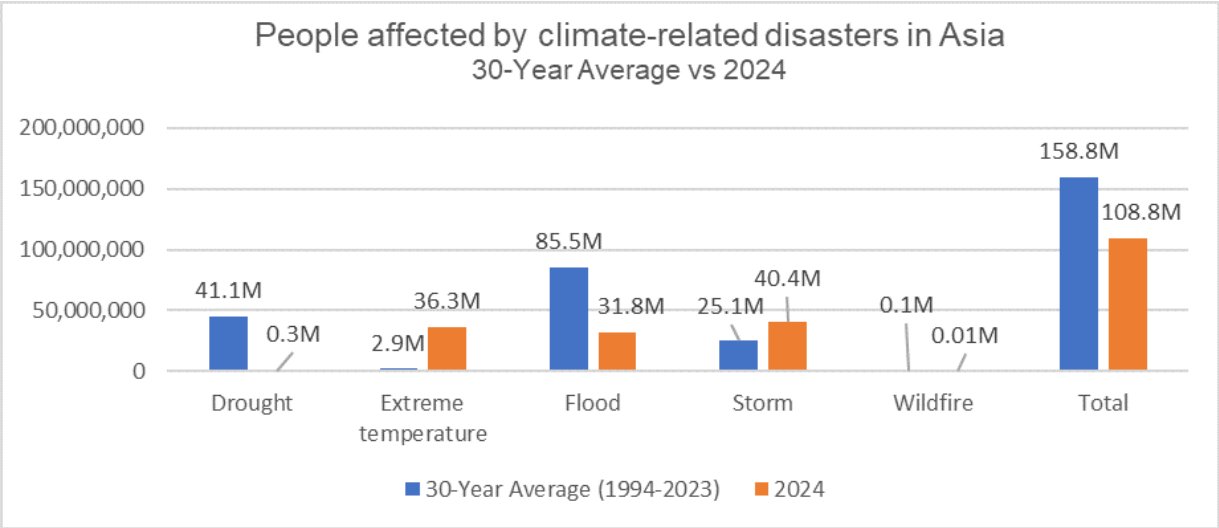


Figure 7.16 People affected by climate-related disasters in Asia: 30-Year Average vs 2024 (EM-DAT/CRED, 2025)

(3) Economic Losses (Asia)

DECREASING TREND. As shown in Figure 7.17, the economic losses from climate-related disasters in 2024 in Asia is lower (USD13.9 billion) than the 30-year average (USD33.5 billion). As mentioned in Section 7.1.2 (4), there are no 2024 data on economic losses for three of the disaster types (i.e., extreme temperature, volcanic activity, and wildfire). On the contrary, the 30-year average includes all data for these three disaster types for the past 30 years (1994–2023). Secondly, it should be recalled that there were huge disasters in 2023 (e.g., Türkiye -Syria earthquakes and South Asia flooding) that could have affected the 30-year average economic losses.

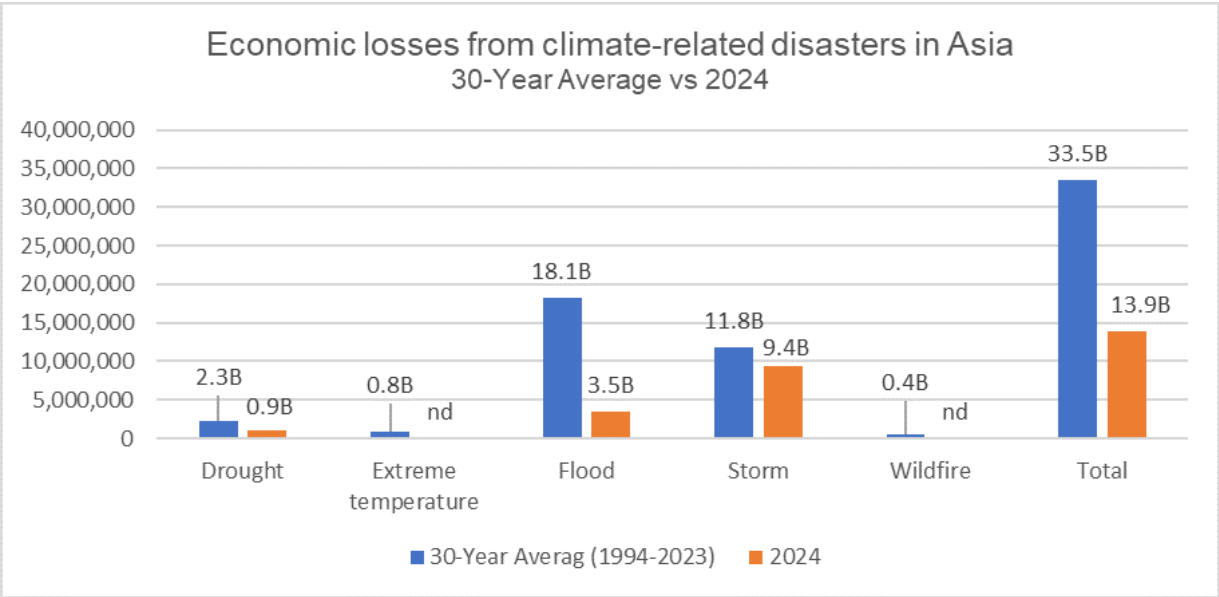


Figure 7.17 Economic losses from climate-related disasters in Asia: 30-Year Average vs 2024 (EM-DAT/CRED, 2025)