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INDONESIA

Impact Monitoring of Hydrometeorological Hazards

April - June (Q2) 2022



August 2022

A Joint Bulletin by:



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Key Messages

Climate Situation - Q2 2022: From April to June, due to the persisting La Niña phenomenon, rainfall across Indonesia was higher than the thirty-year long-term average. Most districts within the Sumatera, Jawa, Kalimantan, and Bali experienced an increase in rainfall. On the contrary, some districts in Aceh, Kalimantan Barat, Kalimantan Selatan, Kalimantan Timur, Sulawesi Tengah, Maluku, Nusa Tenggara Timur, Papua, and Papua Barat experienced less rainfall indicating drier conditions compared to the long-term average.

Impact of Climate and Hydrometeorological Disasters on Agriculture: Extreme rainfall between April and June 2022 caused floods in several regions. This resulted in damaging chilli and shallot plants and disrupting the production of these commodities, leading to shortages in local markets. The Ministry of Agriculture also reported that floods and droughts impacted paddy fields between April and May in Sumatera, Jawa, Kalimantan, and Sulawesi. However, these events did not have significant influence on the price of unhusked rice and rice, which remained relatively stable during the observed period.

Impact of Disasters - Q2 2022: The National Disaster Management Agency reported at least 784 disasters occurred between April and June 2022. More than 90% were caused by hydrometeorological hazards including floods, extreme weather (e. g. storms, cyclone) and landslides. Half of the total disasters took place in Jawa Barat, Jawa Tengah, and Jawa Timur. However, damage caused by disasters was considerably less than the same period last year when the Seroja cyclone impacted Nusa Tenggara Timur.

Status of Food and Nutrition Security: The National Food Agency has reported that most provinces in Indonesia were food secure in June 2022. Twenty-seven provinces were found to be relatively stable, while 6 provinces were under watch for possible degradation of food and nutrition security. These include Riau, Sumatera Barat, Bali, Nusa Tenggara Barat, Sulawesi Barat, and Maluku. Only Nusa Tenggara Timur was considered vulnerable to food and nutrition insecurity.

Food Commodity Prices: Between April and June 2022, out of the 10 strategic food commodities, the prices of shallots and chillies saw the sharpest increase, rising by more than 70% and 50% respectively. The price fluctuation of these food commodities were heavily influenced by high rainfall intensity and extreme weather events, which led to crop failures and shortages of supply. The prices of egg and wheat flour also increased, but remaining below 15%.

Climate Outlook – Aug to Oct 2022: The La Niña phenomenon is still ongoing and forecasted to continue although with a weaker effect until the end of the year. Most areas across Indonesia are expected to experience increased rainfall above the thirty-year long-term average. Increased rainfall is expected in Kalimantan, Jawa, Sulawesi, Nusa Tenggara, the southern part of Sumatera and Papua. However, at the same time, it is also predicted that there will be less precipitation in Sabu Raijua and Sumba Timur districts in Nusa Tenggara Timur and the northern part of Papua.

Media Reports

Bird's eye chilli and shallot were the cause of inflation in June 2022



(01/07/2022) LIPUTAN6.COM - Statistics Indonesia (BPS) stated that in June 2022, the month-on-month inflation was 0.61 percent. The inflation was significantly influenced by the price of chillies and shallots.

When calculated on an annual basis (YoY), inflation in June 2022 reached 4.35 percent. Again, the volatility of prices was the biggest contributor to this increase. [1].

Weather triggers crop failures for chilli farmers



(14/06/2022) ANTARANEWS.COM - The Surakarta City Trade Office stated that the recent increase in chilli prices was influenced by the weather, which resulted in crop failures in a number of areas.

The Head of the Surakarta City Trade Office, Heru Sunardi, said that the dry season should be coming, but the rain intensity is still high, which damaged chilli plants and caused harvest failures [2].

Weather anomaly, shallot prices soar



(04/07/2022) GATRA.COM - The price of shallots soared above the highest retail price (HET). The decreased supply from farmers due to weather anomalies is the main trigger for price increases.

According to data from the Information System of Price Commodity and Production of the Central Java Regional Inflation Control Team, the price of shallots ranges from IDR 48,000 to IDR 60,000 per kilogram. Meanwhile, the reference price of shallots set by the Government through the Ministry of Trade's Regulation Number 07 of 2020 is IDR 32,000 per kilogram.

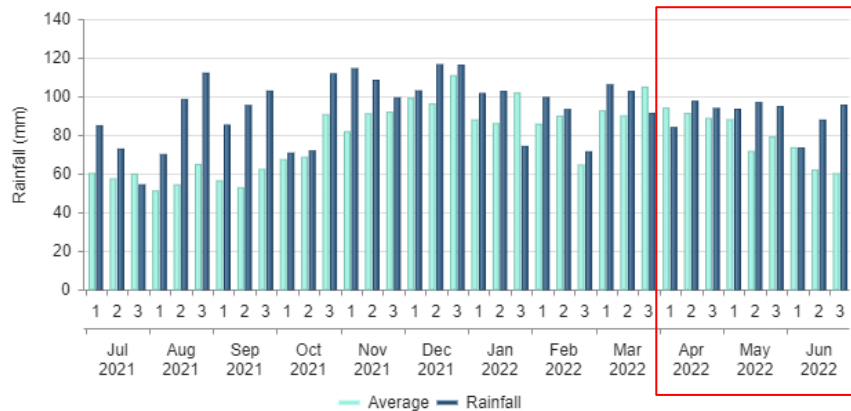
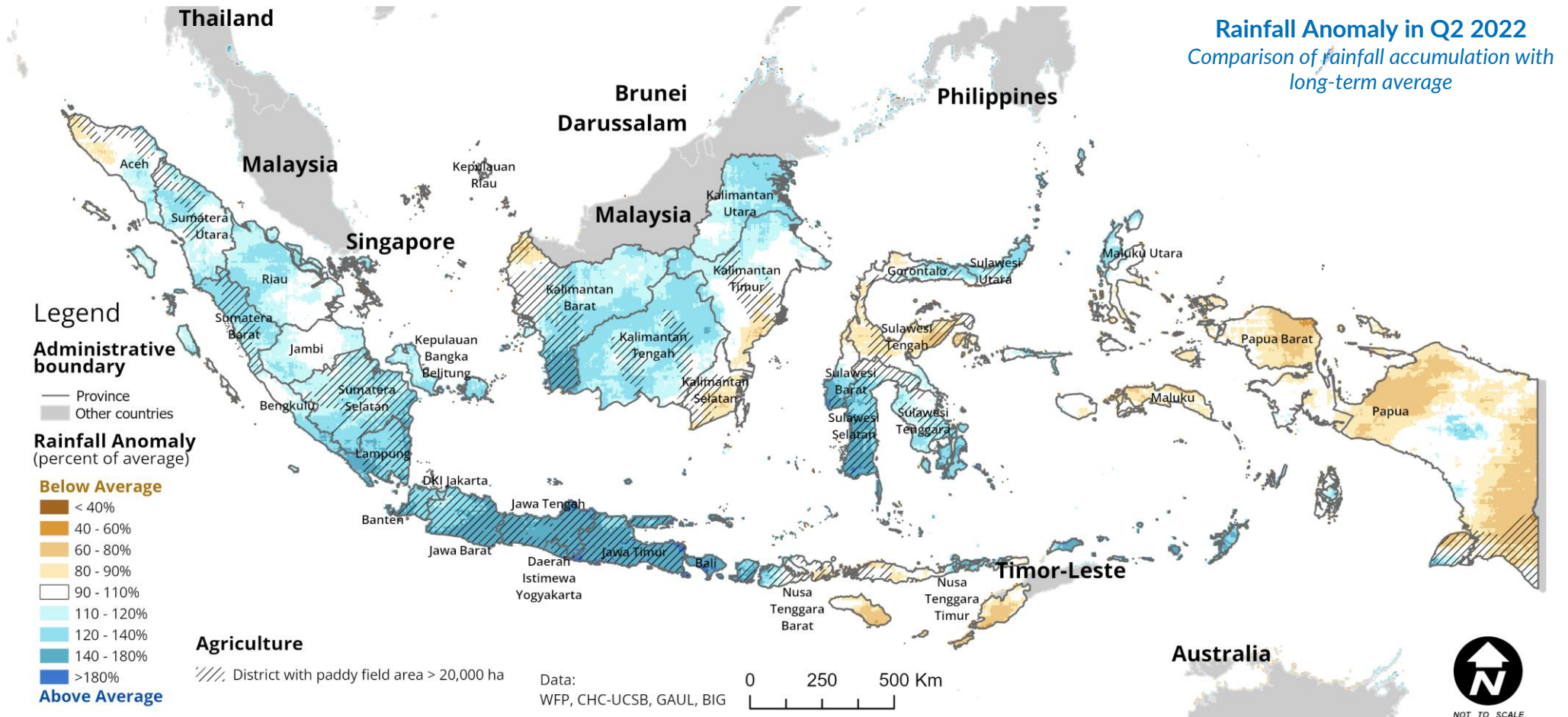
The spike in prices of food commodities was due to reduced supplies from farmers in shallot-producing areas. One of them is Brebes Regency, Central Java [4].

La Niña is strengthening again

(30/05/2022) KOMPAS.ID - The La Niña phenomenon has been ongoing for the last two years. Although it was found to have weakened in January 2022, latest meteorological reports indicate that it is strengthening again. This condition could have an impact on increasing rainfall in parts of Indonesia as well as delaying the dry season more than what was previously predicted.

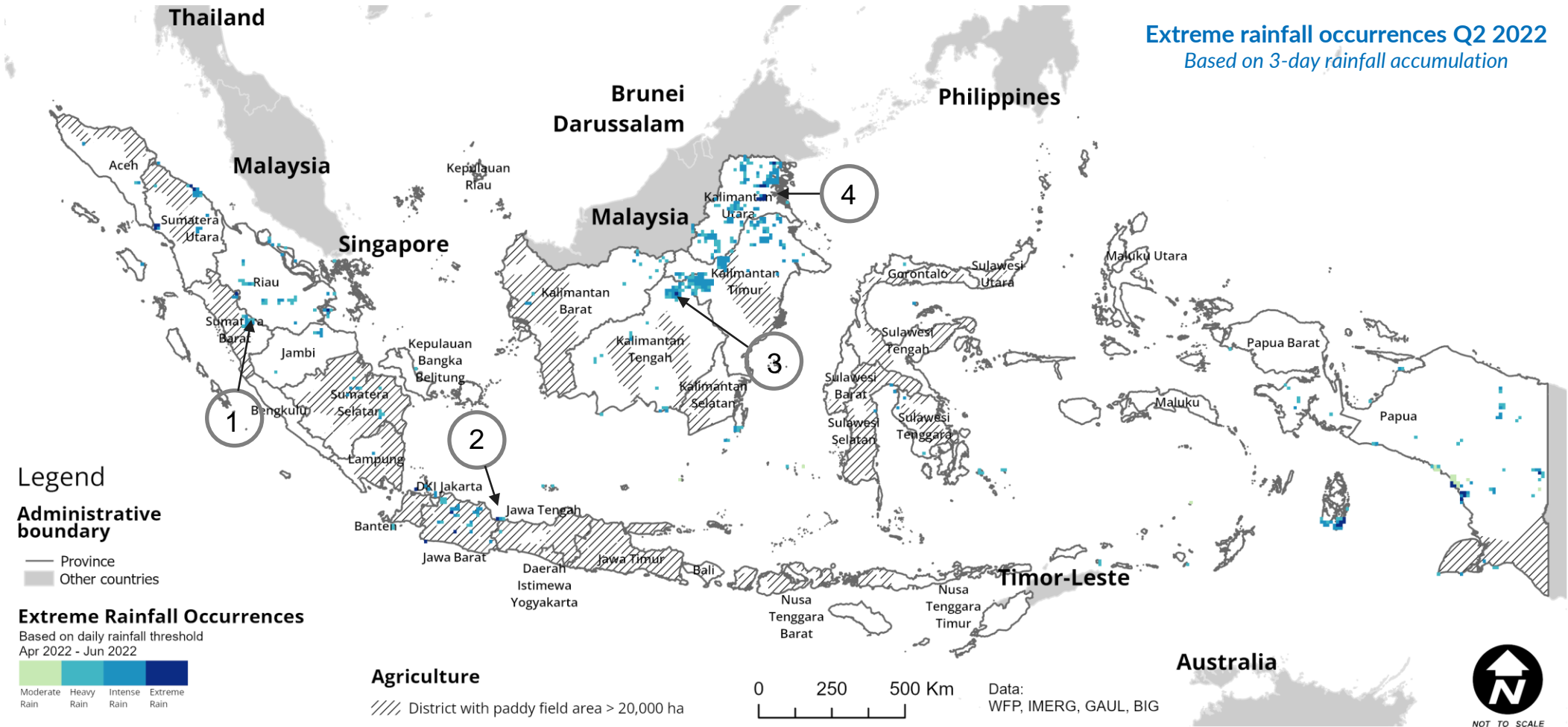
"Long-term climate forecast models from several international climate assessment institutions indicate the possibility that La Niña could continue until the end of the year. This can make it three years in a row," said Climate Researcher and Sub-Coordinator for the Production of Climate Information and Air Quality of the Meteorological, Climatological and Geophysical Agency (BMKG), Siswanto, in Jakarta, on Sunday (29/5/2022) [3].

Rainfall Anomaly: April – June 2022



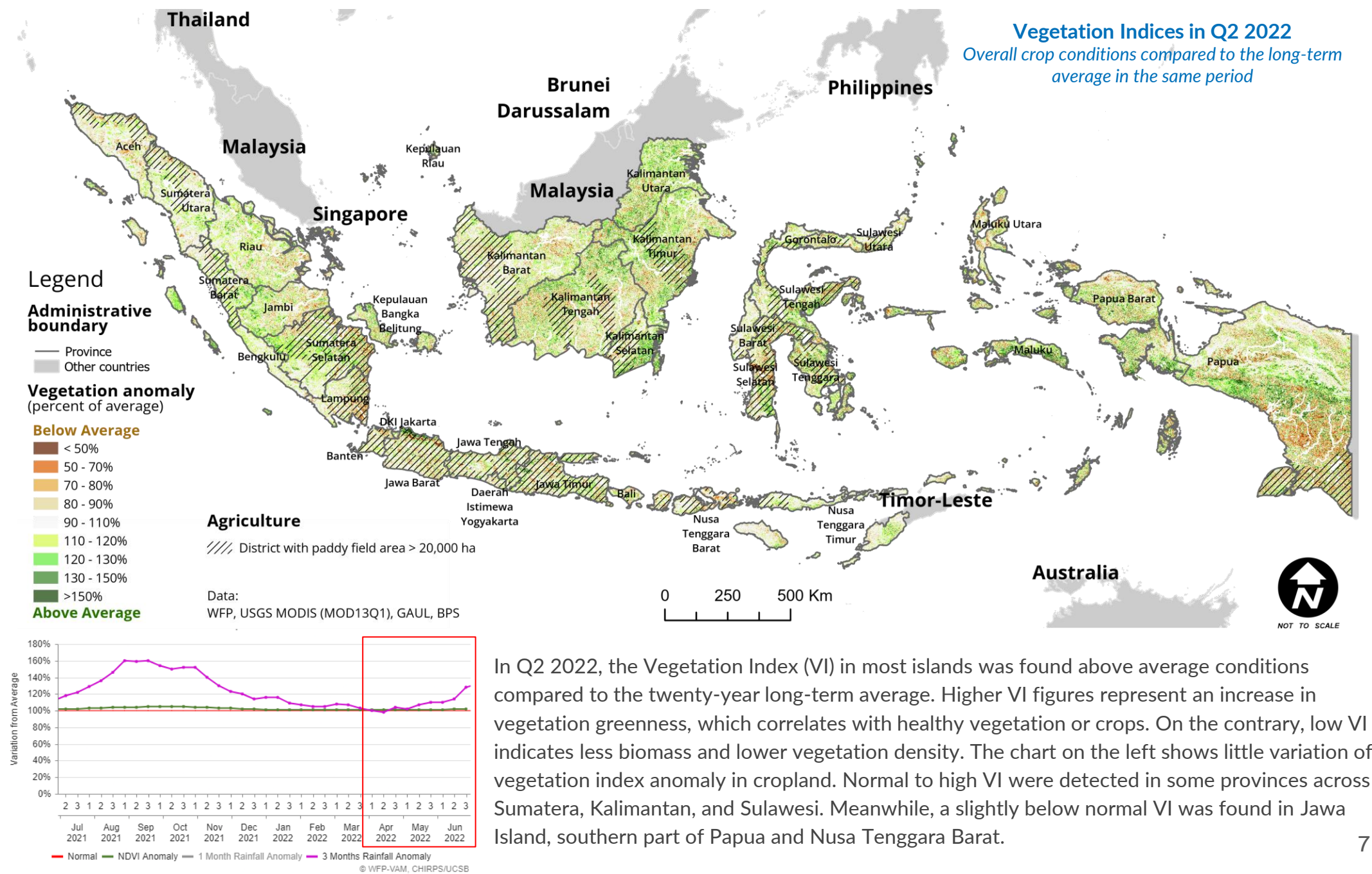
From April to June 2022, rainfall across Indonesia was higher than the long-term average (30 years) especially during the second and third week of June. Most areas in Sumatera, Jawa, Kalimantan, Sulawesi and Bali experienced rainfall above normal condition due to the persisting La Niña phenomenon. On the contrary, some districts in Aceh, Kalimantan Barat, Kalimantan Selatan, Kalimantan Timur, Sulawesi Tengah, Maluku, Nusa Tenggara Timur, Papua, and Papua Barat experienced below average rainfall resulting in drier conditions compared to the long-term average.

Extreme Rainfall Occurrences: April – June 2022



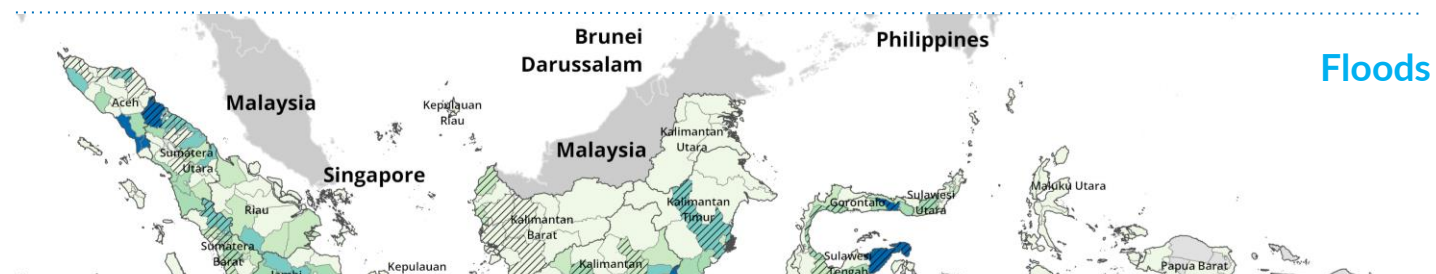
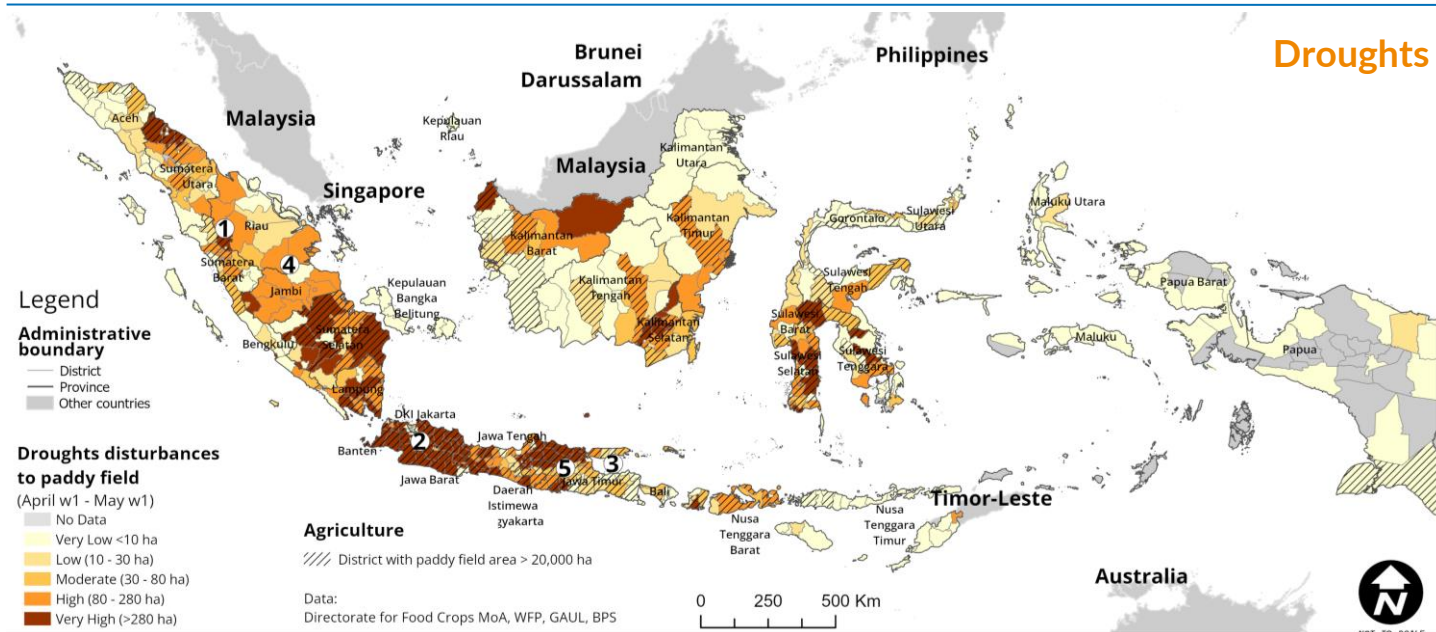
Extreme rainfall was detected in some areas of Kalimantan Tengah, Kalimantan Timur and Kalimantan Utara. The occurrence of these events are associated with the La Niña phenomenon, which caused higher than normal rainfall. As indicated by circles on the map, the incidence of localised extreme rainfall caused floods in Solok (1), Brebes (2), Murung Raya (3), Nunukan and Malinau (4). Floods led to crop failures in Solok and Brebes, which caused supply shortages of chillies and shallots.

Crop Monitoring: Overall Vegetation Situation in Q2 2022



In Q2 2022, the Vegetation Index (VI) in most islands was found above average conditions compared to the twenty-year long-term average. Higher VI figures represent an increase in vegetation greenness, which correlates with healthy vegetation or crops. On the contrary, low VI indicates less biomass and lower vegetation density. The chart on the left shows little variation of vegetation index anomaly in cropland. Normal to high VI were detected in some provinces across Sumatera, Kalimantan, and Sulawesi. Meanwhile, a slightly below normal VI was found in Jawa Island, southern part of Papua and Nusa Tenggara Barat.

Paddy Disturbances by Floods and Droughts: April-May 2022



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https://www.yunbaogao.cn/report/index/report?reportId=5_31613

