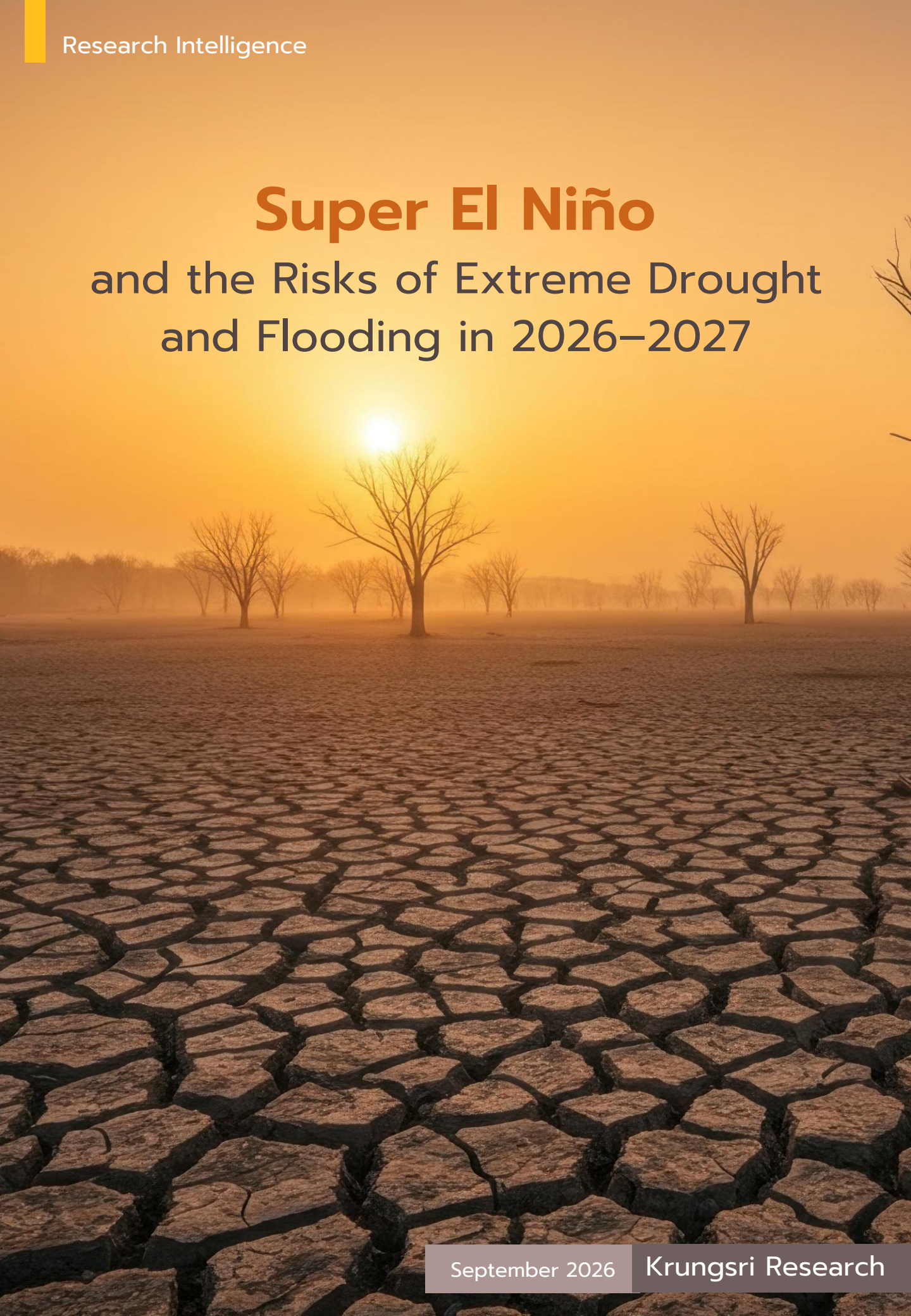
Research Intelligence

Super El Niño

and the Risks of Extreme Drought and Flooding in 2026–2027



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Executive summary

The world has entered El Niño conditions once again since the second quarter of 2026, and this episode is expected to intensify to the Very Strong El Niño level, to the point where it may be classified as a "Super El Niño." This will have knock-on effects on supply chains and on the Thai economy as a whole during 2026–2027.

In 2026, although Thailand will benefit in the second half of the year from the onset of the annual rainy season, water volumes in reservoirs remain close to their average levels, compounded by negative factors expected to persist, such as higher temperatures, faster rates of water evaporation, and below-average rainfall. These factors will reduce agricultural output, affecting household consumption, ecosystems, and related industries in turn. Krungsri Research estimates that damage to key drought-sensitive crops will amount to approximately THB 25.1 billion under the base case. Beyond drought, Thailand must also contend with flood risk in parallel, owing to the influence of tropical cyclones and the local monsoon winds that sweep through the country every year, even though total rainfall will decline under the influence of El Niño. Flood-affected areas in 2026 are projected at 3.1 million rai, inflicting a further THB 10.4 billion in damage on the economy and bringing total damage to as much as THB 35.5 billion, or 0.19% of GDP.

The situation is likely to grow more severe in 2027, as the country faces the twin risks of cumulative drought and a fresh wave of flooding. In the first half , the impact of drought is expected to broaden and to raise economic damage to THB 110.0 billion. Meanwhile, in the second half, El Niño conditions will subside and transition into La Niña thereafter, which will markedly increase Thailand's exposure to storms and rainfall. Areas at risk of flooding will accordingly expand to 5.2 million rai, particularly in the recurrent flood-prone zones of the lower North, the upper Central region, and the Northeast. This will cause direct damage to economic activity worth approximately THB 17.1 billion, pushing the overall economic damage from drought and flooding in 2027 up to THB 127.1 billion, or 0.65% of GDP.

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Risk outlook: From El Niño to Super El Niño

After the world experienced La Niña conditions from mid-2024 through early 2026, which brought below-average temperatures and heavier-than-normal rainfall. However, from the second quarter of 2026 onward the world has entered El Niño conditions (El Niño[1/]), the phenomenon in which temperatures rise[2/]. This episode is likely to be severe and to have continuing effects through 2027, as reflected in the Relative Oceanic Niño Index (RONI) — the index measuring sea surface temperatures in the equatorial Pacific Ocean — which as of May 2026[3/] rose to 0.5°C, marking the transition from the Neutral Phase into El Niño and expected to peak in intensity in the fourth quarter of 2026. This El Niño episode has the potential to reach the Very Strong El Niño level, or a RONI value of 2.6–2.7°C, which would be the most severe reading on record (Above Historical High)[4/], compared with the five previous very strong El Niño episodes, namely 1972 (2.3°C), 1982 (2.5°C), 1992 (2.1°C), 1997 (2.4°C), and 2015 (2.4°C) — and it may therefore be described as a "Super El Niño." That said, El Niño conditions in most cases gradually ease in intensity early in the year, so there is a strong likelihood that the RONI will decline in early 2027 and move gradually back toward the Neutral range[5/] over the remainder of the year (Figure 1). Krungsri Research has projected El Niño conditions under three scenarios[6/] (Figures 2–3), as follows:

- **Mild case:** The RONI accelerates continuously, holding at Moderate El Niño conditions in the third quarter of 2026 and rising to Strong El Niño conditions early in the fourth quarter, but not exceeding the 1.6°C level. The index then begins to cool from November 2026 onward, reaching neutral conditions in May 2027, before easing further and continuously into Neutral-negative conditions (or Neutral leaning La Niña[7/]) throughout the third and fourth quarters of 2027.
- **Severe case (Very Strong El Niño), used as the base case scenario:** Under this scenario, the RONI rises to Strong El Niño conditions from August 2026 and accelerates to Very Strong El Niño conditions in October to November 2026, close to the very strong El Niño episodes of the past (1992 and 2015). The index then begins to ease gradually until reaching neutral conditions between May and July 2027, before declining further into weak La Niña conditions from August 2027 through the end of 2027.
- **Extreme case (Above Historical High):** The RONI is likely to accelerate continuously into Strong El Niño conditions from August 2026, then climb a further step in intensity to Very Strong El Niño conditions in September and accelerate to a New High in November 2026 — a case that may be described as a "Super El Niño." The index then reverses direction sharply, falling abruptly and continuously into neutral conditions between April and May 2027, before dropping further into weak La Niña conditions in June and easing into moderate La Niña conditions throughout the third and fourth quarters of 2027.

1/ El Niño is a phenomenon in which sea surface temperatures warm abnormally. In most cases, it gives rise to drought conditions in the Southeast Asian region and results in below-normal rainfall. The intensity of El Niño conditions can be gauged from the RONI Index: a reading between 0.5 and 0.9 is classified as Weak El Niño, a reading between 1.0 and 1.4 as Moderate El Niño, a reading between 1.5 and 1.9 as Strong El Niño, and a reading above 2.0 indicates Very Strong El Niño. Conversely, a negative index reading indicates the La Niña phenomenon, with the same principle applying in gauging its intensity.

2/ "The phenomenon in which temperatures rise" is the term used to describe the characteristics of El Niño as they affect the world, reflecting a rise in temperature along two principal dimensions, namely: 1) sea surface temperatures rise abnormally, exceeding the normal average by at least 0.5°C continuously for at least five months; and 2) the world's average temperature surges, producing extreme heat, drought, and heat waves across Southeast Asia, Australia, and Africa.

3/ The El Niño/Southern Oscillation (ENSO) is a seasonal phenomenon that persists for a period of at least several months, which is why the index values used are averages — for example, DJF denotes the average of December, January, and February. Accordingly, the latest RONI value as of May 2026 is the three-month average of April, May, and June 2026.

4/ Considered from the start of the database in 1950, or 76 years back.

5/ RONI values in the Neutral range fall between -0.5°C and 0.5°C, a situation which means that sea surface temperatures are tending to return to the average range.

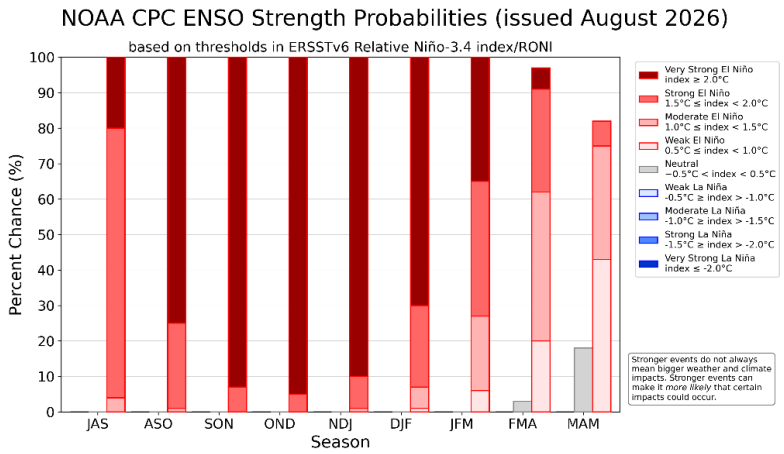
6/ The RONI is estimated through a model in conjunction with the Warm Water Volume (WWV) in the equatorial belt of the Pacific Ocean, which is the volume of the layer of sea water with temperatures above 20°C lying between latitudes 5°N and 5°S. The WWV serves as a proxy for the amount of heat in the ocean, which helps predict the occurrence of El Niño and La Niña phenomena several months in advance.

7/ The RONI ranges between 0 and -0.5°C.

Figure 1

Official NOAA CPC ENSO[8/] Probabilities

Based on thresholds in ERSSTv5 Relative Niño-3.4 index/RONI



Source: National Oceanic and Atmospheric Administration

Figure 2

Historical Relative Oceanic Niño Index

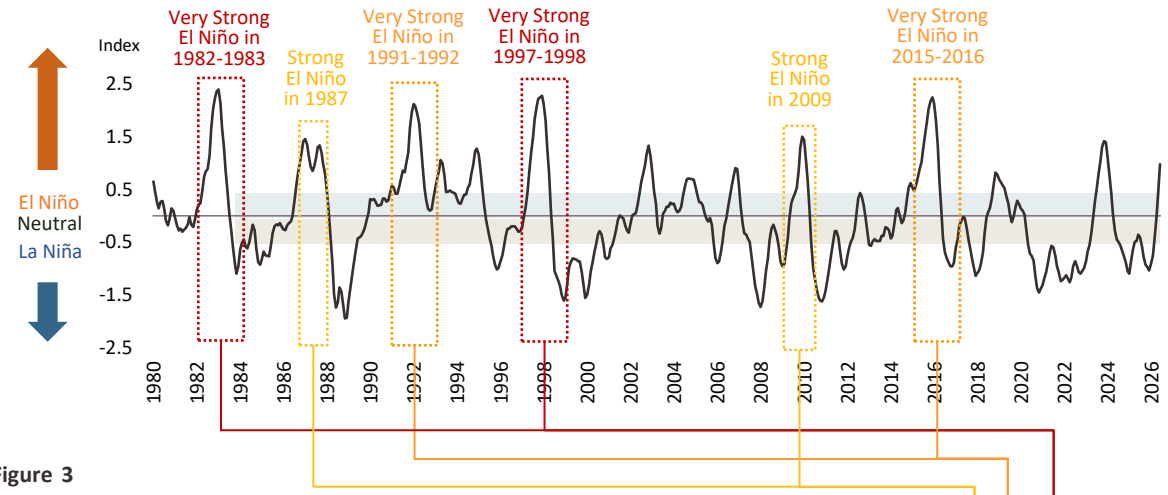
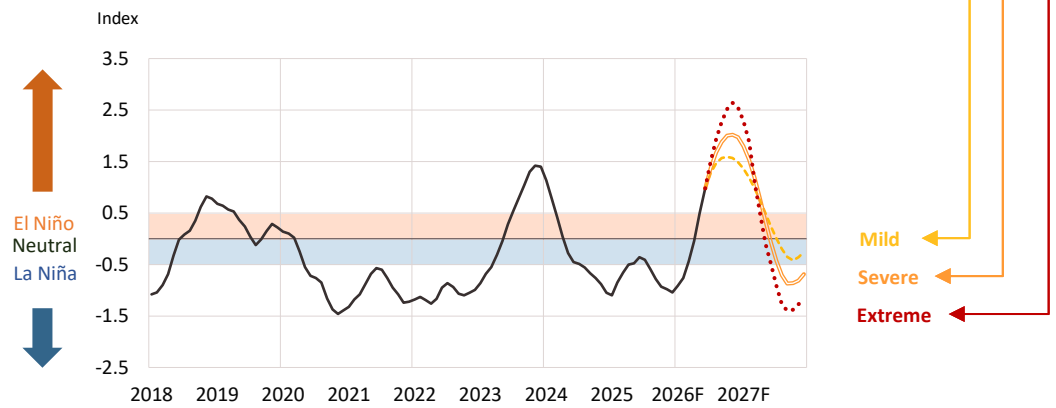


Figure 3

Relative Oceanic Niño Index Forecast



Source: National Oceanic and Atmospheric Administration, forecasted by Krungsri Research
Note: index > +0.5, meaning the rain is less than normal level (El Niño);
index < -0.5, meaning the rain is more than normal level (La Niña)

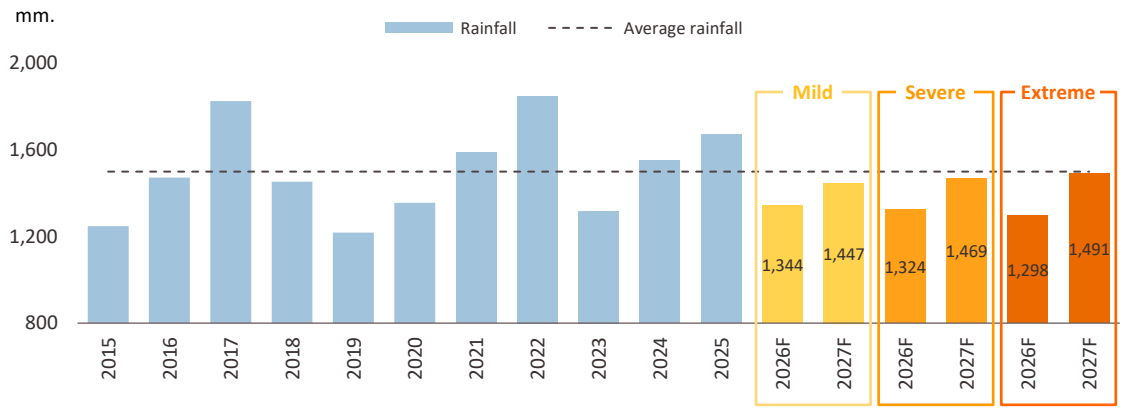
8/ The equatorial Pacific Ocean in the area of 5°N–5°S and 170°W–120°W, an area referred to as the Niño 3.4 Region.

What weather conditions will Thailand face in the second half of 2026?

1) **Rainfall declines.** The Meteorological Department has announced that Thailand entered the rainy season in the third week of May 2026. However, from late June to early July a dry spell occurred, while rainfall in every region is likely to be around 10% below average from June to October 2026, with the severity becoming even more pronounced in the fourth quarter of 2026[9/] in line with the direction of the RONI, which is expected to be in the Moderate El Niño range or above (Figure 3). Krungsri Research expects total rainfall for the full year 2026[10/] to be around 10–13% below the normal average, or approximately 1,298–1,344 millimeters, which is below the 30-year average of 1,499 millimeters (Figure 4). This reduced rainfall will mean that less rainwater can be stored during the 2026 rainy season, which could leave recurrent drought areas outside irrigated zones short of water for agriculture in the first half of 2027.

Figure 4

Annual Rainfall Forecast for Thailand Under 3 Scenarios



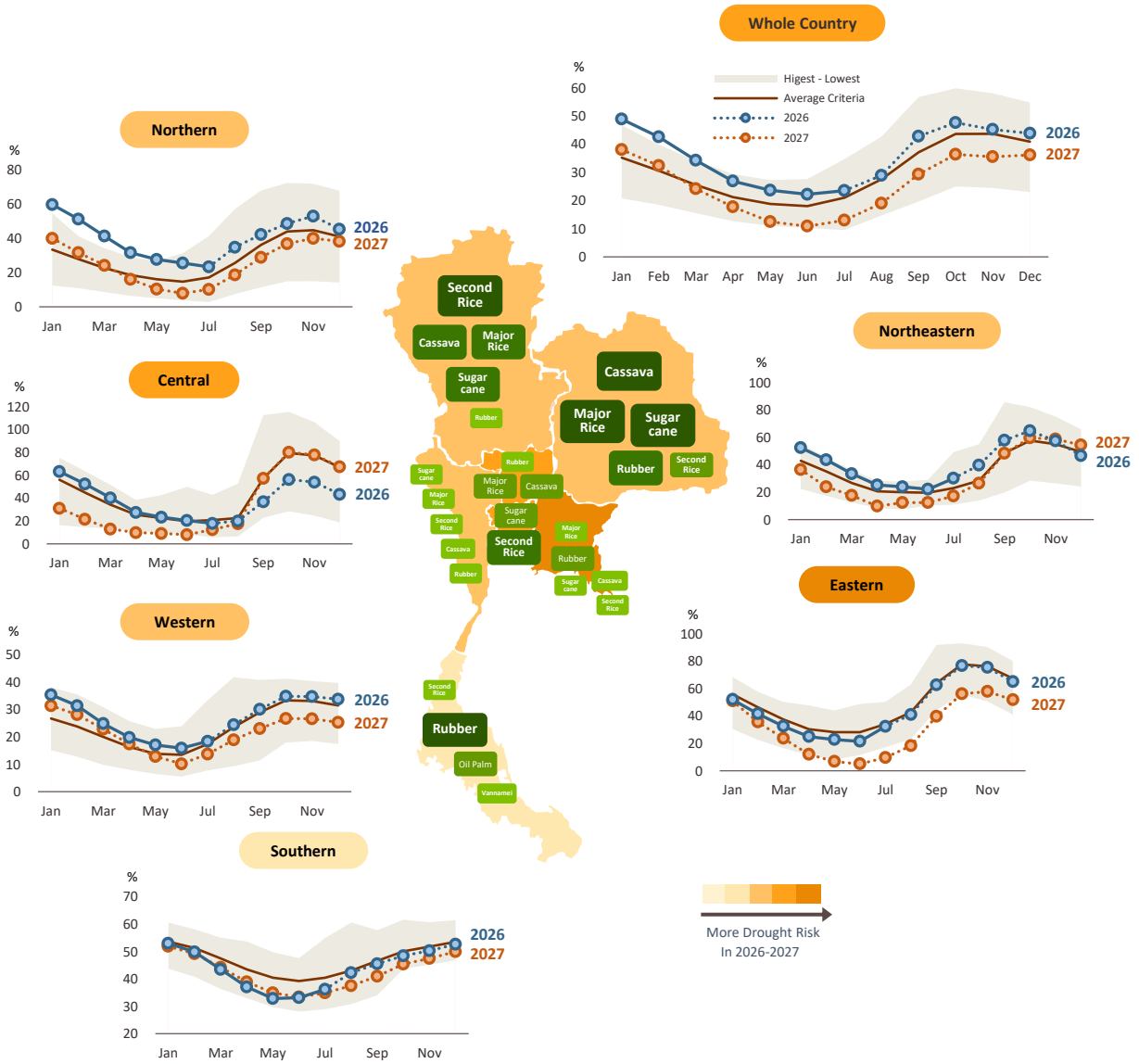
Source: Thailand Meteorological Department
Note: Krungsri Research Forecasts for 2026–2027

9/ Source: Weather Outlook for Thailand's 2026 Rainy Season, as of 11 May 2026
10/ Rainfall volumes are estimated through a model in conjunction with key indices and variables, such as the RONI and the DMI.

2) **Storable water volumes decline.** In addition to the reduction in rainfall, the dry spell also shortens the period over which water can be stored. Both factors bear directly on stored water volumes, in natural water sources and in large dams alike, such that the usable water ratio of dams in each region during the 2026 rainy season is likely to fall or to reach only levels close to the average[11/]. This will leave recurrent drought areas outside irrigated zones exposed to the risk of water shortages for farming in the first half of 2027 (Figure 5).

Figure 5

% Usable Water Supply and Drought Risk in Severe Scenario (Expected Case)



Source: Thaiwater and Krungsri Research

Note : 1. The 2026-2027 dot markers are forecast values.

2. The highest and lowest values are drawn from 2011 - 2025.

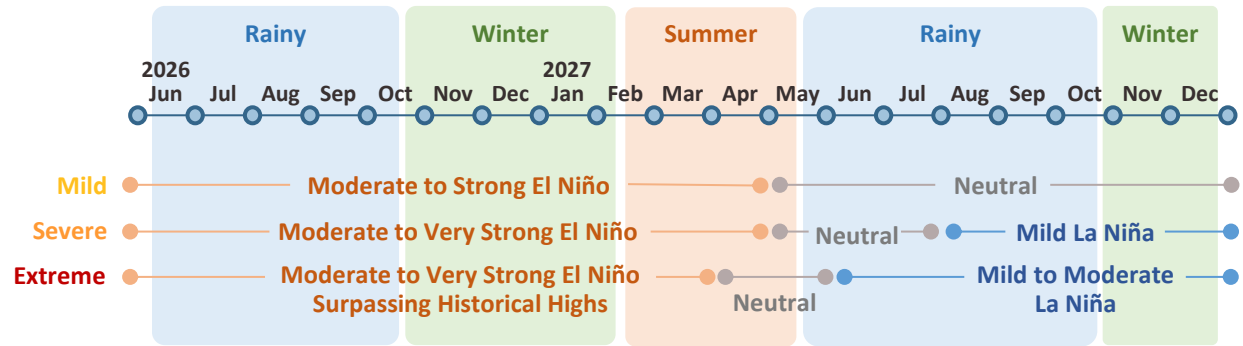
11/ The usable water ratio is estimated through a model in conjunction with key indices and variables, such as the RONI, the DMI, regional temperatures, the volume of rainfall flowing into dams for storage, and water consumption.

2027 may be a year of extreme weather[12/] in Thailand.

Although the shift from La Niña to full-blown El Niño conditions in 2026 has been relatively abrupt, in the following 2027, global climate conditions have the potential to become even more volatile. For Thailand, the country may have to contend with Very Strong El Niño conditions that then subside and turn into moderate La Niña conditions within the span of a single calendar year (Figure 6). Krungsri Research assesses that in the first half of 2027 the RONI will still indicate El Niño conditions, so Thailand may continue to face extreme heat and continuously declining rainfall. However, entering the second half of the year, the index is likely to ease toward normal levels and transition into moderate La Niña conditions. This shift in the index, combined with the influence of the monsoon, the monsoon trough, and the tropical cyclones that pass through Thailand every year, will be a key factor causing Thailand to swing back to facing heightened flood risk in the second half of 2027. Krungsri Research has accordingly projected natural disaster risk under two types of risk, as follows:

Figure 6

Seasonal 2026-2027 Periods Affected by the RONI Index in Each Scenario



Source: Thailand Meteorological Department and Krungsri Research

12/ Meteorological phenomena of abnormal severity that deviate significantly from the climatological average of a given area, whether in terms of intensity, frequency, or duration, and that often cause damage to life, property, and the economic system, such as temperatures that are higher and persist longer than normal for many consecutive days, rainfall below average for an extended period, or abnormally heavy rainfall leading to flash flooding.

1. Drought risk in the first half of 2027, owing to:

1) **Rising temperatures.** From late 2026 through mid-2027, the influence of El Niño conditions will intensify heat waves. Thailand is expected to face extreme heat, particularly during Thailand's annual summer season, between the second half of February and mid-May 2027, with maximum temperatures projected to reach 40–43°C, which falls within the "extremely hot weather" category[13/]. In addition, total rainfall during the summer season is also likely to be around 30–40% below normal levels.

2) **Usable water volumes in some regions fall below average.** Higher temperatures will be one of the factors accelerating water demand upward as well, while rainfall runs below average. This imbalance between the limited volume of water available and rising demand indicates that Thailand faces a clearly elevated risk of encountering a drought crisis, particularly in the first half of 2027, which coincides with the annual summer season. This situation will have a particularly severe impact in areas outside irrigated zones that must rely solely on natural water sources. Assessing the risk by region, the East is found to carry the highest risk, with water volumes expected to fall to a record low, as it must accommodate very high water demand from both the agricultural and industrial sectors, followed by the North, the West, the Central region, and the Northeast, respectively. The East and the Central region stand out in particular, as their risk of water shortage has risen considerably given industrial water demand alongside agricultural water use (Figure 5).

2. Flood risk arriving in the second half of 2027, owing to the following factors:

1) **The number of storms entering Thailand.** In 2027, at least 2–3 tropical cyclones are expected to move into Thailand, close to the average[14/], bringing in greater-than-normal volumes of rainfall in the second half of the year, with the severity depending on each scenario. Normally, tropical cyclones can occur from May through December, and at times their influence may carry over into January of the following year. However, the period in which storms are most likely to form and move into Thailand most frequently is concentrated at the end of the rainy season, particularly between September and October, accounting for as much as 54% of the total probability of storm occurrence. The influence of storms during that period will be the principal factor causing Thailand to face heavy rainfall conditions, leading to flash floods, forest runoff, and overflowing riverbanks.

2) **Rainfall volumes.** The effects of the onset of La Niña conditions will push rainfall in the final five to six months of 2027 above average levels. Krungsri Research forecasts that total rainfall for the full year 2027 may nonetheless tend to be slightly below normal, by around 0.5–3.5%, or at approximately 1,447–1,491 millimeters, which is below the 30-year average of 1,499 millimeters (Figure 4), since climate conditions early in the year will still be under the influence of El Niño before the transition into La Niña. The heavy and increasing rainfall late in the year, however, will be a key factor causing the level of flood damage to intensify accordingly.

3) **Rainfall areas outside dam catchments.** Although storage areas in large dams still have considerable capacity to absorb water volumes, as reflected in dam water ratios that remain close to average levels (Figure 7), in recent years rainfall patterns have begun to change as a result of climate change. That is, rain tends to fall heavily and intensely and to concentrate in specific areas over short periods — known as a "rain bomb"[15/] — and often outside the catchment or storage areas of dams, resulting in greater flood risk.

Beyond these principal factors, there are other environmental factors that cannot be controlled or predicted with certainty and that may act as accelerants, further raising flood risk in 2027. These factors include high tidal surges in the Gulf of Thailand and rising water levels in natural water sources, particularly in the Mekong River basin. Such contributing factors will further compound the risk and add to flood damage, as they represent significant obstacles that slow the drainage of water out of affected areas.

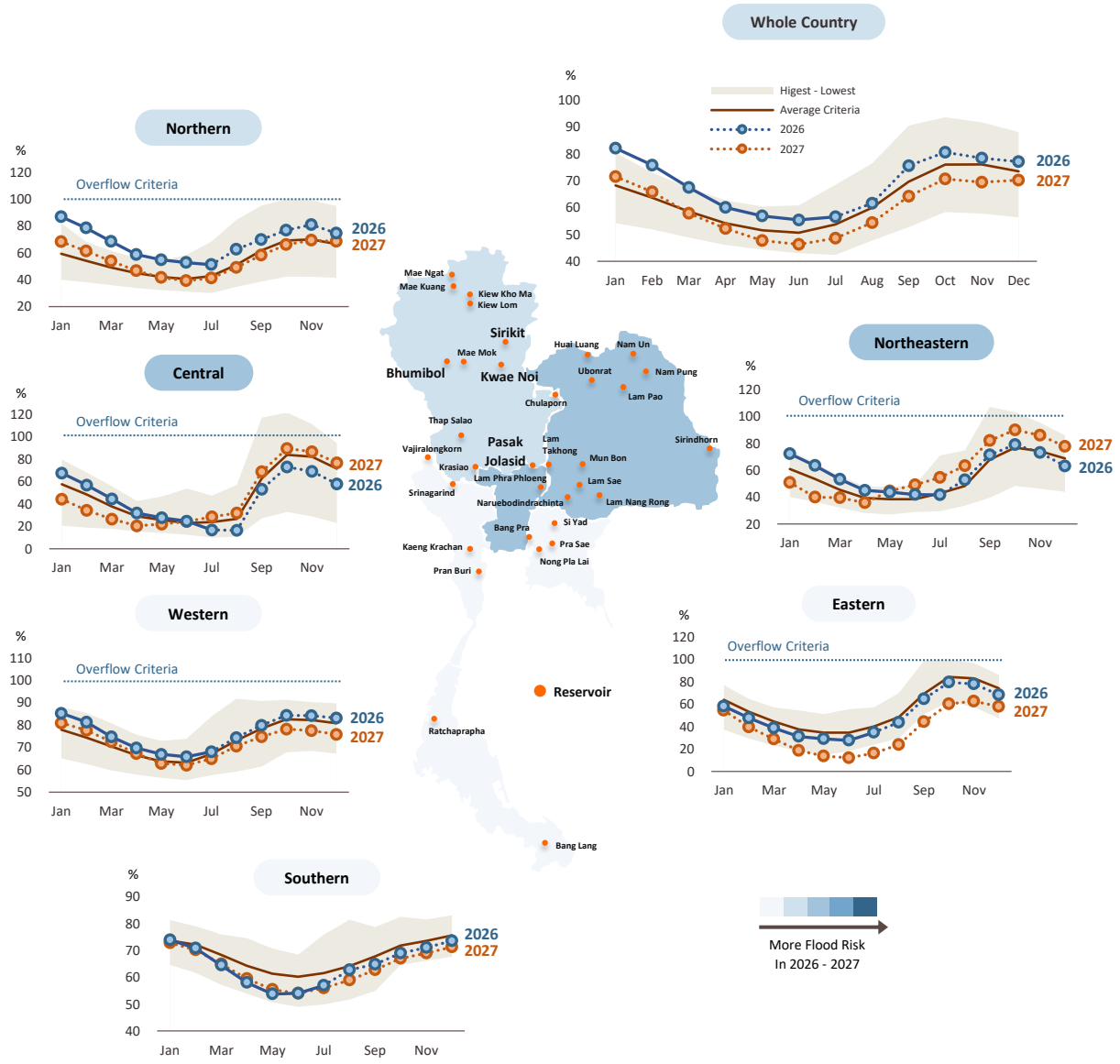
13/ Under the Meteorological Department's criteria, hot weather temperatures fall in the range of 35.0–39.9°C, and the extremely hot weather threshold is 40.0°C and above.

14/ Based on statistics over the past 75 years, an average of around 2–3 tropical cyclones (tropical depressions, tropical storms, and typhoons) per year move directly into Thailand. Over the past 10 years, that average has fallen to approximately 1–2 storms. For 2026, Krungsri Research expects Thailand to face a total of 1–2 tropical cyclones, and expects the figure to be 2–3 storms in 2027, fewer than in the great flood of 2011, when as many as 5 storms entered Thailand.

15/ What is a "rain bomb," and does it affect flooding in Thailand? Source: BBC News Thai

Figure 7

% Water Supply and Flood Risk in Severe Scenario (Expected Case)



Source: Thaiwater and Krungsri Research

Note : 1. The 2026-2027 dot markers are forecast values.

2. The highest and lowest values are drawn from 2011 - 2025.



Krungsri Research's view: The impact of natural disasters on economic activity and industrial supply chains

Krungsri Research assesses that El Niño conditions in 2026, which may flip to La Niña conditions in 2027, will continue to have knock-on effects on the economic system over that period, as follows:

1) Impact on agricultural outputs

Drought stemming from El Niño conditions will affect a number of key crops, but the level of damage will vary according to differing contexts — by crop type, by cultivation area and region, by planting period, and by harvesting period. Perennial crops such as rubber, oil palm, mango, and durian, for example, are by nature able to withstand drought for longer than short-cycle or annual crops, though output volumes may decline in line with planted areas in each region. In the case of annual crops such as rice, cassava, sugarcane, and maize, the impact will differ depending on the planting season, the growth stage, and the harvesting period.

Krungsri Research has therefore assessed the impact in terms of the output of key crops — rice, sugarcane, cassava, rubber, and oil palm — which are sensitive to drought and are also important to the supply chains of various downstream industries[16/] (Table 1). This reduction in output could push agricultural commodity prices higher on the back of supply shortage problems.

Taking into account the many factors involved in cultivation, such as (1) the coverage of irrigated areas and limited dam water levels; (2) dry spells leaving water volumes insufficient for crop growth; (3) dry weather conditions and higher temperatures reducing soil moisture in line with greater water evaporation, leaving crops liable to damage from water shortage; and (4) high cultivation costs (such as fuel and electricity expenses for water pumping and expenses for pest and weed control), among others, **the key agricultural products expected to sustain substantial output damage in 2026 are rice, cassava, and oil palm, while the main economic crops sustaining damage in 2027 are rice, sugarcane, and oil palm (Table 1).**

Table 1

Expected Agricultural Output Growth and Losses from the El Niño Phenomenon

% Output Growth/Losses by Major Products	Peak Harvest Period (JAN JUN DEC)	H1 2026	2026F	2027F
Paddy	November	-4.8% YoY	-3.1% to -4.7%	-11.5% to -12.2%
Sugarcane	December – April	22.5% YoY	23.1 - 23.9%	-14.6% to -15.9%
Cassava	January – March	-11.1% YoY	-11.7% to -14.1%	10.1 - 11.1%
Rubber	December – January	5.0% YoY	0.9 - 1.4%	0.1 - 1.1%
Oil Palm	April – June	-8.3% YoY	-2.1% to -3.7%	-6.2% to -8.5%
Agriculture Production Index		2.8% YoY	1.1 - 1.6%	-3.3% to -3.6%

Source: OAE

Note: 1. Forecast by Krungsri Research

2. Assess damaged crop yield using models integrated with various indices and variables, such as RONI, NDVI, rainfall, temperature, usable water volume, planting and harvesting cycles, and commodity prices.

16/ The factors taken into consideration include the months in which output can be harvested, areas inside and outside irrigated zones, the type of output, the probability of output damage, and current commodity prices.

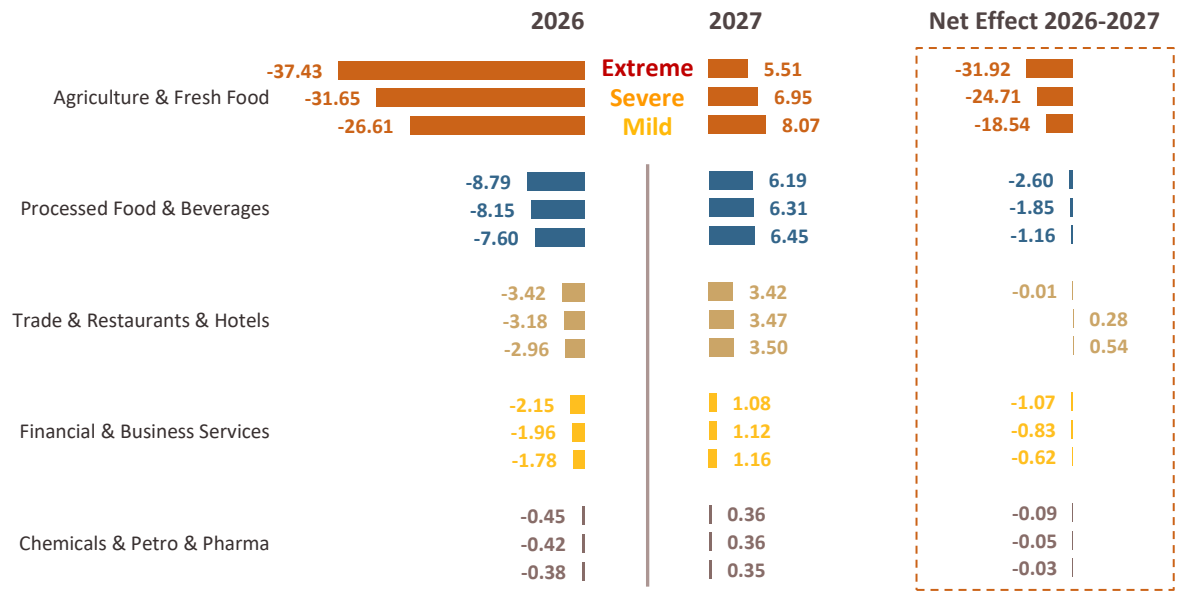
2) Impact on production supply chains

Krungsri Research has analyzed the impact on agricultural commodity supply chains, selecting only the main crops liable to be damaged by drought conditions and dry spells, namely rice, cassava, sugarcane, rubber, and oil palm, and using the 2021 Input-Output Table of the Office of the National Economic and Social Development Council as the tool for analyzing the production structure[17/]. **The analysis finds that drought does not damage the agricultural sector alone but also affects production in the agro-industrial, industrial, and services sectors that are linked to it, both directly and indirectly, within the economic system. The impact of drought is transmitted to the various sectors as follows:**

2.1) Impact on the industrial sector: In 2026, drought may give rise to raw material shortages, which will affect downstream industries. The agricultural and fresh food sectors are the groups sustaining the most severe damage, since the agricultural sector must rely on inputs for use in the next round of cultivation, while the fresh food group uses the output of the main crops directly as raw material. These are followed by the processed food and beverage industries, which face raw material shortage problems in the production process, and by trading businesses, restaurants, and hotels, which are affected by shortages of food and processed agricultural goods. In 2027, however, weather conditions returning to normal and on to moderate La Niña will help stimulate growth in agricultural outputs, allowing the industries previously affected by drought to recover and return to growth, even though the level of recovery will still not match the damage incurred in the preceding year, particularly in the agricultural sector and the processed food and beverage industries (Figure 8).

Figure 8

Spillover Effects from the Agricultural Sector to the Non-agricultural Industrial Sector (THB, billion)



Source: NESDC's 2021 Input-Output Table, Krungsri Research

17/ Krungsri Research has conducted the analysis using the Ghosh Input-Output model, which is suited to analyzing shocks originating on the supply side.

2.2) Spatial impact[18/]: Drought may cause damage in every region, with the epicenter of the greatest damage in 2026 concentrated in the North (Table 2), followed by the West and the Northeast — all three regions being affected principally by declining cassava and rice output. In 2027, the epicenter of damage may shift down to the South, chiefly on account of declining oil palm output, followed by the East and the Central region, where sugarcane and rice output is expected to contract sharply in the first half of 2027. Although the agricultural impact will occur mainly in the North, the West, and the Northeast, the value added from processing, trade, and services is concentrated in the Central region and the East, where factories and the services sector are located (Figure 9). Analysis of the impact transmitted from the agricultural sector to industry (spillover effects) finds that the Central region and the East are the most affected (THB 7.9 billion and THB 5.9 billion), while the North, which is the point of origin, in fact registers only slight spillover. The resulting impact therefore reflects a drought risk that is distributed across areas differently according to economic structure: the agricultural sector in the North, the West, and the Northeast is directly at risk, while the industrial sector in the Central region and the East is at risk of raw material shortages through the production chain, particularly the East, which faces an additional layer of industrial water shortage risk from declining usable water volumes.

Table 2

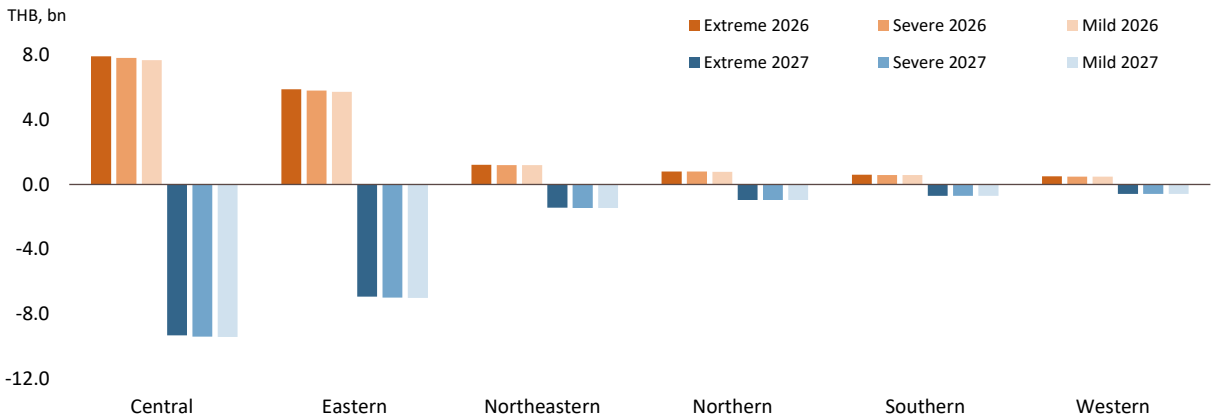
The Transmission of Drought Impacts Across Industrial Locations (THB, billion)

Scenario of Drought Risk	Mild (Strong El Niño)		Severe (Very Strong El Niño)		Extreme (Above Historical High)	
Probability	20%		50%		30%	
Year	2026	2027	2026	2027	2026	2027
Northern	-85.8	69.2	-87.5	68.7	-89.5	68.1
Western	-9.3	2.6	-9.6	2.1	-10.0	1.6
Northeastern	-2.2	1.1	-2.9	1.1	-3.8	1.1
Central inc. BKK & Vicinities	1.9	-6.4	1.8	-6.4	1.7	-6.2
Eastern	25.2	-19.5	23.9	-19.7	22.4	-19.9
Southern	50.5	-35.9	48.5	-35.5	46.3	-35.2

Source: NESDC's 2021 Input-Output Table, Krungsri Research

Figure 9

The Spillover Effects of Drought from the Agricultural Sector to Downstream Industries



Source: NESDC, OAE, Krungsri Research

18/ Spatial analysis derived from 1) distributing the national-level impact by commodity according to production shares across the six regions; 2) converting the impact into a proportion of each region's GDP; and 3) assessing the total economic impact by region by distributing industrial transmission effects according to the location of the industries.

3) Impact of drought on GDP

The magnitude of the impact on GDP depends on the timing of the onset of El Niño conditions, the volume of water available for use, and the planting period. **As a preliminary assessment, Krungsri Research has estimated the impact on economic activity in 2026-2027 across three cases**, based on the El Niño assumptions set out in Table 3, as follows:

- **Mild case:** Strong El Niño conditions cause total supply chain damage of THB 19.9 billion, or around 0.11% of GDP, with damage rising to THB 105.8 billion, or around 0.54% of GDP, in 2027.
- **Severe case (Very Strong El Niño, the base case):** The occurrence of very strong El Niño conditions causes total supply chain damage of THB 25.1 billion, or around 0.13% of GDP, with damage increasing to THB 110.0 billion, or around 0.56% of GDP, in 2027.
- **Extreme case ("Super El Niño"):** This is the occurrence of very strong El Niño conditions on a record-setting scale, causing total supply chain damage of THB 31.9 billion, or around 0.17% of GDP, and causing damage of more than THB 113.2 billion, or around 0.57% of GDP, in 2027.

Table 3

Projection of Economic Losses from Drought

Scenario of Drought Risk	Mild (Strong El Niño)		Severe (Very Strong El Niño)		Extreme (Above Historical High)	
Probability	20%		50%		30%	
Year	2026	2027	2026	2027	2026	2027
Rice	-42.0	-89.9	-44.7	-91.9	-48.1	-92.6
Sugarcane	35.7	-22.6	36.4	-23.6	37.0	-24.7
Cassava	-15.5	14.2	-17.0	14.1	-18.7	14.1
Rubber	4.9	1.3	4.1	1.7	3.1	2.1
Oil Palm	-3.0	-8.9	-4.0	-10.3	-5.3	-12.1
Economic loss (THB, billion)	-19.9	-105.8	-25.1	-110.0	-31.9	-113.2
As percent of GDP	-0.11%	-0.54%	-0.13%	-0.56%	-0.17%	-0.57%

Source: NESDC's 2021 Input-Output Table, Krungsri Research

4) Impact of flooding on GDP

The scale of flood damage to the economy depends on (1) rainfall volumes and water management; (2) the areas in which flooding occurs; and (3) the location of economic units (households, factories, commercial buildings, agricultural areas, and crop types). Accordingly, if the flooded areas lie in locations of high economic significance — such as the sites of industrial estates or business districts, important agricultural areas, or key transport routes that sustain damage — the resulting impact will carry through the production chain from upstream to downstream, driving economic damage higher.

Krungsri Research has assessed the areas that may be affected by flooding across 2026–2027 under simulations of three scenarios based on the El Niño assumptions set out earlier[19/], and has assessed the impact on economic activity (Table 4) as follows:

- **Mild case:** Although the influence of strong El Niño conditions will reduce seasonal rainfall in 2026, flooding still affects an area of around 3.7 million rai, with total damage worth THB 13.6 billion, or around 0.07% of GDP. Damage in 2027, however, is likely to decline, with an affected area of around 4.1 million rai and total damage worth THB 12.1 billion, or around 0.06% of GDP.
- **Severe case (Very Strong El Niño):** Very strong El Niño conditions may reduce seasonal rainfall in 2026 by more than 11–12% from average, yet flooding still affects an area of around 3.1 million rai, with total damage worth THB 10.4 billion, or around 0.06% of GDP. Damage in 2027, however, is likely to increase, since in this scenario weak La Niña conditions occur during the rainy season, resulting in a flood-affected area of around 5.2 million rai and total damage worth THB 17.1 billion, or around 0.09% of GDP.
- **Extreme case ("Super El Niño"):** In this case, seasonal rainfall in 2026 falls by more than 13–14% from average, making it the case with the least flood damage this year, with a flood-affected area of only around 2.8 million rai and total damage worth THB 8.2 billion, or around 0.04% of GDP. Damage in 2027, however, is likely to be higher than in the other cases, since in this scenario moderate La Niña conditions occur during the rainy season, resulting in a flood-affected area of around 6.4 million rai and total damage worth THB 23.3 billion, or around 0.12% of GDP.

Table 4

Projected Economic Losses from Flooding

Flood Impact Forecast	Actual	Mild		Severe		Extreme	
Probability		**20%**		**50%**		**30%**	
Year	**Jan-July 2026**	**2026**	**2027**	**2026**	**2027**	**2026**	**2027**
Assumptions of Affected Areas (Million Rai)	**0.3**	**3.7**	**4.1**	**3.1**	**5.2**	**2.8**	**6.4**
Asset Loss (THB, billion)	-0.1	-1.8	-2.0	-1.5	-2.5	-1.3	-3.1
Agriculture Loss (THB, billion)	-0.7	-11.8	-10.1	-8.9	-14.5	-6.9	-20.2
Total Loss (THB, billion)	**-0.8**	**-13.6**	**-12.1**	**-10.4**	**-17.1**	**-8.2**	**-23.3**
As percent of GDP	**-0.004%**	**-0.07%**	**-0.06%**	**-0.06%**	**-0.09%**	**-0.04%**	**-0.12%**

Source: NESDC, OAE, Krungsri Research

19/ Based on the assumption of currently affected areas, together with the probability of flooding occurring over the remainder of the year, using historical data from the National Hydroinformatics Data Center, the Office of Agricultural Economics, the Office of the National Economic and Social Development Council, the Geo-Informatics and Space Technology Development Agency, the Department of Disaster Prevention and Mitigation, the Royal Irrigation Department, the National Agricultural Big Data Center, and the Ministry of Agriculture and Cooperatives.

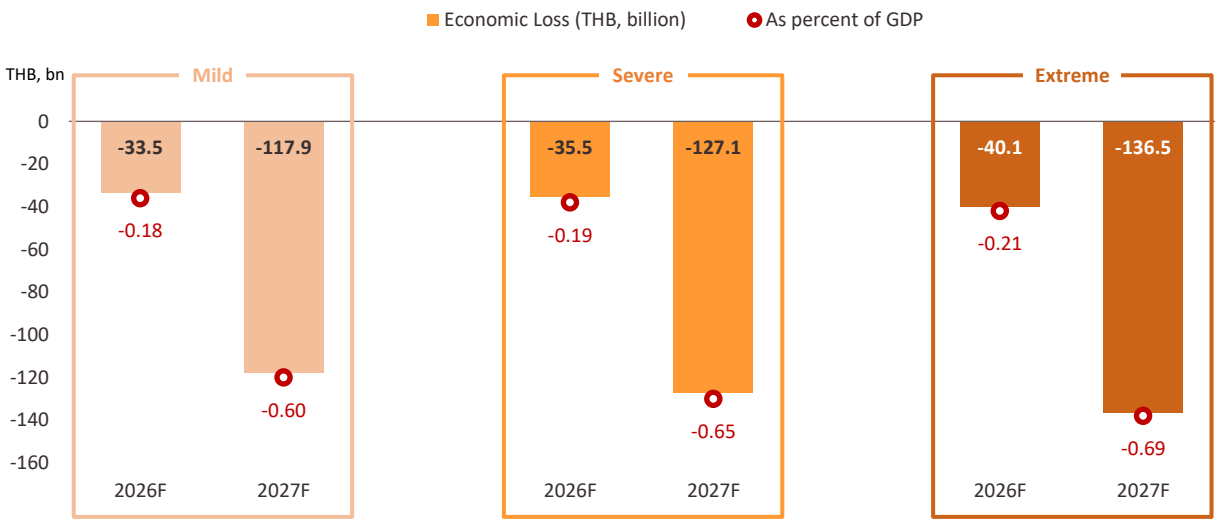
Summary of the economy-wide impacts of drought and flood crises

Combining the impacts of both drought and flooding across the three scenarios allows the damage along the entire supply chain, and its effect on the economy as a whole, to be assessed (Figure 10) as follows:

- **Mild case:** The effects of strong El Niño conditions, together with mild flooding from seasonal rainfall in 2026, cause total supply chain damage of THB 33.5 billion, or around 0.18% of GDP. In 2027, however, the easing of El Niño conditions and the return to neutral conditions will cause greater damage, rising to THB 117.9 billion, or around 0.60% of GDP.
- **Severe case (Very Strong El Niño):** Very strong El Niño conditions and seasonal flooding in 2026 will cause total supply chain damage of THB 35.5 billion, or around 0.19% of GDP. In 2027, the value of economic damage will increase with the onset of weak La Niña conditions, bringing total damage from both drought and flooding in 2027 to THB 127.1 billion, or around 0.65% of GDP.
- **Extreme case ("Super El Niño"):** Under this scenario, 2026 sees El Niño conditions of record-setting severity, coupled with possible seasonal flooding, which will cause total supply chain damage of THB 40.1 billion, or around 0.21% of GDP. In 2027, the value of economic damage will be greater with the onset of moderate La Niña conditions, amounting to more than THB 136.5 billion, or around 0.69% of GDP in 2027.

Figure 10

Projected Economic Losses from Drought and Flooding

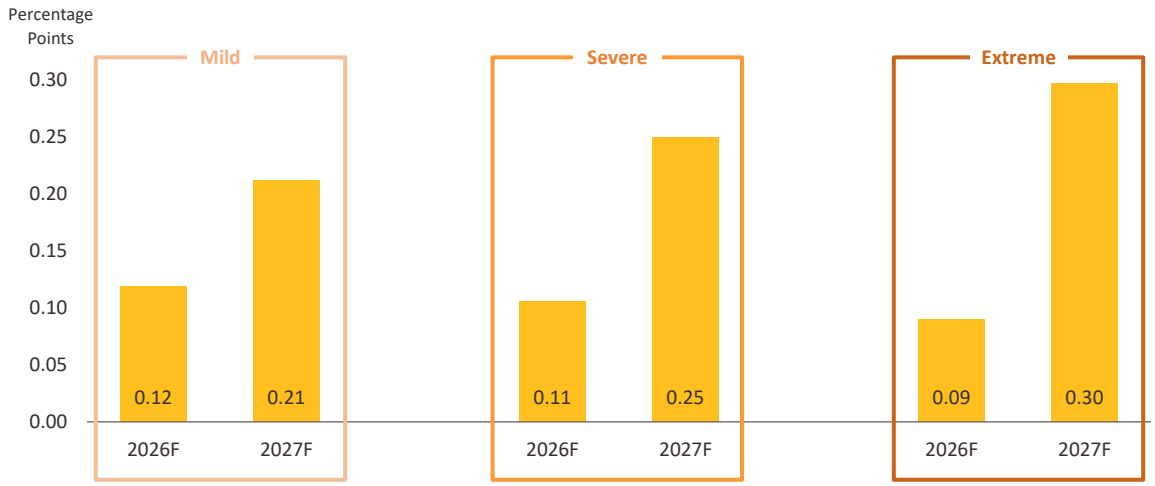


Source: NESDC's 2021 Input-Output Table, Krungsri Research

In addition, both drought and flooding can affect the inflation rate, since they reduce agricultural output and lead to supply shortage problems along the production chain, driving up price levels for agricultural and agro-industrial goods, particularly the prices of rice, sugar, vegetable oil, and various vegetable crops. This raises household consumption costs as well as the costs borne by operators in downstream industries and in the services sector, through both direct and indirect effects[20/], which will exert pressure on the inflation rate in 2026, pushing it above the base case by around 0.09–0.12%, and above the base case by around 0.21–0.30% in 2027[21/] (Figure 11). Moreover, in practice, operators in downstream industries tend to raise product prices in whole baht per unit of goods, so the effect on the inflation rate may be higher than this preliminary assessment indicates.

Figure 11

Impact on Headline Inflation (Percentage Points Change from Baseline Forecast)



Source: NESDC's 2021 Input-Output Table, Krungsri Research

20/ The direct effect of the price increase is that the prices of agricultural goods purchased for consumption or used as primary raw materials rise directly, while the indirect effect is that the prices of goods and services that use agricultural output as a component — such as processed foods and restaurants — gradually rise in line with the raw material costs transmitted along the production chain.

21/ Calculated by Krungsri Research using data from the Ministry of Commerce.

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