

2024 Thailand Climate Impacts on Education Situation Overview



In Thailand, the increase in temperatures has forced Teerawat Sangpunha, a student from Baan Som Dej School in Ubon Ratchathani province, to endure extremely hot temperatures and drought. This significantly affects the day-to-day lives, and development of children.

Climate risks: Globally, Thailand is ranked as the 9th most affected country by climate change according to the Global Climate Risk Index.³ In UNICEF's Children's Climate Risk Index (CCRI), Thailand is ranked 50th out of 163 countries with children most at risk living in the northeastern and southern provinces of Ubon Ratchathani, Nakhon Rachasima, Sri Saket, Nakhon Srithammarat and Narathiwat facing the highest risks.^{4,5,6} In 2021, Thailand emitted 451.42 million tonnes of CO₂ making it the 19th largest emitter of greenhouse gas emissions globally according to the UNFCCC.⁷ 93.9 per cent of children in the country face 3 or more types of climate and environmental shocks, hazards and stresses, and 99.7 per cent of children face 2 or more.⁸ Thailand is prone to seasonal flooding, particularly in its Chao Phraya River basin, as evidenced by the 2011 floods that caused significant economic losses and death.⁹ Around 10.8 million children are highly exposed to riverine, coastal flooding, and water scarcity.¹⁰

Additionally, wildfires in the north are becoming more frequent and severe – in 2022 in 14 provinces there were 3,406 recorded hotspots.¹¹ This increasing frequency of climate hazards further exacerbates existing vulnerabilities among marginalized children, who already face barriers to education. According to the Equitable Education Fund (EEF), around 1.7 million children between the ages of 12 - 21 years are currently out of education, with a high proportion of out-of-school children being boys or children from poor households, and those with disabilities or from migrant communities and ethnic minorities.^{12,13} Unfortunately, in Thailand, no data on schools that are vulnerable to climate hazards such as drought, flooding and heatwaves exists. There does exist data on provinces that are at high risk for climate-induced disasters.¹⁴

Situation in numbers



93.9% proportion of children facing 3 or more types of climate and environmental shocks hazards and stresses.



10,830,000 children highly exposed to riverine and coastal flooding as well as water scarcity.



Ranked 50th out of 163 countries for where children are most at risk to the impacts of climate change.



9th most affected country by climate change in 2021



19th largest emitter of greenhouse gas emissions globally.²

Drought risk's impact on education: According to the UNICEF Thailand's future projections on climate change, the ten provinces most at risk of severe drought in Thailand are Nakhon Ratchasima, Ubon Ratchathani, Si Sa Ket, Surin, Buriram, Nakhon Si Thammarat, Narathiwat, Khon Kaen, Roi Et, and Songkhla. Overall, drought has a profound impact on children's learning and learning outcomes.¹⁵ In regions more severely impacted by drought, girls are nearly 8 percent more likely to repeat a grade, often due to the lack of inclusive WASH facilities in schools and the added domestic responsibilities they face.¹⁶ Furthermore, drought-driven reductions in agriculture income force many families, particularly in northeastern Thailand, to migrate in search of work, leading children to drop out of school. This migration disrupts their education, impacting long-term human capital development and reducing their future earning potential.

Flood risk's impact on education: According to the country office's future climate change scenario, ten provinces in Thailand are highly exposed to the risk of floods. These provinces are Ubon Ratchathani, Nakhon Ratchasima, Chiang Mai, Nakhon Si Thammarat, Tak, Narathiwat, Si Sa Ket, Surin, Chiang Rai, and Sakon Nakhon. Projections from the Development Bank (ADB) estimate that the number of people affected by extreme river flooding in Thailand could exceed 2 million by the 2035-2044 period.¹⁷ Historically flooding has severely impacted Thailand's education sector. In 2024, flooding from Typhoon Yagi disrupted learning for over 19,000 students across 555 schools in Northern Thailand, with teachers shifting to online instruction and delivering educational materials to students at home.¹⁸

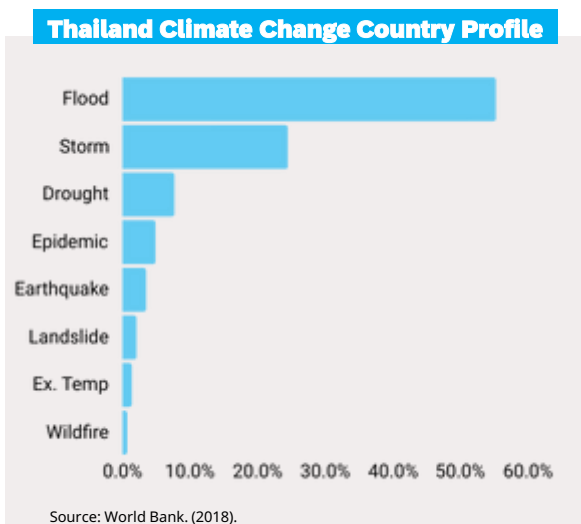


Table 1: Insights from Over the Tipping Point

| Climate Risk | # of Children Highly Exposed/High Risk |
|------------------------|--|
| Water scarcity | 6.1 million |
| Coastal flooding | 1.8 million |
| Riverine flooding | 2.8 million |
| Cyclones | 2.4 million |
| Heatwaves | 5.9 million |
| Air Pollution | 13.6 million |
| Water & Soil Pollution | 5.9 million |

Source: UNICEF. (2023).

Heatwave's impact on education: Young children are especially prone to the negative effects of high heat, placing their mental health and physical development at risk.¹⁹ High heat is also linked to respiratory illnesses, malnutrition, and infectious diseases. Research shows that high temperatures have adverse effects on learning outcomes.²⁰ Additionally, prolonged exposure to intense heat impacts children's ability to concentrate and learn.²¹ In Thailand, around 10.3 million children are frequently exposed to extreme heatwaves.²² The provinces of Bangkok, Nakhon Ratchasima, Ubon Ratchathani, Khon Kaen, and Buriram are most at risk.²³ In April 2024, Thailand's Basic Education Commission advised schools to stop in-person teaching due to the anticipated heat waves to protect students and teachers against heat stroke risks.²⁴

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