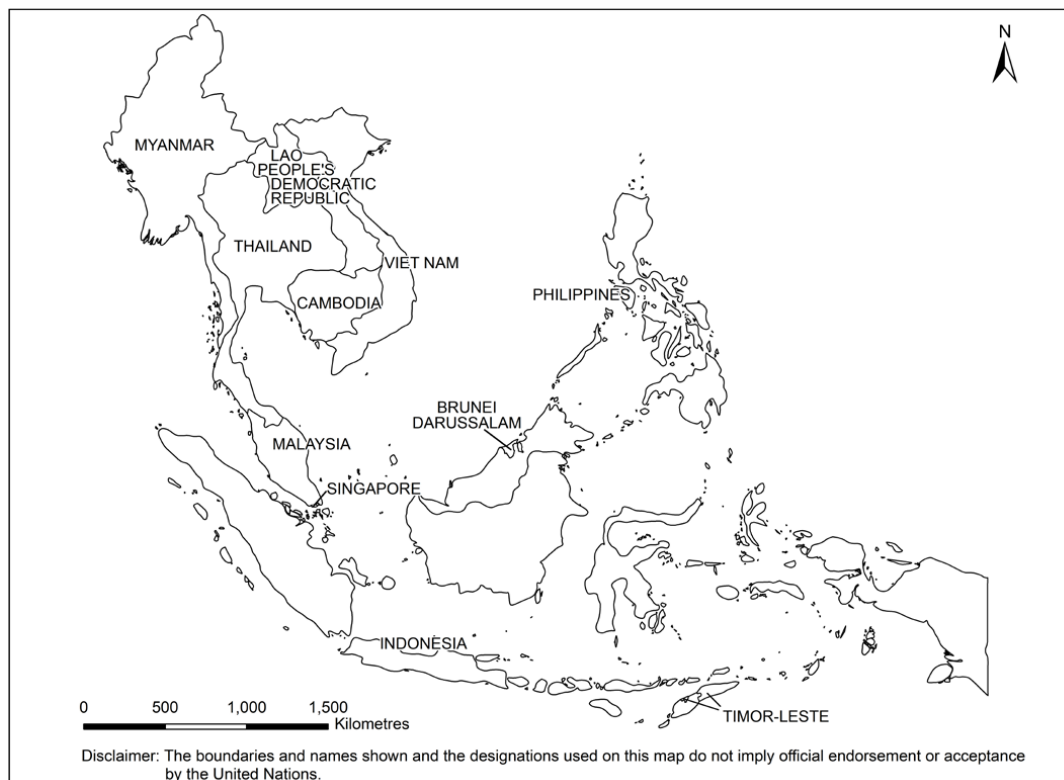


Ready for the Dry Years

Building resilience to drought in South-East Asia

Second Edition





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Armida Salsiah Alisjahbana

Under-Secretary-General of the United Nations and Executive Secretary of ESCAP

Dato Lim Jock Hoi

Secretary-General of the Association of Southeast Asian Nations

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About the cover

A herd of cattle walk through a dry field in Myanmar.

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Forewords



The ever-present threat of drought, with devastating impacts across the South-East Asia region, is a hallmark of the climate crisis. This second edition of *Ready for the Dry Years* analyses in greater detail just how and where droughts happen. It maps recurrent hotspots across South-East Asia, where drought hits hardest at the region's most vulnerable people, especially rural communities and farmers.

Drought is not an isolated event; it is just one of many other pressures on the lives and livelihoods of these communities. With different intensities and time duration, these events can undermine national development efforts. The COVID-19 pandemic is not only threatening people's health but also slowing down drought response and recovery, essentially diverting government's scarce resources to other emergency socioeconomic priorities.

Yet, droughts can often be predicted as they tend to creep up slowly and repeat. Governments can take risk-informed measures to strengthen societal resilience so that populations, sectors and key institutions have the capacity to adapt. The best way to protect people in pandemics, droughts or other disasters, is not just to offer emergency aid but to also help people become more sustainably resilient. For droughts, there is more time for proactive measures. At the country level, solution-oriented policy measures should be adapted within a national comprehensive strategy framework.

The Report highlights the truly regional nature of drought; many of the impacts are transboundary, and no country is spared. It further suggests three tracks for transformation: reduce and prevent, prepare and respond, and restore and recover. The Report shows that these policy measures will not only safeguard hard-won development gains but will also bring many positive environmental co-benefits. It also provides a framework for policymakers to take actions through regional cooperation on drought management.

Through our strengthened engagement and strategic partnership, both ESCAP and ASEAN can mobilize rapid and large-scale collaboration amongst member States, development partners, stakeholders and relevant sectoral bodies to tackle a common and shared transboundary challenge. My hope is that the Report's policy recommendations will help provide the evidence base for the *ASEAN Declaration on the Strengthening of Adaptation to Drought* and the subsequent *Regional Plan of Action*.

A handwritten signature in black ink, appearing to read 'A. Salsiah'.

Armida Salsiah Alisjahbana

Under-Secretary-General of the United Nations
and Executive Secretary of ESCAP



Throughout much of South-East Asia, drought is becoming the norm rather than the exception. As this trend is projected to worsen over the coming years, the prospect of severe dry conditions threatens the rich biodiversity of the region and the well-being of millions of people. Taking into consideration that communities with low levels of socioeconomic development tend to be more vulnerable to the consequences of drought, we must make every effort to ensure that these groups are protected and that no one is left behind.

In response to this challenge, a holistic approach to understanding the impact of drought is needed, by examining the issue from socioeconomic, health, environmental, and humanitarian perspectives. The second edition of the *Ready for the Dry Years* adopts this approach. Expanding on the findings of the first edition, this Report provides a more extensive analysis, particularly in identifying vulnerability hotspots and policy tracks for countries seeking to shift from response to adaptation.

I encourage relevant stakeholders to consider the Report's recommendations in developing the *ASEAN Declaration on the Strengthening of Adaptation to Drought* and the subsequent *Regional Plan of Action*. It is also important that strategic measures and priority actions identified in the Report are incorporated in the development of the new *ASEAN Agreement on Disaster Management and Emergency Response (AADMER) Work Programme 2021- 2025*. This includes strengthening of drought forecasting, monitoring and early warning systems.

This Report represents another successful collaboration between United Nations ESCAP and ASEAN. Drought resilience features as an integral part of the *ASEAN Vision on Disaster Management 2025 and the United Nations 2030 Agenda for Sustainable Development*. Pursuing more of these complementarities is crucial to the region's progress in achieving the Sustainable Development Goals (SDGs), especially amidst a pandemic.

Combatting COVID-19 has underscored the urgency of promoting cross-sectoral cooperation in managing transboundary challenges. I hope the same sense of urgency is channelled in our efforts in mitigating the impact of drought in the region as we work towards building a more resilient ASEAN Community.

A handwritten signature in black ink, belonging to Dato Lim Jock Hoi. The signature is stylized and cursive, written on a white background.

Dato Lim Jock Hoi

Secretary-General of the Association of Southeast Asian Nations (ASEAN)

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Members of the core authors team led by Sanjay Srivastava, Chief, Disaster Risk Reduction Section consisted of Kareff Rafisura, Laura Hendy, Maria Bernadet Dewi, Madhurima Sarkar-Swaigood and Prangya Gupta (ESCAP); and Intani Nur Kusuma (ASEAN). Bradfield Lyon (University of Maine and Columbia University) conducted the climate analysis used throughout the Report, provided technical advice and final review.

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Overview

Drought is a recurring hazard in South-East Asia. As the climate changes, droughts too will change in frequency and intensity. It is essential therefore that Governments act now to strengthen resilience. As this Report points out, this disease also tends to strike hardest at the region's poorest communities. The second edition of *Ready for the Dry Years* provides the latest information on drought in a changing climate, indicates the main tracks of action for Governments and proposes a regional drought agenda.

The COVID-19 pandemic provides a strong impetus for building resilience to drought. As they now also face the COVID-19 pandemic, Governments in South-East Asia are becoming more adept at managing concurrent risks. In some respects, drought is easier to address since it is a slow-onset disaster best managed through risk-informed measures that strengthen societal resilience. Thus, faced with another catastrophic event, like COVID-19, more resilient institutions, sectors and populations can take steps to cope. But at the same time, stimulus packages driven by COVID-19 could also incorporate measures to build resilience to drought.

Over the period 2015-2020, South-East Asia faced its most severe droughts for decades. Major drought events in 2015-2016 and 2018-2020 affected over 70 per cent of the region's land area. The severity and spatial coverage were the highest since the major El Niño of 1997-1998. During the peaks, there were drought conditions in parts of every country. At some point, over 325 million people were exposed to moderate drought conditions, and over 210 million people were exposed to severe drought conditions.

On average, severe droughts occur every five years. While the recent droughts have been exceptional, this Report shows that they fit into a broader historical pattern: since 1981, severe drought conditions have covered at least one-quarter of South-East Asia's land area on seven occasions, and the drought events have become increasingly warm.

The region has a number of drought hotspots. These are areas where droughts hit poor communities with low levels of socioeconomic development. Between 15 and 25 per cent of the region's population lives in drought hotspots. The Report reveals hotspots in Cambodia, Myanmar and the Philippines where exposure to recurring drought coincides with high levels of poverty and malnutrition and where a high proportion of people rely on agricultural employment. New hotspots can be expected to emerge as a result of anthropogenic climate change. To address the intersecting vulnerabilities in all these hotspots, the region needs a comprehensive package of humanitarian and development interventions.

Tackling drought requires cross-sectoral cooperation. The Report shows the wide-ranging impacts of drought, including agricultural disruption and water shortages, as well as secondary hazards, such as forest fires, haze and salt-water intrusion. Drought also affects agricultural output, food security and poverty and has an impact on each country's macroeconomic and trade situation. Moreover, disruptions to food security and livelihoods are cumulative, reinforcing each other and persisting even after the droughts are over.

Countries need to allocate necessary funds. The impact of drought varies from country to country depending on levels of economic development and socioeconomic vulnerability. Nevertheless, across the region, Governments and humanitarian agencies need to embark on long-term cross-sectoral interventions and make the necessary budget allocations. These interventions will be cost-effective and also have additional economic, social and environmental benefits by increasing levels of food and income security and boosting productivity.

Future droughts are likely to occur in warmer conditions. The Report identifies key drivers of drought, such as El Niño, and models the ways in which anthropogenic climate change will exacerbate future droughts. The picture is inherently complex and the intensity, severity and duration of droughts may increase in some locations but decrease in others. But future droughts are projected to be generally warmer, and if greenhouse gas emissions continue to increase, the changes may be even greater.

To scale-up adaptation, a new ASEAN agenda is needed. Compared with other disasters, droughts are fairly predictable, yet policy responses still tend to be largely reactive, offering better early warning and social protection. This report argues instead for a more proactive approach along three clear tracks: reduce and prevent; prepare and respond; and restore and recover. Across all these activities, countries in South-East Asia can capitalize on their extensive experience and expertise through more extensive regional cooperation.

The new agenda can use the collective technical expertise of specialized centres. If countries are to harness advances in science and technology they can look to a number of specialized centres, supported by university networks, that can provide technical support. Their expertise will be vital, for example, for drought risk assessment, prediction, monitoring and early warning services. They can also help with innovative schemes for social protection, insurance and other risk financing solutions.

The best way to tackle drought is through a whole-of-ASEAN response. Instead of just responding to the impacts of drought, the region needs to take a longer-term, and more strategic approach, backed with appropriate financing. This should focus particularly on the drought hotspots. ASEAN has a remarkable track record of coming together to tackle common challenges with rapid and large-scale collaboration. The same spirit of cooperation is now needed to ensure that the entire ASEAN Community is ready for the dry years.

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