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Scaling up Anticipatory Action across Southeast Asia

⚠️ Drought forecasts prompt proactive measures in the Philippines, Viet Nam, Cambodia, and the Lao People's Democratic Republic

Over the last five years, anticipatory action systems for drought have been implemented across several countries in Southeast Asia. Such systems have been created in close collaboration between the national governments and the Food and Agriculture Organization of the United Nations (FAO). These rely on a Combined Drought Index model to signal the looming threat of dry conditions on agriculture production, serving as a guide for initiating anticipatory action. While the integration of these systems into government mechanisms varies, they offer invaluable insight into the timing of proactive measures to mitigate potential impacts.

El Niño was declared in July 2023 and is projected to last until April 2024, with ENSO-neutral conditions becoming the most likely category in May-July 2024.¹ Historically, El Niño has been associated with erratic rainfall patterns and heightened temperatures, elevating the risk of drought in the sub-region.

Photo Credit: FAO Philippines

Although initial signs of its impact were minimal, the first quarter of 2024 has seen a rapid shift in Southeast Asia. The regular monitoring across the region of the Combined Drought Index² offers a more granular understanding of the situation on a monthly basis, with the Philippines being the first country to reach the activation threshold in February 2024. Then in March 2024, the Combined Drought Index in Viet Nam, Cambodia, and Lao People's Democratic Republic (PDR) reached the activation threshold and the triggering of drought AA was confirmed after field verification.

This brief provides an overview of these alerts and urges government bodies and partners to intensify anticipatory action efforts for protecting livelihoods, water security and food security, particularly in vulnerable hot-spots across the four countries.

¹ While three out of seven international models are predicting a La Niña by late winter, El Niño and La Niña predictions made in early autumn tend to have lower accuracy than predictions made at other times of the year.

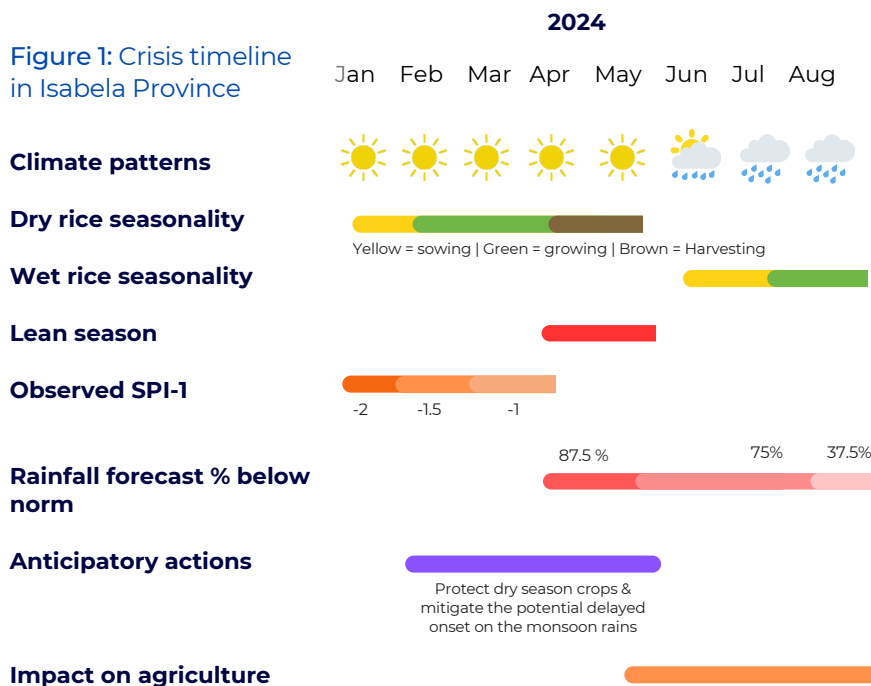
² Using a range of indices including but not limited to: rainfall (1 month observation and 3 month forecast), 3 month forecasted temperature, monthly mean soil moisture and vegetation health index

Overview of countries

The Philippines | High-risk provinces: Isabela

Since December 2023, members from the Philippine Space Agency (PhilSA), Department of Agriculture-Bureau of Soils and Water Management (DABSWM), Department of Social Welfare and Development-Disaster Response Management Bureau (DSWD-DRMB), and FAO, have coordinated the development of drought AA trigger, in particular for the province of Isabela.

As the Combined Drought Index provided by PhilSA shows that mild drought has been observed over the months of December 2023 - January 2024, and as PhilSA's satellite-based Agricultural Drought Outlook informs that drought is in the "developing stage" for the next six months, the launch of drought anticipatory actions was discussed in February with government. Additionally, the PAGASA rainfall forecast indicates that the Province of Isabela will experience "below normal" rainfall conditions during March-April-May 2024, constituting a reduction of 20 percent - 60 percent from normal levels.



From March 2024, drought Anticipatory Actions were further encouraged as the situation was deepening and the Standard Vegetation and Temperature Ratio (SVTR) Forecast implied that the municipality of Echague, Isabela would have increasing dry conditions, with a potential peak of agricultural drought (87.5 percent of the surface at risk) in April 2024.

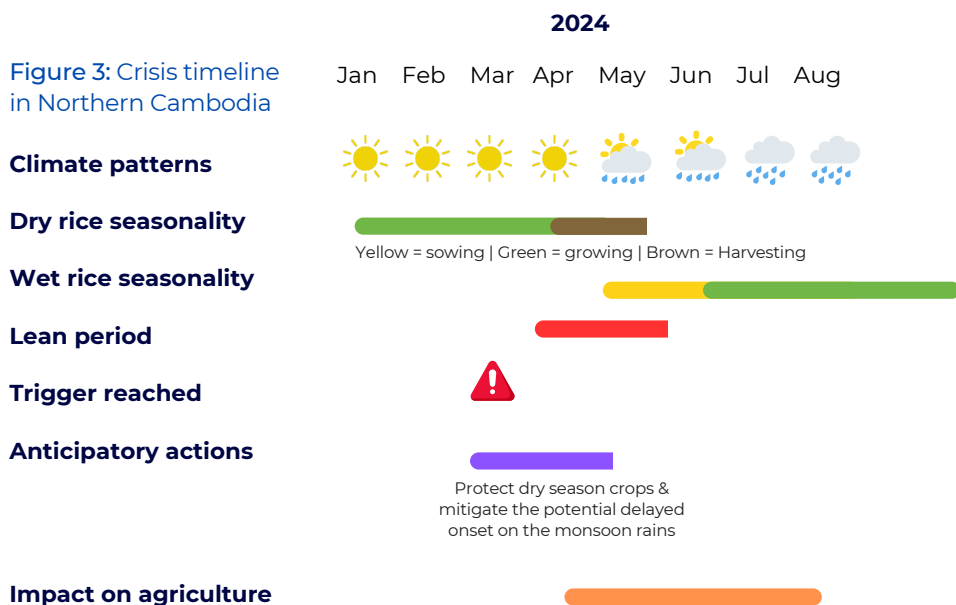
Considering these findings, drought anticipatory actions were confirmed in Echague, Isabela. Ground validation measures, including field inspections to identify early signs of drought such as cracks in fields, changes in leaf coloration indicating plant stress, and depletion of water levels in natural depressions and water sources, further supported this activation.

Both FAO, DSWD, alongside local governments, are leveraging social protection programs to aid the most vulnerable through multipurpose cash and agricultural tools, to protect vulnerable populations. This includes cash support alongside agricultural tools to boost production as the dry period intensifies.

Cambodia | High risk provinces: Oddar Meanchey, Preah Vihear, Siem Reap, Kampong Thom, Banteay Meanchey, Battambang, Pursat and Prey Veng

In March 2024, the Combined Drought Index surpassed its 60 percent threshold in the mentioned provinces, ranging from 70 to 95 percent. The impact on vulnerable farmers is forecasted to worsen over the next 4-5 months due to a delayed onset of the monsoon season, potentially impacting rice and maize planting and growth periods. Hydro-meteorological indicators prove effective for early warning in Cambodia. Performance tests combining indicators like precipitation (SPI3), temperature (Climate Change-adjusted Co-diversion), soil moisture index (SMI), Agricultural Stress Index (FAO), and El Niño (ENSO Index) show promising results, particularly during the dry season.

FAO Cambodia intends to act in three high-risk provinces: Siem Reap, Banteay Meanchey, and Battambang. It is expected that the beneficiaries of FAO's Anticipatory Actions will be identified together with the local government, with a prime focus on those households that are registered in the social protection's registries. The IDPoor (Identification of Poor) Household program in Cambodia is a government-led initiative aimed at identifying and assisting impoverished households across the country. Implemented by the Ministry of Planning in collaboration with various partners, the programme serves as a critical tool for poverty reduction and social protection. Anticipatory actions will involve early warning messaging, multi-purpose cash, and livestock support, where relevant.



Viet Nam | High risk province: Ca Mau

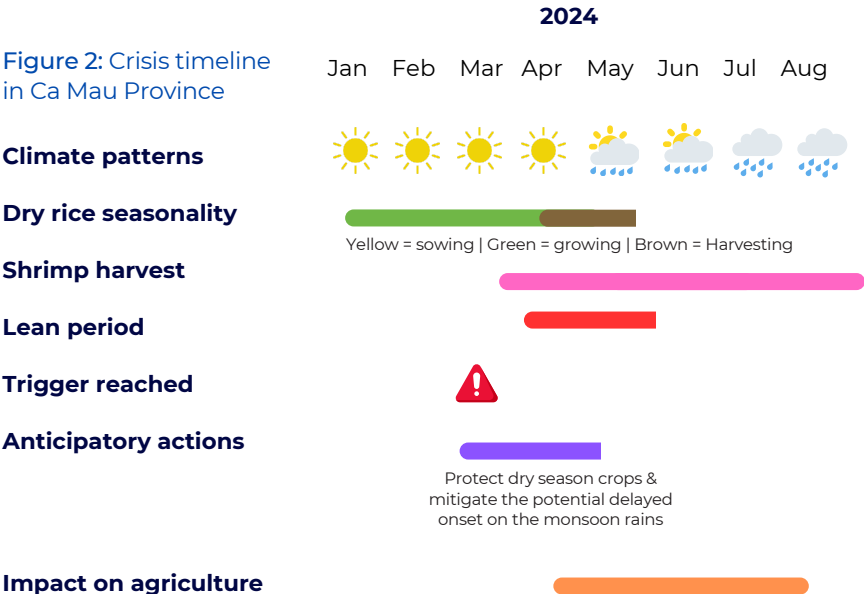
In Viet Nam, a drought Anticipatory Action system exists which focuses on the Mekong Delta Region and Gia Lai Province.

Recent analysis in March 2024, indicates a concerning development in the drought situation in Ca Mau province, situated at the southern tip of the country. The **Combined Drought Index has surged to 77.5 percent, surpassing the 70 percent threshold**, and projections suggest a further deterioration until July 2024. In other provinces in the Mekong Delta region or Gia Lai province, the threshold has not been reached. This is due to their reliance on irrigation which has allowed farmers to mitigate the potential impacts to date.

Early signs of stress have been flagged by the Provincial Committee for Natural Disaster Prevention and Control (CNDPC) and the Department of Agriculture and Rural Development (DARD), validated through field missions. Collaboration with the Viet Nam Disaster Management Authority (VDDMA) and provincial authorities is underway to address these challenges.

DARD in Ca Mau has submitted a report to the provincial government highlighting water shortage issues and proposing solutions. In a proactive move, the CNDPC has utilized allocated funds to promptly install six water storage stations, underscoring the severity of the situation and the urgency of action in the upcoming months. The Hydromet Centre of Ca Mau Province has issued a statement urging CNDPC to enhance their timely action ahead of drought, emphasizing the need to mitigate potential damage and loss. As of the 26th March 2024, Ca Mau Provincial People's Committee has issued an urgent dispatch to use VND 10 billion from provincial budget for preparation of forthcoming potential water shortage, focus on water tanks provision to hardship households, and upgrading and expanding of water supply networks in high risk areas of the province.

VDDMA and FAO have identified priority recipients among farmers and households facing challenges accessing clean water or experiencing disruptions in production or yield loss. Drought anticipatory actions are intended to implement dual multi-purpose cash distributions, paired with public awareness raising sessions on Water, Sanitation, and Hygiene tailored for drought scenarios. This strategy aims to address immediate needs and predicted worsening conditions in the coming months on at-risk families' livelihoods.

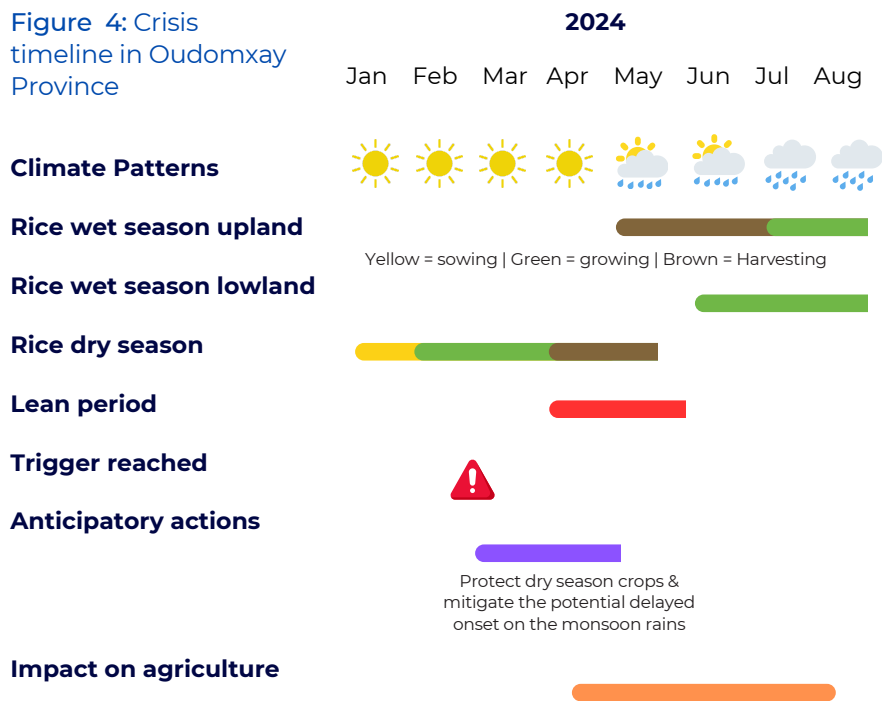


Lao PDR | High risk provinces: Oudomxay, Phongsaly, Sayabouly and Vientiane

In March 2024 the drought Lao PDR Combined Drought Index met or surpassed the 60 percent threshold for Oudomxay, Phongsaly, Sayabouly and Vientiane provinces. Among the identified provinces, Oudomxay presents the highest risk, prompting FAO to focus immediate efforts there. Key drivers underpinning the shift into drought risk were observed soil moisture in past months, and rainfall forecast for upcoming three months.

Over the coming months, FAO will scale up anticipatory action efforts in Oudomxay province, including: dissemination of early warning messages to farmers, drought resistant seeds distribution and a one-off unconditional cash distribution to both rainfed and irrigated farmers

Figure 4: Crisis timeline in Oudomxay Province





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