

THE NEED FOR FOOD SYSTEMS TRANSFORMATION IN ASEAN

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Recent events like the COVID-19 pandemic and the Russia-Ukraine war have exacerbated the existing food insecurity situation faced by many in the world and have highlighted the need for more resilient and sustainable food systems to ensure the availability, accessibility and affordability of food for people. In Southeast Asia alone, **41.7 million suffer from malnutrition** while **251 million are unable to afford a healthy diet**¹. The figure below describes some aspects of the regional food system requiring a major redesign towards one that is more inclusive, resilient and sustainable has never been more urgent today, focusing on production, demand and environmental factors.

Challenges Requiring Transformation



Production

Reduced Agricultural Output (due to climate change)
Southeast Asia's rice yield is projected to fall by about 50% in 2100 relative to 1990 yields.²

Decline in Agricultural Labour Force
In ASEAN, the agricultural share of employment fell from 60% in 1991 to 30% in 2020.³

Lack of adoption of AI
Barriers such as the lack of digital literacy resulting in a lack of awareness among farmers about the availability of such tools and the high cost of adoption.⁴

Reduced Agricultural Labour Supply and Production (during COVID)
Farm labour supply dropped by 1.4% due to COVID restrictions and total agricultural production volume decreased by 17.034 million tons (or 3.11% drop in production for the whole of SEA).⁵



Demand

Food Loss and Waste
Nearly 17% of total food available is lost or wasted. A reduction of 40% in these losses within Southeast Asia would amount to a food output equivalent to 1.8 million hectares of land.⁶

Malnutrition (Ultra-processed food and drinks (UPFD) and Obesity)
The volume sales of ultraprocessed foods (UPFs) were the highest in SEA (67.3%). Similarly, sales of ultra-processed drinks (UPDs), stood at 120%.⁷

Rising Demand
Poultry production in SEA expanded by 56% in the last decade, increasing from 5.9 million metric tons (mmt) to 9.2 mmt in 2018, and is projected to reach 12.3 mmt by 2028.⁸



Environment

Climate Change
Between 2008 and 2018, extreme weather events caused agricultural production losses amounting to USD21 billion in the region.⁹

Decreasing availability of arable land
Arable land in Vietnam, Philippines, Malaysia and Indonesia is expected to decline by more than 10% by 2028 if no action is taken.¹⁰

Land Degradation
20 million hectares of fertile land are deteriorating every year.¹¹

Increased Unsustainable Natural Resource Depletion
ASEAN's agricultural land area in increased from 20.2% to 29.4% during 1970-2011 while forest areas have been significantly reduced.¹²

Water Insecurity
Global demand for water has been growing exponentially with the increase in water withdrawals averaging at 1% per year since the 1990s.¹²

Data Sources

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⁸ Tani Lee, James Hansen. Southeast Asia's Growing Meat Demand and Its Implications for Feedstuffs Imports. US Economic Research Service, 2019;

⁹ Croplife Asia and EU-ASEAN Business Council, "Report on ASEAN Food Systems Sustainability", June 2024;

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