

DOES SOUTHEAST ASIA HAVE A SUPPLY-SIDE PROBLEM IN FOOD SECURITY?

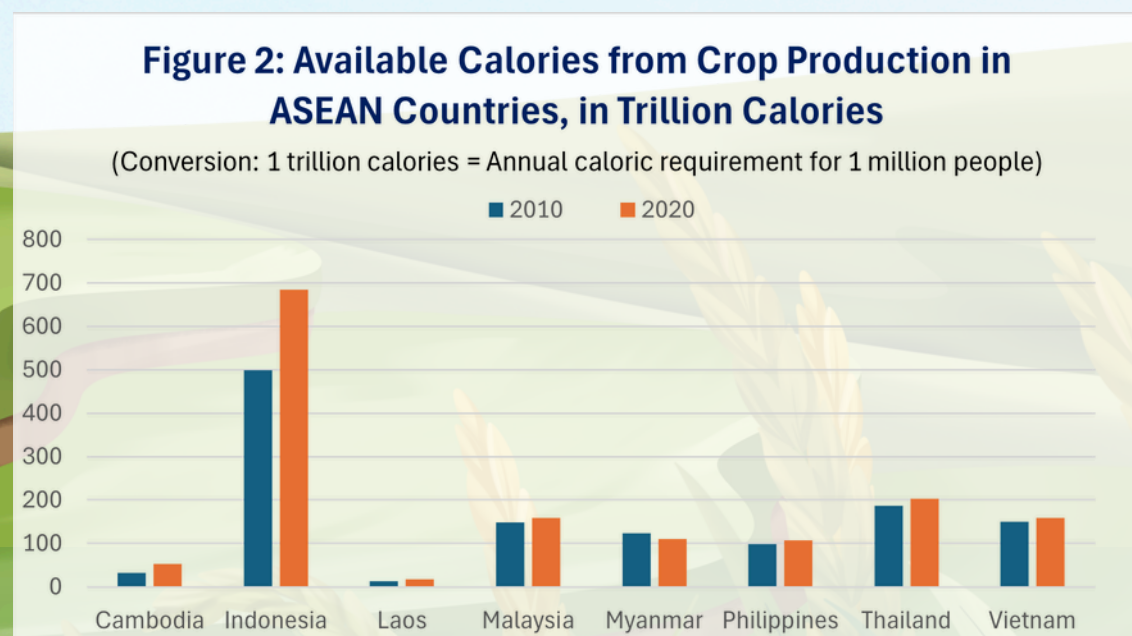
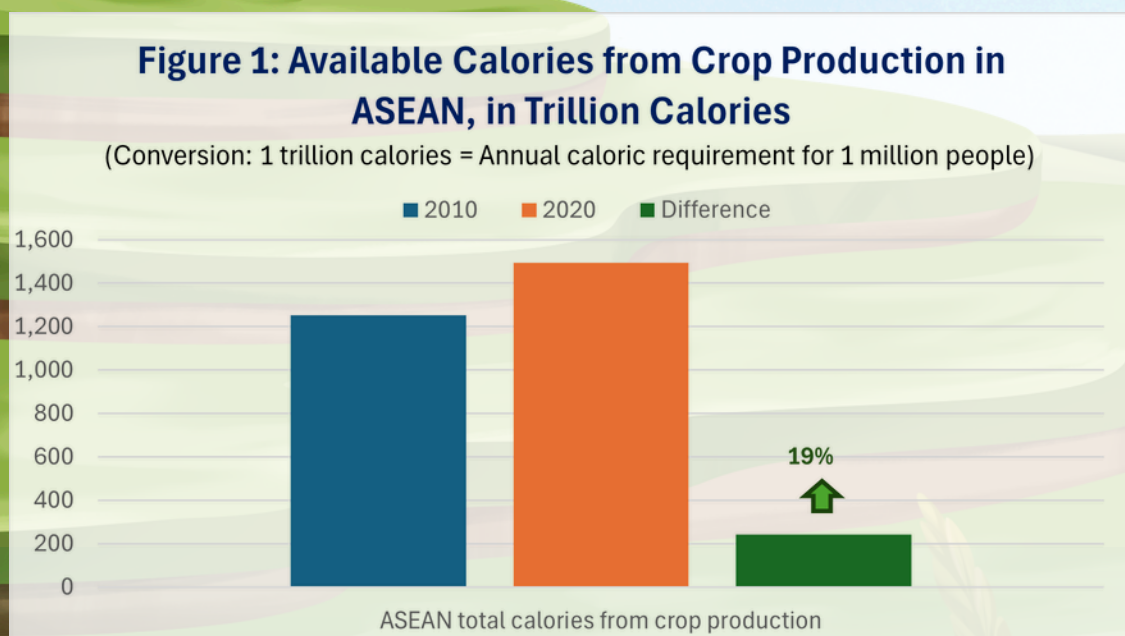
Compiled by Jose Ma. Luis Montesclaros

Amid rising global food instability, the ASEAN Leaders' Declaration on Strengthening Food Security and Nutrition in Response to Crises in 2023 envisioned building regional resilience through a Local Resource-based Food Reserve (LRBFR).¹ This would provide a food supply buffer, building on each ASEAN member state's food reserves, thus improving emergency preparedness and crisis response. Is ASEAN facing a supply-side challenge, though? This NTS Fast Fact highlights another concern that regional crop production could be diverted to non-food purposes.



INCREASED CALORIES FROM FOOD PRODUCTION

Globally, West et al. (2026) found that less than half of the increase in global food production in the past 10 years went into direct food consumption.² Contextualising such findings within ASEAN, the region was able to increase the total calories from its crop production by 19% or close to a fifth between 2010 and 2020 (Figure 1). Indonesia leads the group with a large 37% increase in calories from crop production (Figure 2). Yet, the share of self-reported food insecurity persists at levels above 10% of the regional population since 2015, and even considering Pre-covid 19 levels in 2019.³



Source: Compiled from West, P. C., Gerber, J. S., Cassidy, E. S., & Stiffman, S. (2026). "Only half of the calories produced on croplands are available as food for human consumption," *Environmental Research: Food Systems*, 3(2), 021001. DOI 10.1088/2976-601X/ae4f6b. Note: Data on Brunei, Singapore and Timor-Leste were not available in the dataset.

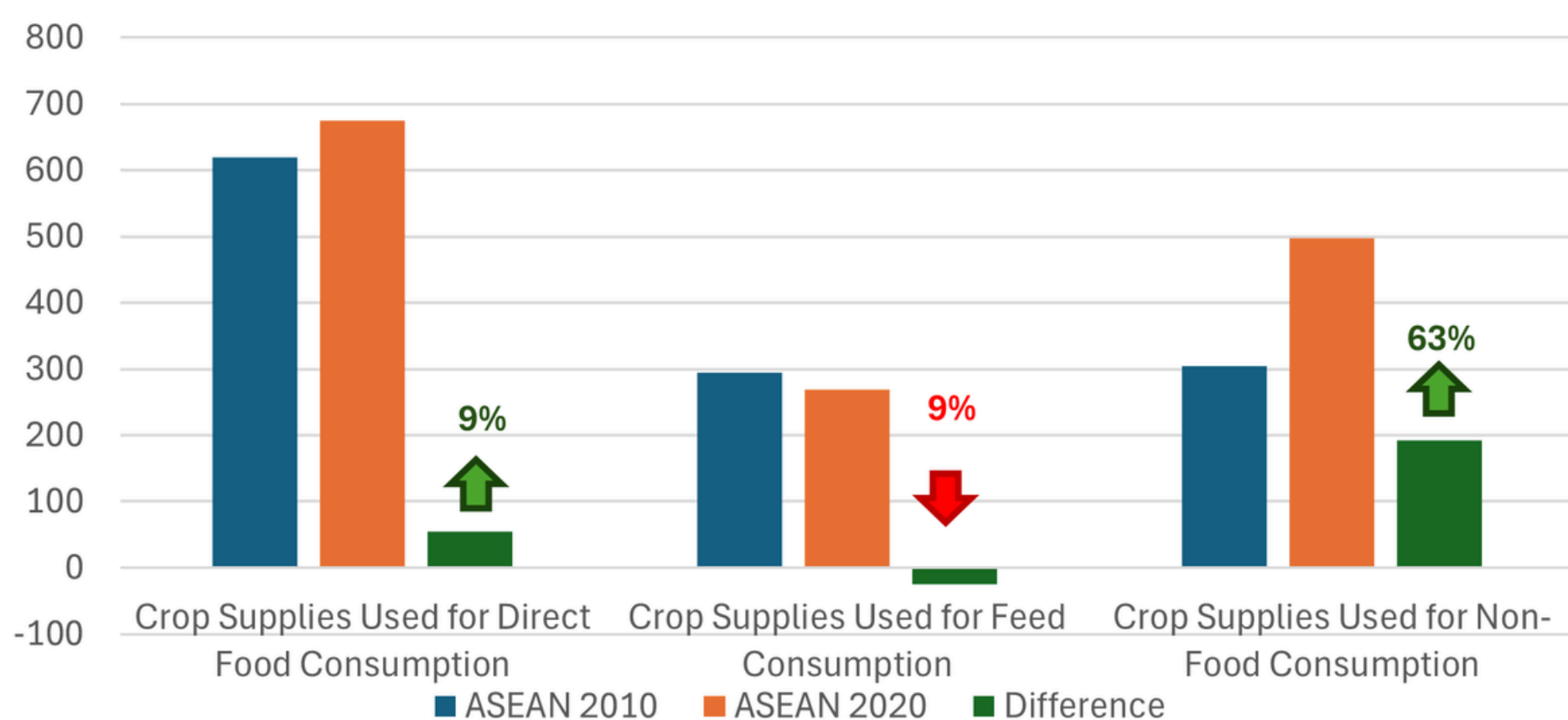
FOOD DIVERSION TO BIOFUELS?

One of the potential reasons is that food production is being diverted to non-food purposes (Figure 3). Despite the 19% increase in total calories from crop production, there was a smaller increase of only 9% in crop supplies for direct food consumption purposes and even a reduction of 9% in crop supplies for feed consumption purposes. By contrast, there was a 63% increase in crop supplies diverted to non-food uses of these food crops, including bioenergy and bioethanol. This potential for diversion to non-food uses proves a critical consideration in planning out the future regional LRBFR.



Figure 3. Uses of Crop Supplies in Southeast Asia, in Trillion Calories Equivalent

(Conversion: 1 trillion calories = Annual caloric requirement for 1 million people)



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NOTES

¹ ASEAN (2023), ASEAN Leaders' Declaration on Strengthening Food Security And Nutrition In Response To Crises, 5 September 2023, accessed 24 April 2026, <https://asean.org/asean-leaders-declaration-on-strengthening-food-security-and-nutrition-in-response-to-crises/>.

² West, P. C., Gerber, J. S., Cassidy, E. S., & Stiffman, S. 2026. "Only half of the calories produced on croplands are available as food for human consumption," *Environmental Research: Food Systems*, 3(2), 021001. DOI 10.1088/2976-601X/ae4f6b.

³ FAO, IFAD, UNICEF, WFP and WHO. 2025. The State of Food Security and Nutrition in the World 2025 – Addressing high food price inflation for food security and nutrition. Rome. <https://doi.org/10.4060/cd6008en>