

Indo-Pacific Era Strategic Centre

Mapping the Geopolitics of the Next Indo-Pacific Century.

April 2024



Farming in the haze / Photo Credit: CIFOR via Flickr.com under Creative Commons

Food Systems Transformation in ASEAN 2025?

By Jose Ma. Luis Montesclaros

Food insecurity is an important global challenge, with [increasing rates of under-nourishment](#) globally from 2014 onwards reflecting climate impacts on food production, and further global supply chain challenges amid the coronavirus (COVID-19) pandemic in 2020, and the Russia-Ukraine war in 2022. [Food insecurity varies across countries and requires a “territorial approach,”](#) however. Regional platforms therefore allow for leveraging country action in a manner that is coordinated internationally.

A Regional Approach to Food Security

In 2017, countries in the Association of Southeast Asian Nations (ASEAN) [committed to the 2nd Sustainable Development Goal \(SDG\) of “Zero-hunger”](#) by 2030. Responding to the Global Food Price Crisis of 2007-08, ASEAN member states agreed on a regional ASEAN Integrated Food Security (AIFS) Framework for 2009-13.

The [2009-2013 AIFS Framework](#) recognised the multi-faceted nature of the 2007-08 GFPC, including the competing demands for land between agriculture and biofuel markets, and interactions between food and energy prices. It also recognised the vulnerabilities of the food sector to climate change’s short-term impacts from sudden flooding, and long-term impacts in productivity growth slowdowns. The region likewise maintains an [ASEAN Food Security Information System](#) (AFSIS), supported by China, Japan and South Korea, to improve transparency and stability in regional supplies and prices.

The latest [2021-2025 AIFS](#) recognised the continued prevalence of these issues, while also setting out three principles to for regional partnership, including country-level ownership of their respective development policies and strategies; alignment of donor support behind the priorities of each AMS’ national development

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strategy; and the harmonisation and coordination of donor efforts to avoid duplication and reduce the transaction costs for ASEAN member states.

A further development in 2023, building on the AIFS was the [ASEAN Leaders' Declaration on Strengthening Food Security and Nutrition in Response to Crises](#), adopted under Indonesia's chairmanship of ASEAN in September 2023. The said declaration called for "rapid responses" to food security amid crises, including encouraging each ASEAN member state to Local Resource-based Food Reserve (LRBFR), or its food reserve that it is sourced domestically. This necessitates smooth flows of trade in productivity-enhancing farm inputs, such as seeds and fertilisers, and improved food handling (storage and logistics) within the cold chain and in post-harvest settings.

Shifting to Food Systems Transformation

An important development in the food sector, which sets the stage for the ASEAN regions' task ahead, is the recognition of the **"wicked problem"** whereby food is vulnerable to climate change, but at the same time, contributes significantly to it. According to a [20-year study by UN FAO for 2000-2020](#), agriculture accounts for 31% of global carbon dioxide equivalent emissions. The 2023 ASEAN declaration likewise noted the need for "long-term resilience and sustainability of agri-food systems", such as improving smallholder farmers' access to finance and investments in the agri-food sector, and reducing greenhouse gas emissions from agriculture.

Given the multi-faceted nature of the food-climate sustainability problem, a potential approach moving forward raised during the recent [2024 Global Food Security Conference in Leuven, Belgium](#), was the need for a transition towards "food systems transformation" (FST). As opposed to purely a food security-focused approach, an FST approach explores **how to reduce agriculture's contributions to climate change, and not just to reduce climate change's impacts on agriculture and food security**. Promoting such transition will require galvanising support from other

sectors too, such as academia in shaping policymakers' understanding on how to transition towards sustainable food consumption behaviours, **with products and practices emitting fewer emissions and greater energy/water savings**, and in upskilling to equip farmers with the capacities to undertake digital agriculture approaches in this regard as well (e.g., use of drones and crop advisory services).

SUGGESTED READINGS

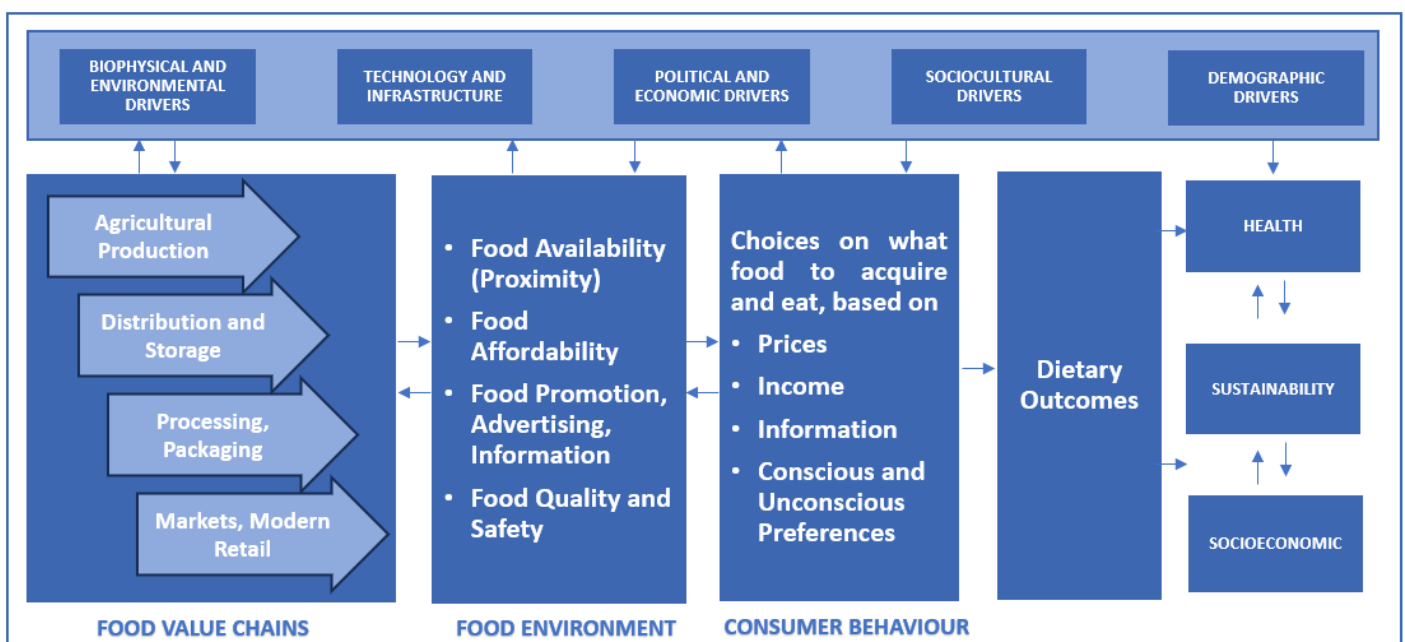
ASEAN. 2020. ASEAN Integrated Food Security (AIFS) Framework and Strategic Plan of Action on Food Security in the ASEAN Region (SPA-FS) 2021-2025.

ASEAN. 2023. ASEAN Leaders' Declaration on Strengthening Food Security and Nutrition in Response to Crises.

UN Food and Agriculture Organization. 2021. "Greenhouse gas emissions from agrifood systems Global, regional and country trends, 2000–2020." *UN FAO Analytical Brief 50*.

OECD/FAO/UNCDF. 2016. *Adopting a Territorial Approach to Food Security and Nutrition Policy*. Paris: OECD Rural Studies, OECD Publishing, Paris.

Paul S. Teng and Jose Ma. Luis Montesclaros. 2023. "Rice Production as a Wicked Problem." *NTS Insight*, No. IN23-03. Singapore: RSIS Centre for Non-Traditional Security Studies (NTS Centre), Nanyang Technological University Singapore.



Food system framework

Source: Adapted via [CC 4.0](#), from [Brouwer, I. D., McDermott, J., & Ruben, R. \(2020\). Food systems everywhere: Improving relevance in practice. Global food security, 26, 100398.](#)

CLIMATE CHANGE



Photo Credit: Freepik.com

NEWS & COMMENTARIES

Shell says landmark emissions ruling won't help climate goals

Shell told a Dutch court that a 2021 order which asked that it should drastically cut greenhouse gas emissions lacks a legal basis and risks obstructing the fight against climate change. Shell said that implementing the ruling would force it to shrink its business and simply lead customers to shift to other suppliers of fuel.

Bart H. Meijer

Reuters | 2 April 2024

Southeast Asia to survive climate change, timid effort is not enough

With its long coastlines that leave it vulnerable to rising sea levels and extreme weather, Southeast Asia region must adopt a comprehensive strategy that includes not just reinforcing coastal defences but also restoring the environment and moving people inland.

Mohammad Yunus

South China Morning Post | 2 April 2024

Commentary: Climate change puts global semiconductor manufacturing at risk

Semiconductor manufacturing requires vast quantities of water to keep machinery cool and wafer sheets free of debris, and the unfolding climate emergency puts the industry at risk. Despite the industry's dependence on water, little attention has been paid to how changing environmental conditions may impact it.

Josh Lepawsky

Channel News Asia | 3 April 2024

Climate change: Logging decline after political change in Brazil, Colombia

The number of trees lost in tropical forests in Brazil and Colombia fell dramatically last year because of political action. New leaders have prioritised the environment, with tree losses in the Brazilian Amazon down by a huge 39%.

Matt McGrath

BBC | 4 April 2024

SELECTED PUBLICATIONS

Marine environmental protection in the South China Sea: Advancing stronger people-to-people cooperation on plastic waste management

Protecting the marine and coastal environments of the South China Sea is crucial, particularly in the face of escalating pollution, biodiversity loss, and climate change impacts. While regional cooperation mechanisms exist to address transboundary environmental challenges, there is a need for enhanced people-to-people collaboration among the countries bordering the SCS.

Margareth Sembiring

RSIS Policy Report | 2024

The carbon majors database: Launch report

58 out of 100 companies examined in the report were linked to higher emissions in the seven years after the Paris Agreement than in the same period before. In Asia, 87% assessed companies are connected to higher emissions in 2016-2022 than in 2009-2015. In the Middle East, the number is 70%, in Europe 57%, in South America 60%, in Australia 75%, in Africa 50% and in North America 43%.

Carbon Majors

2024

EVENT & ANNOUNCEMENT

10th World Water Forum

The Forum provides a unique platform where the water community and key decision makers can collaborate and make long-term progress on global water challenges. The Forum brings together participants from all levels and areas, including politics, multilateral institutions, academia, civil society and the private sector, among others.

Bali, Indonesia

18-25 May 2024

ENERGY SECURITY



NEWS & COMMENTARIES

South-east Asia needs to accelerate renewable energy transition: Experts

The region's annual renewable capacity additions have to increase by seven to 12 times for solar and onshore wind power, as compared with the region's annual average from 2018 to 2021.

Sue-Ann Tan

The Straits Times | 5 April 2024

China's small nuclear reactor starts installing digital control system

The world's first land-based commercial small modular reactor (SMR) has started installation of its digital control system (DCS) in Hainan province.

Xinhua News Agency

CGTN | 12 April 2024

Red hydrogen for a more sustainable future in aviation

As the world grapples with the pressing need to address climate change, conversations around sustainable energy solutions have intensified. One promising contender emerging on the horizon is the use of Red Hydrogen – a concept poised to revolutionise our energy landscape and pave the way to Net Zero Emissions by 2050.

Alvin Chew and Karryl Kim Sagun Trajano

RSIS Commentary | 12 April 2024

China accounted for two-thirds of new global coal plant capacity in 2023, report finds

A report by Global Energy Monitor found that net coal capacity grew by 48.4 GW in 2023.

Jason Dasey and Stephen Dziedzic

CNBC | 14 April 2024

SELECTED PUBLICATIONS

Global urbanization and ruralization lessons of clean energy access gap

This study offers novel understanding on the forces behind clean energy access divide associated with urbanisation and ruralisation by employing the case of the high, low, lower-middle, and upper-middle income economies in the period 2010 to 2021.

Andrew Adewale Alola

Energy Policy, Vol. 188 | 2024

The effects of hydrogen research and innovation on international hydrogen trade

This study argues that that research and innovation progress is indeed associated with increased trade, especially with patenting and (international) standardisation, enhancing hydrogen export volumes.

Parsa Asna Ashari and Knut Blind

Energy Policy, Vol. 186 | 2024

EVENT & ANNOUNCEMENT

Nuclear Energy Summit 2024

The Summit includes panel discussions with experts showcasing how innovation is further enhancing the competitiveness, usability, and sustainability of nuclear power as well as opportunities and challenges in establishing a level playing field for funding and financing nuclear power projects.

Recorded

21 March 2024

FOOD SECURITY



NEWS & COMMENTARIES

Projected famine in Gaza: FAO urges immediate access to deliver urgent and critical assistance at scale

New data released today indicates high levels of acute food insecurity in the Gaza Strip, from “Crisis” to “Emergency” and “Catastrophe” according to the Integrated Food Security Phase Classification (IPC). The report indicated that acute food insecurity in the area has deepened and widened, with 92 percent more people projected to slide into catastrophic levels of hunger in mid-March to July 2024.

UN FAO Press Release

UN Food and Agriculture Organization | 18 March 2024

Harvesting hope to tackle food security

In February 2024, Prime Minister Datuk Seri Anwar Ibrahim said the government would introduce a targeted urban agriculture programme, taking Singapore’s programmes as a model. This article discusses multiple perspectives on such an approach, including the need to make space for agricultural activities when most land is already residential or commercial. Addressing such challenges requires consultative, multi-stakeholder approaches.

Junaid Ibrahim and Allison Lai

The Star | 31 March 2024

Farmers face hurdles in push to innovate and boost Singapore’s food security

Amid Singapore’s technology-oriented push towards 30 per cent of nutritional requirements being sourced from domestic production by 2030, several traditional farms have closed down in recent years after 25 to 75 years of operation. This article discusses some of the risks from “putting all eggs” in the basket of novel high-tech farming. It also notes approaches taken by the domestic farming sector such as through ready-to-cook/eat meals, to improve accessibility of local food to consumers.

Judith Tan

The Straits Times | 1 April 2024

Food security issues in Asia

The author argues that amid anticipated further increases in food demand in Asia accompanied by increased environmental awareness, Asian countries will need to accelerate their move into harnessing technologies and implementing policies which support sustainable food systems. Among others, this entails a “preparedness-paradigm” based on “futuring” scenarios of food supply and demand.

Paul Teng

Inter Press Service | 3 April 2024

SELECTED PUBLICATIONS

Local food systems: Reviewing two decades of research

This article systematically tests eight common claims on local food systems against multi-disciplinary scientific evidence, such as consumers’ willingness to pay price premia for local food, and the benefits obtained by farmers in participating in local food systems, among others. It finds a high degree of context-specificity by country, product, and supply chain, confounds these findings, preventing more direct cross-country comparisons.

Laura Enthoven and Goedele Van den Broeck

Agricultural Systems | 2021

Asian food security: Issues and opportunities

This chapter provides an overview of the trends in Asian food security, and discourses on how the context, scope and meaning of food security have changed from the previous to the current century. It also discusses the unresolved issues facing Asian food security from two perspectives — food demand (consumption) issues and food supply (production) issues. Opportunities are then highlighted to tackle some of these issues.

Paul Teng

World Scientific | 2024

EVENT & ANNOUNCEMENT

The HEAD Foundation Dialogues: Food Security Issues in Asia

This event discussed why matters of food security are paramount for Asia, which is home to half of the world’s population and also has the largest number of food insecure people. It also discussed the specific technologies that are likely to determine agriculture’s future in the region, and the investments needed to enable an environment for technology to have impact.

Recorded Webinar

27 March 2024



Photo Credit: Freepik.com

NEWS & COMMENTARIES

Living the global water crisis: How the world experiences water insecurity

The report underscores the urgency of addressing global water security challenges with reliable data. The Water Insecurity Experiences (WISE) Scales provide innovative tools to measure lived water insecurity experiences, guiding development action.

Center for Strategic and International Studies

22 March 2024

The Frontline Scorecard: An assessment tool for climate and disaster risk management in health systems

The Global Facility for Disaster Reduction and Recovery presents a tool for assessing health system resilience to disasters and climate change, highlighting priorities and operational examples to guide technical assistance and resource allocation.

Global Facility for Disaster Reduction and Recovery and World Bank

3 April 2024

Release of 2024 U.S. Global Health Security Strategy

Highlighting partnerships and initiatives, the 2024 U.S. Global Health Security Strategy aims to bolster global health security, a U.S. national security priority, essential for protecting the health, lives, and economic wellbeing of Americans and people around the world.

U.S. Bureau of Global Health Security and Diplomacy
16 April 2024

The Quadripartite organizations announce the second Term members of its One Health high-level expert panel (OHHLEP)

The Quadripartite organisations announced the Members of the One Health High-Level Expert Panel for Term II. Comprising 29 experts, the panel advises on One Health policies, research, and emerging health threats at the human-animal-ecosystem interface.

World Health Organization

17 April 2024

SELECTED PUBLICATIONS

Forum shifting in global health security

The COVID-19 pandemic has spurred calls for new global health governance structures, including amendments to international regulations, a pandemic convention, and a Pandemic Fund. However, power dynamics and shifting negotiations pose risks to global health security.

Clare Wenham

Bulletin of the World Health Organization, Vol. 102 (2), p. 123-129 | 2024

Interconnecting global threats: climate change, biodiversity loss, and infectious diseases

The interconnected crises of climate change, biodiversity loss, and infectious diseases necessitate a holistic understanding to anticipate challenges. This review emphasizes the need for interdisciplinary approaches to identify potential co-benefits and avoid exacerbating one crisis while solving another.

Alaina Pfennig-Butterworth et al.

The Lancet Planetary Health 8(4) | 2024

EVENT & ANNOUNCEMENT

Asia Summit on Global Health

The Asia Summit on Global Health (ASGH) 2024 will be jointly organised by the Government of the Hong Kong Special Administrative Region and the Hong Kong Trade Development Council. This hybrid meeting (held in-person and virtually) brings together stakeholders from around the world to exchange insights, explore opportunities and collaborate on the diverse and dynamic healthcare sector.

Hong Kong Convention and Exhibition Centre (HKCEC)

16-17 May 2024

HUMANITARIAN ASSISTANCE AND DISASTER RELIEF



NEWS & COMMENTARIES

Humanitarian Diplomacy: A tool to rebuild trust in the humanitarian sector

Considering the trust challenge in the humanitarian sector, humanitarian diplomacy is an ideal tool for humanitarian actors to gain access to affected communities.

S Nanthini

IDSS Paper | 22 March 2024

How is open aid data being used?

As more organisations publishing more aid and development data, and more tools being produced to enable a broader group of people with different interests to access the data, there is a need to dig into the details of exactly how open aid data is being used to support research and policy.

Elma Jenkins

Publish What You Fund | 4 April 2024

Keeping it fair: How to account for inequity in climate and disaster risk analyses

Considering the differences in the distribution of climate impacts among various populations, there is an urgent need to include social inequalities into any climate and disaster risk analyses. Only then will decision-makers be able to create informed policies.

Alessio Giardino et al.

Asian Development Blog | 5 April 2024

Gaza needs humanitarian assistance now as famine sets in

Dealing with the humanitarian catastrophe in Gaza and preventing famine requires increasing airdrops as an interim solution and reinforcing diplomatic efforts to open up more aid channels.

Alistair D. B Cook

RSIS Commentary | 9 April 2024

SELECTED PUBLICATIONS

Guidance on sexual, reproductive, maternal, newborn, child and adolescent health in humanitarian and fragile settings: A scoping review

With COVID-19, conflict and climate change threatening to reverse decades of progress, the need for tailored guidance for women, children and adolescents in humanitarian and fragile settings is urgent. This report analyses the current state of health resources.

Mehr Gul Shah et al.

BMJ Global Health | 2024

Informing decisions on cash programming approaches: Building the evidence base to support shelter and settlements in humanitarian crises

This report looks into the use and impact of cash assistance to support shelter and settlement. Based on interviews with experts in the field, it gathers evidence that can be used to create guidance and tools for humanitarian practitioners who work in shelter.

Shelter Cluster

2024

EVENT & ANNOUNCEMENT

Finance to advance urban resilience and sustainability action

The webinar explores how local governments can augment financing options to strengthen urban resilience and better protect their citizens and cities' basic services and critical infrastructure by tapping into more diverse sources of risk reduction funding.

Recorded Webinar

2024

MIGRATION



NEWS & COMMENTARIES

Mama, come home: Can the Philippines bring back its migrant workers?

The remittances by overseas Filipino workers have risen over the years and has rebounded after the COVID-19 pandemic. While they have brought significant economic gains, this has also resulted in a brain drain and strained family ties due to prolonged separations.

Mara Cepeda

The Straits Times | 6 April 2024

EU passes asylum and migration pact after eight years of deadlock

Changes to EU's migration laws have been passed with an aim to fast-track asylum procedures, tighten screening systems and return those who do not qualify for international protection. Civil society groups have criticised the changes as a step back for human rights.

Lisa O'Carroll

The Guardian | 10 April 2024

How growing hostility in South Africa impacts South-South migration

As one of the three major migration corridors in the Horn of Africa, the southern route to South Africa is often poorly documented and understood.

Obi Anyadike

The New Humanitarian | 9 April 2024

Migrant workers who helped build modern China have scant or no pensions, and can't retire

Chinese workers from rural villages who have travelled to find work in cities are struggling to find jobs in a slowing economy as they get older. With the downturn in China's real estate market, jobs in the construction sector have become scarce, and older workers are left on the shelf.

Ken Moritsugu

Associated Press | 29 March 2024

SELECTED PUBLICATIONS

International Migration Vol. 62 (2) April 2024

In this bimonthly issue of current migration issues, topics of articles include the settlement and integration services during the pandemic, multi-level governance gaps in the labour market integration of highly skilled refugees, and cross border mobility.

International Organization for Migration
2024

Mobility Shutdown: The Impacts of COVID-19 on Migration in Asia and the Pacific

In preparation for future pandemics and crises, this report examines the impact of COVID-19 lockdowns on migrants and health systems of countries in Asia and the Pacific. It includes a discussion on digital health credentials and cross border movement, and the effects of travel measures on labour policies.

Migration Policy Institute
2024

EVENT & ANNOUNCEMENT

Conceptualising Migration Brokerage in (Im)Mobile Times

This workshop discusses the multiple roles of various migration brokers and the relationships between them and the state. Within the migration ecosystem, there is a wide range of brokerage actors such as recruitment agencies, informal recruiters, transport providers and immigration lawyers.

Hybrid Event
25 - 26 April 2024