

### NTS BULLETIN

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### Food Security and SDGs in Times of Disruption

### By Jose Ma Luis Montesclaros

"A world free of hunger by 2030" was set in 2016 as the second Sustainable Development Goal (SDG). Today, with five years remaining until the deadline, modest progress can be observed in that as much as 2.7 million people globally are still unable to afford a healthy diet, representing approximately 35% of the world population. It is timely to reflect on the issue of economic food access as World Hunger Day is celebrated this month as well.

Within Southeast Asia, in fact, there was an <u>increase</u> in the number of people unable to afford a healthy diet from 2017 to 2022. The countries contributing to this increase include the Philippines, Lao PDR and Myanmar. Each of these countries can be seen as cases for better understanding the nuances of achieving the SDGs amidst disruptions.

The experiences of the Philippines and Lao PDR of rapid food price inflation reveal countries' vulnerabilities to perturbances in global food supply chains. This was a consistent finding by the IMF in its review of the <a href="Philippines">Philippines</a>' food inflation history in 2000-2023, where demand-driven factors, owing to monetary policy and domestic preferences, were outweighed consistently by supply-side disruptions including food export bans by source countries. A commonality between these two countries is their lower purchasing power, as lower-middle-income countries, and their high levels of food import reli-

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ance. The <u>recent tariff wars</u>, including between the US and China, further complicates pre-existing supply-driven inflation.

Myanmar's food price inflation experience reveals the difficulties of addressing hunger within conflict settings. Even as the country produces most of its rice as a key staple and is a net rice exporter, the issue lies more in food distribution and access, with over 3.5 million people impacted by displacement amidst armed conflict and violence. One report by the WFP showed that prices of food and other basic staples in the country increased by as much as 30 percent from January 2024 to January 2025, for instance.

These cases point to two potential policy implications in moving closer to achieving SDG2. Firstly, <u>strengthening regional production</u> and trade could help create a layer of buffer to augment the region amidst geopolitical disruptions. In practice, this implies mobilising resources to promote agricultural development regionally, supporting especially the far-flung and capital-scarce regions which possess the natural resources (e.g., favourable land and weather) but lack the financing to activate these resources.

Secondly, in conflict settings, it is equally important to clear the way for international aid to enter and reach the communities in need. One study of the <u>Turkey earthquake</u> for instance showed that the presence of non-profit and other organisations, in helping to direct food supplies, contributes to reducing the risks of food insecurity in disaster struck areas. This suggests the

need to explore intersections between <u>humanitarian</u> <u>diplomacy</u> in conflict disaster settings, and the unique challenges of ensuring sufficient food distribution in such settings. Another study revealed that in some cases, aid-in-cash may be <u>more responsive</u> than aid-in-kind, owing to problems of entry for the latter. These present early learning points to build on in improving regional food resilience amidst disasters.

As early as 2023, it was already recognised that SDGs are mostly offtrack and unlikely to be met by 2030. Nonetheless, regional initiatives in promoting regional food security are critical in providing a counterbalance of stability and resilience amidst geopolitical disruptions as well as in the presence of domestic conflict and disaster settings.

### SUGGESTED READINGS

Chatham House, ORF, CARI, and RSIS. (2023). "The SDGs are not on track: Here is what the world should do." *Global Perspectives*, 10 October 2023.

Htet Oo Linn and Elise Gibergues-Newton. (2025). "Myanmar on the brink as conflict fuels hunger." World Food Programme News, 29 January 2025.

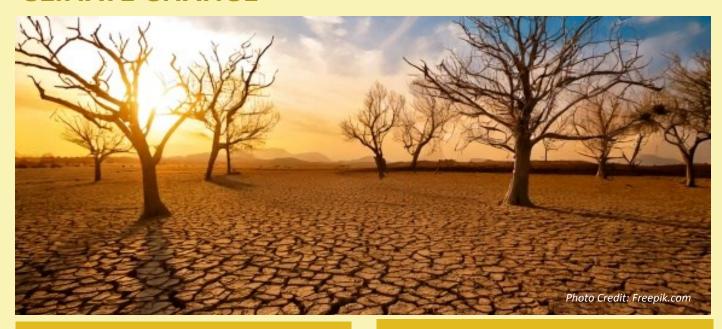
International Monetary Fund. Asia and Pacific Dept. (2024). "Inflation in the Philippines: Supply or demand driven?" *IMF Country Report No.* 24/352.

Muhammet Ali Çakir, et al. (2025). Post-disaster food safety and food security: An example of the Türkiye earthquake. *Food Security*, 22 April 2025.

Jose Ma. Luis Montesclaros. (2025). "Food Security as supply security: Geopolitical implications for ASEAN." RSIS Annual Review 2024



### CLIMATE CHANGE



### **NEWS & COMMENTARIES**

### World's richest 10% caused two thirds of global warming: Study

The world's wealthiest 10 per cent of individuals are responsible for two thirds of global warming since 1990. How the rich consume and invest has substantially increased the risk of deadly heatwaves and drought. Owners of capital could be held accountable for climate impacts through progressive taxes on wealth and carbon-intensive investments.

#### AFP/ec

Channel News Asia | 7 May 2025

### UK experiments to reflect sunlight one step closer

The Advanced Research and Innovation Agency (ARIA) is funding nearly £60m that could allow real-world experiments, including in the UK. As part of the Exploring Climate Cooling programme, projects in Solar Radiation Modification (SRM) will involve trying to thicken Arctic sea ice and make clouds more reflective.

#### Simon King

BBC | 7 May 2025

### Singapore to start deploying funds for clean energy infrastructure in Asia: MAS

Singapore will in the coming months be ready to deploy part of the US\$500 million (S\$646 million) it had set aside as initial funding for green projects in the region, with the set-up of a new Fast-P office to advance a scheme announced in 2023.

#### Shabana Begum

The Straits Times | 8 May 2025

### Climate crisis threatens the banana, the world's most popular fruit, research shows

Rising temperatures, extreme weather and climate-related pests are pummeling banana-growing countries such as Guatemala, Costa Rica and Colombia, reducing yields and devastating rural communities across the region.

#### Nina Lakhani

The Guardian | 12 May 2025

#### **SELECTED PUBLICATIONS**

# Effective emergency management prevented larger catastrophe after climate change fueled heavy rains in Central Mississippi river valley adaptation

The study finds that climate change amplified the heavy rainfall leading to the recent floods in Arkansas. It further highlights the effectiveness of the US National Weather Service (NWS) in providing early warnings for the floods, which allowed state and local emergency departments to prepare, inform the public, and evacuate those at highest risk.

#### Ben Clarke, et al.

World Weather Attribution | 2025

# Anthropogenic climate change contributes to wildfire particulate matter and related mortality in the United States

The study finds that climate change contributed to approximately 15,000 wildfire particulate matter deaths over 15 years with interannual variability ranging from 130 to 5100 deaths and a cumulative economic burden of \$160 billion.

### Beverly E. Law, et al.

Communications Earth & Environment, 6, 336 | 2025

#### **EVENT & ANNOUNCEMENT**

### **Sixth Global Climate and SDG Synergies Conference**

The Sixth Global Conference on Strengthening Synergies between the Paris Agreement and the 2030 Agenda for Sustainable Development is a key platform to accelerate integrated climate and sustainable development action. The conference will bring together policymakers, experts, and stakeholders to drive transformative solutions for a more sustainable future.

### Copenhagen, Denmark

27-28 May 2025

### **ENERGY SECURITY**



#### **NEWS & COMMENTARIES**

### Indonesia plans 10 GW nuclear power in major renewable energy push

Russian state nuclear firm Rosatom, China National Nuclear Corporation, Britain's Rolls Royce, France's EDF and the US small modular reactor firm NuScale Power Corporation have shown interest in Indonesia's nuclear power ambitions

#### Reuters

The Business Times | 1 May 2025

### Nuclear v renewables: The coal mining town caught in Australia's climate wars

Ahead of the election on 3 May, each party insisted that their visions are the best way to both fulfil Australia's commitment to net zero emissions by 2050 and tame rising power bills.

#### Kelly Ng

BBC News 1 1 May 2025

### Asia leads decarbonisation push to build green hydrogen economy

Singapore, Japan and China are leading the charge; Singapore's Sembcorp, for example, has projects at home and abroad to promote a cleaner, more sustainable alternative to fossil fuels. **Vipul Tuli** 

The Business Times | 5 May 2025

### Australians choose batteries over nuclear after election fought on energy

When asked about "the use of nuclear energy as one of the ways to provide electricity for the U.S," 61 percent in the Gallup poll said they "strongly favor" or "somewhat favor" it.

Jess Davis and Jo Lauder ABC News | 6 May 2025

### SELECTED PUBLICATIONS

# Indonesia's RDE program: A multifaceted approach to nuclear energy development encompassing human resource building, public acceptance, and technological innovation

Indonesia faces the challenge of balancing energy development with environmental conservation. The Experimental Power Reactor (RDE) symbolizes progress toward sustainable energy solutions, reducing reliance on fossil fuels while prioritizing environmental protection.

### Djarrot Wisnubroto, et al.

Nuclear Engineering and Technology, Vol. 57, No. 8 | 2025

### Stringent environmental policies: How they shape the future of nuclear energy generation

This research argues that stringent environmental policies lead to a decline in long-term nuclear energy generation. Nonetheless, the environmental policy does not affect short-term nuclear energy generation.

#### Chuan Zhang, et al.

Nuclear Engineering and Technology, Vol. 57, No. 9 | 2025

#### **EVENT & ANNOUNCEMENT**

### Global Critical Minerals Outlook 2025: Report Launch This event launches the 2025 edition of the IEA's annual Global Critical Minerals Outlook which includes a detailed assessment of the latest market and investment trends, along with their implications for critical mineral security.

Livestream and Recorded

21 May 2025

### **FOOD SECURITY**



### **NEWS & COMMENTARIES**

Rice crisis: Japan imports grain from South Korea for first time in more than 25 years

Japan imported rice from South Korea for the first time since 1999 to quell growing consumer anger and curb soaring prices of domestically produced rice. Record-breaking temperatures and rise in consumption by record numbers of tourists have previously caused Japan's rice stockpile to deplete and prices to rise, despite the government's attempts to relieve the pressure. Justin McCurry

The Guardian | 22 April 2025

World food prices rise for third straight month

The Food and Agriculture Organization (FAO) said that the international food price index was higher by 7.6 per cent in April 2025, compared with April last year. Global food prices increased for the third straight month, largely driven by higher meat, dairy products and cereal prices. The price movements can also be attributed to currency fluctuations and uncertainty in world markets amidst tariff policy adjustments.

Shagun

DowntoEarth | 3 May 2025

ADB support for food security to reach \$40 billion by 2030

The Asian Development Bank (ADB) has recently announced plans to expand its support to nutrition and food security in Asia and the Pacific by \$26 billion. The programme will help the Asia and Pacific region to produce a variety of nutritious food, mitigate environmental impacts, generate jobs and promote more sustainable agricultural supply chains through policy support and financing for companies and governments.

Asian Development Bank

4 May 2025

Africa launches system to improve food security

The Kampala Declaration on Building Resilient and Sustainable Agrifood Systems in Africa marks a pivotal step toward transforming the continent's agriculture to address food insecurity, economic stability and climate change. The declaration highlights a 10-year roadmap (2026–2035) with the objective of increasing agrifood output by 45%, tripling intra-African trade in agrifood products, reducing post-harvest losses by 50% and mobilising \$100 billion in investments.

Sharon Nakola

China Daily | 5 May 2025

### **SELECTED PUBLICATIONS**

Towards climate-smart agriculture: Strategies for sustainable agricultural production, food security, and greenhouse gas reduction

The impact of climate change is projected to cause reductions in global crop yields and increase food insecurity, while rising greenhouse gas (GHG) emissions will further exacerbate the crisis. Climate-smart agriculture (CSA) presents an approach to build climate resilience through sustainable practices which reduce agriculture's greenhouse gas emissions while enhancing crop productivity.

Wogene Kabato, et al. Agronomy | 2025

Post-disaster food safety and food security: An example of the Türkiye earthquake

This descriptive and cross-sectional study examined the risk levels affecting food safety and security in foods distributed to earthquake victims by organizations. It finds that organisations which did not the control the distribution and supplies of food were more likely to see higher food security and food safety risks. Thus, "post-disaster food insecurity leads to challenges in accessibility, acceptability, utilization, and availability, significantly affecting vulnerable populations.

**Muhammet Ali Çakir, et al.** Food Security | 2025

### **EVENT & ANNOUNCEMENT**

RSIS-ISEAS-Yusof Ishak Institute Webinar on "Will the Tariff War Lead to Another Global Food Crisis?

The recent tariff wars are upturning global trade; will these lead to another global food crisis impacting Southeast Asia similar to the 07-08 global food price crisis? This timely webinar will discuss this important question, and provide insights on achieving food supply chain resilience for ASEAN member states amidst disruptions in international trade.

Webinar

29 May 2025, 9:30am-11:00am, GMT+8 (Singapore Time)

### **HEALTH SECURITY**



### **NEWS & COMMENTARIES**

### Philanthropic bodies should help fund R&D on treatment of mosquito-borne diseases: Experts

At the Philanthropy Asia Summit 2025, a call was made to philanthropic organisations to fund dengue vaccine trials, as climate change is expected to put more people at risk of dengue in coming decades, especially in Southeast Asia.

Zhaki Abdullah

The Straits Times | 5 May 2025

### Shingles vaccine can lower heart disease risk by 23%, new study finds

A new study by the Center for Digital Health at Kyung Hee University Medical Center in South Korea found that people who receive the shingles vaccines have a 23% lower risk of cardiovascular events, with the protective benefit lasting up to eight years after vaccination.

Corrie Pelc

Medical News Today | 9 May 2025

### Vet Talk: Can antibiotic-resistant bacteria be shared between pets and their owners?

Antimicrobial resistance (AMR) resulting from the inappropriate use of antimicrobials e.g. antibiotics have caused rapid evolution of antibiotic-resistant bacteria, even among pets. This can be transmitted to pet owners and should be managed by sourcing pets from registered breeders, heeding vet advice on culture and sensitivity testing, following instructions on antibiotics, and avoiding raw diets.

Suria Fabbri

The Straits Times | 11 May 2025

### Visualizing the mechanics of hormone-driven gene activation: Insights into breast cancer

Kanazawa University's Nano Life Science Institute has developed a technique of using high-speed atomic force microscopy to visualise new molecular details of hormone signaling, with important implications for diseases like breast cancer.

Asia Research News

12 May 2025

#### SELECTED PUBLICATION

## Cardiac and liver impairment on multiorgan MRI and risk of major adverse cardiovascular and liver events

Cardiovascular disease and metabolic dysfunction-associated steatotic liver disease have high mortality and morbidity and can benefit from integrated prevention.. The study suggests a dual role for magnetic resonance imaging (MRI) in integrated prevention pathways, whereby increased cardiovascular mortality was associated with both cardiac and liver impairment.

**Edward Jackson, et al.** Nature Medicine | 2025

# The effect of the quality of the national health security systems in 12 countries on the prevalence of suicide crisis syndrome during the COVID-19 pandemic

The study analysed 12 countries' health systems including access to health services and extent of health systems being overwhelmed. More robust health systems led to better response and resulted in less severe suicide crisis syndrome (SCS) during the pandemic, highlighting the importance of health security.

Ferdinand Bortenschlager, et al.

BJPsych Open Cambridge University Press | 2025

#### **EVENT & ANNOUNCEMENT**

#### Singapore Mental Health Conference (SMHC) 2025

Organised by the National Healthcare Group, the Institute of Mental Health (IMH), the National Council of Social Service (NCSS), the Agency for Integrated Care (AIC) and the Health Promotion Board (HPB), the conference brings together mental healthcare professional, community partners, and government representatives, to share latest mental health research and networking opportunities.

Singapore

16-17 July 2025

### **BIOSECURITY**



#### **NEWS & COMMENTARIES**

## WHO member states conclude negotiations and make significant progress on draft pandemic agreement

After more than three years of intensive negotiations, WHO Member States took a major step forward in efforts to make the world safer from pandemics, by forging a draft agreement for consideration at the upcoming World Health Assembly in May

**World Health Organization** 16 April 2025

### Videos reveal lax biosecurity in New York poultry markets amid bird flu outbreaks

Video footage obtained by BBC Science Focus reveals that innercity poultry markets in New York are failing to take recommended precautions to protect staff and the public, as bird flu cases in the state continue to rise.

Tom Howarth

BBC Science Focus | 26 April 2025

### **USDA** withdraws plan to limit salmonella in raw poultry

The USDA's Food Safety and Inspection Service scrapped the proposal in response to concerns from chicken and turkey producers that it would be too costly to implement.

Sarah Zimmerman

Food Dive | 29 April 2025

### Biosecurity in the age of AI: Risks and opportunities

The biotechnology-AI nexus can potentially strengthen biosecurity but amplify biological risks if misused. There is an urgent need for integrated governance frameworks to manage the dual-use nature of AI-powered biotechnology tools and regional cooperation through ASEAN to future-proof biosecurity governance in Southeast Asia.

Julius Cesar Imperial Trajano and Jeselyn

RSIS Commentary | 5 May 2025

#### SELECTED PUBLICATIONS

## A targeted vaccination strategy: Integrating vaccines into biosafety, biosecurity, and one health initiatives

This paper aimed to provide an overview regarding the crucial roles of vaccines in biosafety, biosecurity, and One Health approaches, as well as to highlight the importance of targeted and personalised strategies to improve the effectiveness of vaccination programs. Laith AL-Eitan, et al.

Journal of Biosafety and Biosecurity, Vol. 7 | 2025

### Laboratory biosafety risk assessment: A critical component of avian influenza

This paper argued that assessment of laboratory bio-risk in dealing with samples containing viruses with pandemic potential, is a key but frequently overlooked consideration, which has often been performed curiously due to lack of resources, understanding, or time.

Georgia McCluskey, et al.

Journal of Biosafety and Biosecurity, Vol. 7 | 2025

### **EVENT & ANNOUNCEMENT**

### 2025 ABSANZ Annual Conference — Futureproofing Biosafety: Adapting to a World of Disruption and Change

The annual ABSANZ conference will explore a range of topical issues, including the integration of artificial intelligence in laboratories, advancements in synthetic and de novo biology, the development of new containment technologies and adapting to evolving regulatory landscapes, among other critical topics.

Sydney, Australia

27-31 October 2025

### **MIGRATION**



### **NEWS & COMMENTARIES**

### **British PM Starmer's new policies to drive down** net migration

British Prime Minister Keir Starmer has announced policies and reforms to significantly reduce net migration in a bid to end the country's "failed experiment in open borders". These reforms could reduce the number of people arriving by around 100,000 or more per year.

### **The Straits Times**

12 May 2025

### Myanmar refugees in Thailand face health crisis after USAid withdrawal – in pictures

Thousands of people who fled Myanmar's civil war to refugee camps in Thailand are struggling to find healthcare after the freeze on US foreign aid spending. In the Thai border region of Tak, clinics inside refugee camps were forced to abruptly shut

### Wissarut Weerasopon

The Guardian | 14 May 2025

### Human rights groups warn of 'surge' in migrant worker deaths in Saudi Arabia

According to Human Rights Watch and FairSquare migrant construction workers in Saudi Arabia are dying from preventable workplace accidents in the country, as it prepares to host the World Cup in 2034.

### **Caroline Hawley**

BBC | 14 May 2025

### UN migration body says nearly 1.9M displaced Syrians returned home

According to International Organization for Migration (IOM), about 1.87 million displaced Syrians have returned to their communities, but economic challenges and a lack of essential services continue to hinder recovery efforts.

#### **Anadolu Agency**

14 May 2025

### **SELECTED PUBLICATIONS**

### Accessibility of protection systems for children in the context of migration in South-east Asia

This study evaluates the implementation of existing child protection systems and initiatives among the ASEAN Member States and examines the barriers children face in accessing these systems. It focuses specifically on Indonesia, the Lao PDR, Malaysia and Thailand.

### IOM

2025

### Innovative approaches to formalization in Asia and the Pacific: Background report to ILO Asia and the Pacific tripartite regional knowledge sharing forum

Asia and the Pacific is home to around 1.3 billion informal workers, representing approximately 66 per cent of total employment in the region. This report shares insights from a Tripartite Regional Knowledge Forum in Bangkok, Thailand held in November 2024 that discussed innovative approaches that can help to accelerate the transition towards formality.

#### ILO

2025

### **EVENT & ANNOUNCEMENT**

### Children's Season: Get Curious! Building Our Singapore

This programme organised by the National Museum as part of the SG60 celebrations, is designed for children ages 3 and above, inviting families to discover the impact of early and present-day migrants in shaping the nation through installations and workshops.

#### **Singapore**

24 May - 29 June 2025