

Indo-Pacific Era Strategic Centre

Mapping the Geopolitics of the Next Indo-Pacific Century.

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Planetary Health and SDGs: Navigating Geopolitical Shifts for a Sustainable Future

By Pey Peili

Planetary health, defined as the interdependence between human health and the natural systems that sustain life on Earth, has emerged as a critical framework for addressing global challenges. It is deeply intertwined with several of the United Nations' Sustainable Development Goals (SDGs), particularly SDG 3 (Good Health and Well-being), SDG 13 (Climate Action), and SDG 15 (Life on Land). However, recent geopolitical shifts—ranging from escalating climate crises to conflicts over resources—are reshaping how nations approach these goals.

Planetary health underscores the importance of maintaining ecological balance to ensure human well-being. For instance, SDG 3 focuses on ensuring healthy lives and promoting well-being at all ages. Yet, environmental degradation, such as deforestation and air pollution, exacerbates diseases like respiratory illnesses and vector-borne infections. According to the World Health Organization (WHO), climate change alone could cause approximately [250,000 additional deaths](#) annually between 2030 and 2050 due to malnutrition, malaria, diarrhea, and heat stress.

Similarly, SDG 13 emphasises urgent action to combat climate change and its impacts. Climate change has already led to [extreme weather events of increasing unpredictability and difficulty in management](#), including hurricanes, droughts, and wildfires, which threaten ecosystems and livelihoods. In 2023, Canada experienced one of its worst wildfire seasons with the burning of [15 million hectares of land](#), and [California in the United States](#) saw burning of [10,000 homes](#) in 2025, leading to issues of air pollution and displacement of residents. In 2023, Asia remained the region hit hardest by

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extreme weather events with [more than 2000 recorded fatalities and nine million people](#) directly impacted by floods and storms. Such events highlight the interconnectedness of planetary health, climate stability, and the security, safety, and wellbeing of human lives.

SDG 15 aims to protect, restore, and promote sustainable use of terrestrial ecosystems. Deforestation rates remain alarmingly high, driven by agricultural expansion and illegal logging. The Amazon rainforest, often referred to as the "lungs of the planet," [lost an area equivalent to seven times the size of London in just one year](#), according to satellite data analysed by Brazil's National Institute for Space Research (INPE).

Recent geopolitical changes add complexity to achieving these SDGs. One significant development is the growing competition for [critical minerals essential for renewable energy technologies, such as lithium and cobalt](#). As countries transition away from fossil fuels, demand for these resources has surged, leading to [disputes over mining rights and supply chain dominance](#). For example, [tensions between China and Western nations](#) over rare earth elements underscore the need for equitable resource management. These developments directly impact the progress on SDG 13 and mismanagement of mining activities could exacerbate degradation of SDG 3 and SDG 15.

To accelerate progress toward the SDGs amid these challenges, stakeholders must adopt innovative strategies:

1. Invest in Circular Economies: Transitioning to circular economies—where waste is minimised, and materials are reused—can reduce the region's existing resource dependencies. Circular economies supported by bilateral and multilateral collaborative efforts can be scaled up to counter global fragmentation and facilitate shared responsibility.

2. Enhance Local Resilience: Communities vulnerable to climate impacts particularly in Asia and ASEAN require

support to build resilience. This includes national and regional investing in early warning systems, climate-smart agriculture, disaster preparedness infrastructure, and community engagement in policymaking.

3. Promote Equitable Financing Mechanisms: Wealthier nations must fulfill their [commitment to provide climate finance](#) to developing countries and especially those in Asia and ASEAN disproportionately vulnerable to climate shocks. Innovative funding models, such as green bonds and carbon pricing, can also mobilise private sector investment.

Planetary health serves as a unifying lens through which we can address the SDGs amidst evolving geopolitical landscapes. By strengthening international collaboration, embracing sustainable practices, and empowering local communities, stakeholders can overcome barriers to achieving these goals. The window of opportunity is narrowing, but concerted efforts can still secure a healthier and more intergenerationally equitable future.

SUGGESTED READINGS

Asian Infrastructure Investment Bank (2025) "Infrastructure for Planetary Health". Asian Infrastructure Finance 2025.

Planetary Health Alliance (2025). "Special Report: Strengthening Planetary Health in Asia." Planetary Health Alliance, February 24, 2025.

Mahmood, Jemilah, Renzo R. Guinto, Oliver Lacey-Hall, Maisarah Faiesall, Sibrandes Poppe-ma, and Elizabeth Lee. "Safeguarding planetary health for Southeast Asia's future children." *The Lancet Planetary Health* 6, no. 4 (2022): e295-e296.



Photo Credit: Adobe Firefly Generated Images

CLIMATE CHANGE



Photo Credit: Freepik.com

NEWS & COMMENTARIES

A tiny rainforest country is growing into a petrostate. A US oil company could reap the biggest rewards

Guyana now has the world's highest expected oil production growth through 2035. While the government says environmental protection and an oil industry can go hand-in-hand, critics say it's a dangerous path in a warming world, and the benefits may ultimately skew toward Exxon - not Guyana.

Laura Paddison

CNN | 30 March 2025

National heatwave response plan a signal that Singapore should start taking heat seriously

Singapore recently unveiled heatwave plan sends a strong signal that extreme heat is something we all need to prepare for. Cooling centres will be opened islandwide just before a heatwave kicks in to provide a respite from the heat.

Shabana Begum

The Straits Times | 5 April 2025

We passed the 1.5C climate threshold. We must now explore extreme options

One of the greatest challenges of climate science today is that many of the necessary levers to regain control are uncomfortable, even controversial. Ideas such as thickening sea ice to prevent collapse or brightening marine clouds to reflect sunlight may once have seemed extreme. Yet, as crisis is escalating, these possibilities must be explored.

David King

The Guardian | 7 April 2025

Global temperatures at near historic highs in March: EU monitor

Global temperatures hovered at historic highs in March, prolonging an extraordinary heat streak that has tested scientific expectations. In Europe, it was the hottest March ever recorded by a significant margin, driving rainfall extremes across a continent warming faster than any other.

Reuters/lec

Channel News Asia | 8 April 2025

SELECTED PUBLICATIONS

State of the global climate 2024

The publication provides a summary on the state of the climate indicators in 2024 with sections on key climate indicators, extreme events and impacts. The publication also provides most recent finding on climate related risks and impacts including on food security and population displacement.

World Meteorological Organization
2025

Achieving equitable, climate-resilient water and sanitation for frontline communities: Water, sanitation, and climate change in the United States series, part 3

Frontline communities are resilient, and they are finding ways to overcome the myriad barriers and challenges they face from climate change to create equitable, climate-resilient water and sanitation access and systems. This report aims to identify documented strategies and approaches for achieving equitable, climate-resilient water and sanitation for frontline communities in the US.

Shannon McNeeley, et al.

Pacific Institute | 2025

EVENT & ANNOUNCEMENT

10th Our Ocean Conference Korea 2025

The 10th Our Ocean Conference has chosen the theme 'Our Ocean, Our Action' to promote global actions for a sustainable ocean. In particular, this 10th conference will discuss 'Digital Oceans' as a special agenda, focusing on means to drive action. Ocean Digital is a concept that combines the ocean industry and digital technology, serving as an implementation tool to achieve a sustainable ocean swiftly and systematically.

Busan, South Korea

28-30 April 2025

ENERGY SECURITY



Photo Credit: Adobe Firefly Generated Images

NEWS & COMMENTARIES

Small nuclear reactors a viable option for Singapore, but managing waste is key: Energy experts

To harness this powerful source of clean energy, questions about how to manage radioactive waste and earn public acceptance must first be answered, observers told CNA.

Charmaine Jacob and Davina Tham

CNA | 19 February 2025

Asia's coking coal imports slide in February, but recovery looms

Asia's seaborne imports of metallurgical coal dropped to the lowest in three years in February amid a slump in demand from top buyers China and India.

Clyde Russell

Reuters | 12 March 2025

India's energy policy stuck between renewables and fossil fuels

India is investing heavily in renewable energy, but also wants to produce and purchase more oil and gas as India's government does not see its oil interests as being at odds with its green energy transition.

Calvin Yang and Rebecca Bundhun

CNA | 25 March 2025

6 in 10 now support nuclear energy: Gallup

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.

Tara Suter

Institute for Energy Economics and Financial Analysis | 9 April 2025

SELECTED PUBLICATIONS

Tsunami and seiche hazards in site evaluation for nuclear installations

This IAEA Safety Report presents detailed methodologies and recent case studies for the design and safety assessment of coastal nuclear installations, especially with a view to providing defence in depth.

International Atomic Energy Agency

2025

Smart Grid, Smart FiT: A data-driven approach to optimize microgrid energy market

This research presents a comprehensive data-driven framework for determining FiT rates by analysing trends in demand, renewable energy generation, and temperature over time.

Md. Ahasan Habib and M.J. Hossain

Energy Policy, Vol. 203 | 2025

EVENT & ANNOUNCEMENT

The State of Energy Innovation Report Launch

Around the world, there is broad agreement on the importance of boosting technological innovation to address major global energy challenges. At the same time, energy innovation is attracting significant attention from policy makers for its role in driving economic growth and competitive advantage.

Recorded webinar

2 April 2025

FOOD SECURITY



Photo Credit: Adobe Firefly Generated Images

NEWS & COMMENTARIES

In Hainan and Jiangsu, China, FAO Director-General outlines vision of agrifood systems transformation for improved nutrition and food security

In a recent speech, the FAO Director-General set out a multi-layered vision for the transformation of agrifood systems to be more efficient, more inclusive, more resilient and more sustainable. Globally, these systems employ over 1.23 billion people - nearly one-third of the global workforce - and provide livelihoods for 3.83 billion people living in households that depend on them.

Qu Dongyu

UN Food and Agriculture Organization | 28 March 2025

India's agricultural future hinges on a delicate balance between global trade integration and domestic food security

For decades, India's agricultural policies have aimed at ensuring food self-sufficiency while also expanding exports. However, as global trade tensions escalate including "reciprocal tariffs," Indian farmers face mounting challenges that make it harder to export; at the same time, the demand for lower tariffs by India exposes its farmers to greater international competition.

Dhriti Mukherjee Pipil

DowntoEarth | 1 April 2025

ASEAN's principle of collective self-resilience: Foundation for better preparing collectively for future crises?

ASEAN's existing mechanisms need to be strengthened and complemented with new coordination approaches to effectively balance national sovereignty with regional cooperation in preparing for future food crises; this calls for a revisit of the principle of collective self-resilience as a foundational framework for regional food security.

Jose Ma. Luis Montesclaros

Counterpoint Southeast Asia | 2 April 2025

Collateral effects of the tariff war on ASEAN food security

Beyond the direct effects of the ongoing trade war, a key risk to the ASEAN economies lies in the collateral impact on food supplies and prices, especially if China and other "tariffed" countries react and seek alternative sources of food.

Jose Ma. Luis Montesclaros and Kayven Tan

RSIS Commentary | 10 April 2025

SELECTED PUBLICATIONS

Accelerating the digitalisation of the agriculture and food system in the ASEAN region

This article documents experiences and insights on the use of digital technologies and innovation in the agriculture and food system. It encourages fostering public-private partnerships for funding and collaboration, and developing more practical policies for technology adoption, among others.

Masanori Kozono, et al. (eds).

Economic Research Institute for ASEAN and East Asia | 2024

Governance and resilience as entry points for transforming food systems in the countdown to 2030

Due to complex interactions, changes in any one area of food systems are likely to impact—and possibly depend on—changes in other areas. This article presents the first annual monitoring update of the indicator framework proposed by the Food Systems Countdown Initiative, with new qualitative analysis elucidating interactions across indicators.

Kate R. Schneider et al.

Nature Food | 2025

EVENT & ANNOUNCEMENT

The benefits and pitfalls of stockpiles to manage prices and access to critical resources

The panel discussed the opportunities and pitfalls of using public stockpiles for different commodities, in different contexts and for different purposes. Experts debated whether OECD countries should pursue and jointly manage stockpiles for selected critical raw materials, what they can learn from experiences in agriculture or other sectors such as energy, and the role of transparency in softening price shocks and supply disruptions.

Recorded Webinar

25 March 2025

HEALTH SECURITY



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NEWS & COMMENTARIES

Multilateral action for a healthy planet and people

The Under-Secretary-General of the United Nations and Executive Director of the UN Environment Programme emphasises the urgent need for multilateral environmental action to address climate change, pollution, and biodiversity loss for their impact on planetary health — health of people and planet.

United Nations Environment Programme

3 April 2025

Managing global biological risks: Towards a security-health coordination framework

The task of securing the world against biological risks is complicated by enforcement and information challenges. A security-health coordination framework is crucial for securing cooperation among a diverse set of actors with different but converging mandates.

Jose Ma. Luis Montesclaros, Jeselyn and Mely Caballero-Anthony

RSIS Commentary | 8 April 2025

Over three million children died in 2022 due to drug resistance: Study

More than three million children, many from Southeast Asia and Africa lost their lives in 2022 due to infections resistant to antibiotics. Overcrowded hospitals, poor sanitation, and weak infection prevention measures have led to rampant antimicrobial resistance infections.

Al Jazeera

13 April 2025

Poor investment in gynaecological cancer research leading to 'crisis for women', experts warn

Women who were diagnosed with gynaecological cancers faced significantly worse outcomes compared to those with more common cancers Australia New Zealand Gynaecological Oncology Group (ANZGOG) called for increased investment in gynaecological cancers.

Celina Edmonds and Elise Worthington

ABC News | 13 April 2025

SELECTED PUBLICATION

Legal elements to operationalise One Health: From principles to practice

One Health through law requires the identification of legal elements and strategies that translate its core principles into legislative terms. The paper suggests a framework with 4 elements, normative integration, multisectoral and multidisciplinary collaboration, stewardship, and recognition of access and participation rights.

Caro, Carmen B.

Research Directions CUP | 2025

Probiotics, gut microbiota and physical activity: A close relationship

The study showed that physical exercise could have effects on the composition of the gut microbiota, and vice versa. Variables of intensity and duration could be the key to a significant modification. The acquisition of a 'friendly' microbiota had a positive impact on the health of the participants and probiotics administration may be a key element to improved physical performance.

Charitos, Ioannis A., et al.

Sports Medicine and Health Science | 2025

EVENT & ANNOUNCEMENT

Asia Summit on Global Health (ASGH)

Organised by the Hong Kong government and trade development council, the event brings together policymakers, experts, and other healthcare stakeholders. The programme includes networking and conference presentations and discussions on topics such as health technology and ageing.

Hong Kong

26-27 May 2025

BIOSECURITY



Photo Credit: Adobe Firefly Generated Images

NEWS & COMMENTARIES

In Japan, fears of ‘hellish pandemic’ mount over virus lab in Nagasaki

An advanced laboratory at Japan’s Nagasaki University specialising in the study of the deadliest viruses known to man has triggered widespread safety concern about the facility’s security despite official assurance.

Julian Ryall

South China Morning Post | 8 February 2025

Marcos seeks intensified biosecurity measures for ASF prevention

President Ferdinand R. Marcos Jr. has directed the Department of Agriculture (DA) to ramp up livestock consolidation and intensify biosecurity measures to control African swine fever (ASF).

Ruth Abbey Gita-Carlos

Philippine News Agency | 1 March 2025

Harnessing innovation and fostering responsible use of life sciences

Flexible training programmes, curriculum on the potential of misuse of DURC or “gain of function” research, strengthened institute ethics and biosafety committees with inclusion of all stakeholders were identified as key steps for the implementation of the WHO framework in this report.

World Health Organization

4 March 2025

Albanese tells Trump that Australia is ‘not negotiating’ on biosecurity, medicines and news

Anthony Albanese has said he will not bend to president Donald Trump after the US trade body placed Australia’s subsidised medicine system, meat and fruit industries and refreshed media bargaining code in its crosshairs for potential tariffs.

Sarah Basford Canales

The Guardian | 1 April 2025

SELECTED PUBLICATIONS

The age of AI in the life science

AI applications in the life sciences have the potential to enable advances in biological discovery and design as a faster pace and efficiency. However, AI-enabled biological tools developed for beneficial applications could potentially be misused for harmful purposes.

Although the creation of biological weapons is not a new concept or risk, the potential for AI-enabled biological tools to affect this risk has raised concerns during the past decade.

National Academies

2025

Emerging biosecurity landscape in Southeast Asia

Against a rapidly changing environment, the concept of security has evolved, encompassing not only traditional human security challenges but also unseen threats. One such novel threat comes from lethal biological diseases, pathogens, toxins and weapons, collectively referred to as biosecurity threats.

Mely Caballero-Anthony, Julius Cesar Imperial Trajano, Jose Ma. Luis P. Montesclaros, and Jeselyn

RSIS | 2025

EVENT & ANNOUNCEMENT

26th Annual Conference of the European Biosafety Association

The conference brings together biosecurity professionals and practitioners from diverse background to network. The programme will cover a wide range of scientific and regulatory aspects that have an impact on biosecurity and laboratory biosecurity.

Maastricht, the Netherlands

13-16 May 2025

MIGRATION



Photo Credit: Wikimedia Commons

NEWS & COMMENTARIES

6 foreign worker dorms with total capacity of 45,000 beds to be built in next few years

Six new dormitories with a combined capacity of about 45,000 beds will be built in the next few years. The Singapore government has been working with dormitory operators to increase the supply of beds.

Esther Loi

The Straits Times | 8 April 2025

Recent immigration brought a population rebound to America's major metro areas, new census data show

The rise of immigration in the last few years bolstered the US population growth, particularly in large metro areas, playing a key role in the recovery after the COVID-19 pandemic.

William H. Frey

Brookings | 10 April 2025

US and Pakistan threaten Afghan migrants with deportation

The Trump administration has halted temporary protections for thousands of Afghans in the US, forcing them to return to Taliban-controlled Afghanistan. In Pakistan, Afghan migrants are being deported, with more than 24,665 Afghans leaving the country since 1 April.

Australian Broadcasting Corporation

12 April 2025

UN Criticizes Mexico Over Lack of Justice for Missing and Massacred Migrants

The United Nations (UN) Committee on the Protection of the Rights of All Migrant Workers has pressed Mexico for its efforts in justice for missing and killed migrants. The UN committee requested specific information on the actions Mexico has undertaken to investigate human rights violations against migrants.

Carola Guerrero De Leon

The Latin Times | 14 April 2025

SELECTED PUBLICATIONS

Labour migration in times of labour shortages in Austria

In the EU, Austria is one of the countries with the highest rate of job vacancies. This study examines the role of migration in addressing labour shortages and challenges in the recruitment of labour from abroad. With an ageing population and increased digitalisation, has resulted in a declining labour force and changing requirements for professional qualifications.

Leila Hadj Abdou and Prisca Ebner

IOM | 2025

Funding climate mobility projects: Key players and strategies for growth

Development funding for climate mobility has increased and comes from a growing number of sources. While international donors have long supported responses to displacement driven by natural disasters, climate change is reshaping the challenge at hand.

Lawrence Huang and Samuel Davidoff-Gore

MPI | 2025

EVENT & ANNOUNCEMENT

The Immigration Consensus Revisited – Singapore Studies Webinar

Research on immigration policy preferences in the US finds near consensual support for highly educated immigrants working in high-skill occupations. In Singapore, this recorded presentation investigates whether the same immigration consensus holds.

Recorded Video

2 April 2025