

NTS BULLETIN

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Priorities for Food System Transformation in Responding to the COVID-19 Pandemic



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WHILE THERE HAVE been discussions on how countries can adapt to the "new normal" in the post-pandemic phase, the data show that the COVID-19 pandemic remains a critical issue today. This is because of its ability to mutate, which manifests its traits of resilience and adaptation.

The pandemic's trait of adaptation is something which, perhaps, society should develop, in the case of food systems transformation. The societal response should be to adapt to the "normal" in the current pandemic phase, recognising that the COVID-19 pandemic could continue to evolve, and that further pandemics can emerge, vaccines notwithstanding.

Achilles' heel in supply chains, not food production

The direction of food system transformation should address the key challenges brought about by the pandemic. First, the pandemic's main impact is not in the rural food production process. The risk of infection in food and agricultural production is not as high as in the case of the industrial and services sectors in cities. This is because there is a greater expanse of space in rural areas where food is produced, with a lower density of individuals and thus, a lower risk of person-to-person infection.

Rather, society's key problem has been in the <u>supply chains</u>, which have indirect impacts on the food production process. The downstream aspect of

the supply chain includes processing, retail and distribution of food, post-production.

Second, during a pandemic, when individuals cannot go out to eat in restaurants, and especially in the case of restaurants that are not yet digitally integrated (i.e., the absence of ecommerce which is needed for food deliveries), the restaurants' ability to reach consumers is significantly reduced. This results in a reduction in restaurant sales, and in turn, leads restaurants to reduce their demand for farm goods. In turn, farmers will inevitably set lower production targets by ordering fewer seeds, reducing the size of the area planted, and minimising the use of fertilizers and other production inputs.

One way that the pandemic impacts food supplies therefore is not in making rural production of food more difficult, but rather, in how it short-circuits the system of incentives influencing food production. Over time, the tussle between locking down and opening up, which we can observe today with the 2nd and 3rd waves of the pandemic, can lead to further perturbations and coordination challenges tween producers and consumers. These factors cause more periods of food price inflation as producers adjust, given the long gestation periods required and the seasonality of food production.

Digital integration as imperative

The challenges above occur as a result of the failure of the retail and distribution sector to digitally integrate. However, this will not happen, if consumers themselves are not in the habit of making internet purchases, which in turn draws from the insufficiency of telecommunications and transport infrastructure in less developed areas. These challenges therefore provide a direction for a needed digital transformation in the food sector, in response to future novel contagious diseases similar to the COVID-19 pandemic.

Suggested Readings

- Aday, S. and Aday, M.S. (2020). Impact of COVID-19 on the food supply chain. Food
 Quality and Safety, Volume 4, Issue 4, December 2020:167–180.
- Joiner, J. and Okeleke, K. (2019). *E-commerce in agriculture: new business models for smallholders' inclusion into the formal economy*. GSM Association.
- Montesclaros J.M.L. and Caballero-Anthony, M. (2020). "Lessons from Covid: Tackling disease with a city-by-city approach", *The Interpreter*, 29 October.
- Odonkor, A.A. (2020). "Challenges and prospects in Southeast Asia's e-commerce market," CGTN, 24 September.
- Wouters, O. J., Shadlen, K. C., Salcher-Konrad, M., Pollard, A. J., Larson, H. J., Teerawattananon, Y., & Jit, M. (2021). Challenges in ensuring global access to COVID-19 vaccines: production, affordability, allocation, and deployment. *The Lancet*.

CLIMATE CHANGE

NEWS & COMMENTARIES

Halting the vast release of methane is critical for climate, U.N. Says

The global methane assessment reflects a growing recognition that the world needs to start reining in planet-warming emissions more rapidly, and that abating methane will be critical in the short term.

Hiroko Tabuchi

The New York Times

24 April 2021

This coral refuge may disappear if climate change brings cooler winters

The Red Sea has been distinguished as a climate change refuge due to the corals' exceptional tolerance to increasing seawater temperatures. But winters even 1°C cooler than the current average could be stressful for corals.

Priya Shukla

Forbes

28 April 2021

For Southeast Asian nations, Summit a good start but holistic approach needed

By focusing only on the development of clean energy and pursuing a fragmented approach to environmental protection through nature-based solutions, the underlying drivers of environmental degradation are left untouched.

Margareth Sembiring

The Council on Foreign Relations

28 April 2021

Climate change: World's glaciers melting at a faster pace

Nearly all documented ice streams have lost almost 270 billion tonnes of ice a year over the opening two decades of the 21st Century. The meltwater produced now accounts for about a fifth of global sea-level rise.

Jonathan Amos

BBC

28 April 2021

India's deepening water crisis at the heart of farm protests

India's water crisis looms over an agrarian crisis that has been brewing for decades. At its heart is a conundrum: The government has been subsidising the cultivation of rice in northern India, but such water-intensive crops have dramatically lowered the groundwater table.

AP

Channel News Asia

30 April 2021

World must go beyond 'hot air' at COP26 climate summit: UK's Johnson

Over the next six months, relentless ambition and determination is needed to support net-zero emission transition, kickstart a green industrial revolution, and meet the long overdue US\$100 billion-a-year commitment.

Reuters, The Straits Times

6 May 2021

SELECTED PUBLICATIONS

Warming projections global update

Climate action announcements at US President Biden's Leaders Summit on Climate, together with those announced since September last year, have improved warming estimate by 0.2°C to be 2.4° C. It is still well above the Paris Agreement's 1.5°C limit.

Climate Action Tracker

2021

The United Nations world water development report 2021: Valuing water

Differences in the way water is valued occur not only between stakeholder groups but are widespread within them. Common valuation needs to be developed to improve water resources management.

United Nations Educational, Scientific and Cultural Organization

Paris: UNESCO

2021

EVENTS & ANNOUNCEMENTS

United Nations World Oceans Day 2021: "The Ocean: Life and Livelihoods"

With 90% of big fish populations depleted, and 50% of coral reefs destroyed, we are taking more from the ocean than can be replenished. We must create a new balance, rooted in true understanding of the ocean and how humanity relates to it.

Virtual Event

8 June 2021

London Climate Action Week 2021

London Climate Action Week is the annual event bringing together world-leading climate professionals and communities across London and beyond to find practical solutions to climate change. It is the largest independent climate change event in Europe.

Virtual Event

26 June - 4 July 2021

ENERGY SECURITY

NEWS AND COMMENTARIES

Philippine power capacity to double by 2030

Most of the installed capacity is expected to be sourced from thermal power and renewable power. For renewable power, capacity is seen surging more than 300% to 22.2 GW from last year's 5.3 GW. Thermal power capacity will likely increase by 67% to 30.7 GW by 2030, largely driven by coal fired thermal power plants

Louise Maureen Simeon

Philippine Star

20 April 2021

India closer to building world's biggest nuclear plant

The plant would provide 10 GW of electricity, roughly enough for 70 million households. Construction is expected to take 15 years, but the site should be able to start generating electricity before its completion

AFP

The Straits Times

23 April 2021

Lessons from Singapore: How to generate solar power in a city without much space

Singapore is betting on floating solar farms and vertical panels to increase its clean-energy supplies and cut carbon emissions, a model that could work in other densely populated cities, urban experts said.

Rina Chandran, Reuters World Economic Forum

23 April 2021

Asia's energy transition needs to pick up pace

While the restructuring of Asia's energy system is underway, the pace has been relatively slow. Phasing out coal, accelerating the deployment of renewable energy sources, developing hydrogen, and improving energy efficiency are key to lowering Asia's carbon footprint

Krytal Tan

The Business Times

5 May 2021

Colonial pipeline outage in the United States underscores risks to energy supplies

This episode underlines that energy systems have to become more cyber resilient – to withstand, adapt to and rapidly recover from incidents and attacks, while preserving the continuity of critical infrastructure operations. There are a number of different approaches that governments can take to enhance cyber resilience.

Kristine Petrosyan

International Energy Agency

11 May 2021

Why China believes it's go big on carbon emission cuts or go home

If China succeeds, its ambitions would effectively shave 0.2 to 0.3 °C from global warming forecasts for 2100, down to around 2.4 to 2.5 °C above pre-industrialised levels. Carbon neutrality will also help China achieve energy self-reliance, as domestic renewable projects will have to make up the majority of energy infrastructure by 2060.

Chen Gang

Channel News Asia

14 May 2021

SELECTED PUBLICATIONS

Global energy review 2021: Assessing the effects of economic recoveries on global energy demand and CO2 emissions in 2021

The report explores whether the rebound in activity risks pushing CO2 emissions to a new high and to what degree new policies targeting a sustainable recovery are able to curb a rebound in emissions.

International Energy Agency

Paris: IEA

Faster or slower decarbonization? Policymaker and stakeholder expectations on the effect of the COVID-19 pandemic on the global energy transition

The COVID-19 pandemic might have tremendous consequences on decarbonisation efforts across the globe. Understanding governments' policy action in the short and medium term is key to assess whether the response to the crisis will crowd out or fast-track decarbonisation efforts.

Silvia Pianta, et al.

Energy Research & Social Science, Vol. 76

2021

EVENTS & ANNOUNCEMENTS

Updating the ASEAN Power Grid for Increased Renewables

The ASEAN Centre for Energy organised a webinar that tackled next steps in implementing the interconnection process, solar and wind potential generation, project opportunities in Southeast Asia, and collaboration among international organisations and donors on financing and building interconnected grid systems.

Recorded Webinar

20 April 2021

High-Level Discussion on the Role of Critical Minerals in Clean Energy Transitions

This International Energy Agency's conference offered the most comprehensive analysis to date of the complex links between critical minerals and the prospects for a secure, rapid transformation of the energy sector.

Recorded Conference

12 May 2021

FOOD SECURITY

NEWS & COMMENTARIES

China's food security policy is shaking up commodity trading

China's COFCO International (CIL), which became the leading exporter of soy from Brazil in 2018, is further expanding, with fears it may lock out other food producers from entering the China market

Paula Dupraz-Dobias SwissInfo.ch 24 April 2021

China food security: Why the nation's 'food crisis' is more of a livestock feed challenge

As meat figures as a staple in the meals of the present-day higher-income generation in China, there is an increased demand for feeds (soybeans and corn), beyond what is domestically available in China. Many fear China's increase in feed imports may lead to soaring corn and soybean import prices internationally.

Cissy Zhou South China Morning Post 27 April 2021

SFA to pump \$23 million into R&D to boost food security

S\$23 million is being invested by the Singapore Food Authority in 12 research proposals, including a collaborative project between Nanyang Technological University and Panasonic Farm Factory Solutions on real-time monitoring of crop health and nutrient analysis of hydroponics crops.

Audrey Tan The Straits Times 27 April 2021

Sheikh Mohammed launches Food Tech Valley in Dubai

A new food tech hub was launched by the Prime Minister of UAE and Ruler of Dubai to help the UAE meet its National Food Security Strategy 2051 targets. It seeks to serve as 1) a hub for agricultural technology and engineering, 2) a food innovation centre, 3) R&D facilities, and 4) an advanced smart food logistics hub.

Varun Godhino Gulf Business 2 May 2021

Rice is keeping world's food crisis from getting worse

Ironically, whereas rice price inflation contributed to the food crisis in 2007/08, rice is seen as a source of stability in the present-day as it is not as easily convertible to feeds, unlike corn and soy whose prices are currently less stable as they are also used for feed purposes.

Randy Thanthong-Knight and Pratik Parija The Japan Times 7 May 2021

SELECTED PUBLICATIONS

Global report on food crises 2021

155 million people are acutely food insecure in over 55 countries/ territories, which is the highest level in the past 5 years, driven by persistent conflict, pre-existing and COVID-19-related economic shocks, and weather extremes.

Food Security Information Network

Myanmar: Analysis of the economic fallout & food insecurity in wake of the takeover

Since the military junta on 1 February 2021, and given the COVID-19 pandemic and the recent labour strikes, the market prices of rice and cooking oil have increased by 5% and 18% respectively. Around 1.5 to 3.4 million people are expected to suffer food insecurity on top of the 2.8 million estimate prior to the coup.

World Food Programme 2021

EVENTS & ANNOUNCEMENTS

Global Food Security Symposium 2021

This event discussed high-impact solutions that have potential to radically transform the food system into a more sustainable, inclusive, nutritious, and resilient one. It also discussed the key impacts on people, the planet, and shared prosperity.

Recorded Webinar

11 May 2<mark>021</mark>

How to enable finance in game-changing food systems solutions

During the plenary session of the independent Food System Summit Dialogue, speakers discussed how to enable finance in gamechanging food systems solutions.

Recorded Webinar

1 May 2021

HEALTH SECURITY

NEWS & COMMENTARIES

Vaccine politics: Compulsory licensing in SE Asia?

Compulsory licensing offers an attractive option for Southeast Asian governments to bypass patent protections and produce desperately needed COVID-19 vaccines for their populations while navigating the geopolitical risks of relying on Chinese vaccine donations.

Hannah Sworn

RSIS Commentary

23 April 2021

How Al may hold the key to faster rare disease diagnosis

Leveraging artificial intelligence can shave years off the difficult process of diagnosing a rare disease. By safely sharing patient data, more will benefit globally.

Yann Le Cam, Gregory Moore, and Wolfram Nothaft MedCity News

11 May 2021

WHO says India Covid variant of 'global concern'

The World Health Organization (WHO) has classified the coronavirus variant first found in India last year as a "variant of global concern". It said preliminary studies show the B.1.617 mutation spreads more easily than other variants and requires further study.

BBC

11 May 2021

What is the deadly 'black fungus' seen in Covid patients in India?

A rare "black fungus" that invades the brain is being increasingly seen in vulnerable patients in India, including those with COVID-19, as the health system continues to struggle in the midst of the pandemic.

Melissa Davey

The Guardian

11 May 2021

Covid-19: Infection of vaccinated persons possible but benefits of jabs outweigh risks, says Gan Kim Yong

The benefits of the two COVID-19 vaccines approved in Singapore continue to outweigh the risks, Health Minister Gan Kim Yong said. In the meantime, intense studies into infections of vaccinated persons and new coronavirus variants are under way.

Ng Jun Sen

Today Online

11 May 2021

China's Sinovac Covid-19 vaccine found highly effective in real world study

Sinovac Biotech Ltd's vaccine is wiping out COVID-19 among health workers in Indonesia, an encouraging sign for the dozens of developing countries reliant on the controversial Chinese shot, which performed far worse than Western vaccines in clinical trials.

The Straits Times

12 May 2021

SELECTED PUBLICATIONS

Gaps in health security related to wildlife and environment affecting pandemic prevention and preparedness, 2007–2020

This article describes and quantifies the extent of wildlife and environment sector inclusion in country evaluation and prioritisation tools for health security. It provides practical recommendations for global and national action to improve pandemic prevention and preparedness

Catharine Machalaba et al.

Bulletin of the World Health Organization, Vol. 99, No. 5 2021

Emergency response and the need for collective competence in epidemiological teams

This study assesses the challenges met by, and needs of, the epidemiology emergency response workforce.

Amy Elizabeth Parry et al.

Bulletin of the World Health Organization, Vol. 99, No. 5 2021

EVENTS & ANNOUNCEMENTS

IANPHI COVID-19 Webinar: The Role and Challenges of National Public Health Institutes in Vaccination

This webinar facilitated a high-level discussion on the role of national public health institutes in the COVID-19 vaccination and challenges they have to face.

Recorded Webinar

15 April 2021

One-year Anniversary of the ACT-Accelerator with Dr Tedros

This virtual event marked the one-year anniversary of the Access to COVID-19 Tools Accelerator, and brought together ACT Accelerator co-founders, Facilitation Council co-chairs and Principals from the partner agencies to reflect on progress, challenges and the path forward.

Recorded Webinar

23 April 2021

HUMANITARIAN ASSISTANCE AND DISASTER RELIEF

NEWS & COMMENTARIES

Drones, data and humanitarian action

Air operation has been important to humanitarian action since it was first used as a tool of evacuation and delivery of supplies in the early 20^{th} century. While drones are not likely to replace airplanes, there are specific areas in which their use makes humanitarian operations more efficient

International Committee of the Red Cross

27 April 2021

This is the time to ramp up, not decrease funding for women and girls

The particular effects of COVID-19 on women have reversed decades development gains in several areas including job security and domestic violence. As such, rather than further decrease support to an already underfunded areas, investment needs to be ramped up in order to prevent even more losses in these area.

Phumzile Mlambo-Ngcuka UN Women

3 May 2021

Australia to create disaster recovery office after spate of natural disasters

An attempt at hastening the delivery of government aid, the government announced the creation of National Recovery and Resilience Agency following one of recommendations of the bushfire royal commission. The Australian government is also establishing an Australian Climate Service in an attempt to improve collection of data to inform emergency management policy.

Cameron Gooley

Australian Broadcasting Corporation News

4 May 2021

Six ways Southeast Asia strengthened disaster risk management

As one of the most hazard-prone regions in the world, Southeast Asia has been strengthening its disaster risk management with the help of organisations such as the ADB. These improvements include enhanced risk identification and analysis, improved access to disaster risk finance, and scaling up of community-based and gender-focused activities.

Asian Development Bank

4 May 2021

'From complex to chaotic': Myanmar coup shrinks frontline aid

Since the 1 February coup in Myanmar, the country has sunk deeper into crisis. With renewed conflict across the country, humanitarian aid has dwindled—in terms of access, capacity and supplies.

Emily Fishbein & Nu Nu Lusan The New Humanitarian

6 May 2021

COVID is a global humanitarian emergency – act like it

The COVID-19 pandemic is not merely a global health crisis, but a global humanitarian emergency. The humanitarian community cannot focus on only short-term lifesaving responses, but needs to also think about long-term development.

Ayoa<mark>de Alakija</mark> The New Humanitarian

13 May 2021

SELECTED PUBLICATIONS

From digital promise to frontline practice: New and emerging technologies in humanitarian action

This report examines opportunities for solving technology-related problems across the humanitarian programme cycle, challenges posed by new and emerging technologies in humanitarian contexts, and enablers of technology in the humanitarian sector.

Leonie Arendt-Cassetta UN OCHA

2021

Reducing the humanitarian financing gap: Review of progress since the report of the high-level panel on humanitarian financing

This report identifies issues that humanitarian actors should pay special attention to when using or deciding to use cash transfers. It explores the challenges faced when evaluating the usefulness of cash assistance for various humanitarian scenarios.

Barnaby Willitts-King and Alexandra Spencer Humanitarian Policy Group

2021

EVENTS & ANNOUNCEMENTS

Greening the Humanitarian Response: Challenges and Opportunities

This webinar discussed what is meant by "greening" the humanitarian response, why humanitarians need to address the environmental impacts of their activities, how the greening agenda can be put into practice, and what benefits can be gained from climate and environment- friendly humanitarian action.

Recorded Webinar

26 April 2021

Technology and Humanitarian Action: From Digital Promise to Frontline Practice

This webinar discussed the promises and pitfalls of new technologies, and how to realise the 'digital promise' for the humanitarian sector.

Recorded Webinar

1 May 2021

MIGRATION

NEWS & COMMENTARIES

No "Us Versus Them": Why equitable inclusion of all migrants in COVID-19 vaccine plans is essential

With COVID-19 not discriminating based on immigration status, the success of national vaccination campaigns depends on how inclusive they are. Without a targeted effort at including vulnerable communities including irregular migrants, any national vaccine campaign is likely to fall short of true success.

Jacqueline Weekers and Michele LeVoy International Organization for Migration

23 April 2021

Life at disaster's edge: What it means to start over – again and again

The recent fires that devastated parts of the refugee camps in Bangladesh are only among the dangers that have hit the refugees living there. The constant dangers faced by these refugees including the monsoon season and risk of human trafficking are making it increasingly clear that the camps are only a temporary solution.

Mohammad Ahtaram The New Humanitarian

6 May 2021

New Covid-19 wave sparks fresh worker exodus from India's cities

With India's surging COVID-19 cases and livelihoods affected by lockdowns, vulnerable migrant workers have been leaving major cities to go back home despite promises of support from local governments.

Sudhi Ranjan Sen & Dhwani Pandya Bloomberg

6 May 2021

Pandemic dramatically alters path of migrant Workers

COVID-19 has caused migrant workers to return to their home countries across Asia, including Nepal. However, the Nepali government's current support services for these workers in terms of reintegration have been largely insufficient, with undocumented workers particularly lacking in reintegration support.

Suswopna Rimal The Asia Foundation

12 May 2021

Defying predictions, remittance flows remain strong during COVID-19 crisis

Despite COVID-19, remittance flows to low-and-middle income countries only decreased by 1.6% compared to 2019 total figures. While remittance inflows increased in some parts of the world including South Asia and the Middle East, there was a significant decrease in East Asia and the Pacific – although inflows were expected to increase as major host economies recover.

World Bank

12 May 2021

Indefinite detention of refugees is unlawful under international law, but Australia has quietly made it legal

With the recent passing of the Migration Amendment Bill 2021, Australia codified the indefinite detention of refugees and asylum seekers into domestic law.

Ben Doherty The Guardian

15 May 2021

SELECTED PUBLICATIONS

Locked down and left out?

Drawing on research from various Red Crescent and Red Cross societies across the world, this report looks at the direct and indirect impacts of COVID-19 on migrants' access to basic services in their host countries. This report also provides recommendations on enabling migrants' access to such services during future health emergencies.

N. Hoagland and A. Randrianarisoa Melbourne: Red Cross Red Crescent Global Migration Lab

2021

Responding to disasters and displacement in a changing climate

By examining the response by National Red Cross and Red Crescent Societies in coordination with governments and other agencies, the report seeks to examine the impacts of displacement on vulnerable populations using case studies from the Asia-Pacific.

International Federation of Red Cross and Red Crescent Societies

2021

EVENTS & ANNOUNCEMENTS

A Transatlantic Roundtable on Human Mobility

This webinar examined the different parts of migration, from the concept of borders to discrimination. With a particular focus on COVID-19, this webinar structured its discussion around the Global Compact on Migration and the New EU Pact on Migration and Asylum.

Recorded Webinar

19 May 2021

Economic Well-being and Integration

This webinar will bring together a panel of experts who will share their insights on the economic well-being and integration of forcibly displaced populations in the context of COVID-

19. The panelists will also discuss the challenges of data collection with displaced populations during the pandemic and the impacts these challenges have had on their research.

Webinar

2 June 2021