



Scaling Up the Sustainable Palm Oil Value Chain through Collective Action

RSPO Annual Roundtable Conference

Prof. Tan Sri Dr. Jemilah Mahmood
29 November 2022

RSPO's impacts – limiting climate change and protecting and restoring nature

Advancing Certification

Since RSPO certification began, global certified area has increased from 125,000 ha over 3 countries in 2008, to 4.5 million ha over 21 countries

Certification Trends

Protecting and Restoring Nature

An area of 301,020 ha, almost 30 times the size of Paris, has been conserved and protected through RSPO certification

Safeguarding Nature

Limiting Climate Change

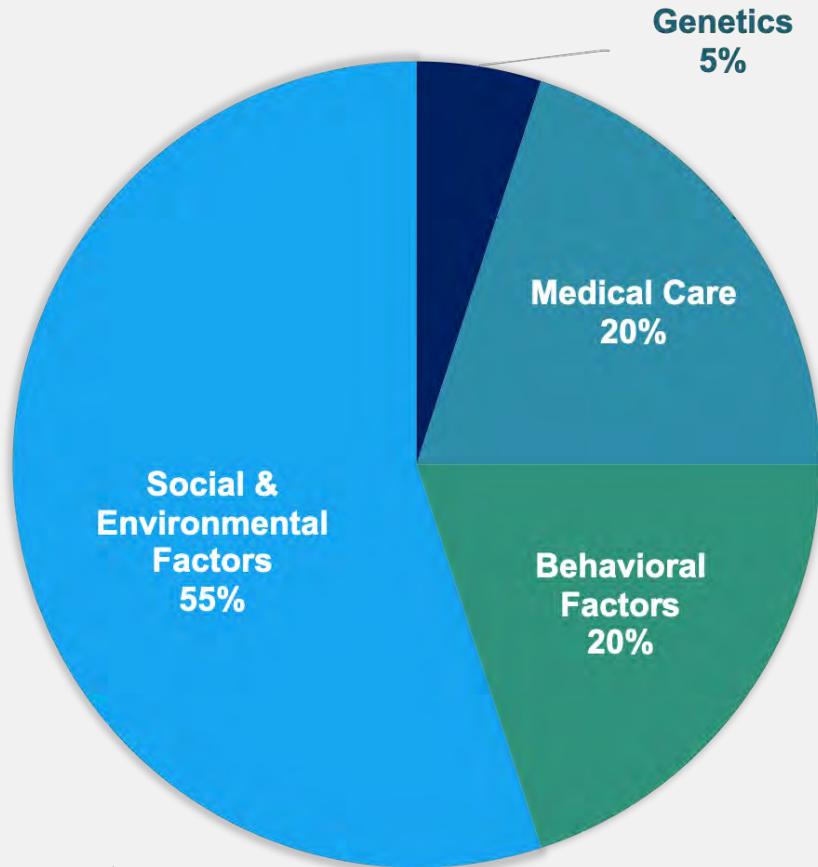
Indicative data, supported by research, shows that CSPO is associated with a lower rate of greenhouse gas (GHG) emissions compared to conventional palm oil

Emissions Management - Mitigation





As a medical doctor, I was tired of treating the symptoms



(Sowada, 2003)

Exhibit 20: Impact by intervention type

Upper Middle Income Country, 2040

Environmental, social and behavioral

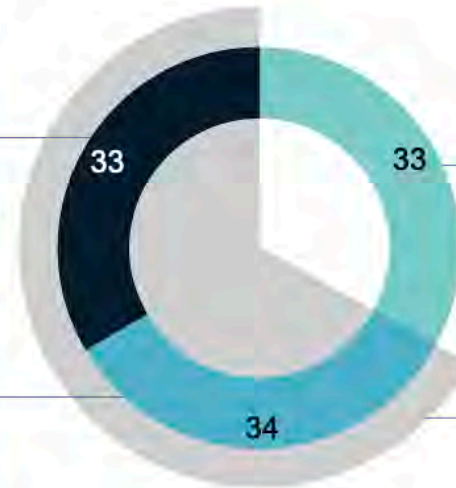
Education for behavioral change	9%
Dietary	4%

Prevention and health promotion

Preventive medication for heart disease, stroke and diabetes	12%
Safer child birth	3%

Therapeutic

Specialist surgery	11%
Psychological therapies	3%
Physiotherapy	3%



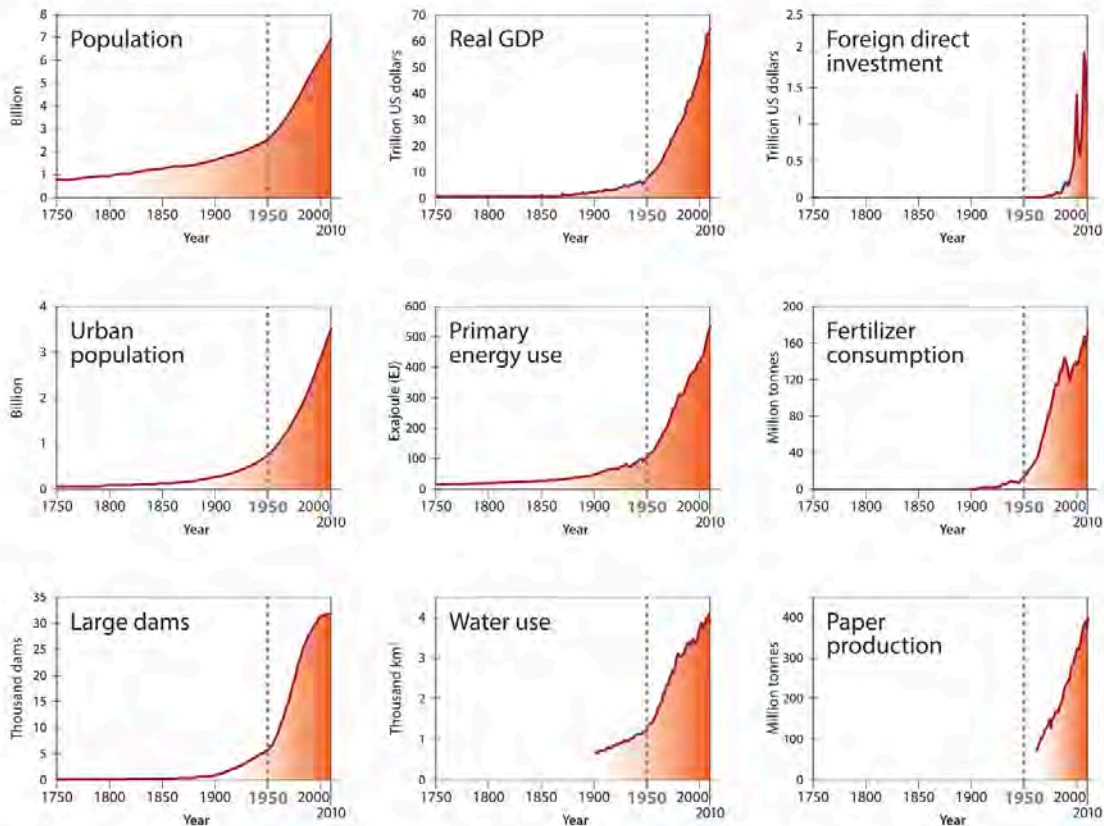
67%

Source: Global Burden of Disease Database 2017 IHME

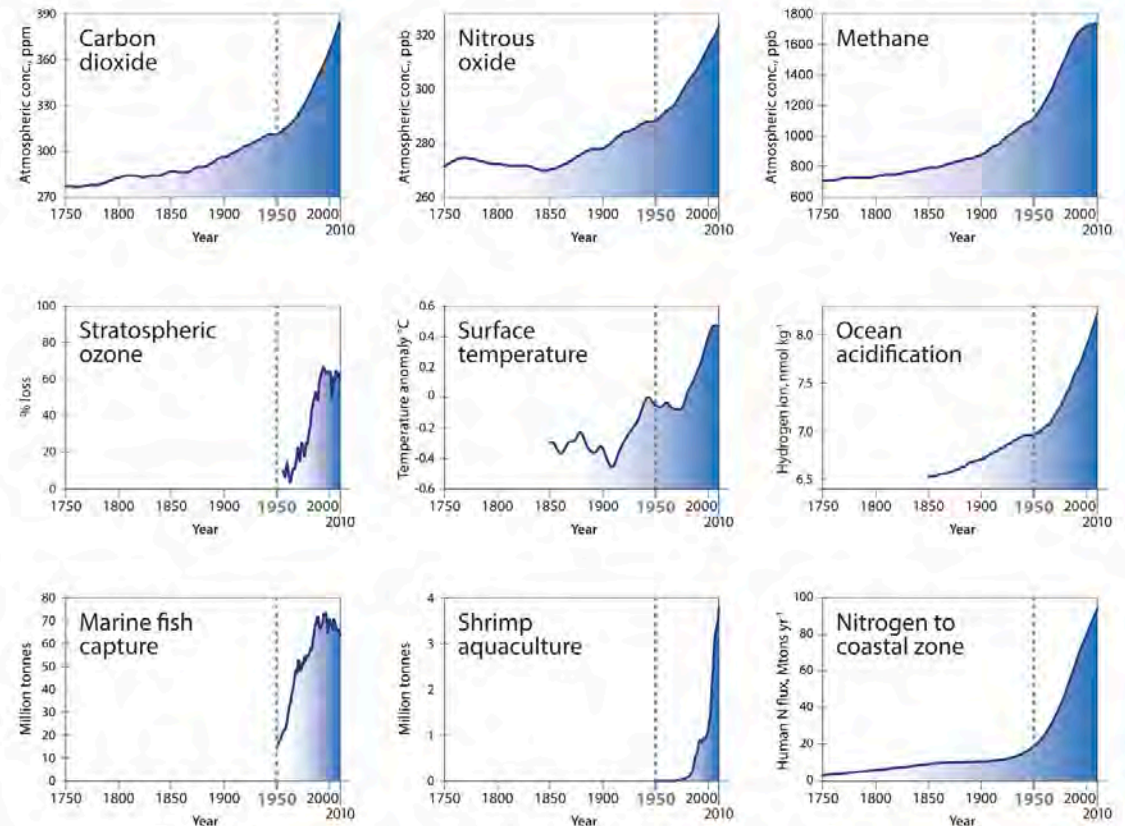
(Malaysia Health System Blueprint, 2021)

The Great Acceleration – climbing up and up, but until when?

Socio-economic trends



Earth system trends



... all at the expense of the planet.



Unchecked climate-change related impacts could cause 250,000 more deaths per year

By 2050, over 40% of world's population could be under severe water stress



Biodiversity loss threatens humanity

Soil degradation leading to loss of 1-2 million hectares of agricultural land per year



Damaging the planet damages human health.



Millions at risk of under-nutrition



Over 150 million at risk for climate-sensitive malaria



10 million children stunted from climate change-related impacts



\$30 billion health costs due to climate change

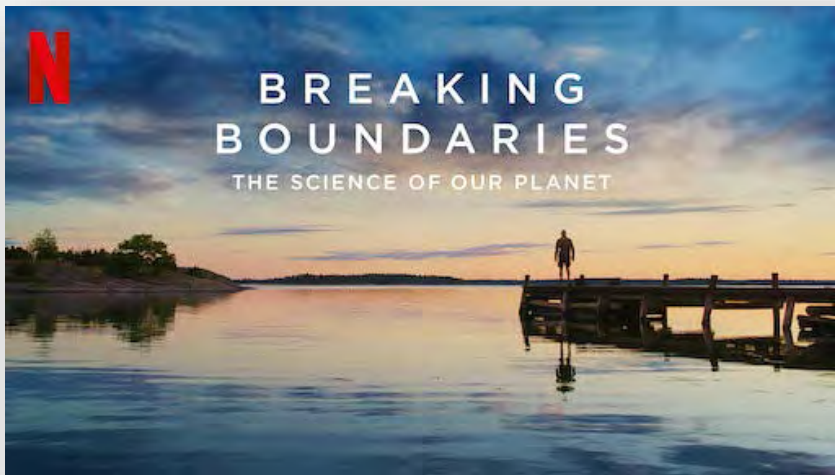


“We have mortgaged the health of future generations to realize economic and development gains in the present.”

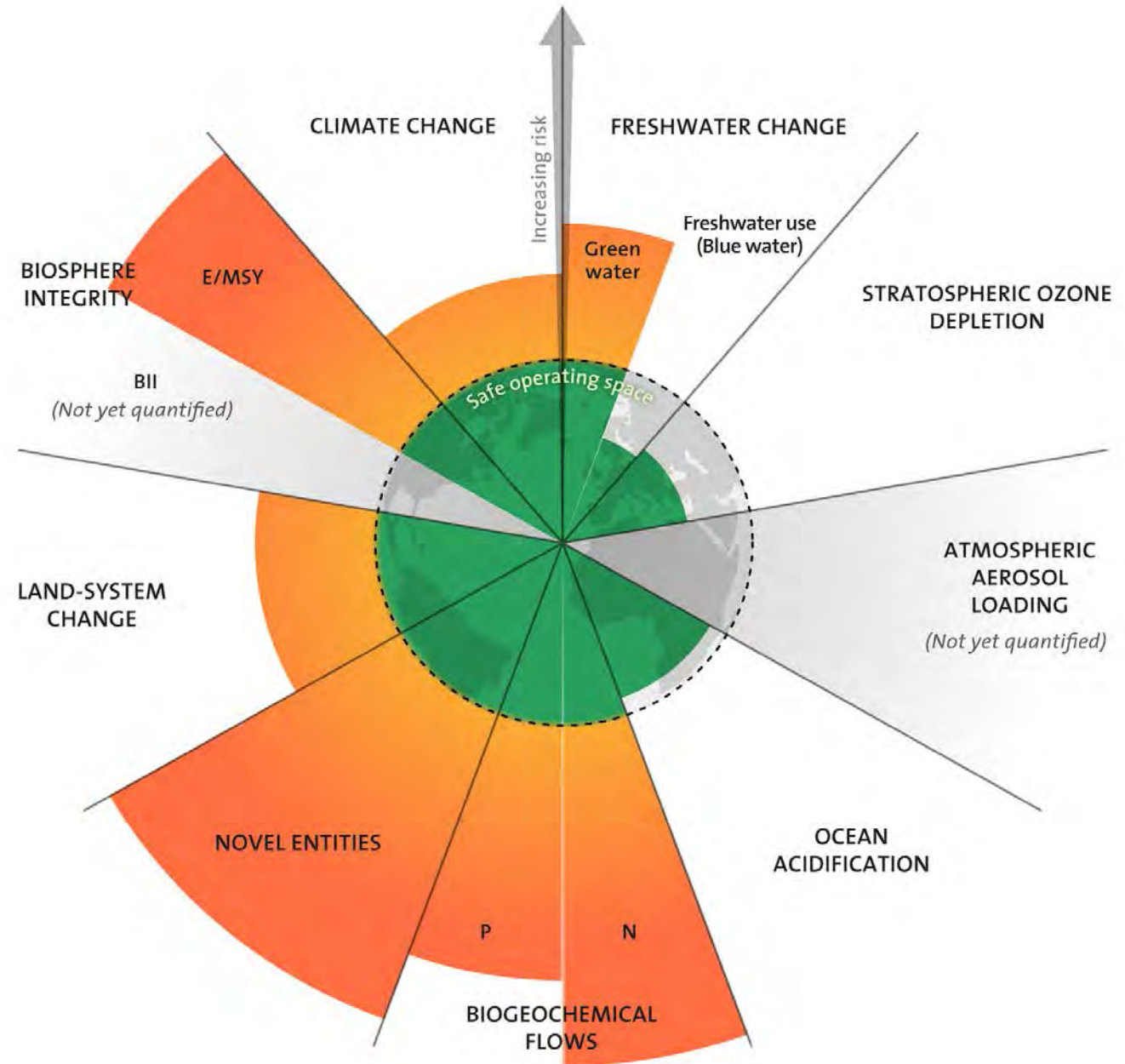
The Rockefeller Foundation-Lancet Commission on planetary health (2015)

Protecting planetary boundaries

6 out of 9 have been breached



(Stockholm Resilience Centre, 2022)



The Rockefeller Foundation–*Lancet* Commission on
planetary health

Safeguarding human health in the Anthropocene epoch:
report of The Rockefeller Foundation–*Lancet* Commission on
planetary health



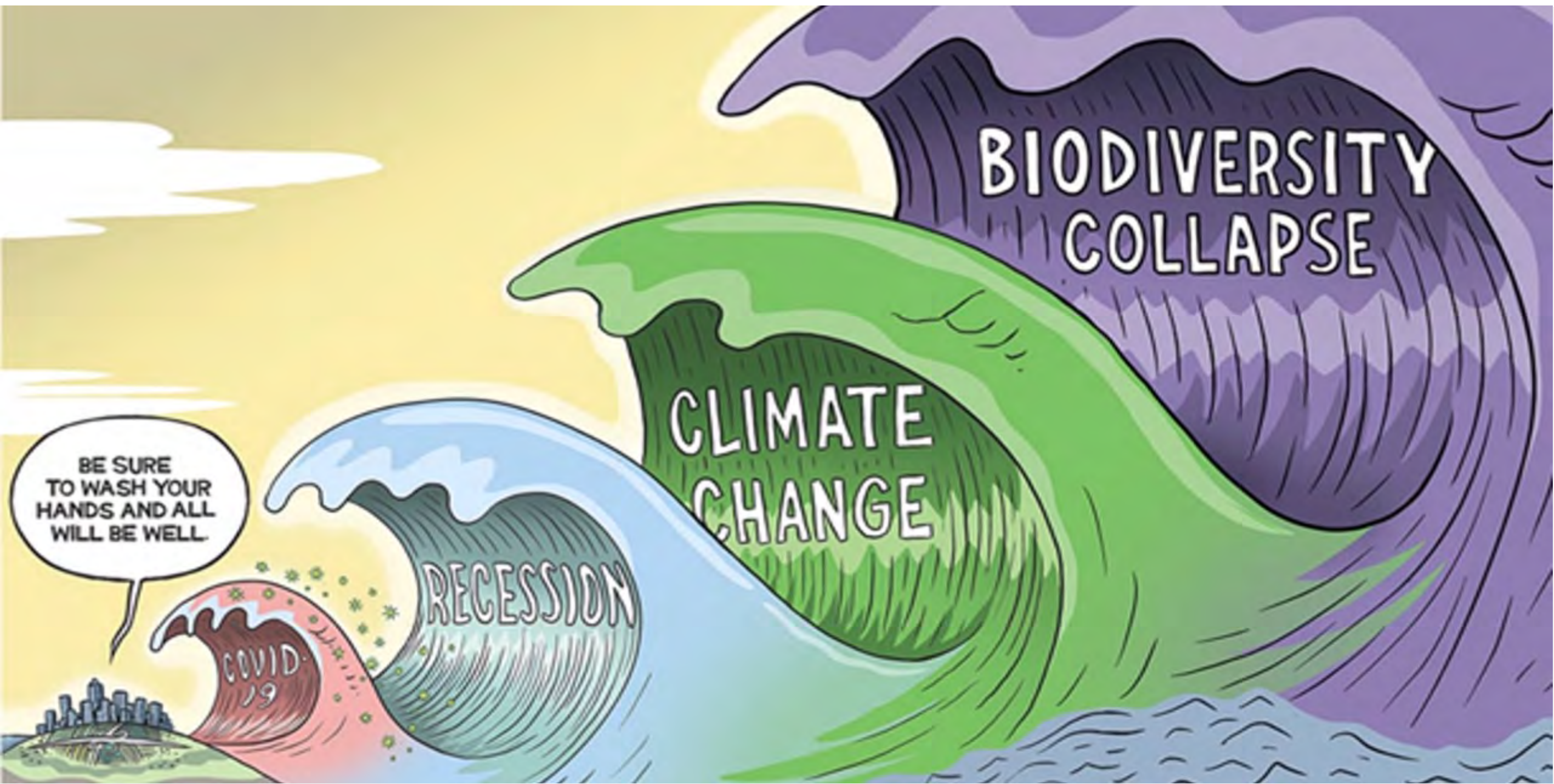
PLANETARY HEALTH

“the health of human civilization and the state of the
natural systems on which it depends”
Lancet-Rockefeller Commission, 2015

“the international and interdisciplinary field focused
on characterizing and addressing the human health
impacts of global environmental change”
Planetary Health Alliance, 2019

Planetary health is a solutions-oriented approach focused on tackling humanity's actions that affect the natural systems so that both people and planet can thrive.

To advance humanity's wellbeing, the declining state of planet Earth can no longer be ignored.



Planetary health is key to preventing infectious diseases.


THOUGHT LEADERS

EARTH DAY

[OPINION] Earth Day at 50: Lessons for the post-coronavirus world

APRIL 22, 2020
RENZO GUINTO



 *'The global COVID-19 response, imperfect it may be, is demonstrating that rapid collaborative action on a planetary scale is possible; hence, there is hope for the climate'*

dating more International

theguardian

The planet's health is essential to prevent infectious disease

The new field of planetary health examines the link between human health and the environment to prevent viral pandemics such as Zika and Ebola



Coronavirus, Flu And Climate Change: Is There A Connection?

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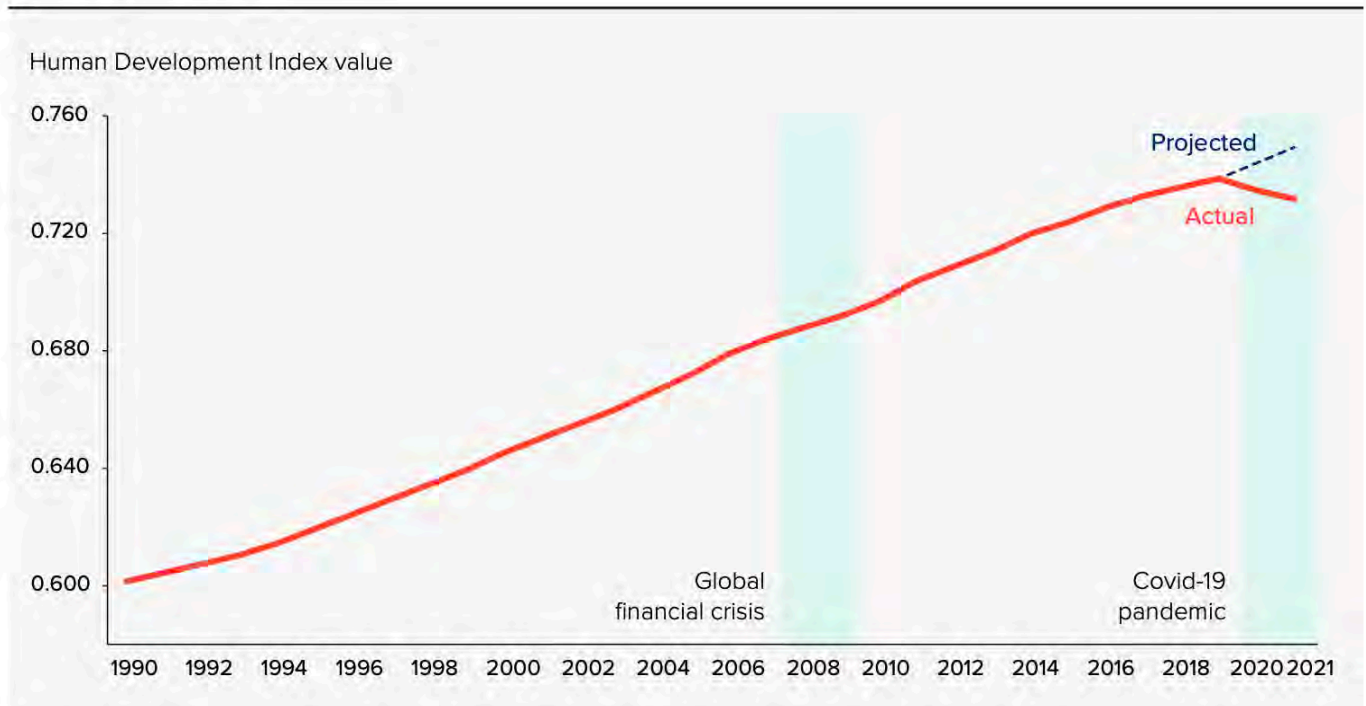
by: [Joris Zuid](#) January 23 2020



The past 2 years have erased the gains of the 5 years prior.



Figure 2 The global Human Development Index value has declined two years in a row, erasing the gains of the preceding five years



Note: The period of the global financial crisis is indicative.

Source: Human Development Report Office calculations based on data from Barro and Lee (2018), IMF (2021c, 2022), UNDESA (2022a, 2022b), UNESCO Institute for Statistics (2022), UNSD (2022) and World Bank (2022c).

UN-REDD PROGRAMME



How deforestation and palm oil plantations impact on the emergence of zoonotic diseases like COVID

Blog | Tue, 08 Jun, 2021 · 10 min read





MONGABAY
NEWS & INSPIRATION FROM NATURE'S FRONTLINE

Did palm oil expansion play a role in the Ebola crisis?


by Emmanuel K. Urey on 14 January 2015



ORIGINAL RESEARCH

WILEY Ecology and Evolution Open Access

Pollination by the locally endangered island flying fox (*Pteropus hypomelanus*) enhances fruit production of the economically important durian (*Durio zibethinus*)

Sheema A. Aziz^{1,2,3,4}  | Gopalasamy R. Clements^{1,5,6} | Kim R. McConkey^{3,7} |
Tuanjit Sritongchuay⁸ | Saifful Pathil⁹ | Muhammad Nur Hafizi Abu Yazid⁹ |
Ahimsa Campos-Arceiz³ | Pierre-Michel Forget² | Sara Bumrungsri⁸

 **REUTERS** World Business Markets Breakingviews Technology Investigations Li

Malaysia confirms more coronavirus cases detention centre



The condition of palm oil workers amidst Covid-19 pandemic

by TPOLS | Sep 2, 2020 | Labour, Migrant Workers, News Update



Summary of Discussion

Contents lists available at ScienceDirect
Social Sciences & Humanities Open
Journal homepage: www.elsevier.com/locate/sshu

The outbreak of Covid-19 in Malaysia: Pushing migrant workers at the margin
Andika Wahab
Institut of Malaysian and International Studies (IKMAS), The National University of Malaysia (UKM), Malaysia

ARTICLE INFO
Keywords: COVID-19, Migrant workers, Irregular workers, Labour stop.

ABSTRACT
Experiences in other countries such as Singapore and the Gulf countries have taught us that precarious living conditions and poor access to health care have contributed significantly to rapid transmission of COVID-19. National policy and measures to flatten the curve of the pandemic require significant consideration of issues facing migrant workers, including fulfilling their basic needs, guaranteeing their welfare and upholding labour standards. In Malaysia, prior to COVID-19 outbreak, migrant workers were already living in cramped workers' accommodation and unsanitary conditions, with poor access to healthcare, further exacerbated by the lack of workers' protection. The implementation of various phases of Malaysia's Movement Control Orders (MCOs) and the way the government addresses the situation facing migrant workers have significant negative consequences on their already precarious living and working conditions. This includes a growing number of positive COVID-19 cases found among migrant workers in May 2020 onwards. This study is a preliminary research, averaging existing secondary sources with a view to generate initial findings for further in-depth research. This study ends with several short-term policy recommendations such as making COVID-19 containment measures a legal requirement, and implementing a nation-wide regularization programme to legitimize the immigration status of undocumented migrant workers.

1. Introduction
World Health Organization (WHO, 2020) declared that older people (60 years and above) are at a greater risk of severe disease following the infection from Coronavirus Disease 2019 (shortly known as COVID-19). In many receiving countries, migrant workers tend to be younger than the local population (Vijay et al., 2020). In Singapore, for example, only those aged below 50 years will be allowed to work as migrant workers in the country. Similarly, in Malaysia, only migrant workers aged between 18 and 45 years old will be given a working permit to work in six selected sectors of the economy (i.e., manufacturing, construction, services, plantation, agriculture and domestic work). This, however, does not translate into an understanding that migrant workers are more immune than the local population.
In many countries that receive millions of migrant workers, migrant population serves as the epicentre of the pandemic. For instance, while active COVID-19 cases among citizens of Kuwait, United Arab Emirates (UAE) and Bahrain ran in the single digits in early May 2020, thousands of migrant workers were still ill and locked down. In Singapore, as of the end of May 2020, the vast majority of 30,000 infected persons were among migrant workers largely living in employer-sponsored dormitories.
Existing reports and studies indicate that poor living and working conditions, including cramped workers' dormitories and unsanitary conditions, had led to the rapid transmission of infection of COVID-19 among migrant workers (World Bank, 2020). In these situations, it is hardly that social distancing and good hygiene are practised among the workers. Prior to COVID-19 outbreak, many migrant workers were already facing poor access to healthcare, including lack of access to health insurance, administrative hurdles and language barriers.
One obvious lesson can be drawn from these countries is that migrant workers often left behind and excluded from policy development and national actions in times of crisis such as COVID-19 outbreak. They tend to view migrant workers as a separate community living temporarily, and hence serving no strategic interest to the country. Experiences from these countries (i.e., Singapore and the Gulf countries) have cautioned us on the dangers of leaving migrant workers behind. Malaysia is hosting more than two million migrant workers in the country. The question to ask is - do we learn from what happened in these countries? How did we respond to issues and many forms of vulnerability facing migrant workers? And importantly will Malaysia face the same fate if it continuously excludes migrant workers in its efforts to flatten the curve of the pandemic? This

Email address: andikawahab@nu.edu.my.
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2590-2911/© 2020 The Author(s). Published by Elsevier Ltd. This is an open access article under the CC BY-NC-ND license (<http://creativecommons.org/licenses/by-nc-nd/4.0/>).



Make this the
last costly
pandemic!

Cost of Preventing The Next Pandemic Just 2% Of Covid-19 Bill

Estimated cost of containing future pandemic compared to Covid-19's economic damage

Total estimated economic damage from Covid-19



Estimated spending needed over the next 10 years to prevent a future pandemic



\$260b

Great job! But...



HUTANWATCH

HOME

MAPS

NEWS

SUBMIT

English

Malay

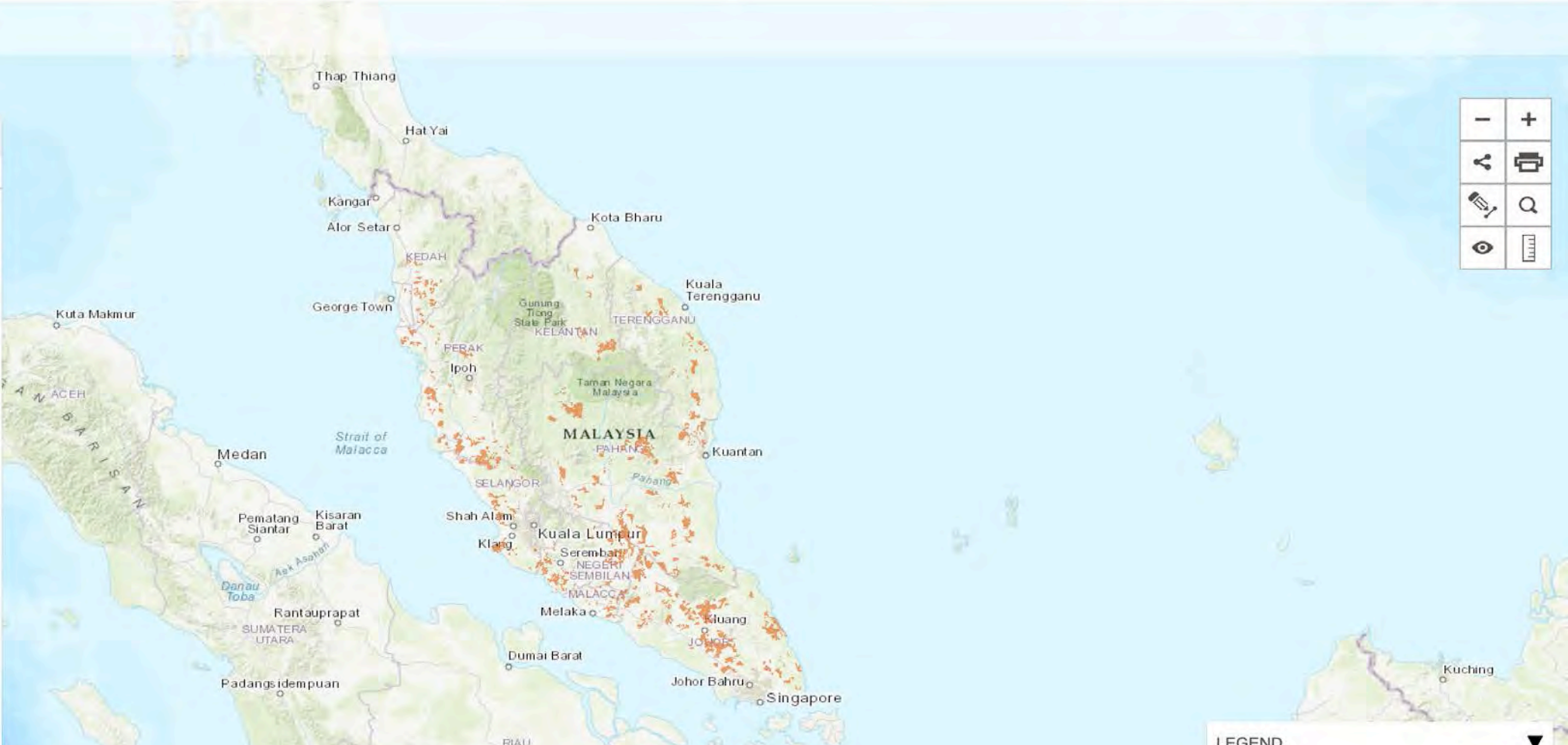







PENINSULAR MALAYSIA
Interactive map under construction

Layers Select All Clear All

- LAND COVER DYNAMICS ▲
- LAND USE ▼
- Permanent Reserve Forest
- CFS Linkages
- Totally Protected Areas
- RSPO Oil Palm Concessions
- Peatlands
- River Basin
- River Networks
- Malaysia_State

LAND COVER ▲



-	+
	
	
	

LEGEND



METHANE (CH₄)

SOURCES Methane is one of the fastest growing greenhouse gases in the atmosphere. Human activity causes 2/3 of emissions.



% = global emissions

IMPACTS

CLIMATE

Responsible for 40% of warming since the industrial revolution

86x

times more powerful than carbon dioxide over a 20-year period

AGRICULTURE & ECOSYSTEMS



Up to **15%** annual yield losses of soy, wheat, rice and maize

HEALTH

Increasing emissions are driving a rise in tropospheric ozone air pollution, which causes 1+ million premature deaths annually. Methane is responsible for roughly 1/2 of these deaths.



- Respiratory diseases
- Heart disease
- Damaged airways and lung tissue

LIFETIME IN ATMOSPHERE: 12 YEARS

Since methane does not last long in the atmosphere, efforts to reduce it will bring immediate benefits for the climate and human health.



THE LANCET

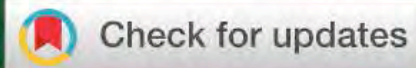
Planetary Health

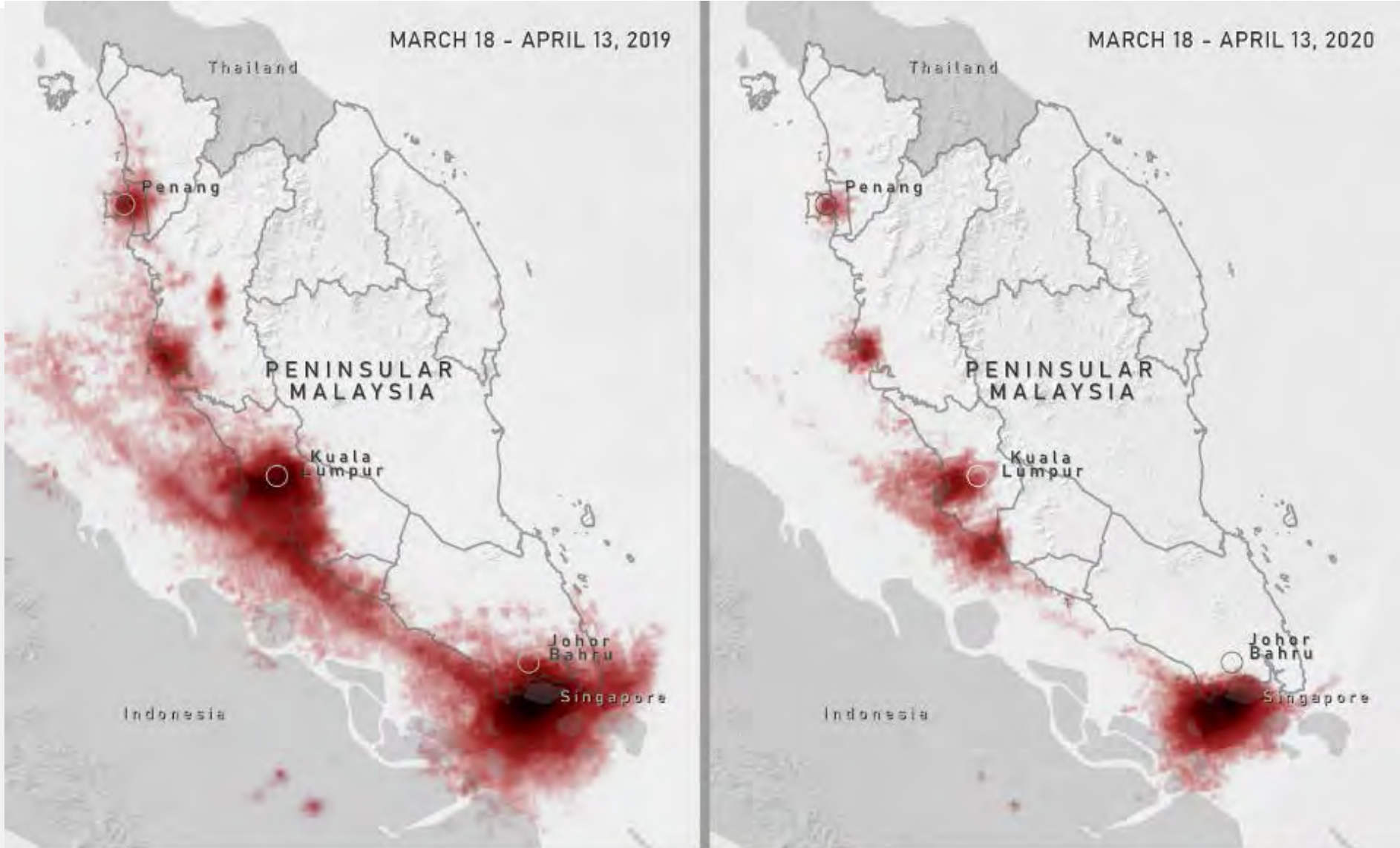
ARTICLES | VOLUME 3, ISSUE 4, E166-E178, APRIL 01, 2019

Global, national, and urban burdens of paediatric asthma incidence attributable to ambient NO₂ pollution: estimates from global datasets

Pattanun Achakulwisut, PhD • Prof Michael Brauer, ScD • Perry Hystad, PhD • Susan C Anenberg, PhD  

Open Access • Published: April 10, 2019 • DOI: [https://doi.org/10.1016/S2542-5196\(19\)30046-4](https://doi.org/10.1016/S2542-5196(19)30046-4) •





0 50 100 200
km

Data: Copernicus Sentinel-5P 19/20

Sentinel-5P TROPOMI Nitrogen Dioxide Density ($\mu\text{mol}/\text{m}^3$)



thinkCITY

In Landmark Ruling, Air Pollution Recorded as a Cause of Death for British Girl

Legal and environmental experts hailed a coroner's ruling that, for the first time in Britain, directly linked a specific person's death to air pollution.

 Give this article



Ella Adoo-Kissi-Debrah in a photo shown by her mother, Rosamund. Hollie Adams/Agence France-Presse — Getty Images

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Environment Climate crisis Wildlife Energy Pollution

Air pollution

Ella Kissi-Debrah: how a mother's fight for justice may help prevent other air pollution deaths

Landmark ruling that toxic fumes killed nine-year-old Londoner follows long campaign for truth

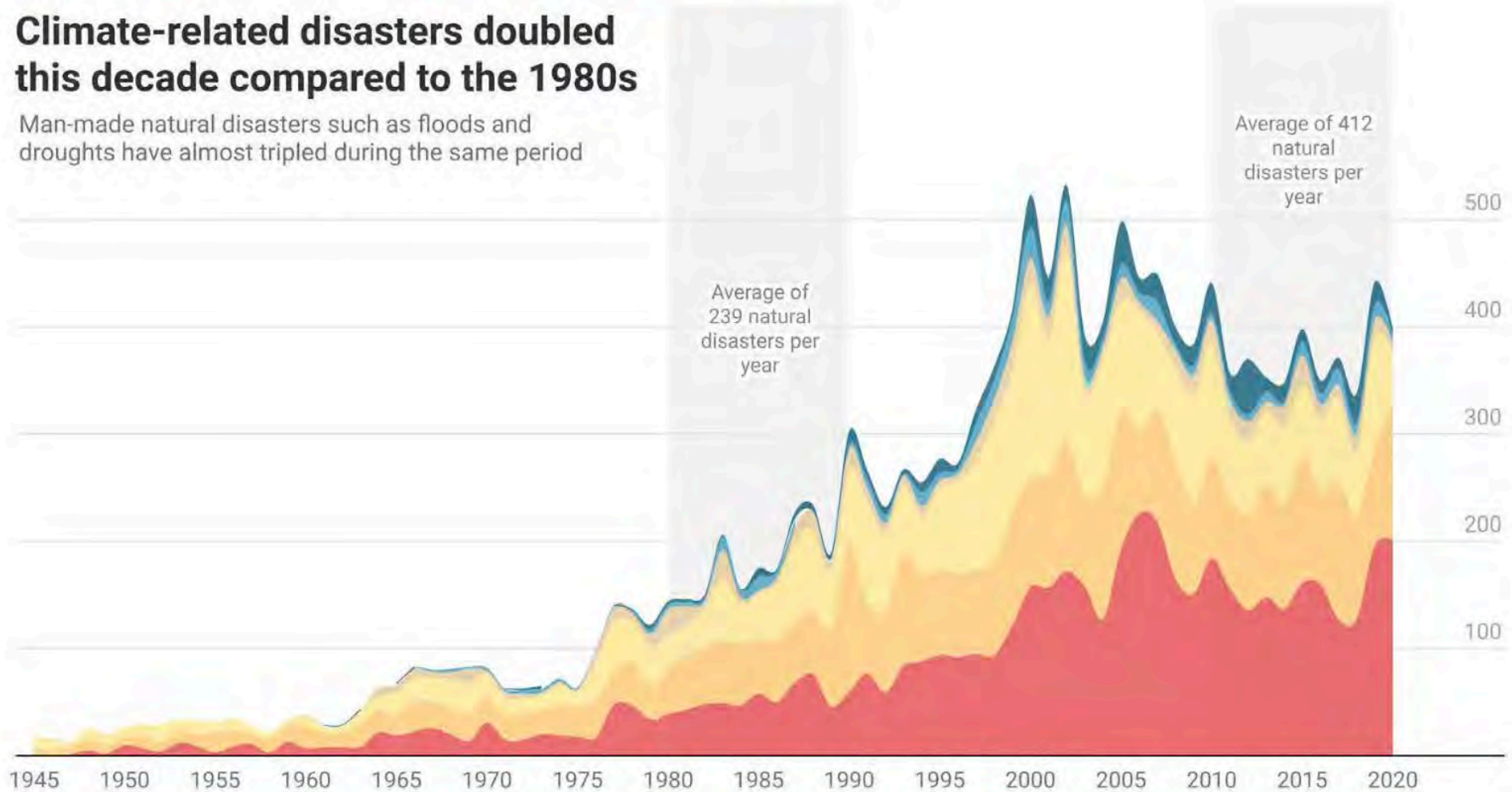


 Ella Kissi-Debrah died in February 2013 after a severe asthma attack. Photograph: Hollie Adams/AFP/Getty Images

■ Droughts
 ■ Extreme temperatures
 ■ Floods
 ■ Storms
 ■ Wildfires
 ■ Others

Climate-related disasters doubled this decade compared to the 1980s

Man-made natural disasters such as floods and droughts have almost tripled during the same period



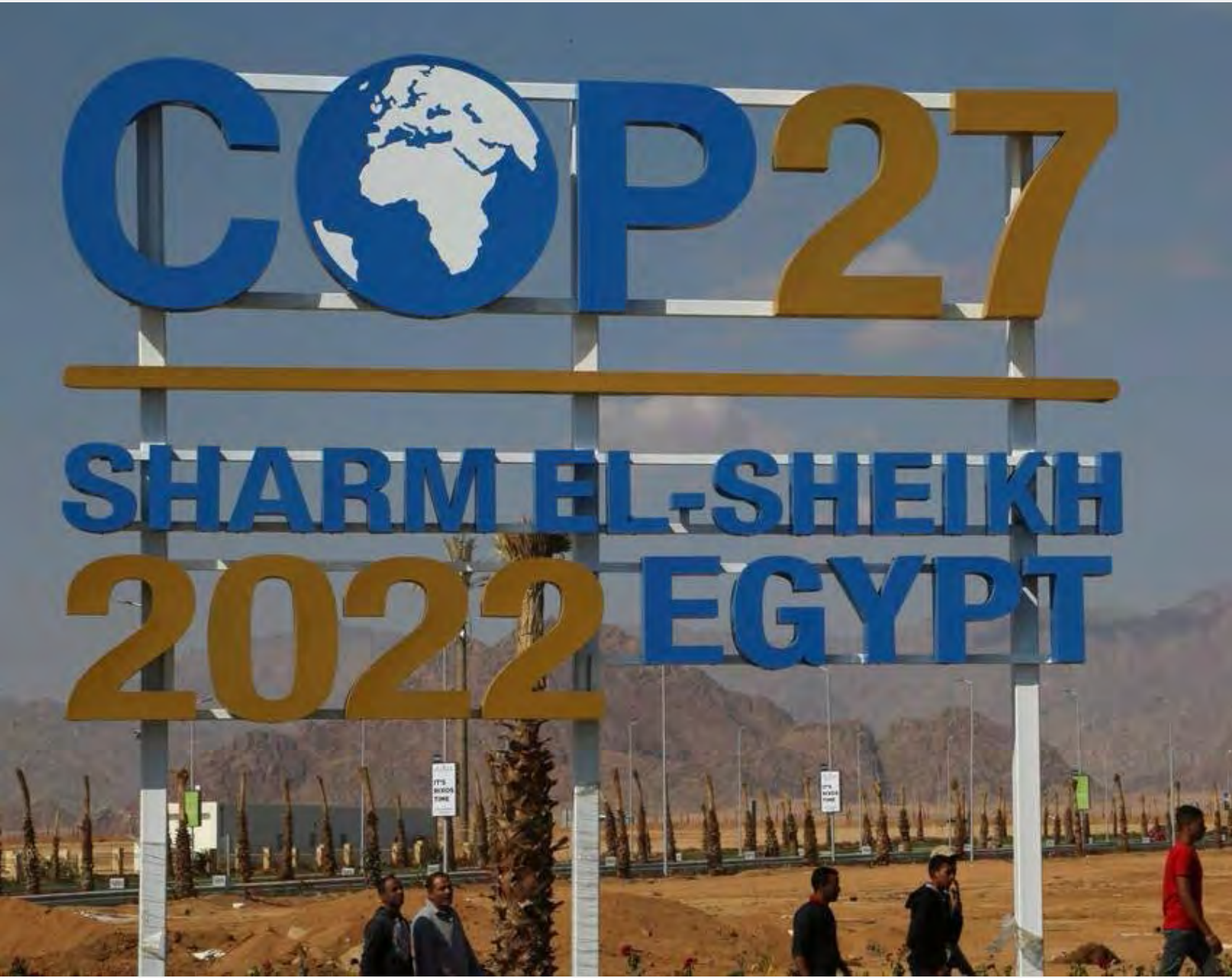
Others: Earthquakes, Epidemics, Infestations, Landslides, Mass movements and Volcanoes

Chart: Global Humanitarian Overview 2022 • Source: WTO/CRED



BENTONG, PAHANG





- **Loss and Damage Fund**
- **Transformation of the global financial system**
- **Clean, healthy and sustainable environment as a human right**

Moving Forward

Beyond doom-and-gloom
to pragmatic approaches

Create solutions.

From oil palm plantations to carbon-rich forests?





Mongabay Series: [Carbon Offset Markets](#)

Carbon offsets: A key tool for climate action, or a license to emit?

by Ian Morse on 4 November 2022



Join us

COP 27

Explained: Carbon offsetting, and why we can no longer ignore it

Nov 1, 2022



Collaborate.



PRIORITY THEMES



PREVENTING THE NEXT PANDEMIC

Covid-19 was a wake-up call that pandemics, infectious disease outbreaks and other illnesses are a result of human behaviour driving unintended change.



TACKLING THE CLIMATE EMERGENCY

The climate crisis is driven by human behaviour, economic activity and endless GDP growth. Heat, floods, erratic weather and related disasters confirm that the planet cannot sustainably support this growth-based model.



CREATING HEALTHY CITIES

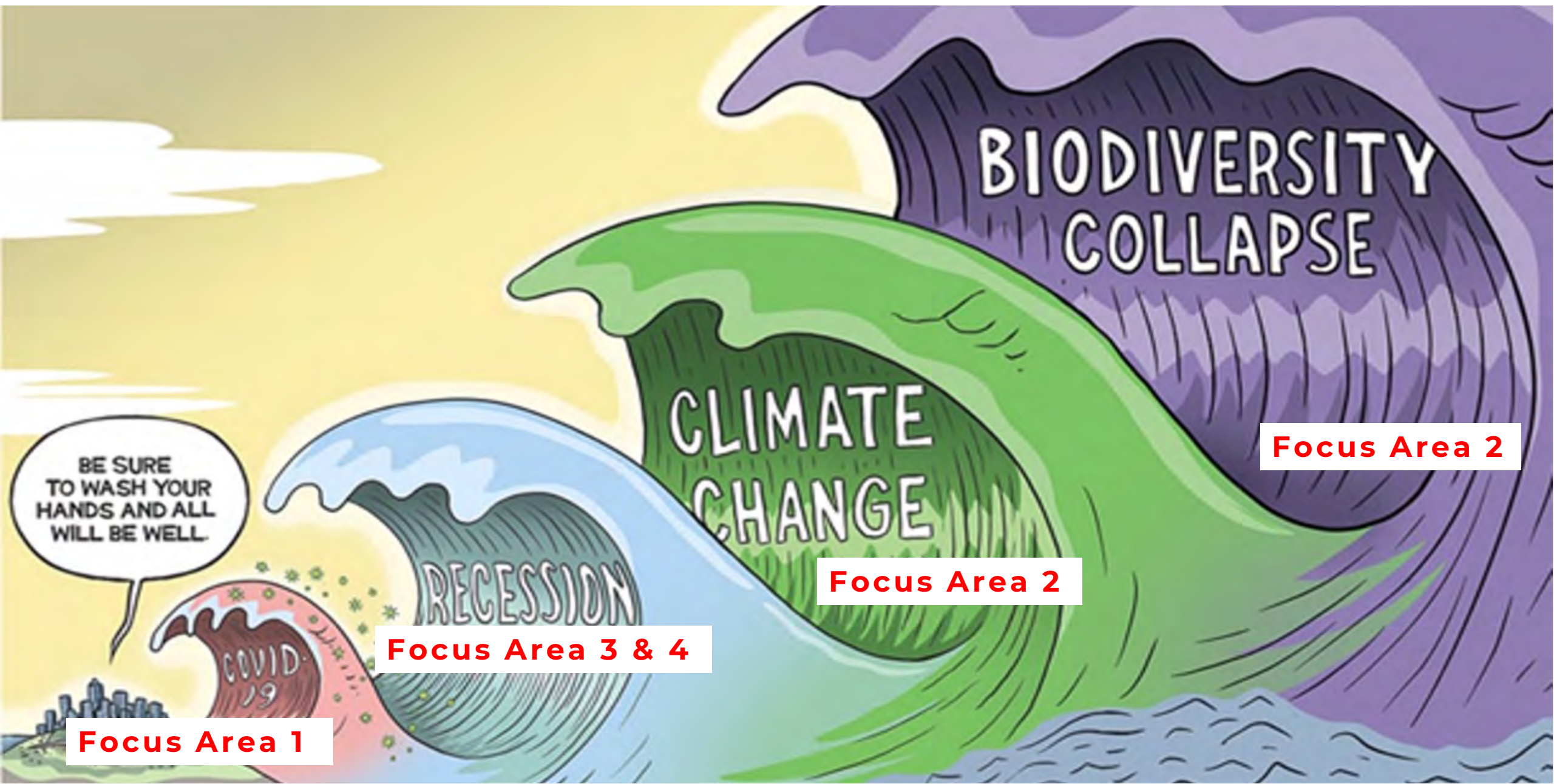
Cities face specific challenges on air, water and pollution, health risks, waste and energy management, all exacerbated by rising inequity and urbanisation.



ACHIEVING SUSTAINABLE FOOD SYSTEMS

Global food systems and extractive and wasteful. Our relationship with the natural world and current means of food production and consumption must change

Underpinned by communications, effective planetary health governance, and a planetary health education revolution.



Focus Area 1

Focus Area 3 & 4

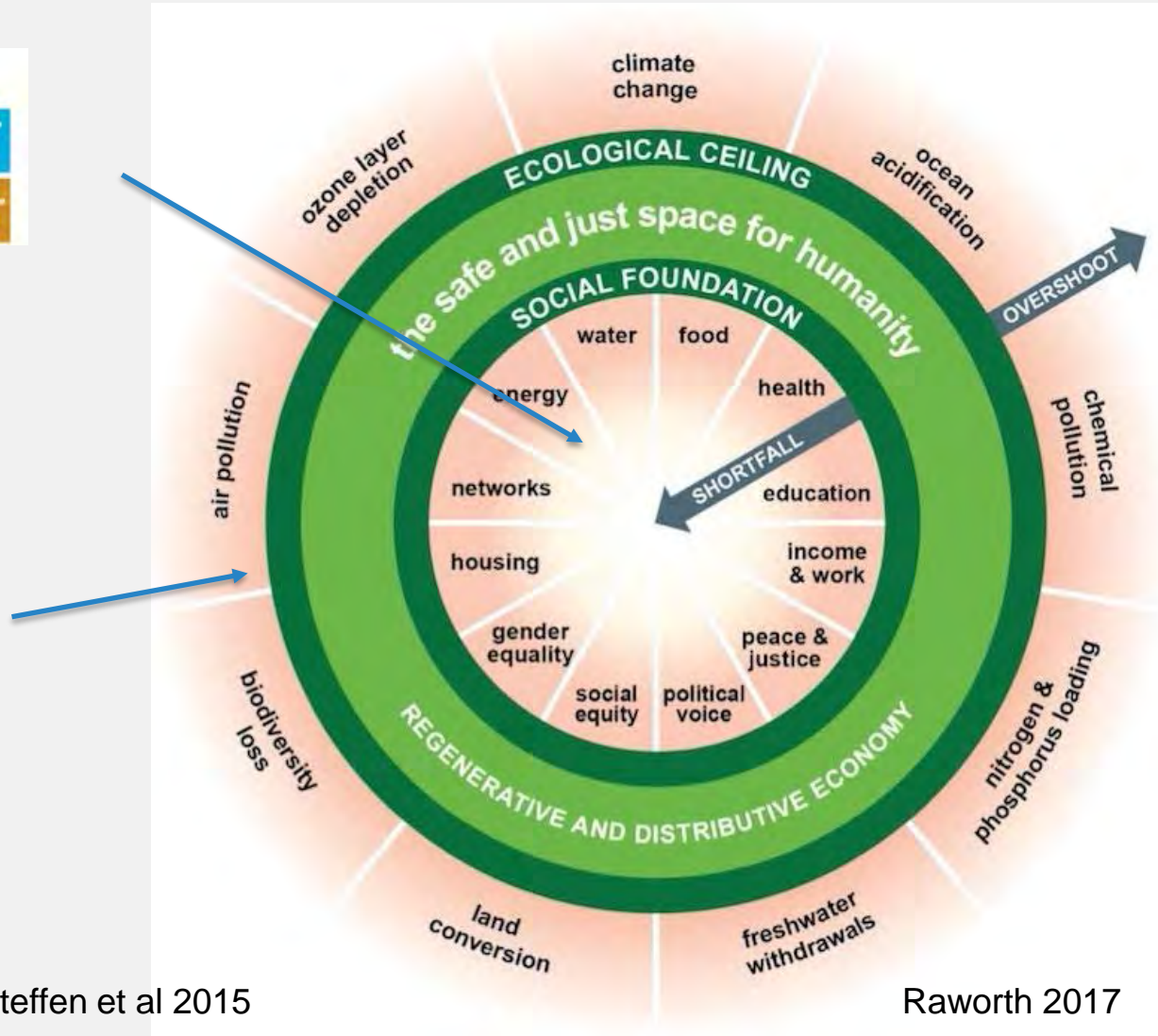
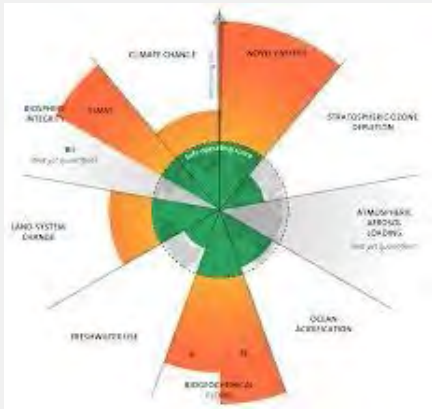
Focus Area 2

Focus Area 2

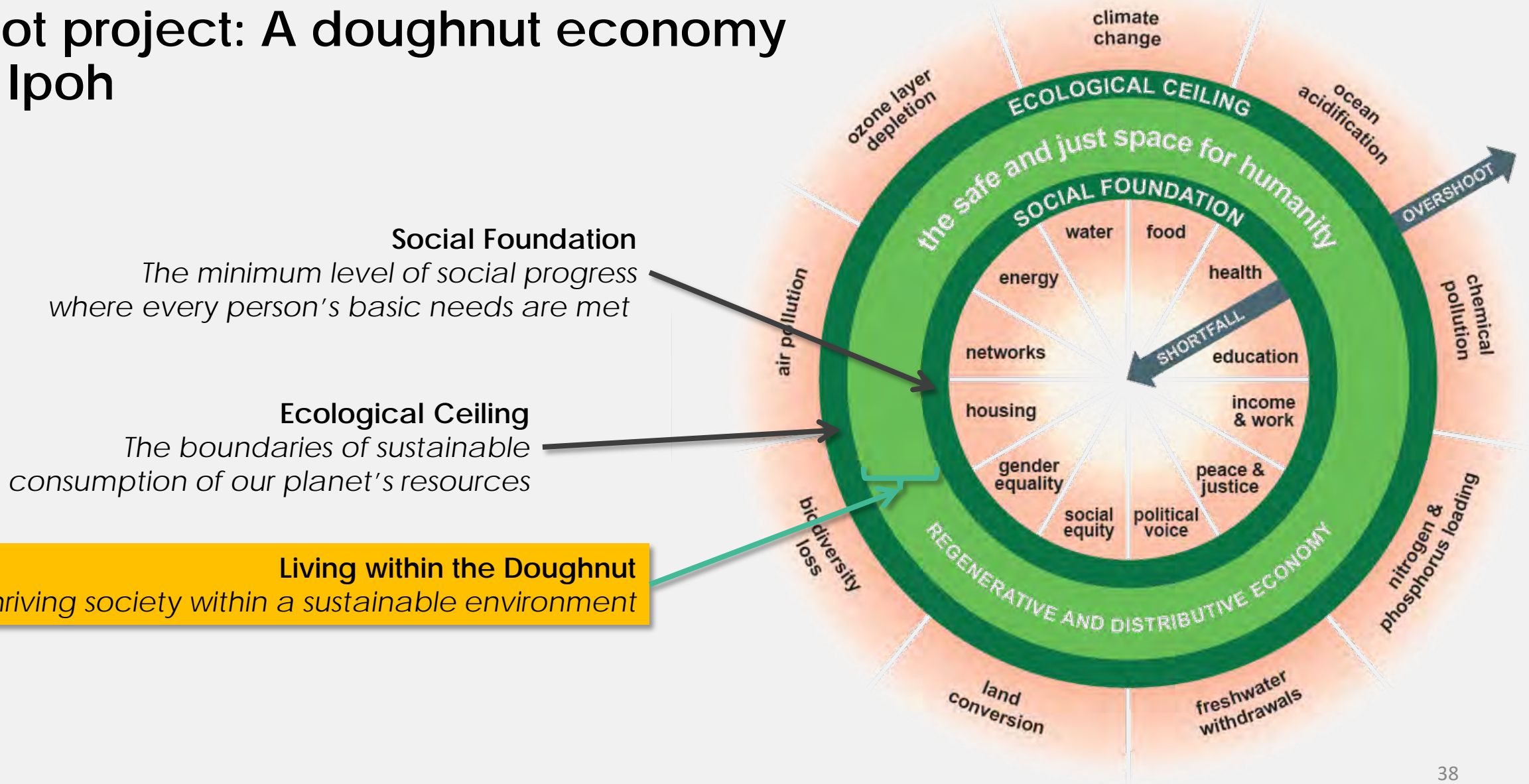
A compass for human prosperity



PLANETARY BOUNDARIES



Pilot project: A doughnut economy In Ipoh



Model Ekonomi Donat

Tema Keberhasilan Perak Sejahtera 2030 Social Foundation



- 1 Keselamatan Awam (19)
- 2 Perumahan (8)
- 3 Asas Kemasyarakatan (29)
- 4 Pendidikan (10)
- 5 Alam Sekitar dan Amalan Teknologi Hijau (28)
- 6 Prasarana (232)
- 7 Seni Budaya dan Warisan (18)
- 8 Bella (1)
- 9 Wanita (1)
- 10 Keluarga (4)
- 11 Warga Tua (11)
- 12 Orang Kurang Upaya (1)
- 13 Penduduk (36)
- 14 Industri Utama (15)
- 15 Keusahawanan (19)
- 16 Sumber Manusia (1)
- 17 Pelaburan Domestik dan Luar Negara (8)
- 18 Agihan Kekayaan, Kumpulan Pendapatan dan Kemiskinan (6)
- 19 Tadbir Urus Kerajaan (35)
- 20 Perpaduan Nasional (1)
- 21 Kepimpinan (0)

Pengukuran Perak Sejahtera 2030 berteraskan Model Ekonomi Donat

Nota:
Pendekatan kerangka fikir ekonomi donut berteraskan ekonomi kitaran ke arah menjayakan Perak Sejahtera 2030, di mana keseimbangan ekonomi, sosial dan alam sekitar dititikberatkan.



**THE PALM OIL VALUE CHAIN IS COMPLEX:
IT INVOLVES MANY STAKEHOLDERS AND STAGES OF COLLECTION AND TRANSFORMATION.**

1. Palm fruit is harvested on a plantation



**SMALLHOLDERS
AND LARGE
PRODUCERS**

2. Palm fruit is transported to a collection facility, where it is mixed with fruit from other plantations



**LOCAL
TRADERS**

3. Palm fruit is transported to a mill, where it is processed to create crude palm oil (CPO) and palm kernel oil (PKO)



PROCESSORS & REFINERS

4. Palm oil is refined into palm stearin, palm olein and other derivatives



TRADERS

5. Tankers transport the refined palm oil to a centralised collection port, where it is shipped overseas to another port



**PROCESSORS
& REFINERS**

6. Refined palm oil is transferred to a manufacturing plant, where it is processed into different products (e.g. food, personal care, chemicals, animal feed, biofuels)



MANUFACTURERS

7. The product is sold to consumers



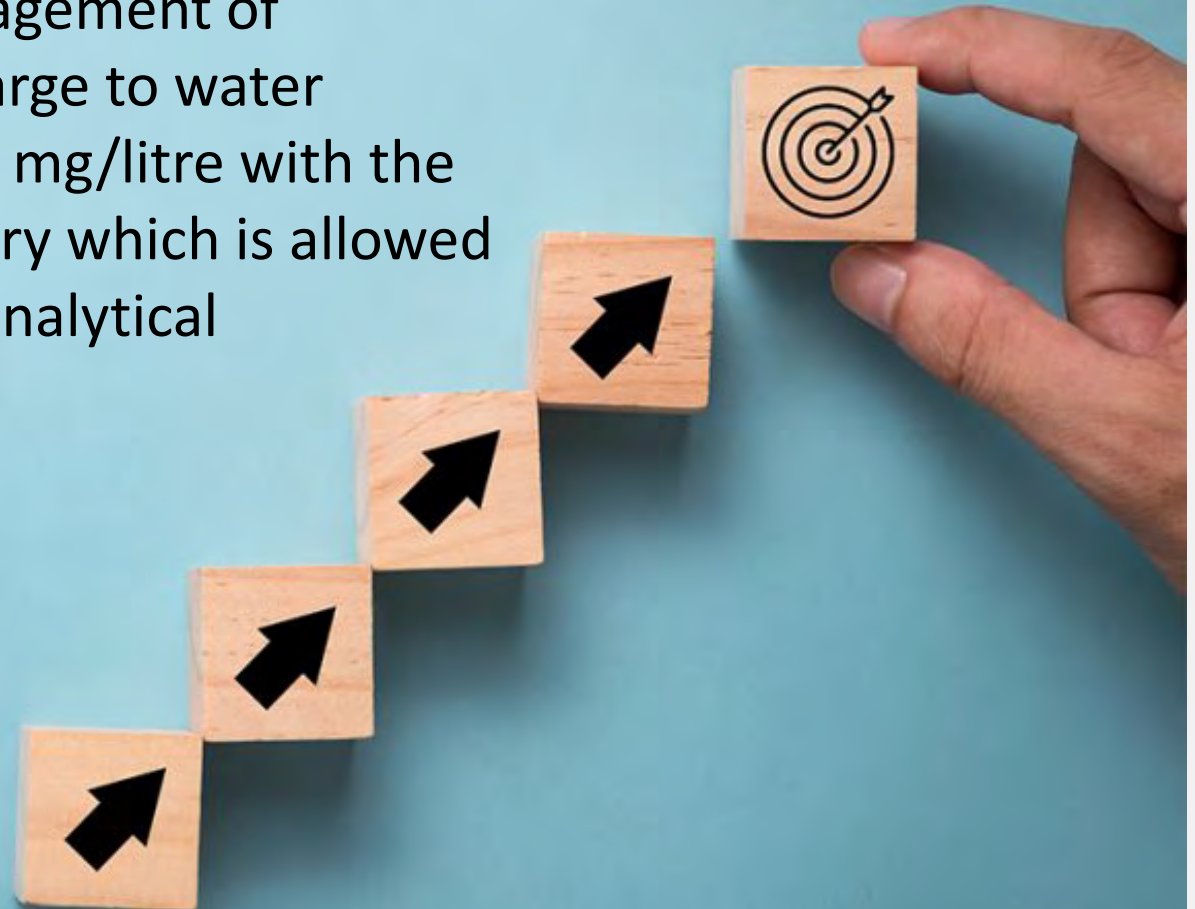
**RETAILERS
& FOOD SERVICE
COMPANIES**

Compliance – raise the bar!

The DOE requirements on management of industrial effluent before discharge to water bodies is to achieve BOD5 of 30 mg/litre with the exception of the palm oil industry which is allowed up to 100 mg/l (at 30C, 3 days analytical procedures)

Is this a licence to pollute?

Deregulation of the Industry?





KUALA KOH BATEKS, CHINLOY (2ND LEFT) AND FAMILY 2008. IMAGE CREDIT: EDITH MIRANTE

Death amid oil palms: Malaysia's Batek Orang Asli health crisis

EDITH MIRANTE - 24 JUN, 2019

Communicate, not spin and greenwash.

NEW STRAITS TIMES

Importance of media framing, advocacy about palm oil

By Datuk Dr Nasir Shamsudin, Dr Wong Mui Yun
July 9, 2021 @ 9:10pm





Over the years, the palm oil industry has been subjected to constant "public relation (PR) attacks" resulting in bad publicity in the global perspective, and hence degradation of demand of palm oil-based products. -File pic

MONGABAY Follow

'The promise was a lie': How Indonesian villagers lost their cut of the palm oil boom



by Mongabay | The Gecko Project | BBC News on
23 May 2022



Certification makes palm oil pricier, so why aren't producers benefiting from it?

If all the actors in the supply chain were treated fairly, consumers would barely notice the premium for sustainable palm oil products. Multinationals could play a much bigger role.

EN 中文



Conservation news

'Meaningless certification': Study makes the case against 'sustainable' palm oil

Hans Nicholas Jong

2 years ago



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EU Regulation on Imported Deforestation: Time to Consider Sustainable Production for Palm Oil


Posted on [April 18, 2022](#)

Science

UN Report Says Humanity Has Altered 70 Percent of the Earth's Land, Putting the Planet on a 'Crisis Footing'

Agriculture is the biggest degrader of land, the authors say. Transforming farming practices could restore billions of acres by 2050 for less than is spent on developed-world farm subsidies.



By Georgina Gustin 

April 27, 2022





Feb 25



Mar 28



Sep 17



Nov 20



Dec 18



Dec 13



Dec 2



Nov 24



Dec 25

(Biomimicry, 2022)



Dec 31
12.25pm



Dec 31
11.24pm



Dec 31
11.59.58pm

2 seconds ago!

When enough people come together, then change will come, and we can achieve anything. So, instead of looking for hope – start creating it.