Design Thinking for SDGs

Session 5:
Call to Action to Build Back Better

Tuesday August 17, 2021

Prof Semee Yoon

Today's agenda

1) Setting the tone for SDG12

2) DT Reminder: "Leaving no one behind for SDG12"

   25 min lecture
   15 min questions

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Human Development
Report **2019**

Beyond income, beyond averages, beyond today:
Inequalities in human development in the 21st century

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UNDP

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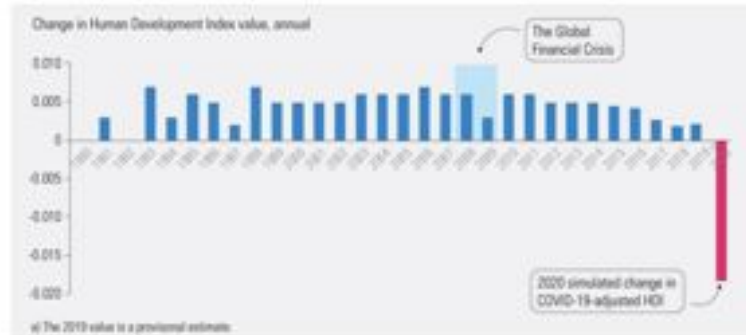
PRESS RELEASE

UNDP

COVID-19: Human development on course to decline this year for the first time since 1990

Concerted action with a focus on equity could still limit the impacts of this unprecedented crisis: closing the digital divide would reduce by more than two-thirds the number of children currently not learning because of school closures.
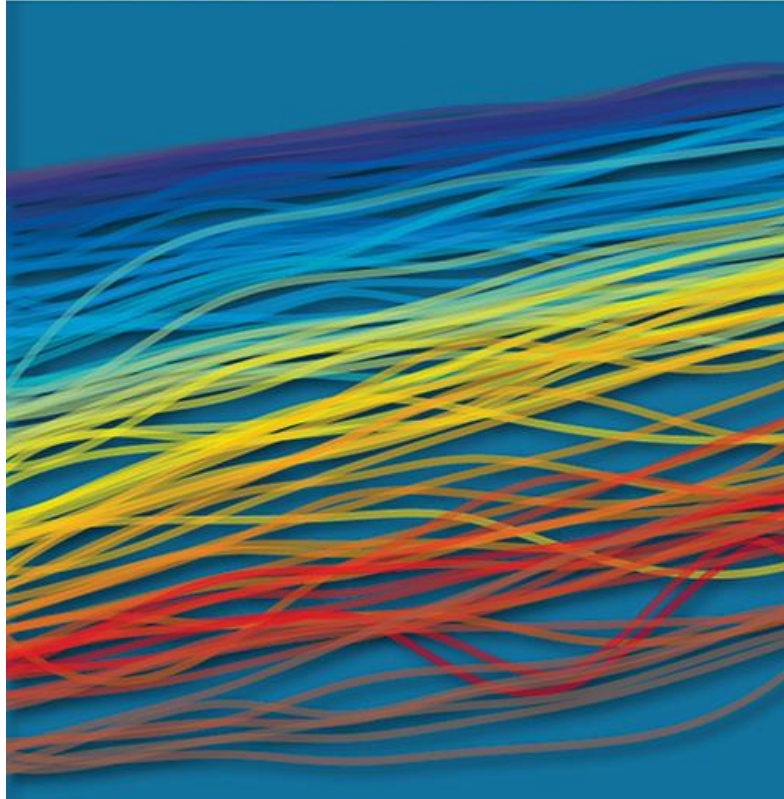
New York, 20 May 2020 – Global human development – which can be measured as a combination of the world's education, health and living standards – could decline this year for the first time since the concept was introduced in 1990, the United Nations Development Programme (UNDP) warned today.

"The world has seen many crises over the past 30 years, including the Global Financial Crisis of 2007-09. Each has hit human development hard but, overall, development gains accrued globally year-on-year," said UNDP Administrator Achim Steiner. "COVID-19 – with its triple hit to health, education, and income – may change this trend."

Change in Human Development Index value, annual

The Global Financial Crisis

0.010
0.005
0
-0.005
-0.010
-0.015
-0.020

2020 simulated change in COVID-19-adjusted HDI

a) The 2019 value is a provisional estimate.

Human Development Report 2010
UNDP
20th Anniversary edition

"Human development is the expansion of people's freedoms to live long, healthy and creative lives; to advance other goals they have reason to value; and to engage actively in shaping development equitably and sustainably on a shared planet. People are both the beneficiaries and drivers of human development, as individuals and in groups.

Reaching SDG targets by 2030

Table 1-1
Projected distance from reaching selected targets by 2030 (at current trends)

GOAL	WITHIN 5%	5–10%	>10%	NEGATIVE LONG-TERM TREND
Goal 1		1.1. Eradicating extreme poverty	1.3. Social protection for all	
Goal 2		2.1. Ending hunger (undernourishment)	2.2. Ending malnutrition (stunting) 2.5. Maintaining genetic diversity 2.a. Investment in agriculture*	2.2. Ending malnutrition (overweight)
Goal 3	3.2. Under-5 mortality 3.2. Neonatal mortality		3.1. Maternal mortality 3.4. Premature deaths from non-communicable diseases	
Goal 4	4.1 Enrolment in primary education	4.6 Literacy among youth and adults	4.2. Early childhood development 4.1 Enrolment in secondary education 4.3 Enrolment in tertiary education	
Goal 5			5.5. Women political participation	
Goal 6		6.2. Access to safe sanitation (open defecation practices)	6.1. Access to safely managed drinking water 6.2. Access to safely managed sanitation services	
Goal 7		7.1. Access to electricity	7.2. Share of renewable energy* 7.3. Energy intensity	
Goal 8			8.7. Use of child labour	
Goal 9		9.5. Enhancing scientific research (R&D expenditure)	9.5. Enhancing scientific research (number of researchers)	
Goal 10			10.c. Remittance costs	Inequality in income*
Goal 11			11.1. Urban population living in slums*	
Goal 12				12.2. Absolute material footprint, and DMC*
Goal 13				Global GHG emissions relative to Paris targets*
Goal 14				14.1. Continued deterioration of coastal waters* 14.4. Overfishing*
Goal 15				15.5. Biodiversity loss* 15.7. Wildlife poaching and trafficking*
Goal 16			16.9 Universal birth registration **	

2021 EARTH OVERSHOOT DAY JULY 29

Country Overshoot Days 2021
When would Earth Overshoot Day land if the world's population lived like...

Dec 18 | Indonesia
Dec 7 | Ecuador
Dec 2 | Nicaragua
Nov 24 | Egypt, Guatemala
Nov 20 | Iraq
Nov 17 | Cuba
Nov 2 | Colombia
Oct 21 | El Salvador
Oct 13 | Ghana
Oct 5 | Namibia
Sep 29 | Peru
Sep 26 | Gabon
Sep 18 | Viet Nam
Sep 16 | Djibouti
Sep 14 | Panama
Sep 13 | Venezuela
Sep 11 | Algeria
Aug 16 | Costa Rica
Aug 15 | Thailand
Aug 11 | Mexico
Aug 8 | Ukraine
Jul 27 | Brazil
Jul 9 | Bolivia
Jul 8 | Paraguay
Jul 4 | South Africa
Jun 30 | Iran
Jun 26 | Argentina
Jun 21 | Romania
Jun 10 | Bahamas
Jun 7 | China
May 25 | Spain
May 23 | Montenegro
May 22 | Greece
May 19 | United Kingdom
May 17 | Chile
May 15 | New Zealand
May 13 | Italy, Portugal
May 11 | Switzerland
May 7 | France
May 6 | Japan
May 5 | Germany
April 30 | Slovenia
Apr 27 | Ireland, Netherlands
Apr 17 | Russia
Apr 16 | Israel
Apr 12 | Norway, Saudi Arabia
Apr 10 | Finland, Singapore
Apr 8 | Sweden
Apr 5 | Republic of Korea
Mar 30 | Belgium
Mar 26 | Denmark
Mar 22 | Australia
Mar 14 | Canada, Kuwait, United States of America
Mar 7 | United Arab Emirates
Feb 15 | Luxembourg
Feb 9 | Qatar

2021

Source: National Footprint and Biocapacity Accounts, 2021 Edition
data.footprintnetwork.org

EARTH OVERSHOOT DAY
Global Footprint Network
Advancing the Science of Sustainability

Earth Overshoot Day
1970 - 2021

1 Earth   1.7 Earths

Global Footprint Network
FODAFO FOOTPRINT DATA FOUNDATION
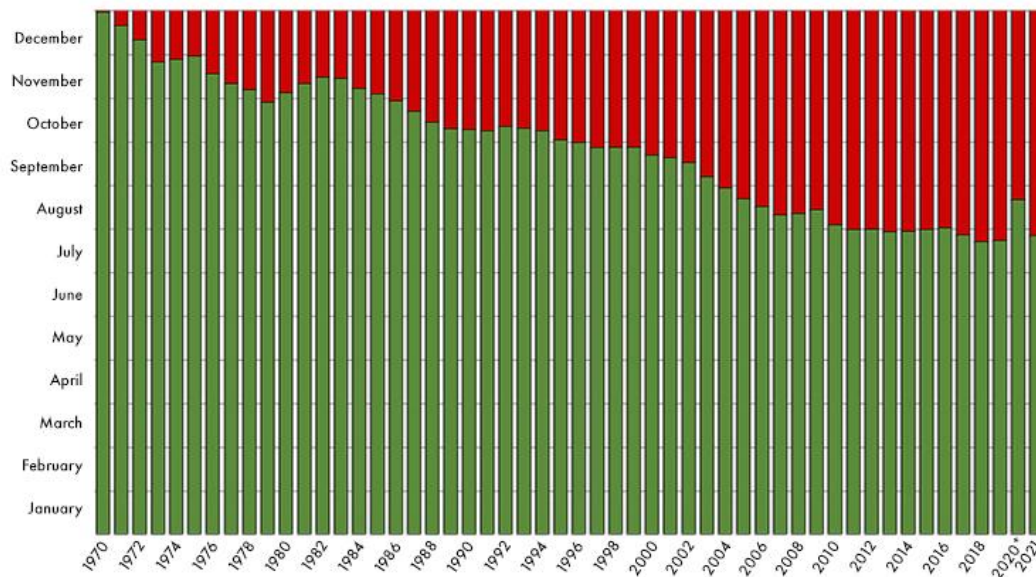EARTH OVERSHOOT DAY

*The calculation of Earth Overshoot Day 2020 reflects the initial drop in resource use in the first half of the year due to pandemic-induced lockdowns. All other years assume a constant rate of resource use throughout the year.

Source: National Footprint and Biocapacity Accounts 2021 Edition
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Box 1-8
The Global Sustainable Development Framework for knowledge-based transformations towards sustainable development
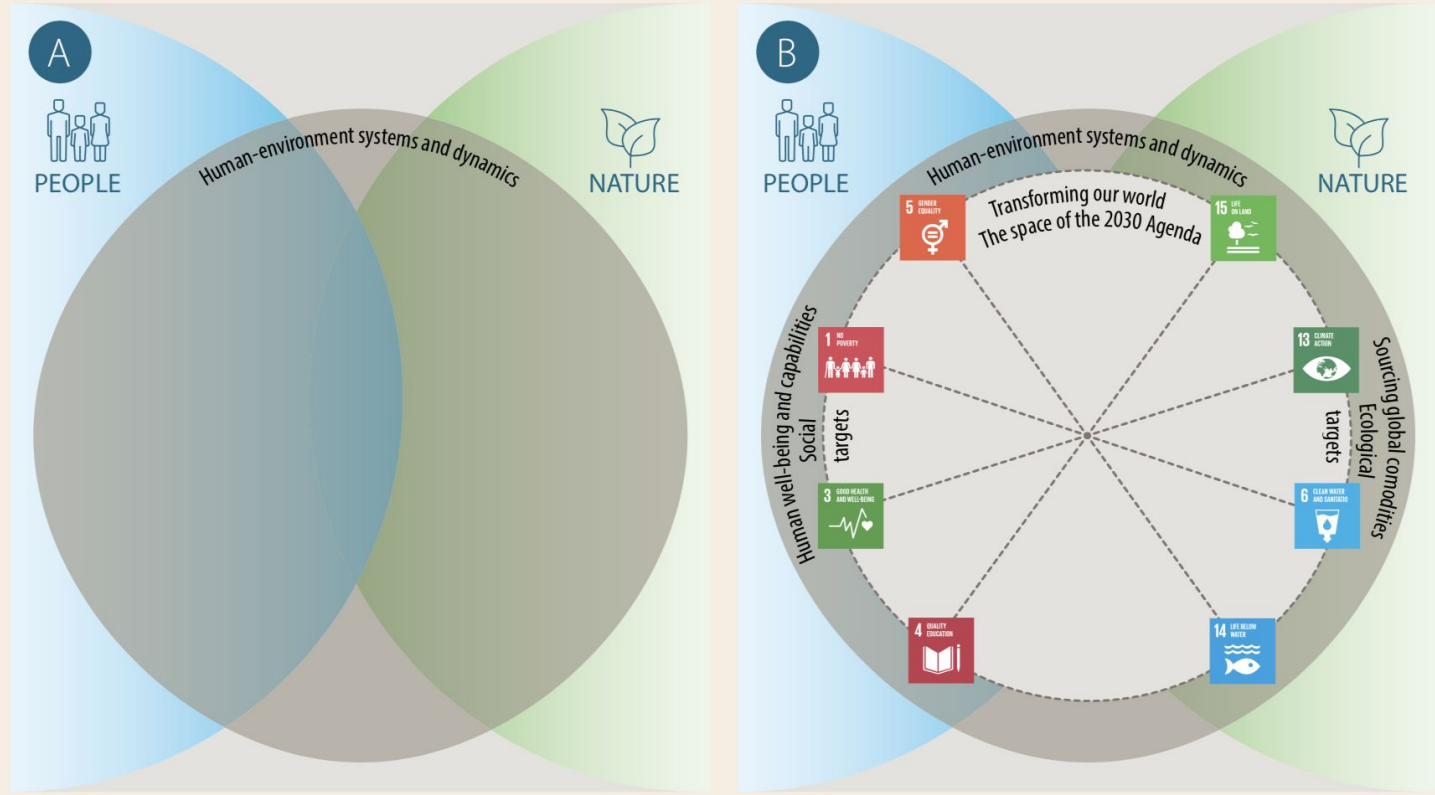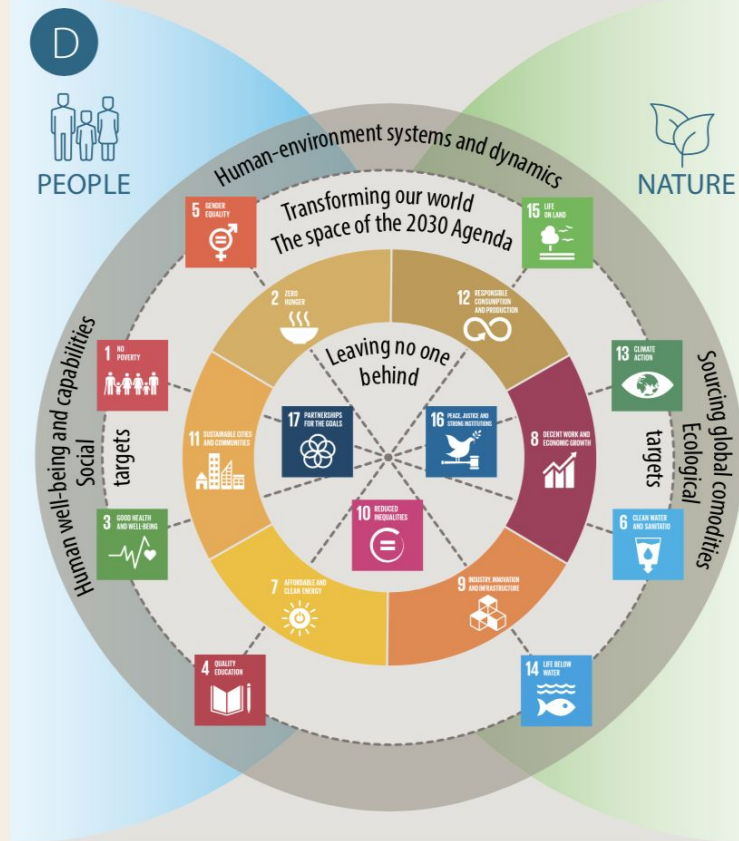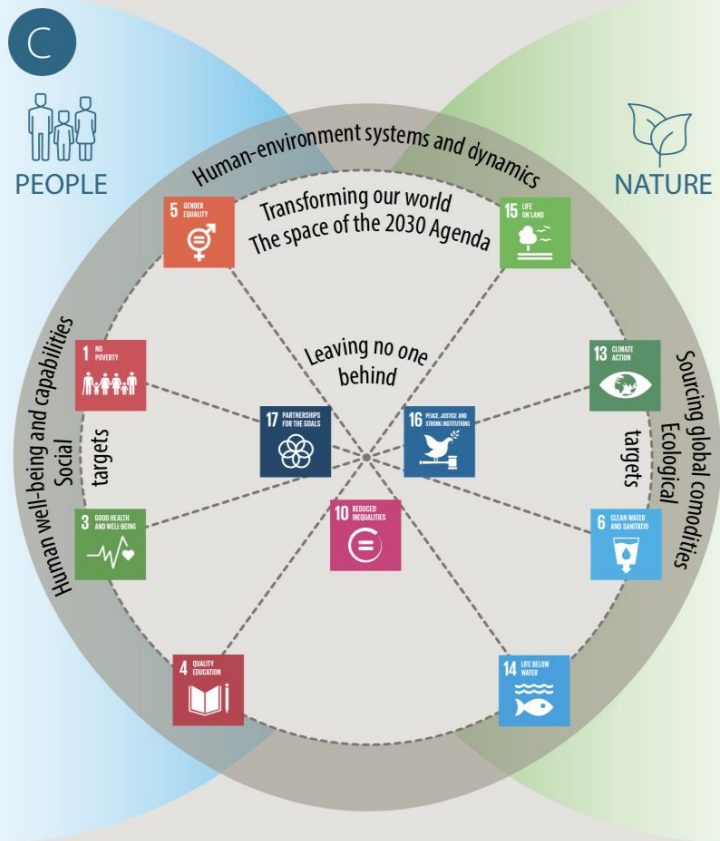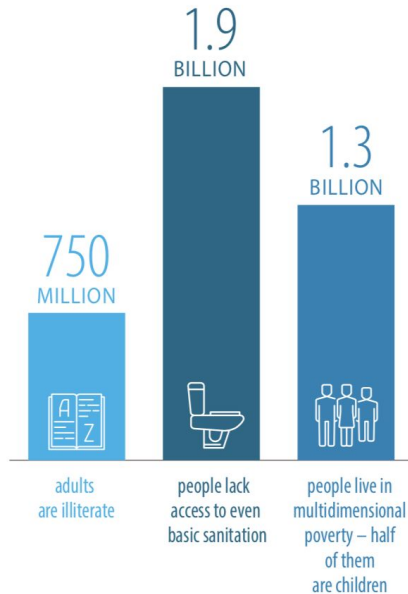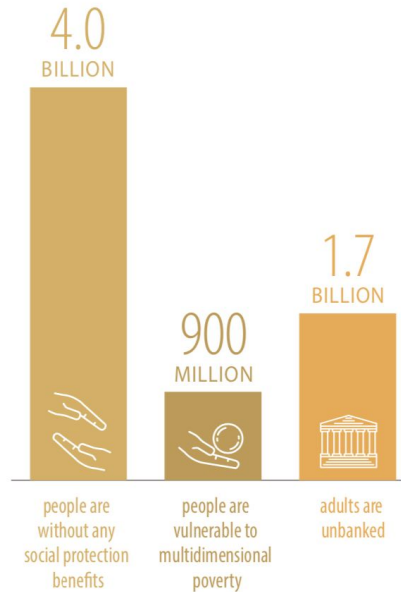
Figure 2-3
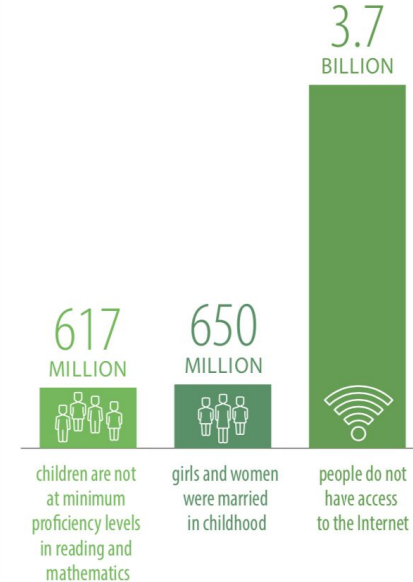## Human well-being and capabilities: where the world is falling short

Basic deprivations are shrinking, but action is needed toward full eradication

750 MILLION
adults are illiterate

1.9 BILLION
people lack access to even basic sanitation

1.3 BILLION
people live in multidimensional poverty – half of them are children

Building resilience to shocks is imperative to secure gains in well-being

4.0 BILLION
people are without any social protection benefits

900 MILLION
people are vulnerable to multidimensional poverty

1.7 BILLION
adults are unbanked

Inequalities in opportunities must be eliminated to expand human capabilities

617 MILLION
children are not at minimum proficiency levels in reading and mathematics

650 MILLION
girls and women were married in childhood

3.7 BILLION
people do not have access to the Internet

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Fig. 1 | Six SDG Transformations. Each Transformation describes a major change in the organization of societal, political and economic activities that transforms resource use, institutions, technologies and social relations to achieve key SDG outcomes (represented by the SDG wheel in the centre). Figure adapted from ref. [1], TWI2050; SDG colour wheel courtesy of UN/SDG.
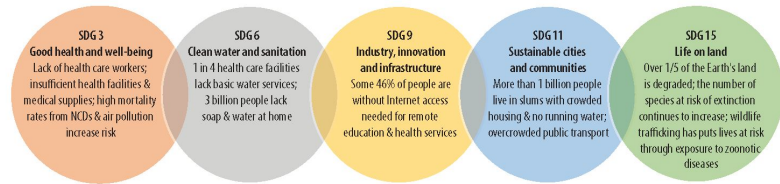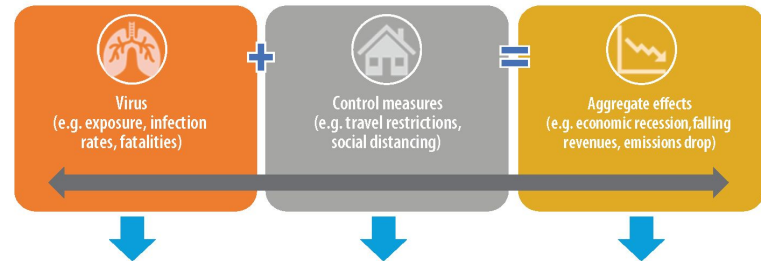
Sachs, J. et al. (2019). Nature Sustainability, 2:805-814.

Story of Stuff

SDG12 & COVID19

SDG icons:
1 NO POVERTY | 2 ZERO HUNGER | 3 GOOD HEALTH AND WELL-BEING | 4 QUALITY EDUCATION | 5 GENDER EQUALITY | 6 CLEAN WATER AND SANITATION | 7 AFFORDABLE AND CLEAN ENERGY
8 DECENT WORK AND ECONOMIC GROWTH | 9 INDUSTRY, INNOVATION AND INFRASTRUCTURE | 10 REDUCED INEQUALITIES | 11 SUSTAINABLE CITIES AND COMMUNITIES | 12 RESPONSIBLE CONSUMPTION AND PRODUCTION
13 CLIMATE ACTION | 14 LIFE BELOW WATER | 15 LIFE ON LAND | 16 PEACE AND JUSTICE STRONG INSTITUTIONS | 17 PARTNERSHIPS FOR THE GOALS
1 NO POVERTY | 2 ZERO HUNGER | 3 GOOD HEALTH AND WELL-BEING | 4 QUALITY EDUCATION | 5 GENDER EQUALITY | 6 CLEAN WATER AND SANITATION | 7 AFFORDABLE AND CLEAN ENERGY

Figure 1
Pathways of COVID-19 impact on select SDGs*

Severity of impacts influenced by pre-pandemic SDG progress through 2019

SDG 3 Good health and well-being — Lack of health care workers; insufficient health facilities & medical supplies; high mortality rates from NCDs & air pollution increase risk

SDG 6 Clean water and sanitation — 1 in 4 health care facilities lack basic water services; 3 billion people lack soap & water at home

SDG 9 Industry, innovation and infrastructure — Some 46% of people are without Internet access needed for remote education & health services

SDG 11 Sustainable cities and communities — More than 1 billion people live in slums with crowded housing & no running water; overcrowded public transport

SDG 15 Life on land — Over 1/5 of the Earth's land is degraded; the number of species at risk of extinction continues to increase; wildlife trafficking has puts lives at risk through exposure to zoonotic diseases

IMPACT CHANNELS

Virus (e.g. exposure, infection rates, fatalities) + **Control measures** (e.g. travel restrictions, social distancing) = **Aggregate effects** (e.g. economic recession, falling revenues, emissions drop)

Outcomes for the SDGs in 2030 look dire without transformative action

SDG 1 No poverty — 35–60 million people could be pushed back into extreme poverty—the first increase in global poverty in more than 20 years

SDG 2 Zero hunger — Economic slowdowns and supply chain disruptions are exacerbating hunger & food insecurity

SDG 4 Quality education — School closures have affected 90% of the world's student population—1.6 billion children and youth

SDG 5 Achieve gender equality — Women make up 70% of health care workers, do the bulk of unpaid care work, are at risk of domestic violence & depend on informal work

SDG 8 Decent work and economic growth — Disruption of the global economy has left 1.6 billion people working in the informal sector at risk of losing livelihoods

SDG 13 Climate action — GHG emissions are projected to drop 4–7% in 2020 & air quality has improved, but this is temporary without systemic shifts

MITIGATING THE IMPACTS and BUILDING BACK BETTER

Eradicate extreme deprivations | Provide universal quality essential services | Reverse environmental degradation

* This figure is indicative. All SDGs are impacted by COVID-19.

TWI2050 - The World in 2050 (2020). International Institute for Applied Systems Analysis (IIASA), Laxenburg, Austria.
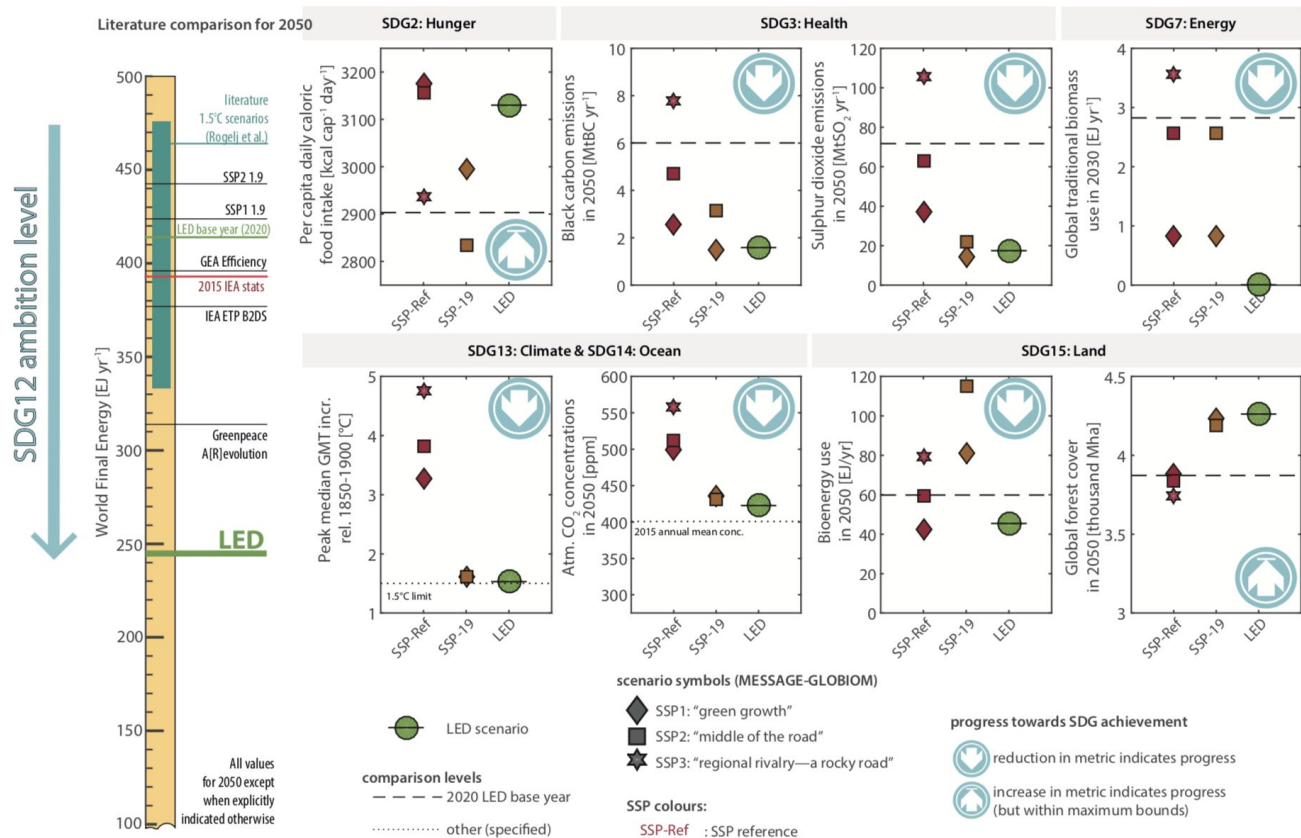
Figure 27. Scenario comparison of SDG synergies and co-benefits of a demand-side focused (SDG12) versus supply-side focused scenarios for meeting a 1.5°C climate target (SDG13). Also shows desirable direction for various SDG indicators. Source: After Grubler et al. (2018), cfr. TWI2050 (2018), Figure 3.7.
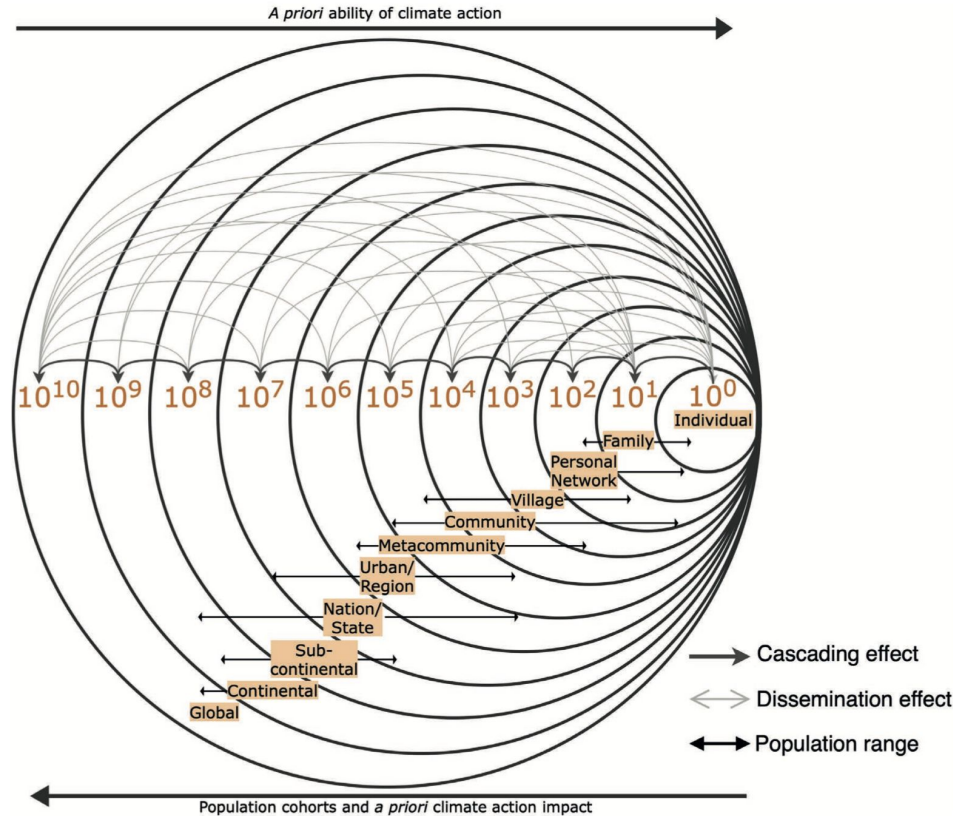
Figure 37. A networked governance approach for societal transformation Note: A 'Powers of 10' approach to form agencies and polycentric networked governance between every individual and estimated 10 billion people by 2050. The community to urban level or a community of 10,000–1,000,000 people may provide a sweet spot for maximizing the sustainability action impact through polycentric networked governance. Source: Bhowmik et al. (2020).

TWI2050 - The World in 2050 (2020). International Institute for Applied Systems Analysis (IIASA), Laxenburg, Austria.
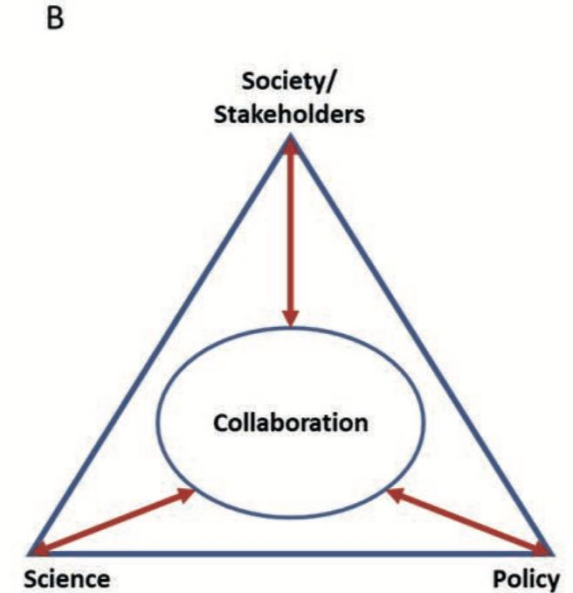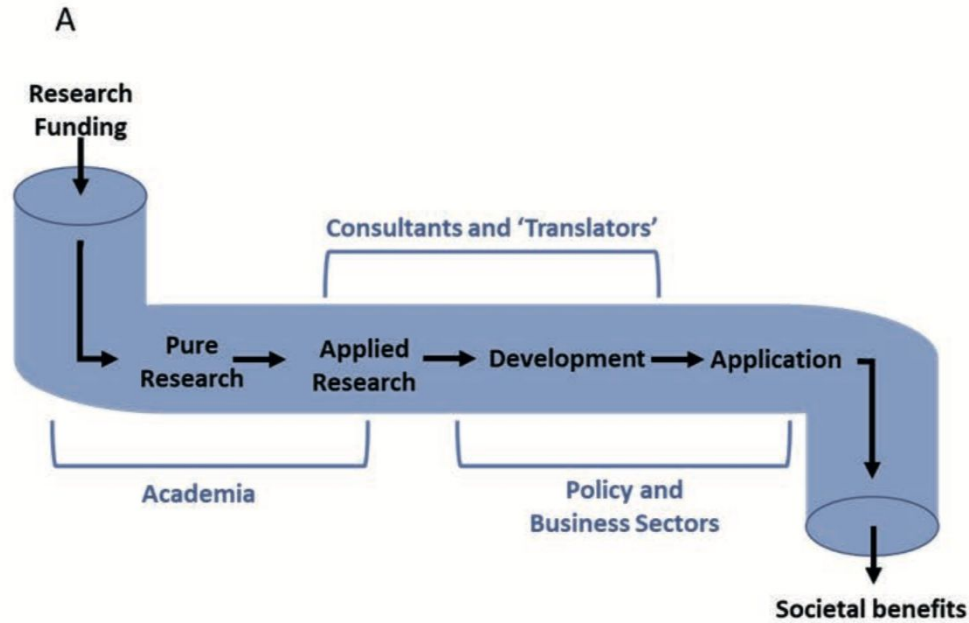
Figure 41. From a standard linear model (A) to the Science-Policy-Society Triangle (B). Source: Ullah (2017), adapted from Hessels and Van Lente (2008).

Final Pitch Criteria

Two teams will be rewarded

Creativity/ Innovativeness	The innovativeness of the idea to solve an evidence-based problem or issue
Compatibility	The compatibility of the idea to the 2030 Agenda and the Sustainable Development Goals and specific targets
Plausibility	The applicability and feasibility of the solution for practical implementation to accelerate the SDGs
Process	The application of the Design Thinking Methodology throughout the whole design process
Influence/Pitch delivery	The ability of the presentation and presenters to captivate and persuade the audience

Be mindful of interconnectedness of SDGs

As you resume with DT process (empathize and define)

- Outline which SDG targets your idea addresses
- **-** Background research on relevant targets, specific to your user group