United Nations – MoST Joint Capacity Building Workshop on
Science, Technology and Innovation for Sustainable Development Goals
December 9-17, 2019
Guilin, China

Sustainable Development Goals (SDGs) and the Global Sustainable Development Report (GSDR) 2019*

Eun Mee Kim
Professor, Graduate School of International Studies
Director, Global Health Institute for Girls and Women
Ewha Womans University
Seoul, Republic of Korea
December 9, 2019

*Excerpts from Peter Messerli's presentation (2019.9) and GSDR 2019

I. Sustainable Development Goals (SDGs)

Agenda 2030

Leave No One Behind

II. Global Sustainable Development Report (GSDR) 2019

1. UN member states requested an independent and critical assessment of the implementation of the SDGs every four years.

2. The Mandate of the *Global Sustainable Development Report*:
   - Science-policy interface with evidence-based research
   - To reflect "the universal, indivisible and integrated nature of the 2030 Agenda for Sustainable Development" (GSDR 2019: xix)

3. UNSG appointed 15 scientists as the Independent Group of Sciences (IGS) for the first *Global Sustainable Development Report 2019* (December 31, 2016 – September 24, 2019).

1. Independent Group of Scientists (IGS)

Co-Chairs

Endah Murniningtyas (Indonesia; Agriculture Economics, Environment, Indonesia Development)

Peter Messerli (Switzerland; Geography, Southeast Asia, African Ecosystem)

Wolfgang Lutz (Austria; Demography, Human Capital Population & Environment)

Jean-Pascal van Ypersele (Belgium; Physics, climate Change, Energy & Climate, Climate Change)

Parfait Eloundou-Enyegue (Cameroon; Sociology, Education, Inequality)

Katherine Richardson (Denmark; Biology, Bio-Diversity, Marine Biology)

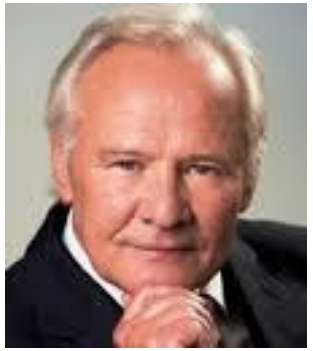
Eeva Furman (Finland; Environmental Policy, Bio-Diversity, Eco-System)

Jean-Paul Moatti (France; Economics, Health Economics, HIV/AIDS)

Ernest Foli (Ghana; Tropical Forest Ecology, Biostatistics)

David Smith (Jamaica; Disaster Management, Climate Change)

Muhammad Saidam (Jordan; Climate Change, Agriculture, Water and Sanitation System)



Jurgis Staniskis (Lithuania; Environmental Engineering, Environment Economics)

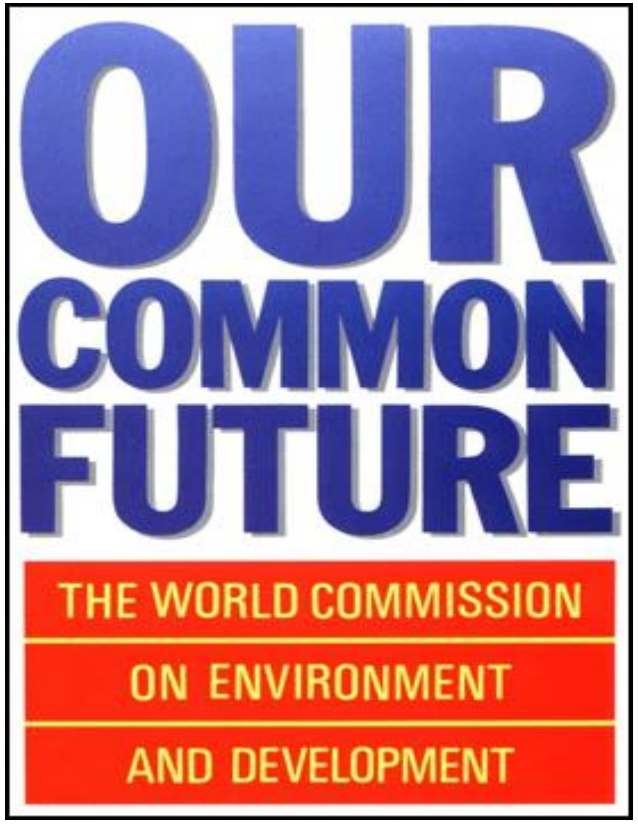
Gonzalo Hernández Licona (Mexico; Economics, Poverty, Economic Development, Social Development)

Eun Mee Kim (Republic of Korea; Sociology, East Asian Economic Development, International Development Cooperation)

Amanda Glassman (US; Maternal and Child Health, Global Public Health, Social Protection)

2. The Brundtland Report (*Our Common Future*), 1987

The Brundtland Commission Report/ Former Prime of Norway, Gro Harlem Brundtland



UN World Commission on Environment and Development (WCED): 1987

- Environment became a major global issue at the Stockholm Conference
- **Environment & Development as One Global Problem** ➔ Presented as a major global political problem to be solved by all
- Poverty eradication, gender equality, redistribution of wealth in order to enhance human development are also important for the sustainability of the environment; Need to limit economic growth in order to save the environment for developed and developing countries
- Research, analysis, and recommendations for Solutions for Sustainable Development

3. Process of GSDR 2019

Face-to-face meetings in New York and continuous consultations facilitated by UN DESA.
Support by Task Team of six UN Agencies: UN DESA, UNEP, UNCTAD, UNDP, UNESCO, and World Bank.

Dec 2016 — Received mandate

- Nominations by Member States
- Appointment by UNSG

2017

- Understanding the mandate
- Develop overall concept

- First Member State briefing
- Workshop: Helsinki, Finland
- External Inputs

2018

- Zero Draft
- Consultations
- 1st Draft

- Second Member State briefing
- Workshop: Washington DC
- Regional Consultations: South Africa, Argentina, Bangladesh
- Participation in Regional UN Forums: Thailand

2019

- 2nd Draft
- Scientific review
- Member states comments
- Final draft and launch at UN SDG Summit

- Third Member State briefing
- Regional Consultation: Jordan

4. GSDR 2019

Global Sustainable Development Report 2019

The Future is Now: Science for Achieving Sustainable Development

UN Secretary General and IGS
September 10, 2019

UN Sustainable Development Summit
GSDR Fireside Chat
September 24, 2019

(1) A decisive decade ahead

Sounding the alarm bell:

The need to scale-up and accelerate implementation

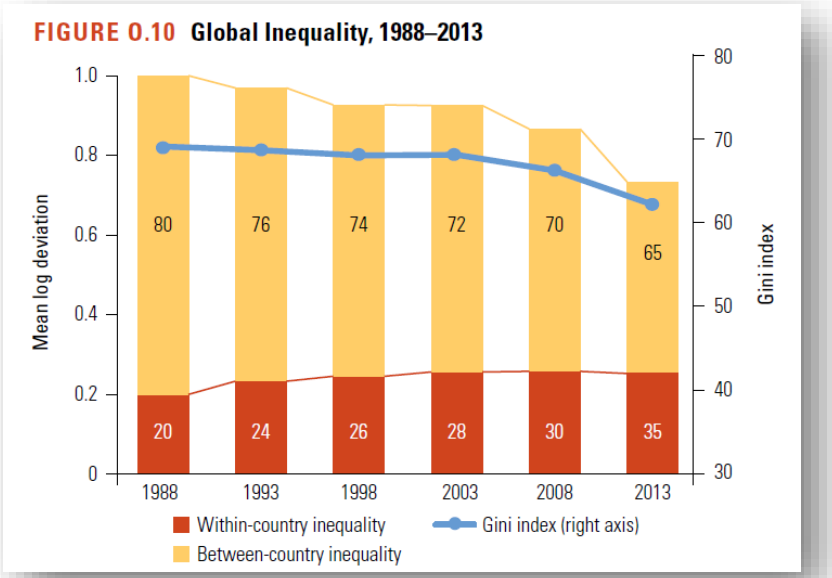
Business-as-usual approaches

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 *	

* target not specified ** based on most recently available data

Understanding the systemic challenges

Rising inequalities



World Bank, 2016

Biodiversity loss

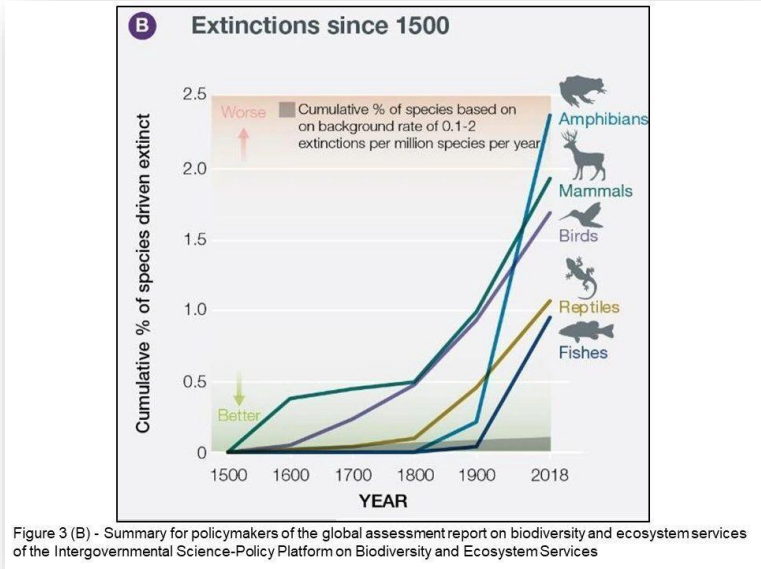
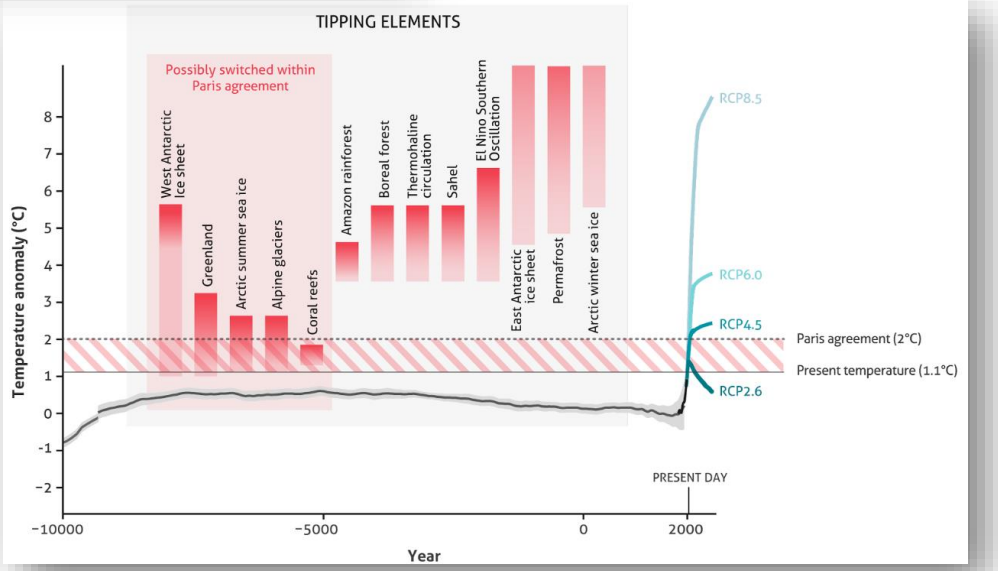


Figure 3 (B) - Summary for policymakers of the global assessment report on biodiversity and ecosystem services of the Intergovernmental Science-Policy Platform on Biodiversity and Ecosystem Services

IPBES, 2019

Climate change



Future Earth, 2017, based on Schellnhuber et al. 2016

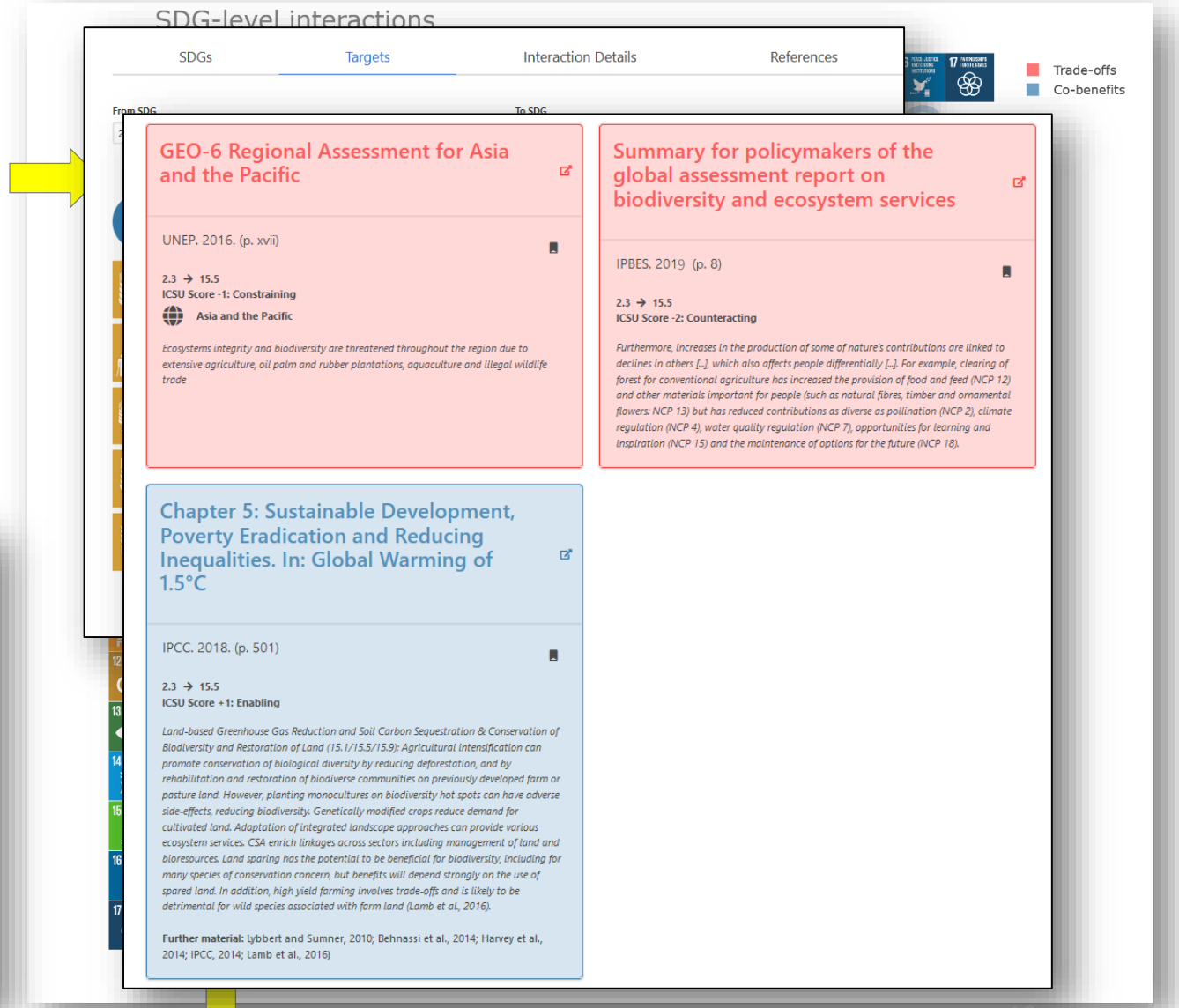
Ecological footprint

(2) Knowledge-based transformations

Insight (a): From boxes to arrows – a systems perspective

Moving forward:

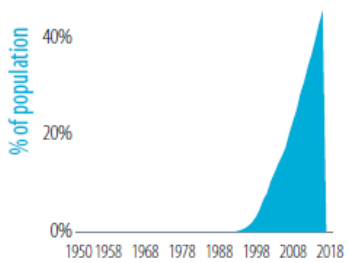
- *address trade-offs*
- *harness co-benefits*
- *turn vicious- into virtuous cycles*



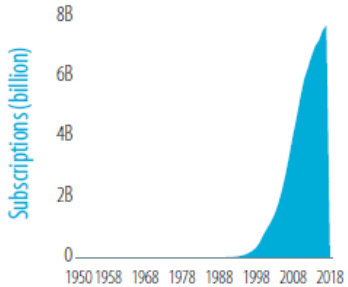
Insight (b): Levers for change in a hyper-connected world

Flows of information

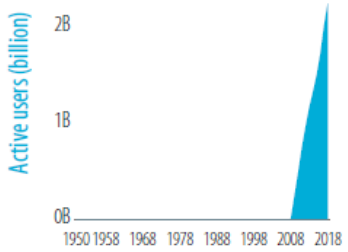
Individuals using the Internet



Mobile cellular subscriptions

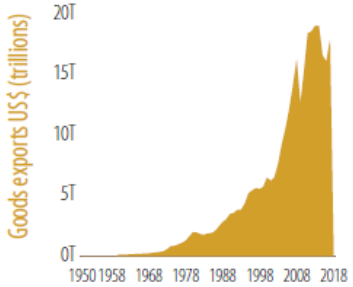


Monthly active Facebook users worldwide

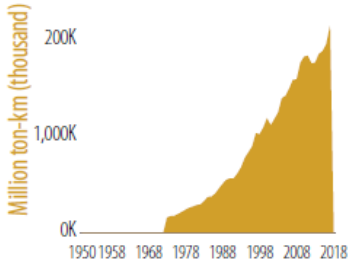


Flows of goods

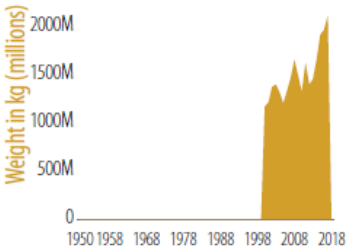
Merchandise exports



Air transport, freight

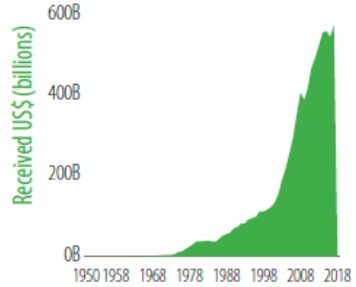


Rice imports by the EU

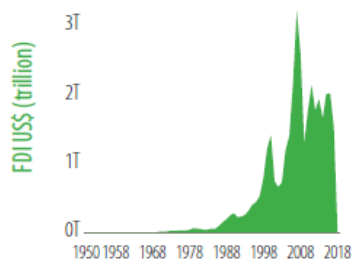


Flows of capital

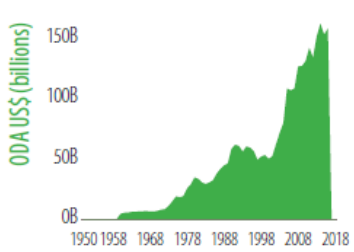
Personal remittances, received



Foreign direct investment, net outflows

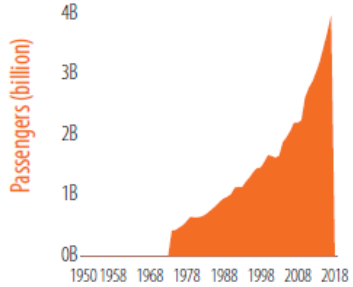


Net official development assistance received

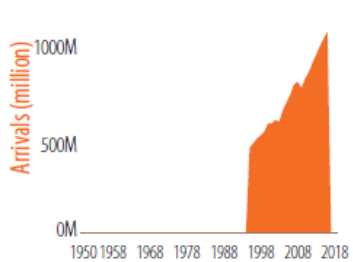


Flows of people

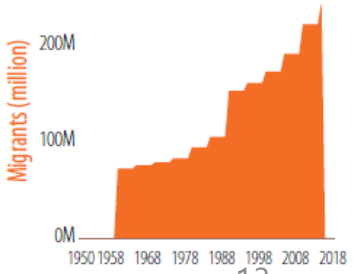
Air transport, passengers carried



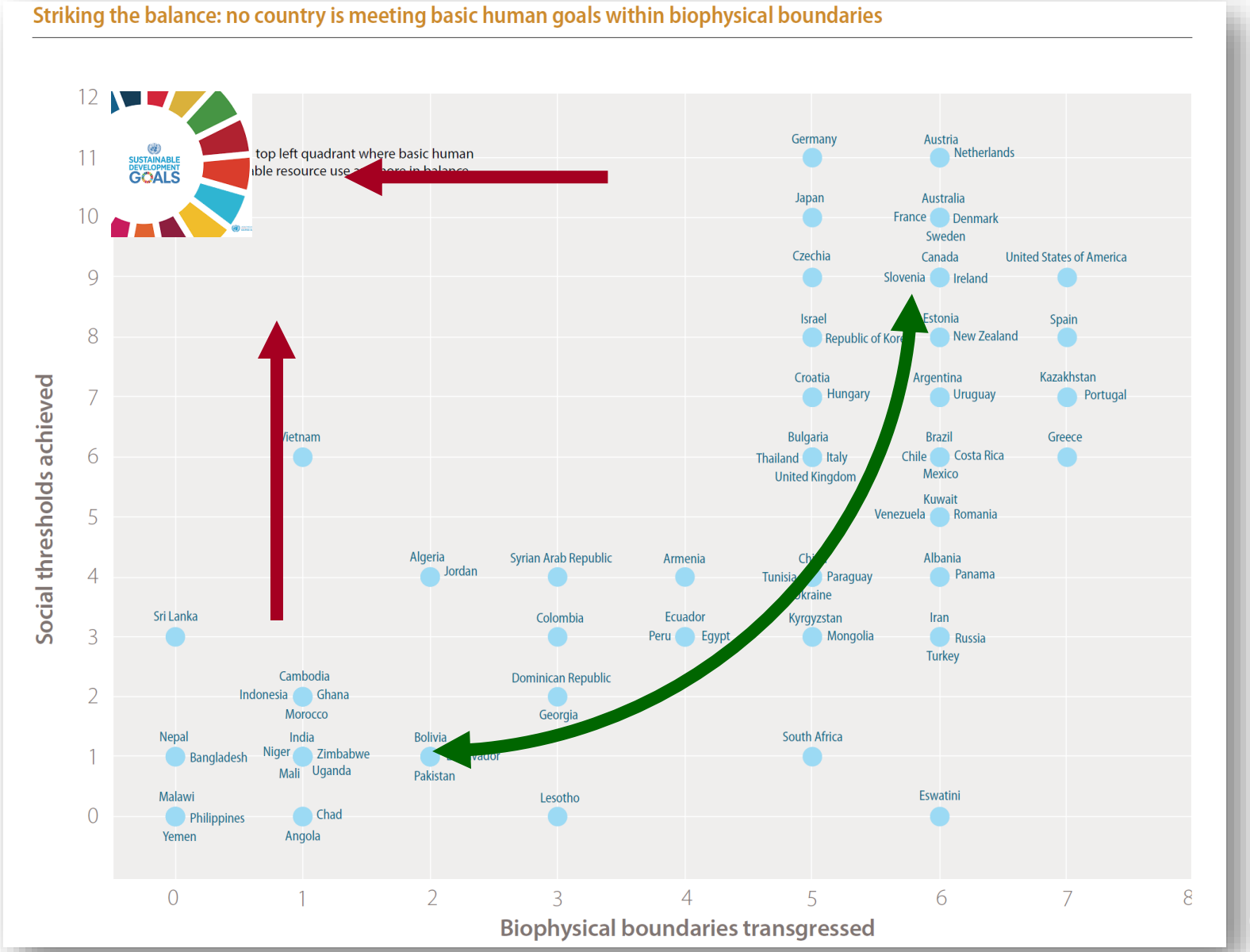
International tourism, number of arrivals



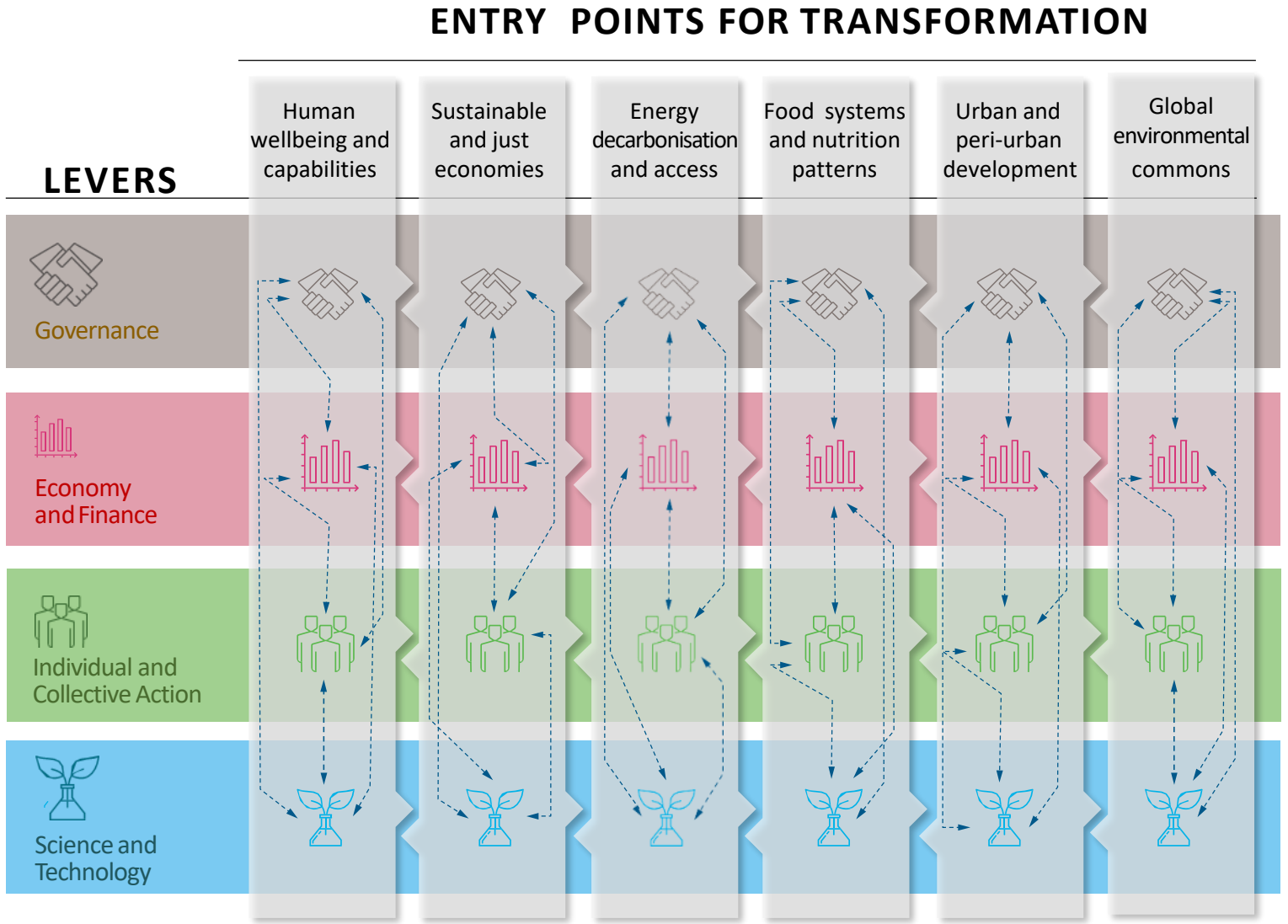
International migrant, total



Insight (c): Context and universality matter!



Context-specific pathways to transformation for sustainability

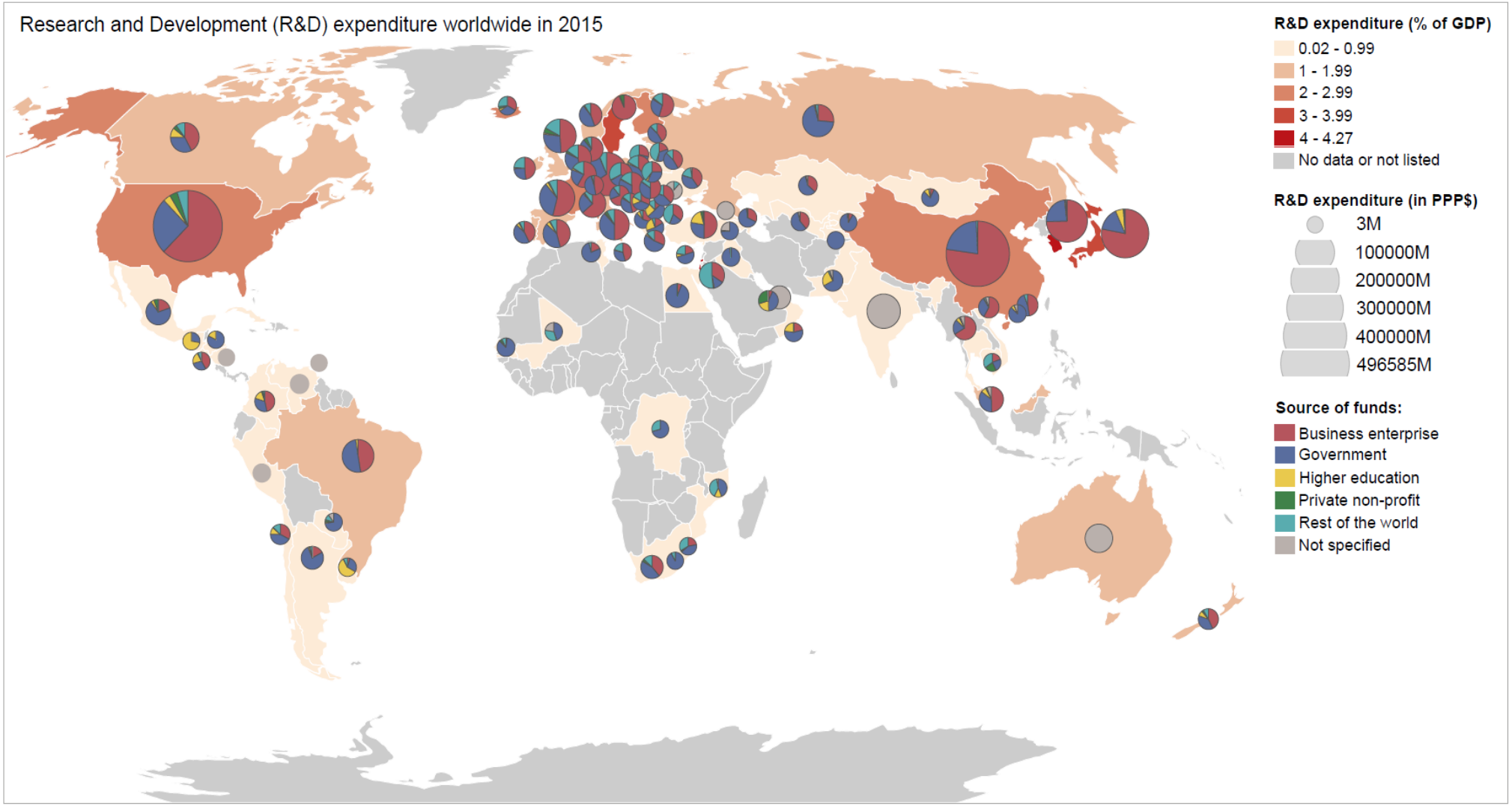


Each entry point:

- ✓ **Impediments**
- ✓ **Levers**
- ✓ **Integrated and context-specific pathways**
- ✓ **Call to Action**

Pathways to Transformation as context-specific configurations of levers to achieve transformation in each entry point

R&D Gap in the Global North and the Global South: Implications for ODA & GPEDC for SDGs



(5) Summary of Key Points of *GSDR 2019*

1) **Independent and Critical Assessment of SDGs Implementation**
   - Meta Analysis of scientific research publications, UN Reports, Country Reports, etc.

2) **Evidence-based Research for SDGs**
   - Reflect the universal, indivisible and integrated nature of the 2030 Agenda
   - Interlinkages and correlation among the 17 goals: Trade-offs and co-benefits
   - Policy recommendations to be based on scientific evidence including indigenous knowledge

3) **Policy Recommendations**
   - **Message to the UN and Member States to implement SDGs: STRONG POLITICAL WILL → WE NEED TO MAKE HARD CHOICES and MAKE SDGs TOP PRIORITY!**
   - **ALARM BELL: We only have 10 years left until 2030**
   - **BUT, WE CAN DO IT: 6 ENTRY POINTS FOR TRANSFORMATION and 4 LEVERS**

III. Concluding Remarks

- **Science, Technology and Innovation (STI) for SDGs:**
  - (1) Use science and scientific evidence to guide and inform policy for SDGs (GSDR 2019)
  - (2) Interlinkages among SDGs: Address trade-offs, and harness co-benefits
  - (3) 6 entry points for transformation and 4 levers for SDGs
  - (4) Take advantage of existing science and technology including indigenous knowledge to achieve the SDGs
- **Gap in STI between the Global North and the Global South:**
  - (1) Large gap in research and development (R&D): Large investments in R&D and innovation in the Global North, largely from the private sector
  - (2) Disaggregated data to measure inequalities and to find workable solutions are needed in the Global South
  - (3) Good higher-education is needed in the Global South
  - (4) Use Official Development Assistance (ODA) and South-South Cooperation (SSC) to assist developing countries to reduce the gap in STI
- **We must work together, hand in hand between developed and developing countries as partners for SDGs!**

Thank you very much!