

The key messages from the 2019 Global Sustainable Development Report

Prof. Jean-Paul Moatti

CEO

French National Research Institute for Sustainable Development (IRD)

OTMED Conference on Sustainability Transitions

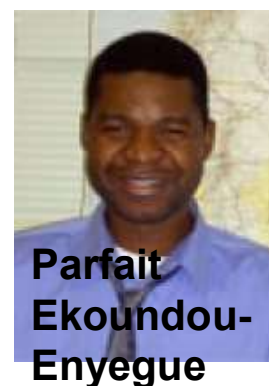
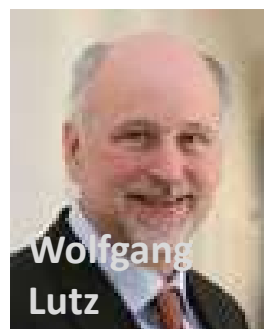
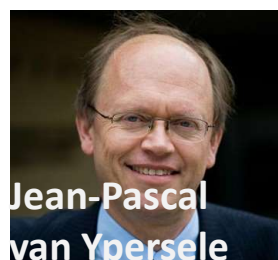
Marseille, October 15th 2019

A decisive decade ahead





The GSDR Independent Group of Scientists (IGS)



THE FUTURE
IS NOW
SCIENCE FOR ACHIEVING
SUSTAINABLE DEVELOPMENT



GLOBAL SUSTAINABLE
DEVELOPMENT REPORT 2019



GSDR mandate agreed by UN Member States in July 2016

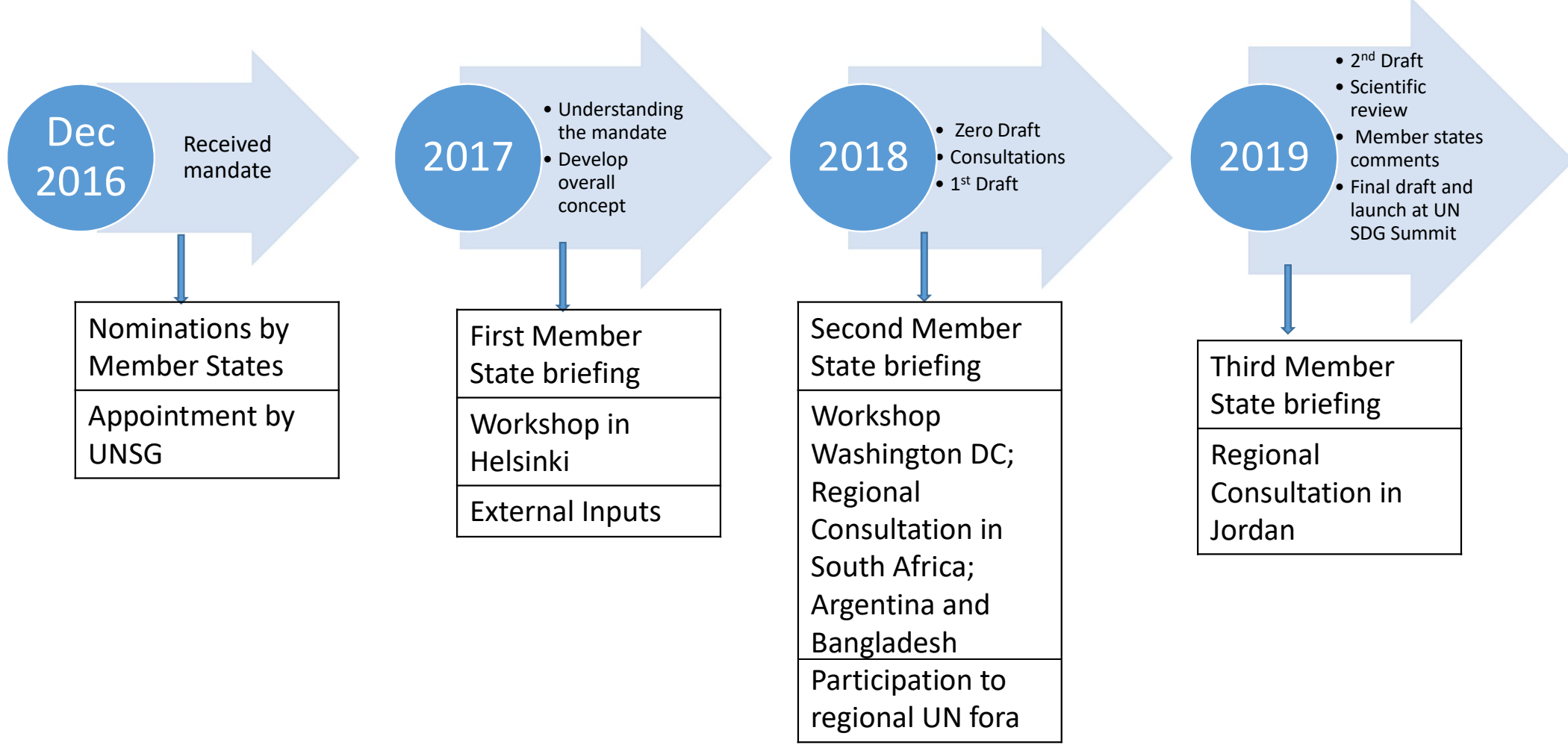
In complement to the annual progress report by the UN secretariat, the **GSDR** is

- the key component of the **follow-up and review process for the 2030 Agenda** for Sustainable Development
- will **inform the high-level political forum (HLPF)**, and shall strengthen the science-policy interface and provide a strong evidence-based instrument to support policymakers
- will also be **available for a wide range of stakeholders**, including business and civil society as well as the wide public
- Is a “**non negociable report**” but has benefited from intensive consultation with the scientific community, UN and other international organizations, member states, civil society and NGO’s, and business private sector



Process of GSDR

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



Preliminary GSDR 2019 Key Messages

- **It is time to sound the alarm**
- **Better focus on the arrows than on the boxes**
- **Mobilize the billions and shift the trillions**
- **Promote sustainability science**



1. A decisive decade ahead

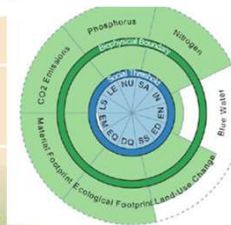
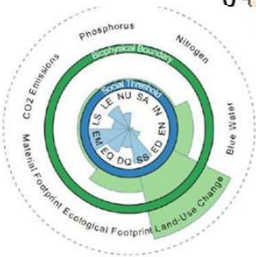
*Sounding the alarm bell:
The need to scale-up and
accelerate implementation*

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

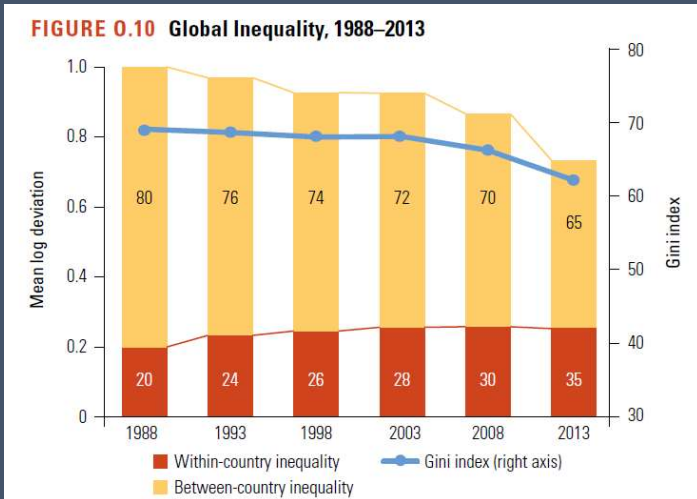
Not a single country has achieved a high level of well-being in an ecologically sustainable way



Lähde: O'Neill et al. 2018, © SYKE & SITRA

Understanding the systemic challenges

Raising inequalities



Biodiversity loss

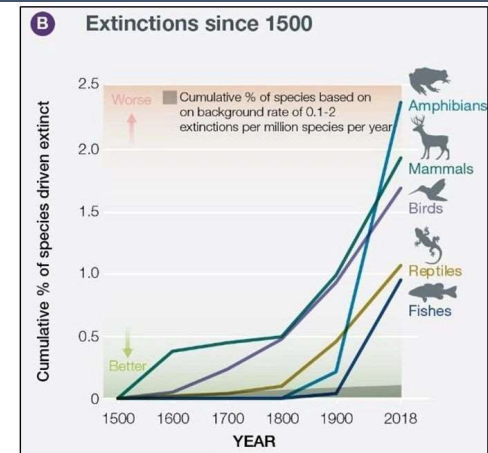
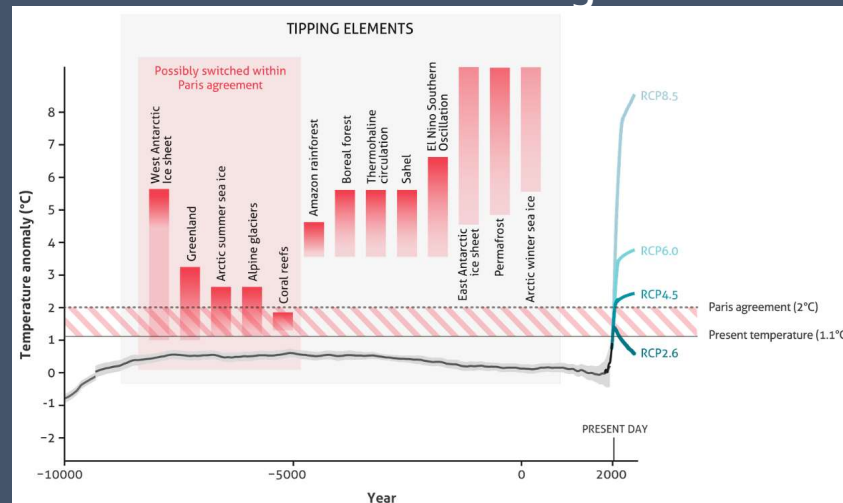


Figure 3 (B) - Summary for policymakers of the global assessment report on biodiversity and ecosystem services of the Intergovernmental Science-Policy Platform on Biodiversity and Ecosystem Services

IPBES, 2019

Climate change



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

It's not the Kuznets' curve, It's the elephant's curve

The idea that increased inequalities are « the price to pay » for poverty eradication is misleading

Inequality reduction and poverty elimination are strongly interrelated

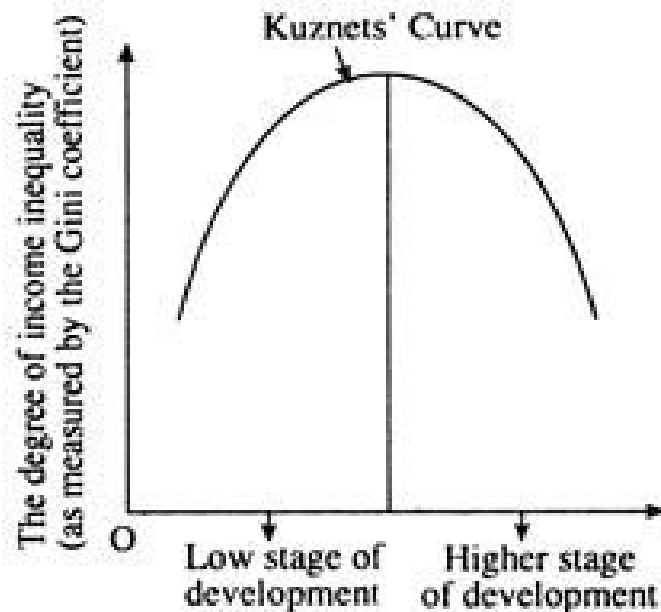
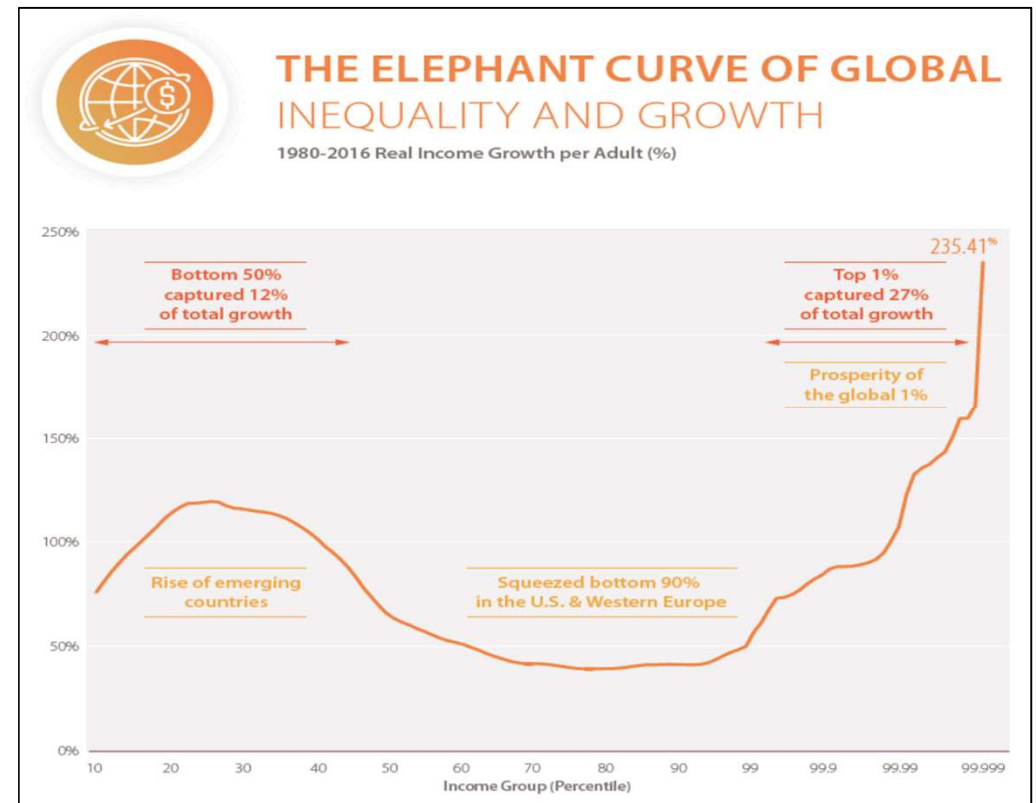


Fig. 2: Kuznets' Inverted U Hypothesis

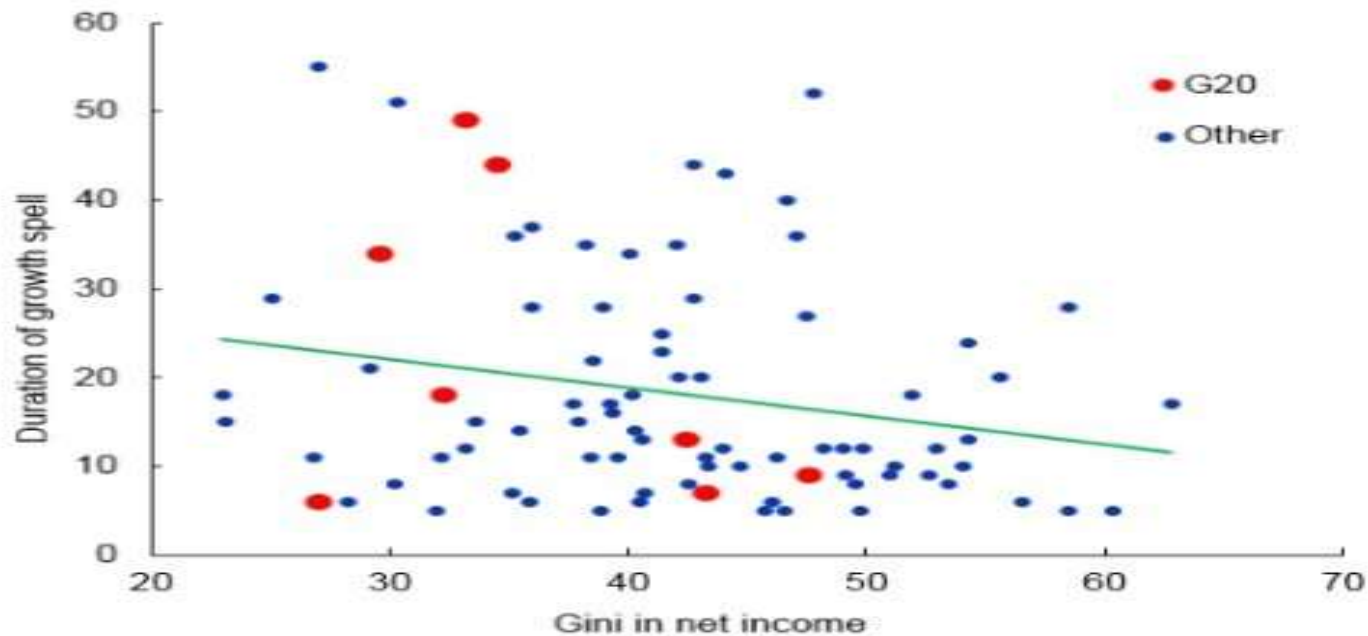


“ Persistent lack of inclusion can fray social cohesion and undermine the sustainability of growth itself.” IMF 2017

Inequality and the durability of growth

The higher the levels of inequality, the shorter the duration of high growth spells (as shown by the green line).

(spells, average net income inequality, 1960-2010)

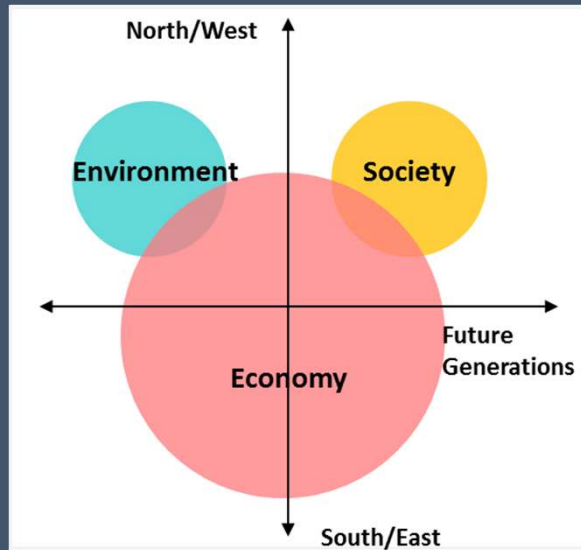


IMF

Sources: Ostry, Berg, and Tsangarides (2014), using data from Penn World Tables version



The transformative power of the 2030 Agenda



Evolution to SD:

Three pillars, compromises, emergent in space and time



Transformations to SD:

Indivisible, hard choices, intentional, time-bound

Need to focus on interactions, synergies and trade-offs among SDGs

Coding:

- 62 Global Reports and scientific assessments
- 110 scientific papers with explicit mention of SDG interactions

General pattern:

- 2080 interactions positively or negatively assessed at target level

	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17		
1			-2.00		-2.00	-1.00								-1.00	-2.00	-2.00			
2	2.00	2.40	2.00	2.00	2.25			2.00									2.00		
3	-1.50	-1.60	-1.57			-1.58	-1.25							-1.80	-1.00	-1.64			
4	2.10	1.83	1.63	1.50	2.00	2.29	1.64	1.75	2.00	1.50		2.00	1.93		1.92	2.00			
5		-2.00					-1.00	-2.00											
6	2.00	1.80	1.89	2.00	3.00	2.00		2.00		1.50			2.00		2.00				
7	-2.00				-1.00												2.00	2.00	
8	1.67	1.50	2.00	2.00	2.80			2.00	3.00	2.00	2.00	2.00	2.00	2.00	2.00		2.00	2.00	
9																			
10	1.80	1.87	1.75	2.00	3.00	1.00		2.00			1.67		1.00					-1.00	
11		-2.00			-1.00	-2.00	-1.00												2.00
12	1.94	1.76	2.00	2.00	1.94	1.00	1.58	1.70	1.00	1.80	1.00	1.09	2.33	2.00	2.00	1.50	2.00	1.50	2.00
13	-1.20	-1.33	-1.00			-1.20		-1.00	-1.00	-1.00				-1.00	-1.00	-1.33			
14	2.00	1.81	1.68	1.00	1.17	1.92	1.89	1.48	1.71	1.20	2.11	1.86	1.88	1.67	1.78	2.00			
15	-2.00		-1.00			-2.00	-1.00	-1.00		-1.00		-2.00	-2.00	-1.80					
16	2.15	2.00	2.11	2.00	3.00	2.86	1.09	1.75		1.57	1.50	2.00	1.67	1.25	1.50				
17	-2.00	-1.00	-2.00		-1.00	-1.00	-1.00	-2.00		-1.33				-1.00		-3.00			
18	1.90	2.00	1.67	1.50	1.67	2.89	2.00	2.00	3.00	2.00	2.00		2.00		1.00	1.00	1.00		
19	2.00		-2.00	-1.00	-2.00														
20	2.00	1.38	1.75	1.25	2.00	2.33	2.00	1.80	2.00	2.00	1.50	2.00	2.00	1.50	2.00	1.50	2.00	1.50	2.00
21		-1.00				-1.00	-1.00												
22	1.82	2.00	1.96	1.00	1.67	2.67	2.50	2.00		1.67			2.00	1.67	2.10	2.00	1.00	2.00	
23		-2.00					-1.00												
24	2.00	2.11	2.00		2.00	2.87	1.63	2.00			2.00	1.50		2.50	1.70	2.00	1.50		
25	-2.00	-1.50	-1.50			-1.50						-1.00							
26	1.87	2.36	2.31	1.00	1.00	2.00	2.00	2.40	1.75	2.00	2.08	2.00	2.00	2.04	2.12	2.00	2.00		
27	-1.11	-1.00						-1.86						-2.00	-2.00				
28	2.06	1.84	2.20	2.00	1.00			2.00	1.00	2.00	1.92	2.58	1.83	2.10	1.80	2.00			
29		-2.00				-2.00													
30	2.00	1.75	2.08		1.50	2.22	1.67	2.10		1.00		1.00	2.18		1.69	2.00	2.00		
31			-3.00		-2.00									-2.00					
32	2.50	2.00	2.50	2.00	1.50	2.00	2.00	2.14	2.00	1.20	2.00	2.00	2.00	2.00	2.00	1.60	1.75		
33					-1.00														
34	2.00	1.88	1.50	2.00	1.50	1.88	1.70	1.56	1.71	2.00	2.00	2.00	2.00	1.50	2.00	2.00	2.00	1.90	

TRANSFORMATIONS –
WAYS TO TACKLE ARISING PHENOMENA

AGENDA 2030 –
A VISION FOR HUMANITY
IN THE ANTHROPOCENE

Sustainable &
Frugal
INNOVATIONS



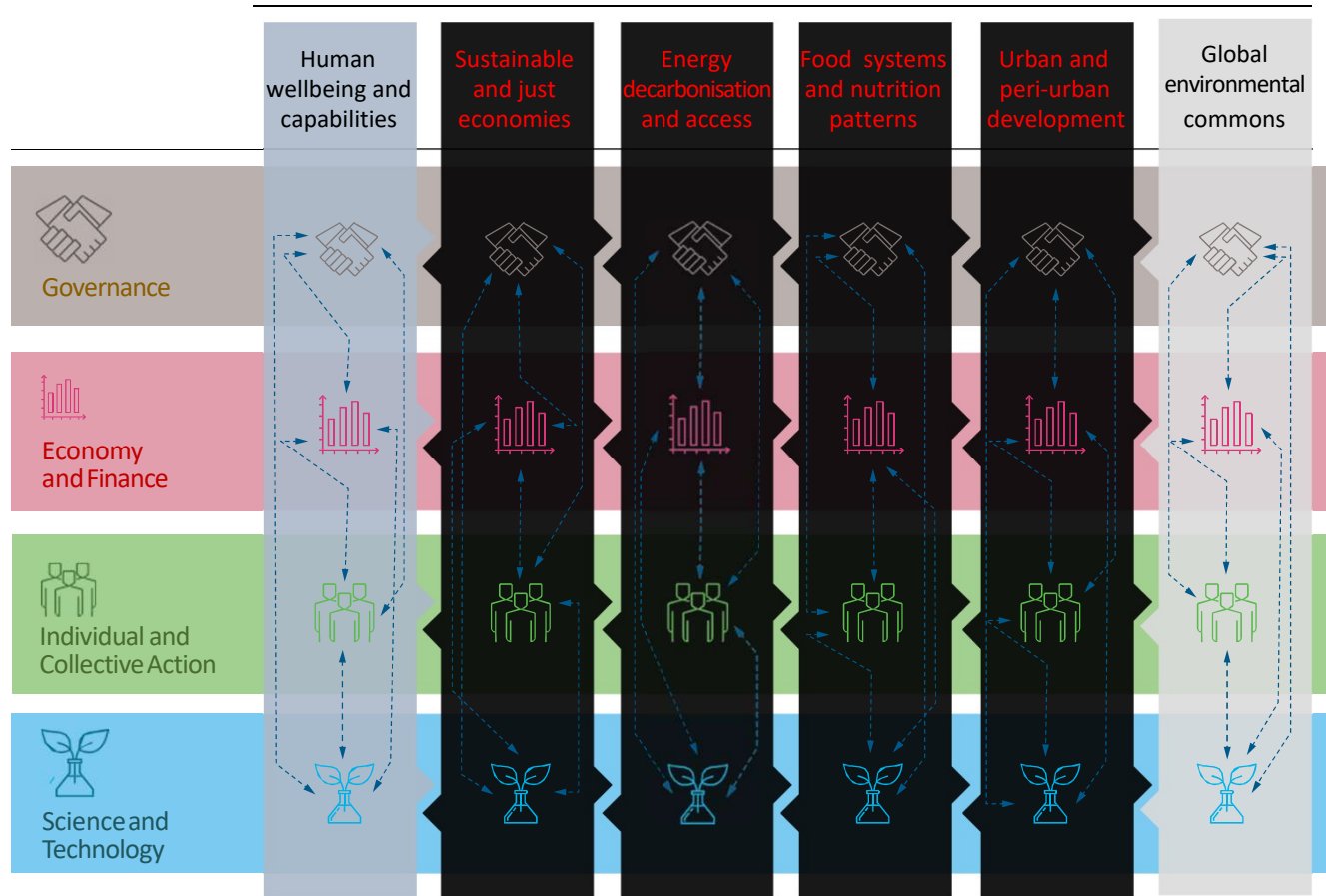
KNOWLEDGE –
UNDERSTANDING
COMPLEX CAUSAL
CHAINS
MINIMIZING NEGATIVE
EXTERNALITIES &
MAXIMIZING POSITIVE
SYNERGIES BETWEEN
POLICIES TOWARD SDGs

GSDR : 6 Entry points for systemic transformations + 4 levers

- Human potential and wellbeing
- Sustainable economies
- Energy decarbonisation and access
- Food and nutrition
- Urban and peri-urban development
- Securing the global commons



2. Knowledge-based transformations



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

Building sustainable food systems and nutrition patterns

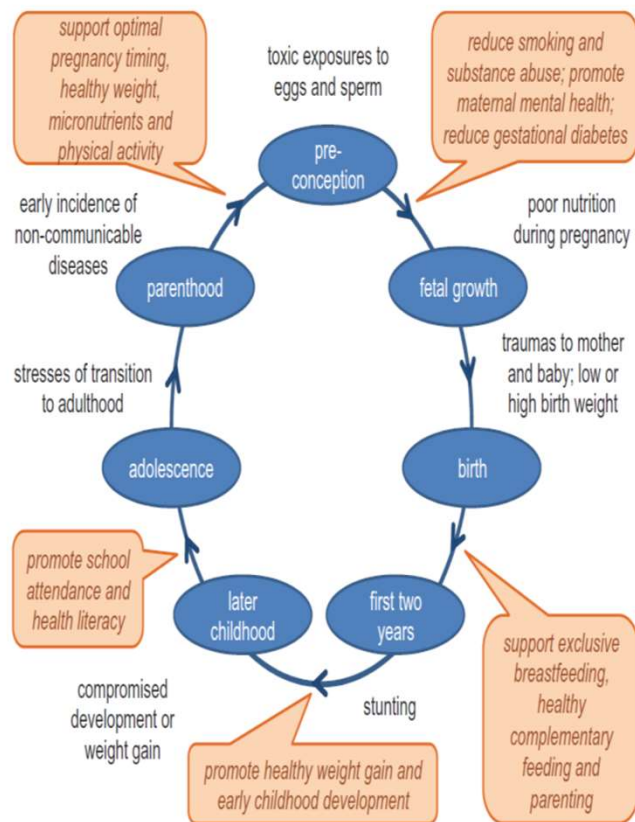


Pathways

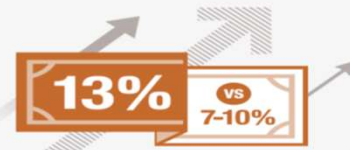
Levers



Policy Implications of the DOHAD Hypothesis (Developmental Origins of Health & Disease)



Quality birth-to-five early childhood education delivers the greatest return on investment.



HIGHER RETURNS THAN PRESCHOOL ALONE Every dollar invested in high-quality birth-to-five early childhood education for disadvantaged children delivers a 13% annual return on investment, significantly higher than the 7-10% return delivered by preschool alone.

THERE IS NO FADEOUT Unlike other early childhood programs, ABC/CARE shows lasting gains in IQ. Lasting boosts in cognition and socio-emotional skills drive better education, health, social and economic outcomes.

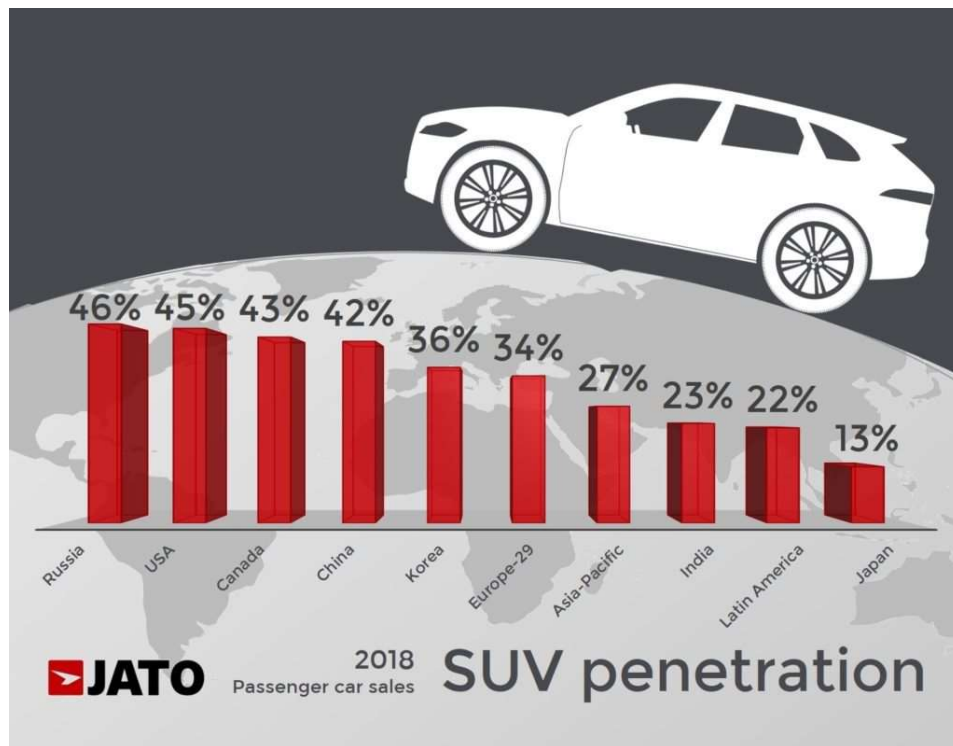


QUALITY PROGRAMS ARE COMPREHENSIVE Starting from birth, integrating early health and nutrition with early learning, providing reliable child care and having a developmentally focused program delivered by nurturing teachers and skilled professionals lead to better outcomes.

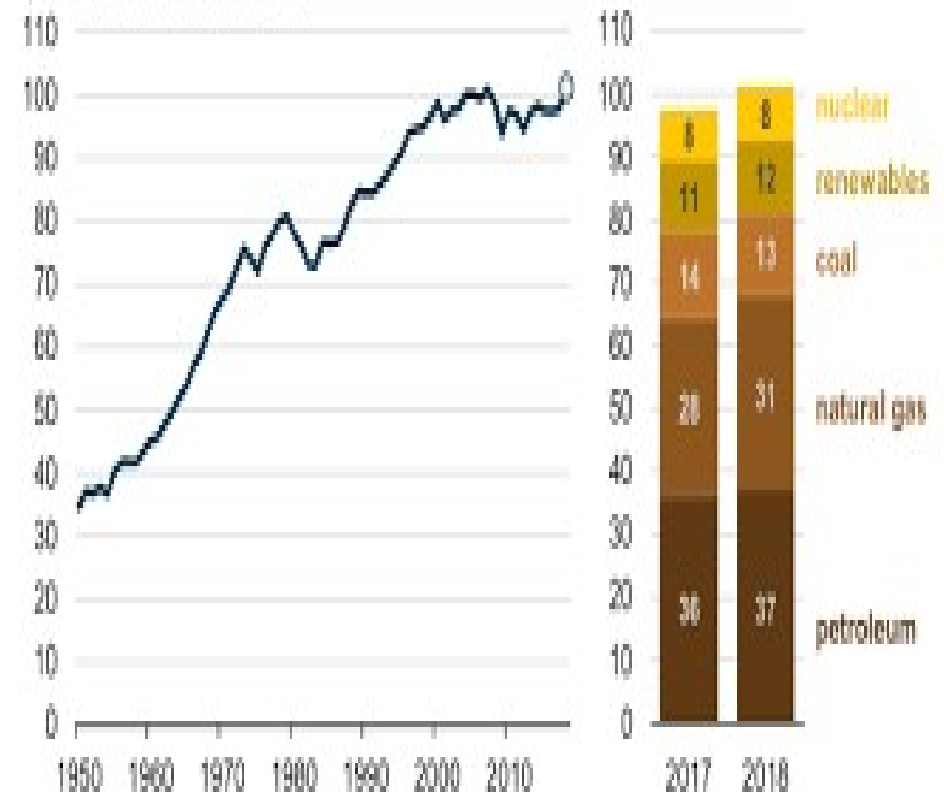
CHILD CARE HELPS MOMS Quality care and learning provided five days a week for five years gave ABC/CARE mothers the time to enter the workforce, build skills and advance careers and income—while their children gained the skills to become productive adults. The program pays for itself within five years just based on income gains among mothers who re-enter the work force.



Increase in SUV sales has offset all US energy efficiency efforts



U.S. total energy consumption (1950-2018)
quadrillion British thermal units



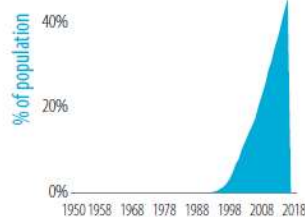


Insight (b): Levers for change in a hyper-connected world

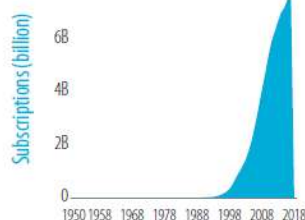


Flows of information

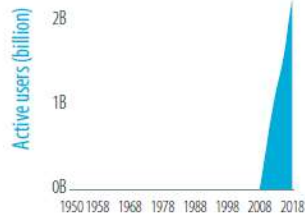
Individuals using the Internet



Mobile cellular subscriptions

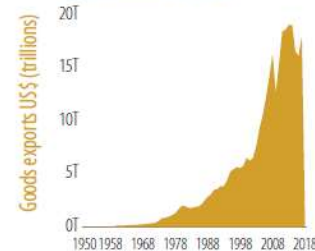


Monthly active Facebook users worldwide

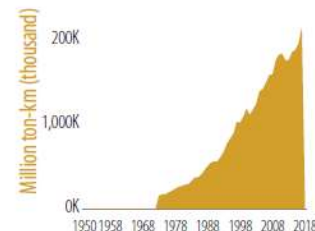


Flows of goods

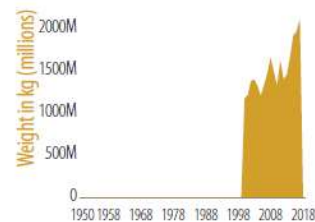
Merchandise exports



Air transport, freight

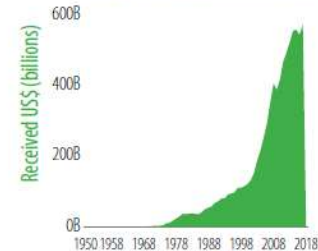


Rice imports by the EU

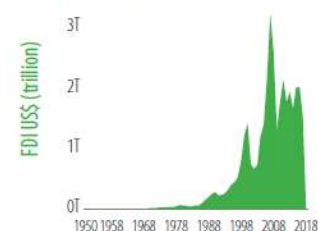


Flows of capital

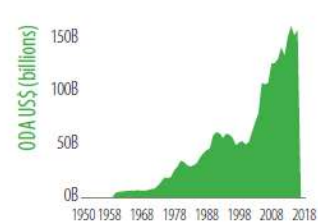
Personal remittances, received



Foreign direct investment, net outflows

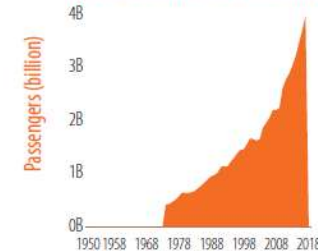


Net official development assistance received

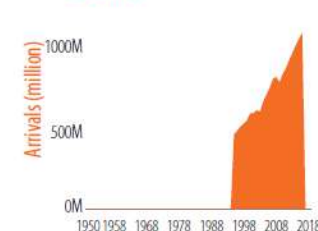


Flows of people

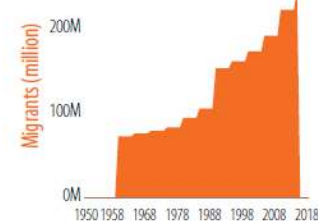
Air transport, passengers carried



International tourism, number of arrivals



International migrant, total

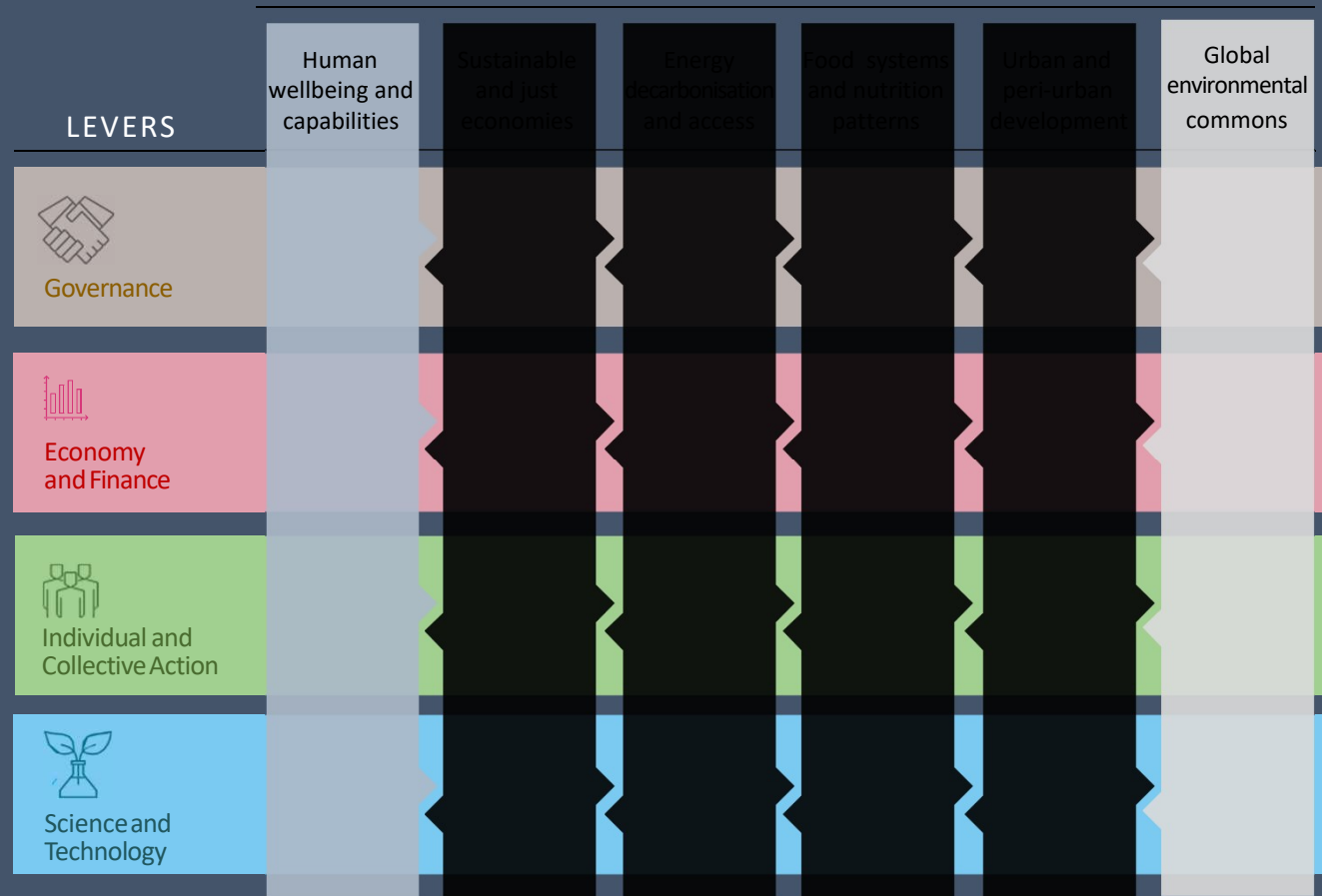




2. Knowledge-based transformations

Innovation through combined levers and new partnerships

ENTRY POINTS FOR TRANSFORMATION




3. Implementation of Agenda 2030 :

Mobilizing the billions, Shifting the trillions (KM3)

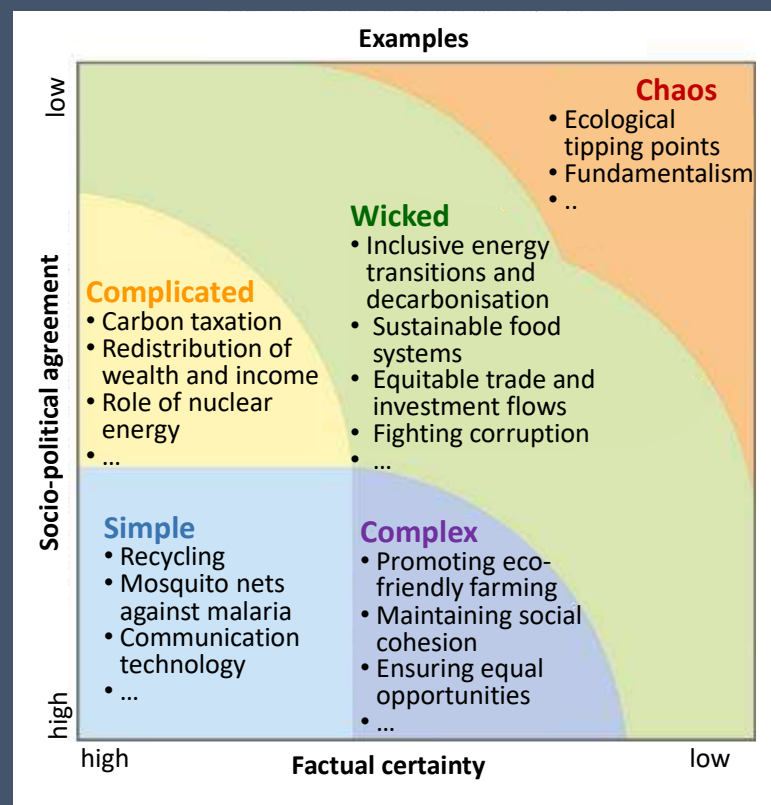
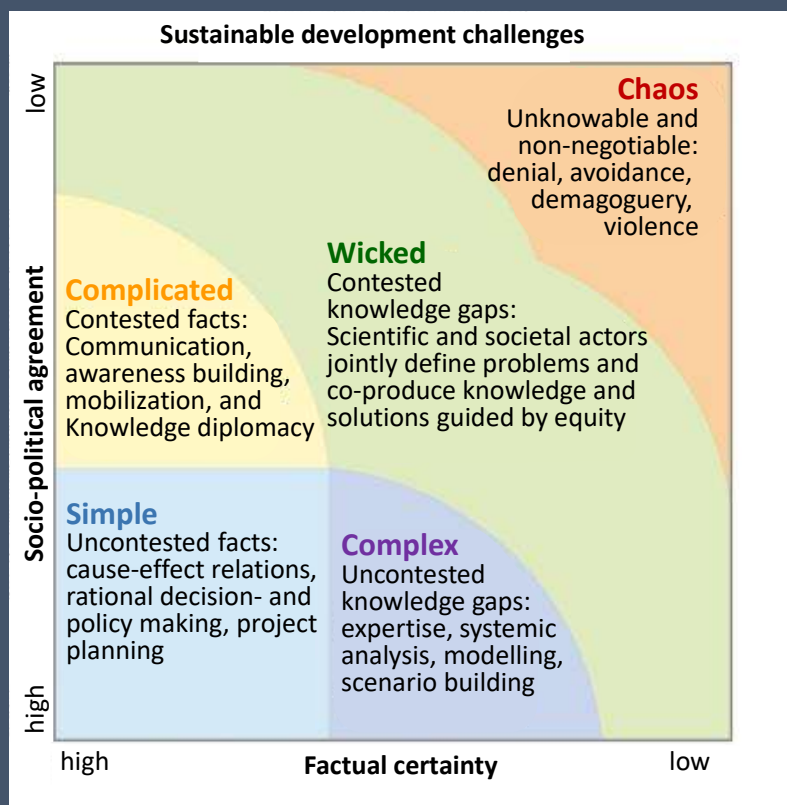
- Total world investment in 2019 (IMF) = **22.8** trillion US\$
11.5 in advanced economies
11.3 in emerging and developing economies
- Foreign Direct Investment in 2018 (UNCTAD) = **1.43** trillion US\$
0.67 in developing countries
- Total ODA (OECD/DAC) in 2018 = **0.15** trillion US \$
- Public Development Finance Institutions Investment in 2018 = **1.9** trillion US\$
- Annual funding gap until 2030 for sustainable development in developing countries (UNDP) = **2.5** trillion US\$
- World total subsidies for fossil fuels in 2018 (IMF)= **400** billion (direct)/ **5.3** trillion (indirect)US \$
- 2015 annual commitments of advanced countries for climate finance toward developing countries = **0.1** trillion US\$
- Total volume of Exchange-trading funds = **3.5** trillion US\$
- Total assets of world private finance = **413** trillion US\$

Call for action: « Fair » public/private partnerships

- Governments, international organizations and the private sector should work to **encourage investment that is more strongly aligned to longer-term sustainability pathways** and to facilitate disinvestment away from those that are less sustainable.
- 
- The United Nations and other organizations should promote a **new sustainable development investment label** to provide a technically robust system that defines what sustainable means and help to channel capital flows towards assets that contribute to sustainable development.
 - The United Nations and other organizations should promote **measures other than GDP that reflect a more comprehensive assessment of overall national well-being.**



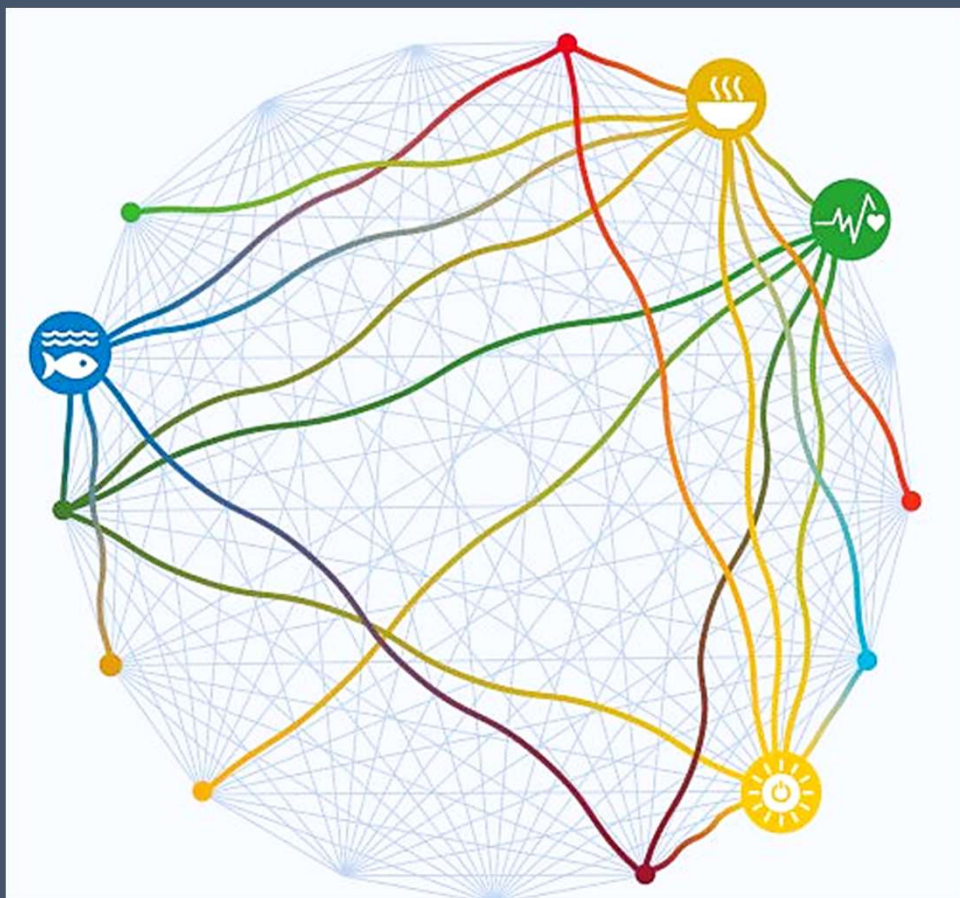
4. The role of science in knowledge-based transformations to sustainable development





Call to Action (1/3):

Harness existing knowledge for accelerated SDG implementation

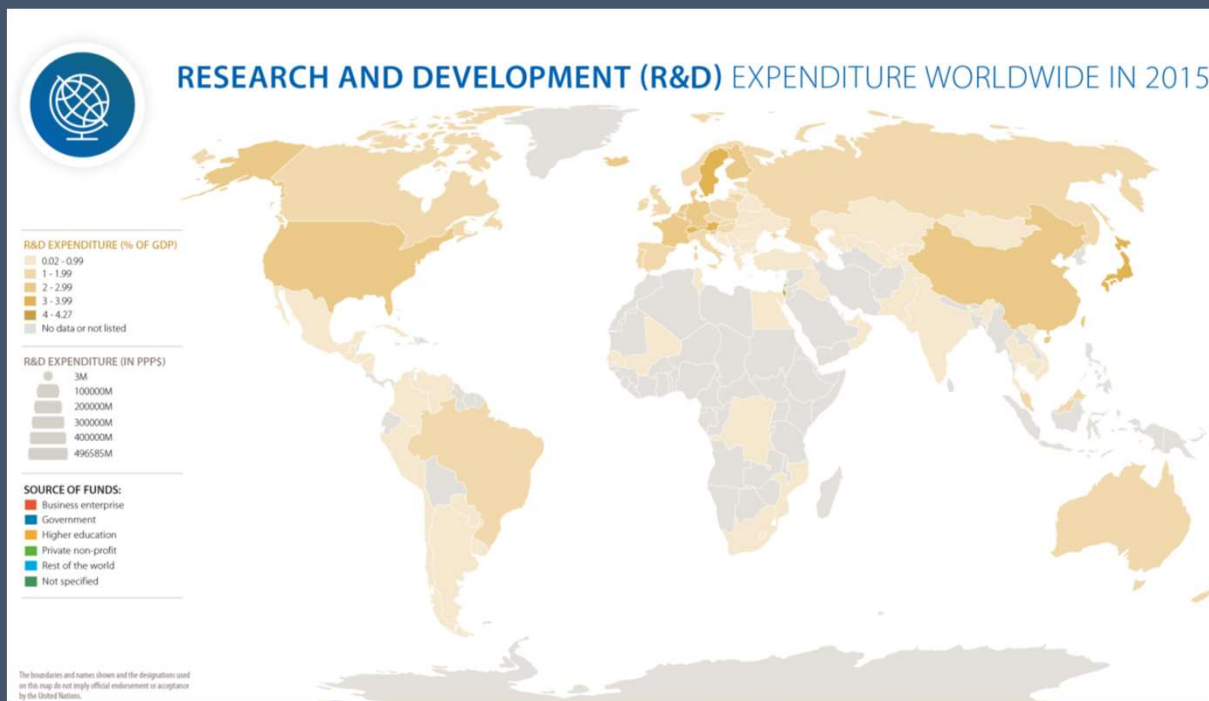


1. Continued support for international scientific assessments and synthesis and their increased coherence
2. Establish open-access national and regional SDG knowledge platforms
3. Sustainable development councils and knowledge diplomacy
4. Support novel partnership of science (public-private-civil society) and building of competencies



Call to Action (2/3):

Boosting scientific knowledge in low and middle income countries

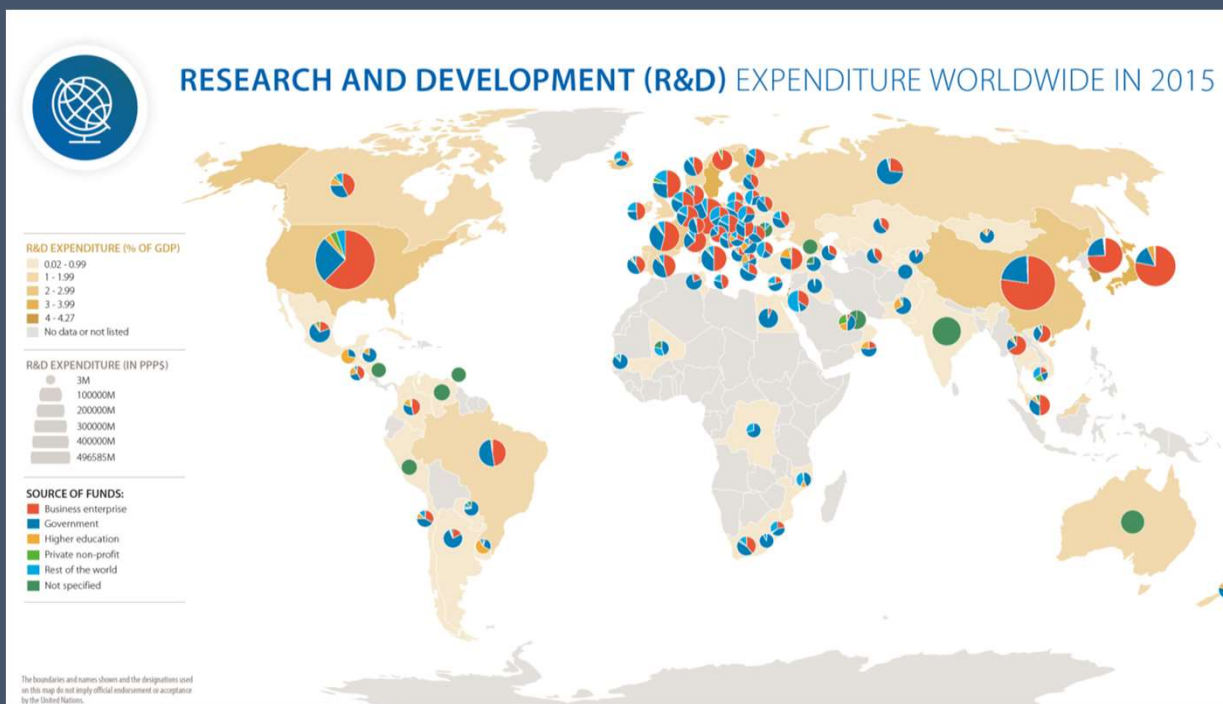


1. Build open-access SDG knowledge and technology platforms to design, monitor, and evaluate transformations to SD
2. Harnessing and boosting scientific capacities through North-South and South-South transboundary research partnerships
3. Support curricula and education in sustainable development
4. Build national and regional scientific funding institutions



Call to Action (3/3):

A 'moon-shot' mission for Sustainability Science



1. Scientific assessment of existing transformation knowledge including non-academic sources
2. Adapt funding schemes to programme structures supporting inter- and transdisciplinary research
3. Expand incentive- and evaluation schemes
4. Create experimental spaces and transformation labs for next generation science-policy interfaces
5. Rapid increase of mission-oriented research guided by the 2030 Agenda

Pour télécharger, lire et diffuser le GSDR

- <https://sustainabledevelopment.un.org/gsdr2019>

THE FUTURE
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SCIENCE FOR ACHIEVING
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