STeering Research and INnovation for the Global goalS (STRINGS)

Mapping Research Related to the Sustainable Development Goals (SDGs)

STRINGS workshop
(In lieu of STI conference special track)
04 September 2020

Uneven Distribution of Scientific Advances

- Science and technology (S&T) contribute to solving and creating societal problems
- Well-being improvement/deterioration in relation to these problems are unevenly distributed across societies
- Scientific advance is unevenly distributed across societal problems (Gibbons et al., 1994; Nelson, 2003; Novitzky et al., 2020)
  - Health (Evans et al., 2014; Yegros-Yegros et al., 2020)
  - Agriculture (Vanloqueren and Baret, 2008, 2009; Carlisle and Miles, 2016)
- Some causes: sheer complexity; distribution of resources and power; path dependency

SRINGS Objectives to Steer STI ⬌ SDG

- **Global**: map the main STI topics (in publications and patents) and relations to the SDGs

- **Local**: describe STI practices situated in different regional contexts

- **Meso**: in depth and large scale consultation to identify areas in which STI can produce positive/negative impact on concrete SDG outcomes
  - Real time Delphi
  - Engagement of experts and users

Global Mapping: Aims and Contribution

- **Analysis** of SDG in **Science**
  - the portfolio of SDGs relevant topics in STI; per SDG
  - main actors, countries, disciplines, communities
- Analysis on **Patents** (Technology and Innovation) – and **private sector**
- **Taxonomy**: Categorisation of SDG science and patents in relation to types of STI and types of actors
  - STI: Open/closed; international domestic; North/South; trans/monodisciplinary
  - Organisations type (funders, researchers, users, public, private)
- **Synergies** between SDGs across STI
- **Relation with progress in SDGs targets**: is investment in research (priorities) "balanced" with respect to target indicators performance across countries?
- **Future trajectories** of emerging research areas and STI

Collectively Improve Existing Mapping?

- Many organisation are willing to know how they **score** with respect to SDGs (Universities, Regions, Countries)
  - Problematic, as earlier examples of indicators used for evaluation (journal impact factor): e.g. THE university ranking

- We are **not interested in scoring** but in uncovering potential **imbalances/misalignments, synergies, categories, trajectories**

- However, so much investment is providing hugely valuable information: workshop a big step forward → **improve methods for all purposes, and all users**
  - UN ontology, SIRIS, Dimensions, Elsevier, Aurora Universities, Bergen, Nesta, RISIS2, OECD SDG pathfinder, SDG financing Lab, Open SDG …

Looking forward to a very productive day
Thanks to Hugo and Aristea