

Global cooperation in STI for development: connecting the dots, supporting communities, creating knowledge

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In a fragmented landscape, international collaboration on STI requires actions aimed at 'connecting the dots,' supporting communities of practice and creating shared knowledge

1. A fragmented/ing landscape and the key role of communities of practice
2. Which contexts are most suited to increase inclusivity for knowledge circulation?



Challenges of global cooperation in science, technology and innovation for development

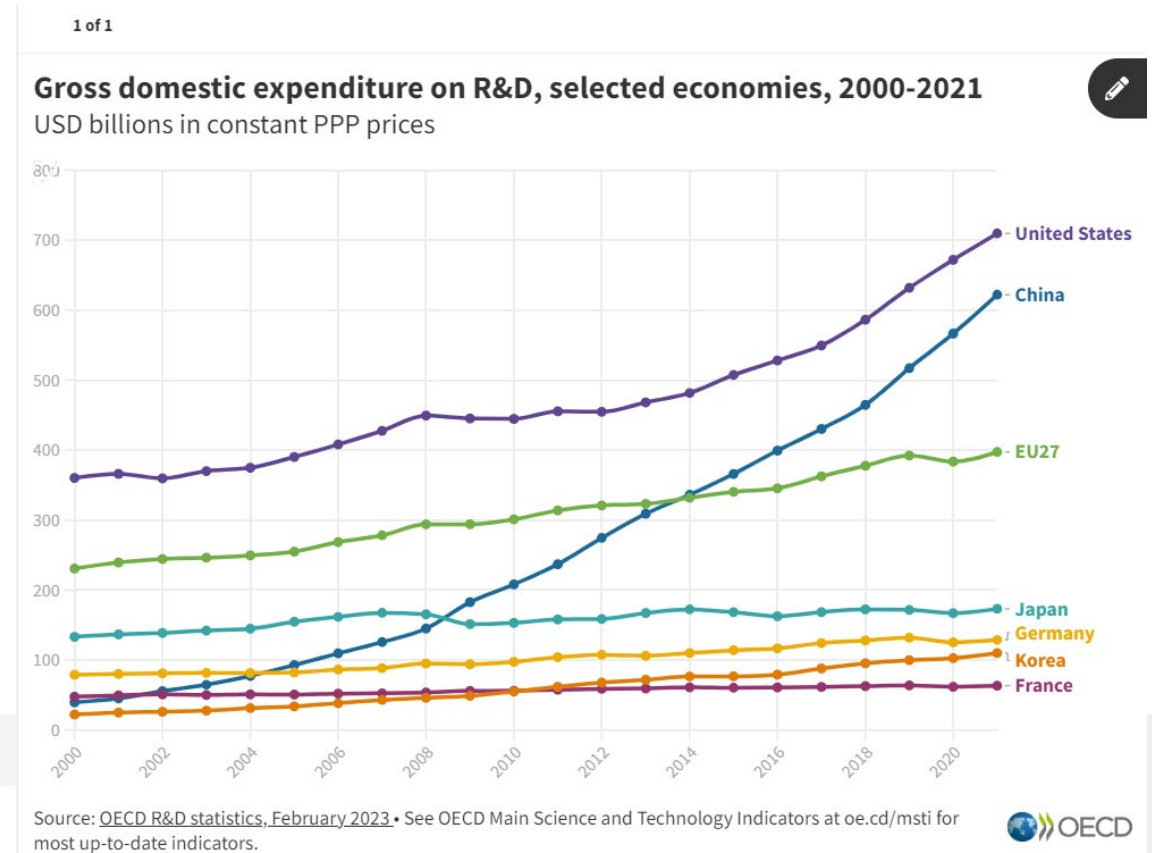
A deeply fragmented/ing landscape

- rapid pace of technological advancement
- rising geopolitical tensions, increasing focus on (digital) sovereignty
- tension between new actors and lasting traditional ties, often from colonial times
- meritocracy at odds with equality?

→ There are reasons to both urge and resist global collaborations on STI

→ Disjointed initiatives won't automatically coalesce at times of geopolitical competition

→ Added value of connecting the dots



In a fragmented context, communities of practice work best to create trust and knowledge



Organising principles: markets (profit-oriented), institutions (hierarchies that freeze a political constellation in time), networks (flat and flexible)

Communities of practice (CoPs) are groups of practitioners who are brought together by a professional interest (e.g. science, AI, a new method) and share/create knowledge to 'do it better'

→ A sort of 'super-network' but with an emphasis on sociality, personal contacts, professional drive



In a fragmented context, communities of practice work best to create trust and knowledge



Advantages: CoPs are innovative / create knowledge / are goal-oriented / synchronise work / integrate newcomers

Disadvantages: CoPs can be disruptive, they take time to build

→ Create CoPs: identify emerging practices + create connections + invest time, leadership and money

In order to improve STI cooperation at the regional/global levels esp. on key development challenges, it is key to 'connect the dots,' support communities of practice and create knowledge

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LEGAL REGULATIONS CREATE RIGID LONG-TERM REGIMES

E.g. EU's 'regulatory power' deeply affects non-EU countries too: GDPR (General Data Protection Reg.), 2016

E.g.: US AI Act 2023 establishes visa categories to attract skilled workers

- Ex ante, might be possible to create coalitions of the willing
- Ex post, difficult to influence / establish CoPs



PUBLIC-PRIVATE PARTNERSHIP CAN BE VOLATILE

E.g. EU Global Gateway: 2021-2027, aims to mobilise €300billion, on global digital/energy/transport/research

- Has not yet attracted sufficient funding for critical mass
- Profit-driven at times of geopolitical competition might be volatile

Public and private funds for grants and soft loans can work well in the mid-term to create opportunities



E.g. EU Horizon Europe 2021-2027, €95.5billion

Aim: strengthen the European Research Area, reduce the R&I divide, 'open science, open innovation, open to the world' (e.g. publications open access)

Three 'strands':

- Individual researchers: ERC grants, Marie Curie Fellowships, based in European institutions
- European Innovation Council: for SMEs, based in Europe
- **Collaborative projects:** On selected priorities, STI most prominent. Most low- and middle-income countries are eligible for funding. Some countries (e.g. Brazil, India) have co-funding mechanisms.

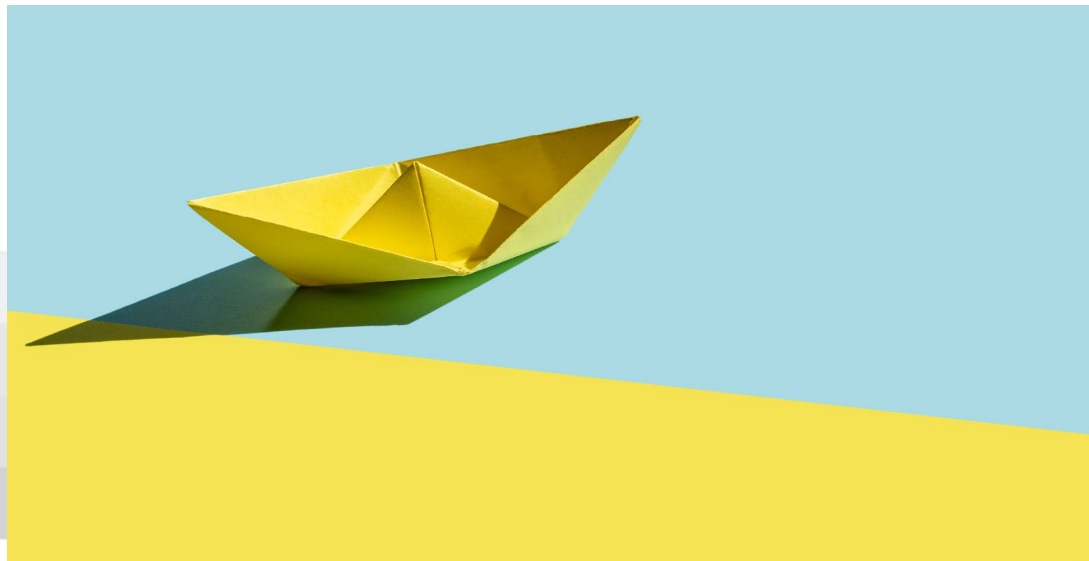
Overwhelmingly about merit

Overwhelmingly collaborative networks / CoPs

To what extent is it possible to use initiatives based in developed countries as a launchpad for inclusive CoPs?



- High chances of replicating traditional, potentially exploitative networks: it is VERY difficult to innovate on physical and virtual mobility patterns
- A broader lesson: pool the money, create region-wide funds



- The need for international legitimacy / soft power
- E.g. EU: Africa Initiative I and II, on public health, transition to green energy, innovation and technology, and capacities for science
- The next EU Framework Programme could include co-design, quotas, emphasis on co-authorship
- Start creating and supporting CoPs ahead of funds disbursement
- Creating CoPs requires time, money and especially **commitment**

Conclusion: in a fragmented/ing landscape, connecting the dots and supporting inclusive communities of practice contributes to create knowledge and foster STI cooperation on key development challenges

→ Research and development activities provide useful opportunities to establish CoPs of young scholars and future professionals

