It all started in Jomo Kenyatta University
By Rania Baleela

About me

- U. of K. & LSHTM Alumni
- Pathogen Molecular Biologist
- EIFL.net OA Sudan coordinator
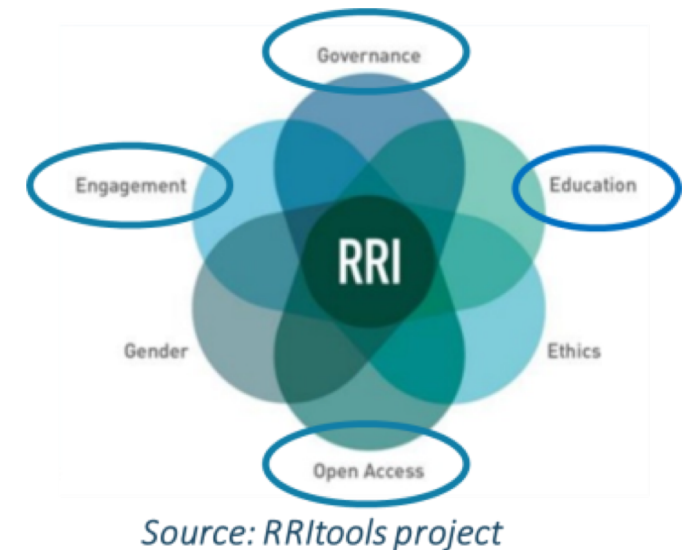- RSTMH Sudan Ambassador (2020-2023).

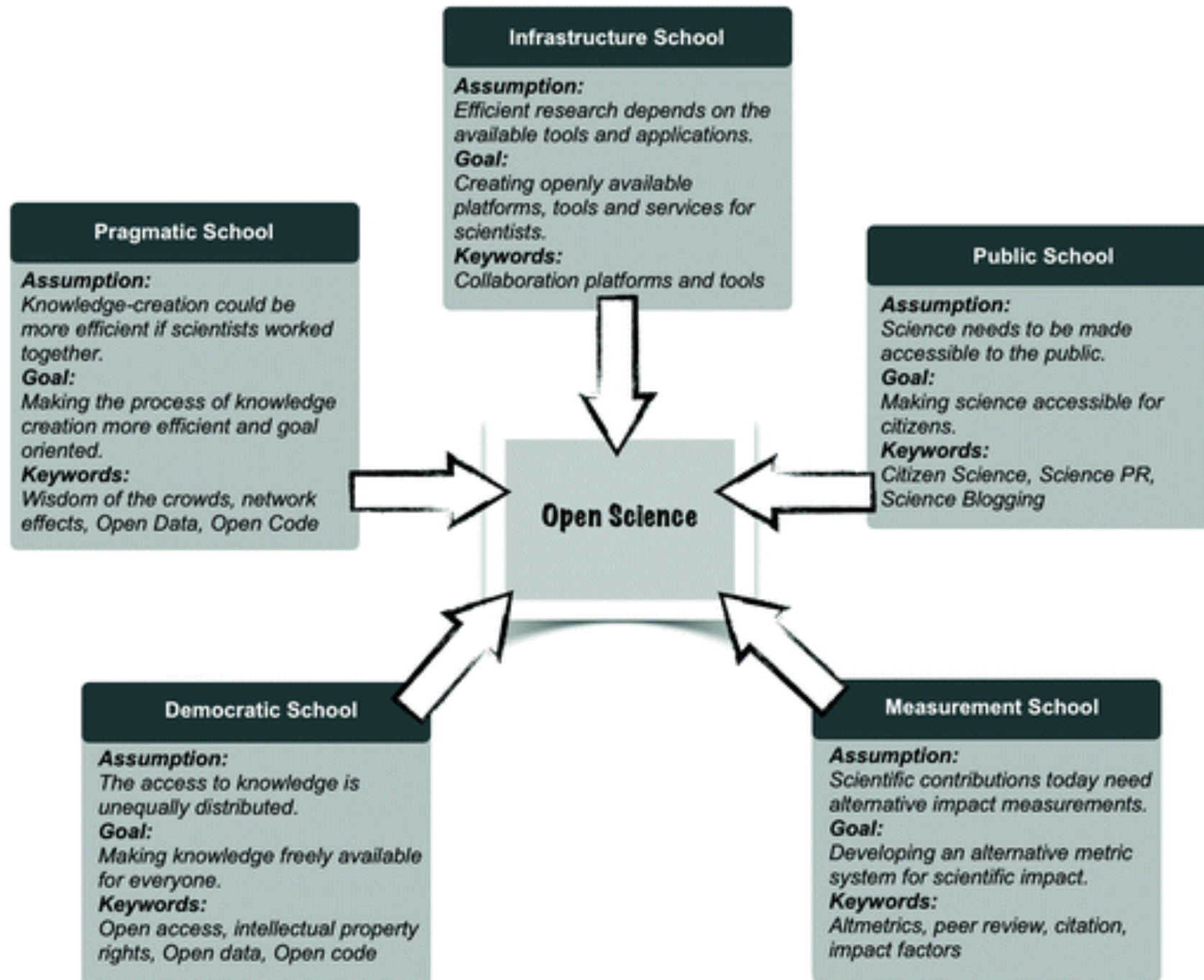# Leap & the net will

Open Access Afric

Open Science

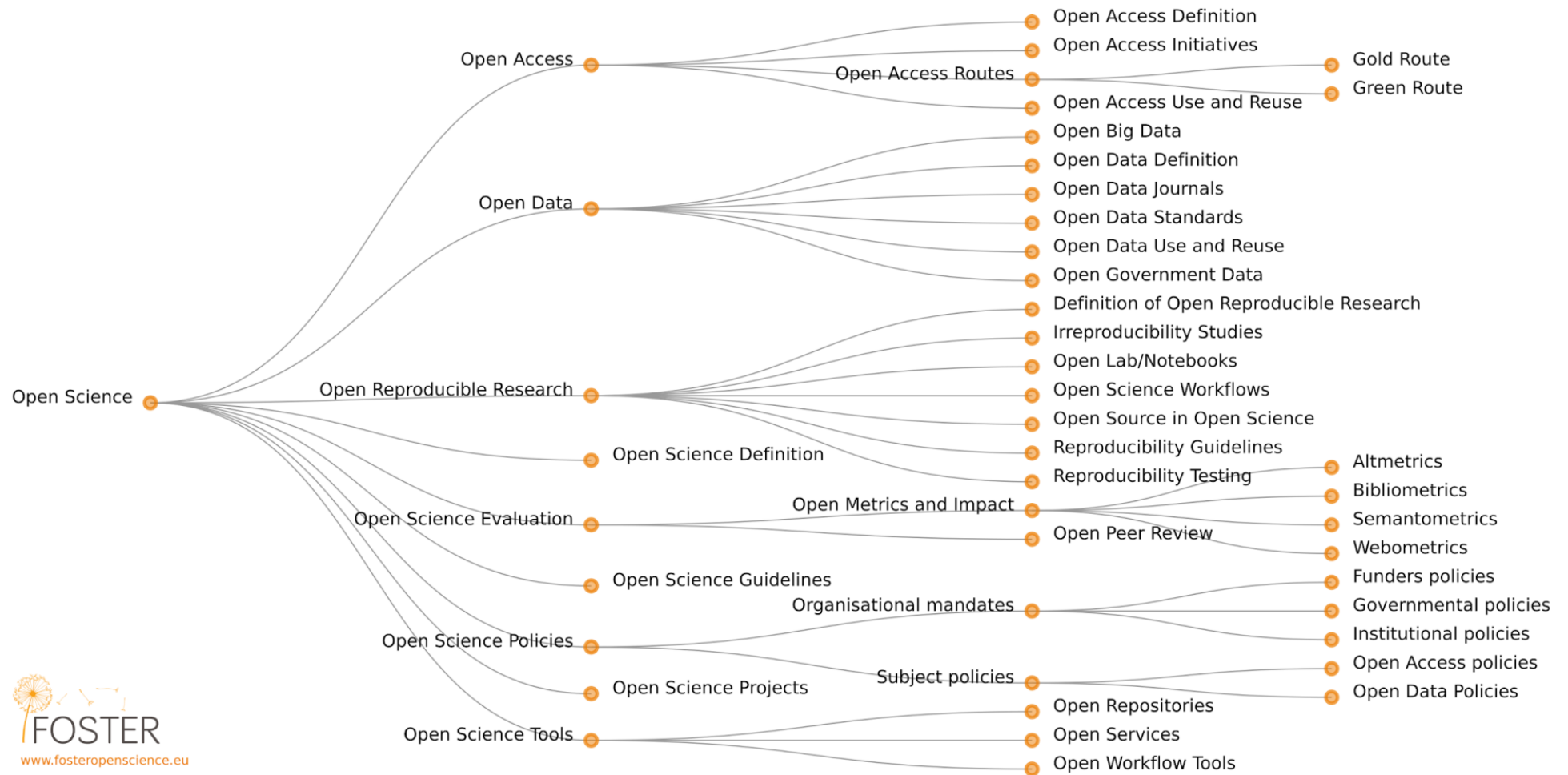Transparent and accessible knowledge that is shared and developed through collaborative networks
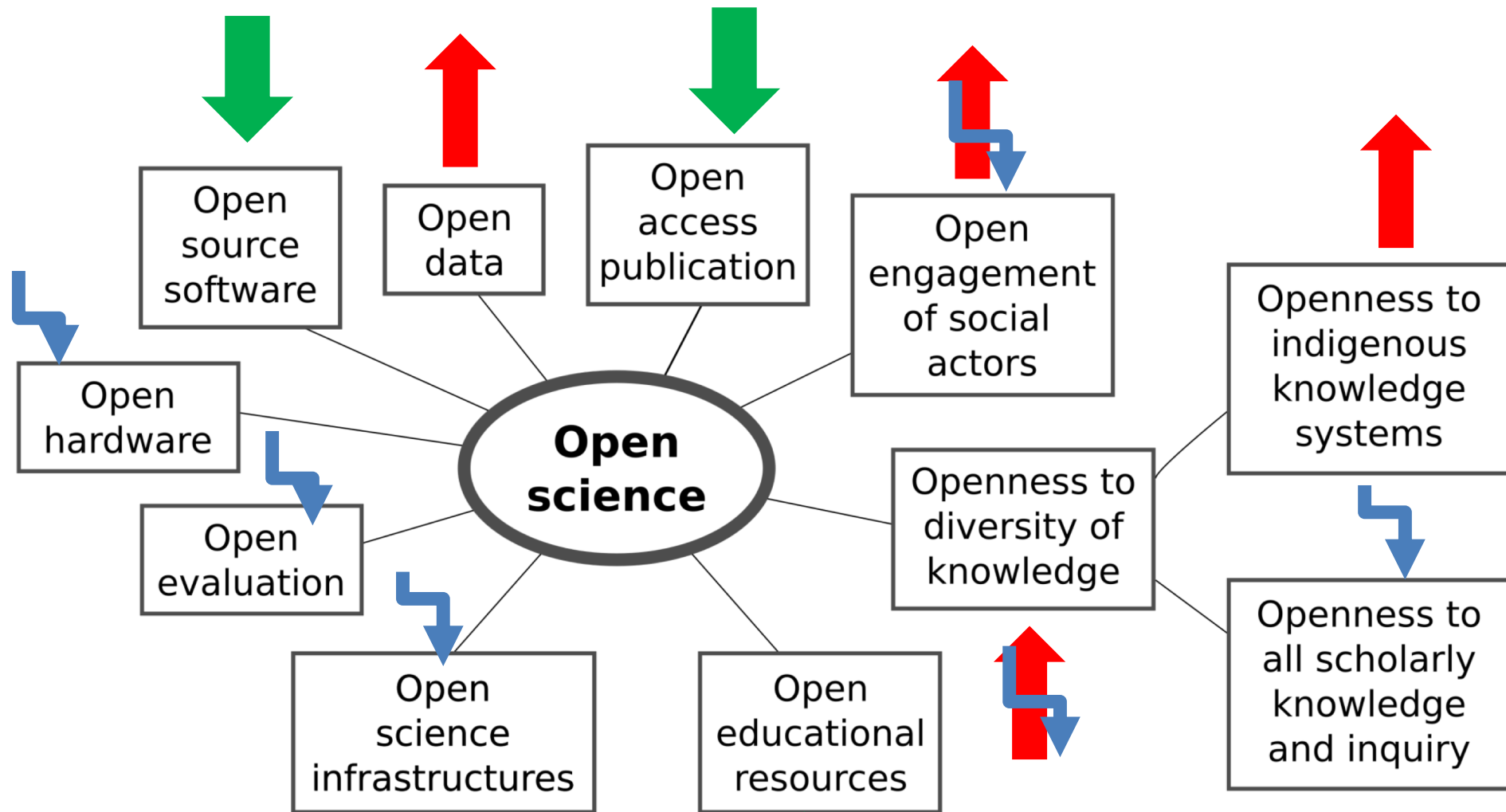
Responsible Research and Innovation

Source: RRItools project

Infrastructure School

Assumption:
Efficient research depends on the available tools and applications.
Goal:
Creating openly available platforms, tools and services for scientists.
Keywords:
Collaboration platforms and tools

Pragmatic School

Assumption:
Knowledge-creation could be more efficient if scientists worked together.
Goal:
Making the process of knowledge creation more efficient and goal oriented.
Keywords:
Wisdom of the crowds, network effects, Open Data, Open Code

Public School

Assumption:
Science needs to be made accessible to the public.
Goal:
Making science accessible for citizens.
Keywords:
Citizen Science, Science PR, Science Blogging

Open Science

Democratic School

Assumption:
The access to knowledge is unequally distributed.
Goal:
Making knowledge freely available for everyone.
Keywords:
Open access, intellectual property rights, Open data, Open code

Measurement School

Assumption:
Scientific contributions today need alternative impact measurements.
Goal:
Developing an alternative metric system for scientific impact.
Keywords:
Altmetrics, peer review, citation, impact factors

opening science

OS taxonomy

Open source software

Open data

Open access publication

Open engagement of social actors

Open hardware

Open science

Openness to indigenous knowledge systems

Openness to diversity of knowledge

Open evaluation

Openness to all scholarly knowledge and inquiry

Open science infrastructures

Open educational resources

Moving Forward

Getting there (a bit behind)

Not there yet

Sudan analyses

But why?

1. The mindset

2. Policies

- **Intellectual Property** issues
- licensing, copyright issues
- **Promotion** policies
- National **Openness** policies
- Institutional **Openness** policies

3. Institutional commitment

- OA= librarians by training (*or cyberarians!)
- OS Infrastructure is expensive = Financial challenges

4. Bias & misconceptions

Science growth 2005-2015
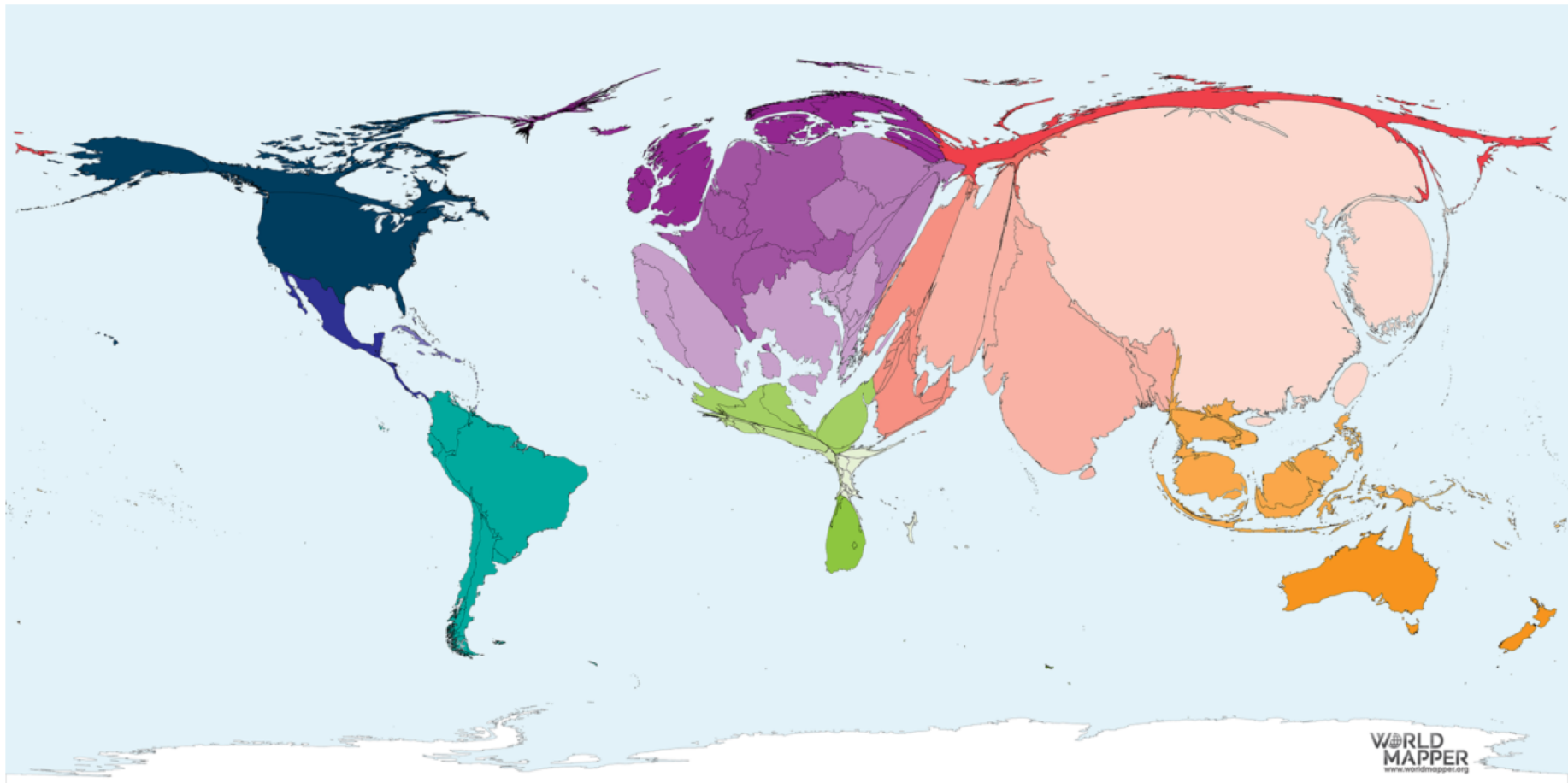
Proportion of freely available research in Africa exceeds that in Europe & North America

It does not have to be a reckless jump!

Way forward, one step at a time!

- Publicly funded research outputs should be publicly available.

- Need to drive cultural change in research and amongst researchers.

- Embracing of Web-based tools and technologies to facilitate scientific collaboration.

Inclusion, fairness, equity & sharing

Photo by Ian Schneider -

Open Science to Leave no One Behind

Thank you

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