

Open Science: Pathways to Knowledge Democracy in South Asia

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United Nations
Educational, Scientific and
Cultural Organization



UNESCO Chair in Community Based
Research and Social Responsibility
in Higher Education



University
of Victoria



Knowledge. Voice. Democracy.
PRIA



History of Open Universities with Global Scholars

- ▶ Nalanda & Takshashila Universities – considered by historians as world's first ever residential universities, located in India
- ▶ These universities welcomed students & scholars from other countries as well to pursue their studies and provided them access to Libraries & Knowledge Centres



“Knowledges”

Experiential knowledge, by doing everyday

Indigenous knowledge

Cultural, linguistic embeddedness



Food



Water



Health



Crafts



Examples of Local Traditions and Everyday Practices

Local Health Traditions (LHT):

- Oral Folk Stream (folk medicine)
- Codified classical stream (ayurveda, siddha, unani and Tibetan medicine)
- Allied stream (yoga and naturopathy)
- Systems of foreign origin (homeopathy, western biomedicine)

-Quinine, a drug from Cinchona tree was possible from the lead from a Peruvian LHT

-Artemesia, was sought from a Chinese LHT

-Solution for Hepatitis B and C was developed from Indian LHT (Phyllanthus amarus)

-According to Natural Products Alert database (University of Illinois, WHO), 95% of all modern drugs derived from plants have been based on leads provided by LHT

-A plant called Keelanelli has a medicinal property that can cure jaundice, which was later patented.

-There is a long- drawn history of hijacking indigenous knowledge and traditional medicine by the huge pharmaceuticals. This practice does not allow the local knowledge to flourish.

Recent UNESCO Policy Recommendation



UNESCO Recommendations on Open Science, 2021

Open to
multiple
knowledge
systems-
decolonize
research
and
teaching in
HE

Open to
practitioners,
community,
society-
ecologies of
knowledge,
place-based
knowledge,
knowledge
Equity

Open
to Participatory
research,
citizen
science,
people's
science

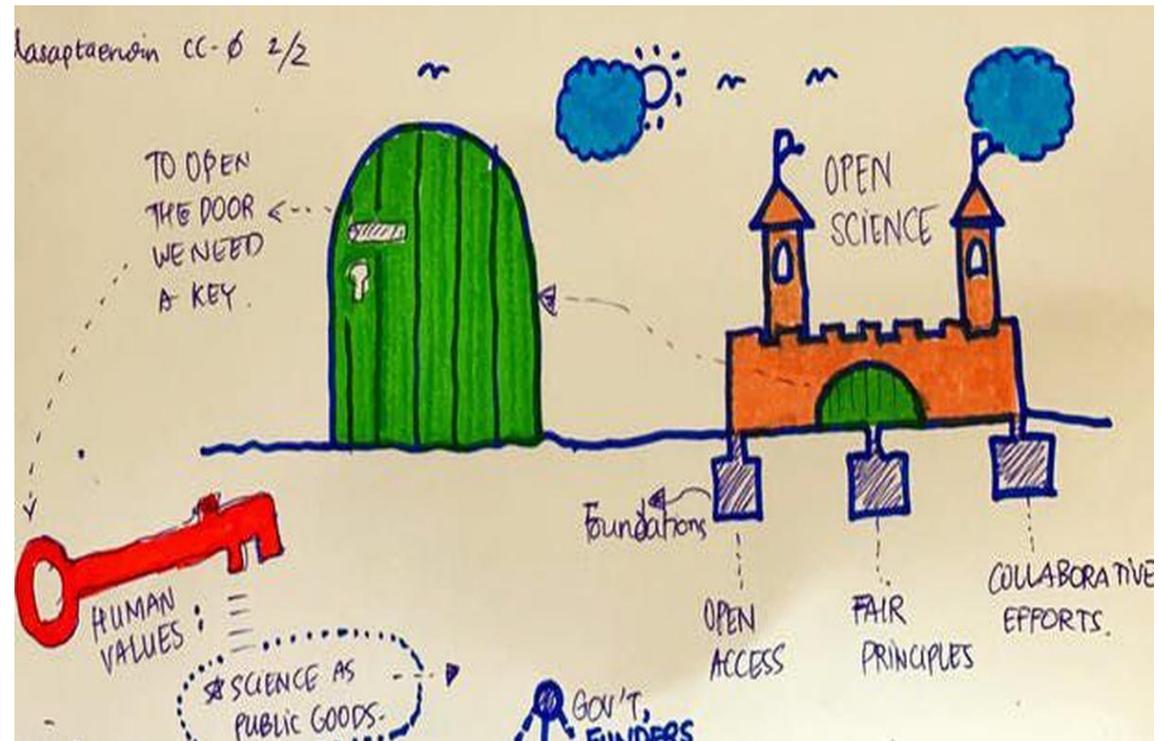
Open to
multiple
cultural
and
linguistic
tools/
methods

[Read here:](https://unesdoc.unesco.org/ark:/48223/pf0000379949.locale=en)

<https://unesdoc.unesco.org/ark:/48223/pf0000379949.locale=en>

Open Access: Beyond Academics

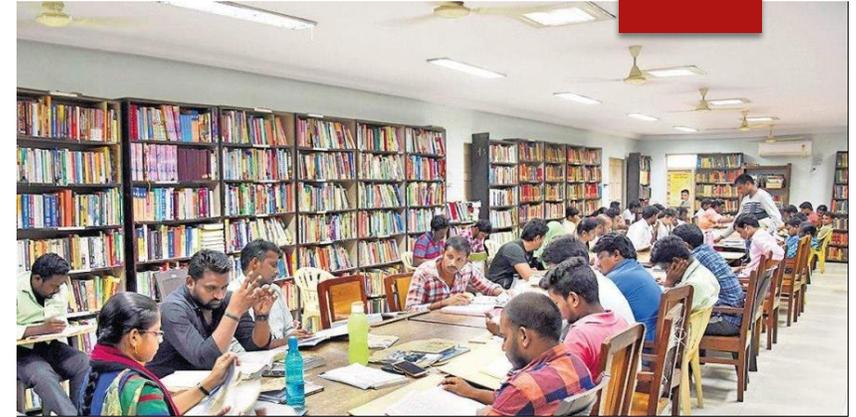
- ▶ Researchers in academic institutions can access data
- ▶ Many others in society may benefit from such research
- ▶ How do practitioners, policy-makers, service-delivery workers get access?
- ▶ 'One nation, one subscription' built on 'Platform Profiteering' (Dutch??)



Open to Society

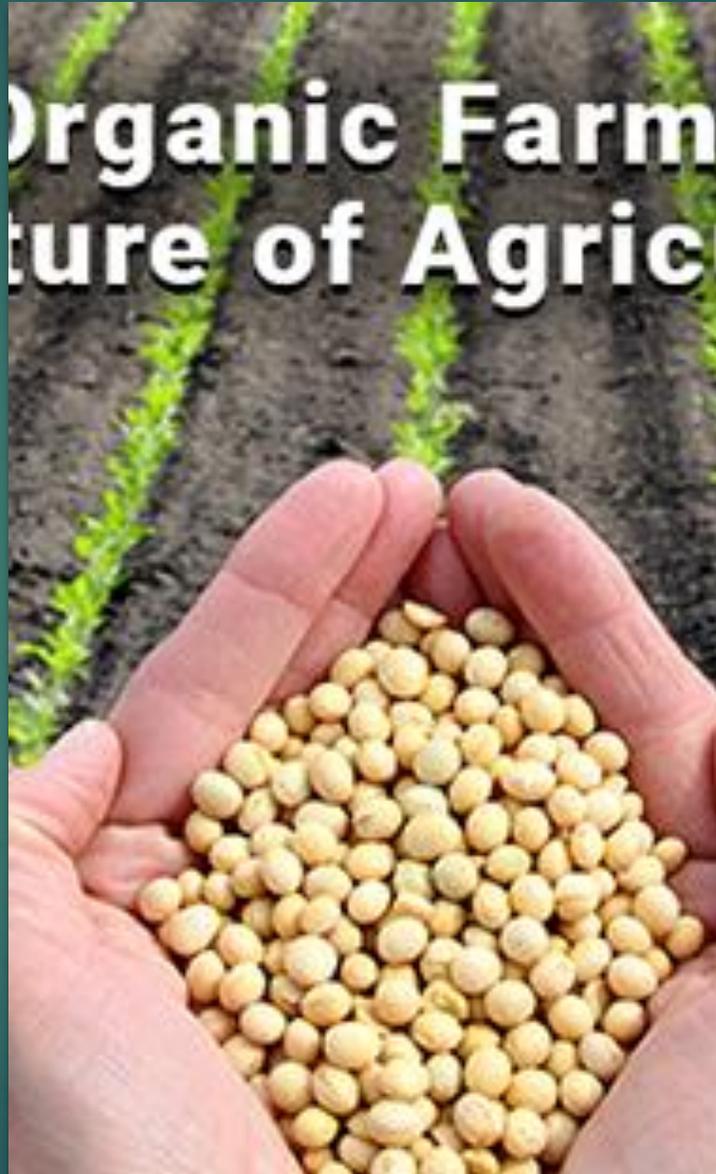
- ▶ Situate 'broad vision' beyond 'science', link to outward...society
- ▶ “Designing models that allow co-production of knowledge with heterogeneous societal actors”
- ▶ “Including citizen and participatory science as integral part of Open Science policies and practices”
- ▶ “Epistemic pluralism of diverse research communities, scholars, knowledge holders and social actors” requires multilinguism”

Read more [here...](#)



Open to *Excluded* Knowledges

- ▶ Indigenous knowledge systems in India (*Jewel of Reflection on the Truth about Epistemology* by the 12th century Sanskrit scholar Gangesha Upadhyay)
- ▶ Organic agriculture, water harvesting & storage, and irrigation systems (other Ministries?)
- ▶ Collective governance of indigenous knowledge systems: *knowledge commons*



General Measures

-  Drink warm water throughout the day.
-  Daily practice of Yogasana, Pranayama and meditation for at least 30 minutes as advised by Ministry of AYUSH
-  Spices like Haldi (Turmeric), Jeera (Cumin), Dhaniya (Coriander) and Lahsun (Garlic) are recommended in cooking

Global Access to Knowledge of South-Asian Societies

- ▶ Strengthening South-Asian Journals & Digital Knowledge sharing
- ▶ Open access to southern societies, south-south cooperation
- ▶ Delink academic ranking from international publication industry
- ▶ Learn from southern publishing models: Brasil, South Africa...



Pillars of Responsible Research and Innovations (RRI)



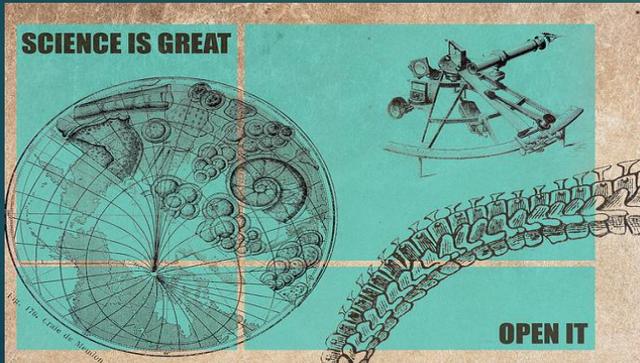
Public Engagement



Gender Equality



Ethics



Open Science

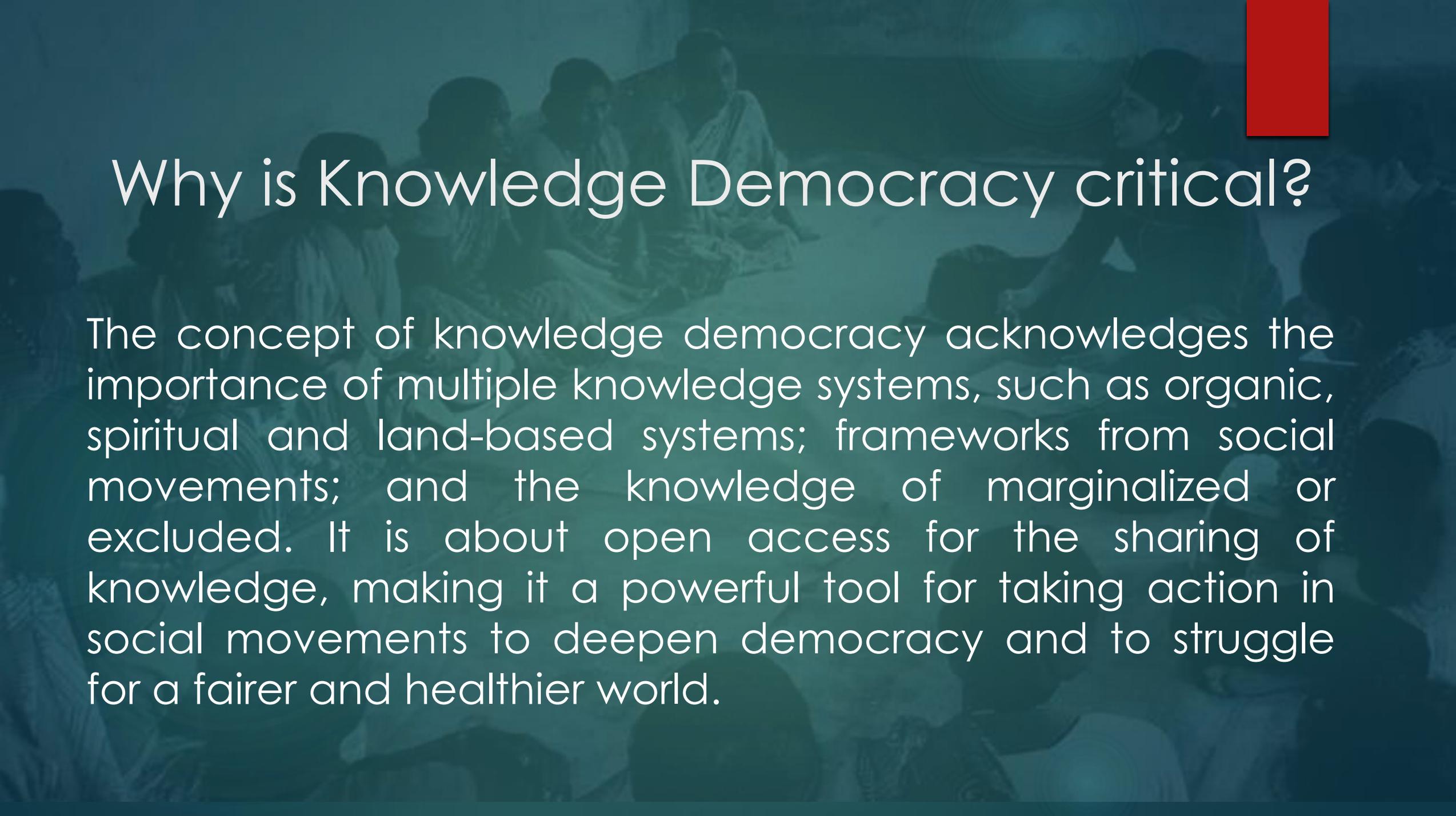


Science Education



Governance

Click [here](#) for the RRING Project Report prepared by PRIA



Why is Knowledge Democracy critical?

The concept of knowledge democracy acknowledges the importance of multiple knowledge systems, such as organic, spiritual and land-based systems; frameworks from social movements; and the knowledge of marginalized or excluded. It is about open access for the sharing of knowledge, making it a powerful tool for taking action in social movements to deepen democracy and to struggle for a fairer and healthier world.

Global Recommendations WHEC 2022



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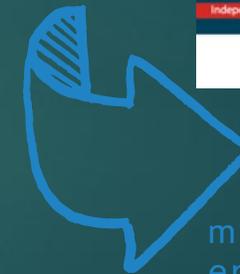
Stronger
and
Continuous
Engagement
with
Societal
Actors

2

Integrating
Diverse
Ways
of
Knowing,
Fostering
Epistemic
Dialogue

3

Inter
&
Trans
disciplinary
ways of
Producing
&
Teaching
Knowledge



Read here:
https://priamy.sharepoint.com/personal/niharika_kaul_pria_org/Documents/PRIA/PRIA/UNESCO%20CHAIR%20DOCS/Guni/UNESCO%20SDG%20EXPERT%20GROUP.pdf

Resources

[Preparing for Open Science- Blog](#)

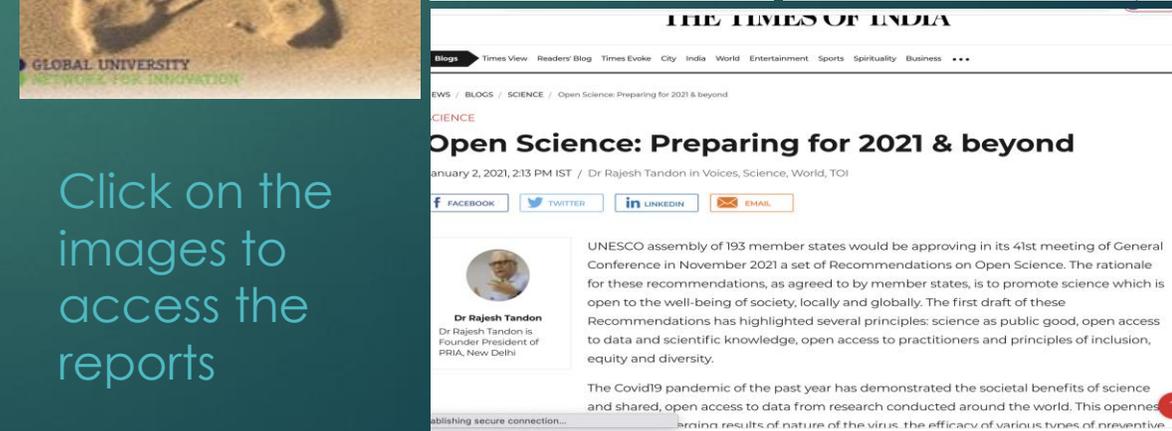
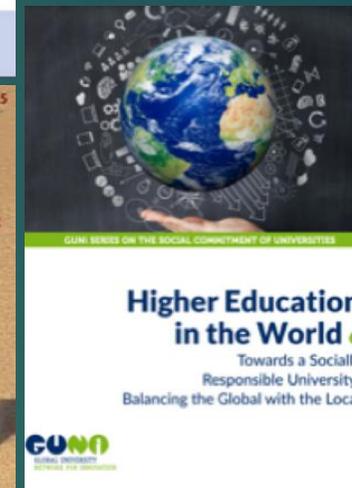
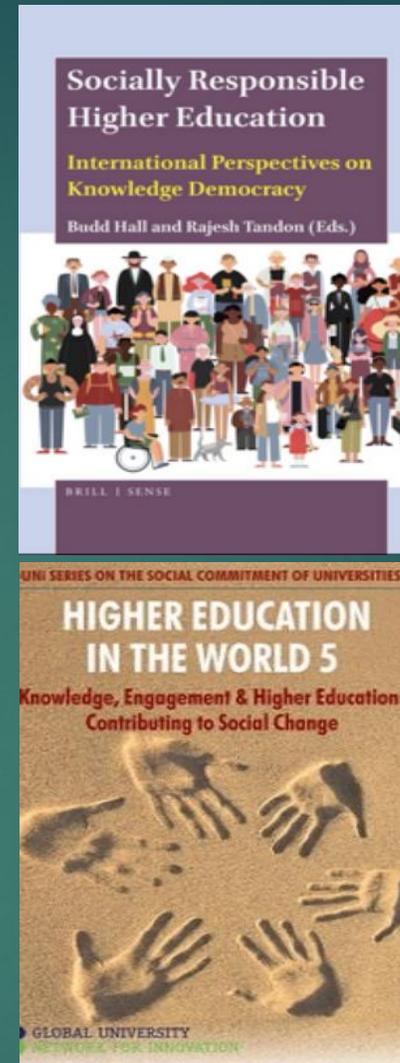
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[UNESCO Chair website](#)

[UNESCO Chair Youtube Channel](#)

[Open Science Brief](#)

[Recommendation on Science and Scientific Researchers](#)



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