Capacity-Building Workshop on Policy Formulation &SDG Acceleration

STI for SDGs UNESCO's Perspective

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The Sustainable Development Goals

CLEAN WATER

AND SANITATION

RESPONSIBLE CONSUMPTION

- 17 global goals to eradicate poverty, protect the planet and ensure prosperity for all by 2030
- Accepted by all countries and apply to all
- **Everyone has to do their part:** governments, the private sector, civil society
 - Not legally binding, but governments expected to establish national frameworks for their achievement, monitor and review

progress







QUALITY EDUCATION















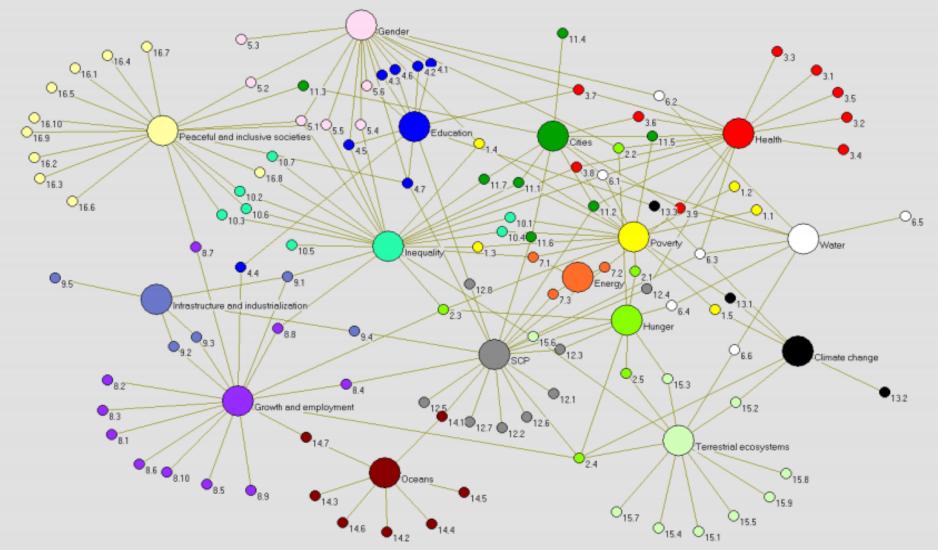




For Sustainable Development

Interrelationships between **Sustainable Development Goals**

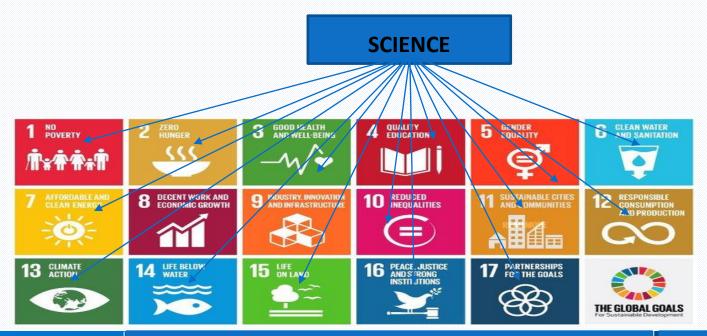




ROLE OF STI IN SDGs

STI Cross Cutting in SDGs

- While there is no stand-alone goal on STI, there is not a single SDG in the new agenda that will not require inputs from STI.
- The SDGs recognize the need to mobilize science at multiple levels and across disciplines to gather or create the necessary knowledge and thus lay the foundations for practices, innovations and technologies needed to address global challenges today and in the future



STI towards SDGs







































17 SDGs - 169 SDG targets

40 selected with greatest relevance to STI covering innovation, health, ecosystems, food security, habitat and education

SDGs as Global Framework

Science IN SDGs and Agenda 2030

Science FOR SDGs and Agenda 2030

Agenda 2030 and SDGs FOR Science

STI featuring directly in the Goals



SDG 9: Build resilient infrastructure, promote inclusive and sustainable industrialization and foster innovation

Target 9.5: Enhance scientific research, upgrade the technological capabilities of industrial sectors in all countries, in particular developing countries, including, by 2030, encouraging innovation and substantially increasing the number of R&D workers per 1 million people and public and private R&D spending



- 17.7 Promote the development, transfer, dissemination and diffusion of environmentally sound technologies to developing countries on favourable terms, including on concessional and preferential terms, as mutually agreed
- **17.8** Fully operationalize the technology bank and science, technology and innovation capacity-building mechanism for least developed countries by 2017 and enhance the use of enabling technology, in particular information and communications technology

Implications for STI on some SDGs



6.3 By 2030, improve water quality by reducing pollution, eliminating dumping and minimizing release of hazardous chemicals and materials, halving the proportion of untreated wastewater and substantially increasing recycling and safe reuse globally



7.3a By 2030, enhance international cooperation to facilitate access to clean energy research and technology, including renewable energy, energy efficiency and advanced and cleaner fossil-fuel technology, and promote investment in energy infrastructure and clean energy technology

7.3b By 2030, expand infrastructure and upgrade technology for supplying modern and sustainable energy services for all in developing countries, in particular least developed countries, small island developing States, and landlocked developing countries, in accordance with their respective programmes of support



- **8.2** Achieve higher levels of economic productivity through diversification, technological upgrading and innovation, including through a focus on high-value added and labor-intensive sectors
- **8.3** Promote development-oriented policies that support productive activities, decent job creation, entrepreneurship, creativity and innovation, and encourage the formalization and growth of micro-small- and medium-sized enterprises, including through access to financial services

STI is systemic...

STI plays a key role in achieving targets across all SDGs

- National (Regional) STI Systems
- Variety of institutions and actors
- Linkages and interactions

- Exchanges and flows
- Legal Framework
- Varieties of Policies
 - ✓ STI
 - ✓ Other

Time dimension: Where does a country want to be in 5, 10 .. years?

UNESCO for the 2030 Agenda

Foster intercultural dialogue, culture of peace and non-violence, and prevent violent extremism through global citizenship education: support free, independent and pluralistic media, ensure the safety of journalists; protect cultural and natural heritage, strengthen governance systems for culture and enhance fundamental freedoms.



Develop education systems that foster quality inclusive education and promotes lifelong learning opportunities for all.



Support girls' and women's education, the participation and empowerment of women in science, the media, and culture and combating violence against women in all its forms.



Eradicate poverty by developing human capacity and productivity through quality education and skills development: science, technology and innovation; access to ICTs and the media; sustainable management of terrestrial and marine resources: protection and promotion of cultural heritage and of the diversity of cultural expressions.



Reduce inequalities through include the contribution of culture



quality education for all, reduce the science and knowledge gaps between and within countries. close the digital divide, develop inclusive public policies, which to sustainable development.



Strengthen the Means of Implementation by providing capacity building, strengthening multi-stakeholder partnerships and supporting data monitoring and reporting.

Support the protection and sustainable use of biodiversity and management of natural resources through UNESCO sites (World Heritage, Biosphere Reserves and UNESCO Global Geoparks).



UNESCO contributes to the building of peace, the eradication of poverty, sustainable development and intercultural dialogue through education, the sciences, culture, communication and information



Improve water security through water research, water resources management, education, capacity building, advocacy and global monitoring.



Strengthen science technology and innovation systems and policies.

Promote ocean science knowledge and build capacity to protect and sustainably manage the ocean and coasts.



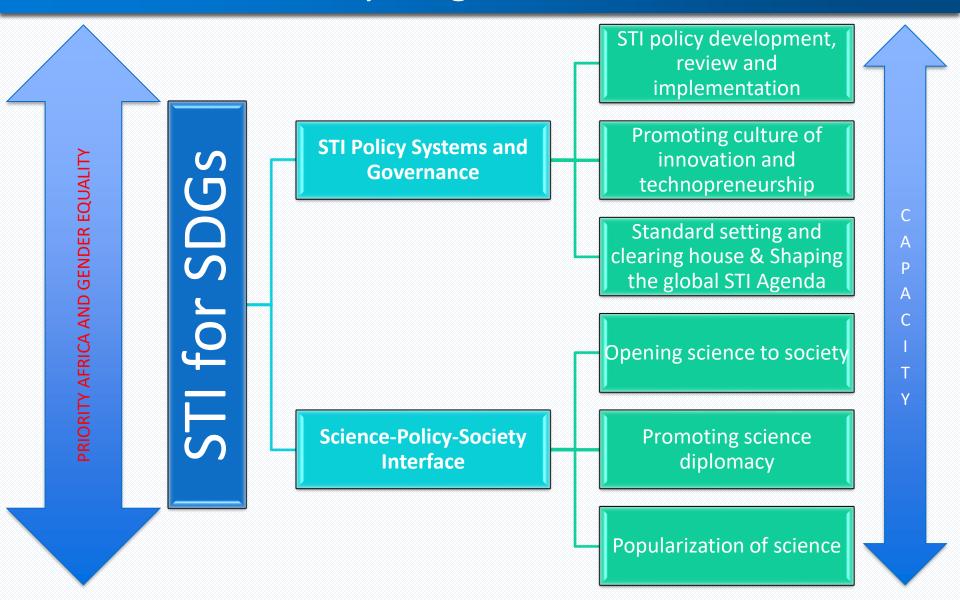
Provide climate services in support of climate change mitigation and adaption efforts with a focus on knowledge (co) production and dissemination, policy advice, education, public awareness and capacity-development.





Promote inclusive sustainable cities through quality education for all, safeguarding cultural heritage, innovation and creativity, promoting environmental sustainability and building resilience to the effects of climate change, disasters and conflicts.

UNESCO's STI Policy Programme



Actions in 2020-2021

STI Policy Systems and Governance

STI policy development, review and implementation

Promoting culture of innovation and technopreneurship

Standard setting and clearing house & Shaping the global STI Agenda

Guidelines and standards

- STI for SDGs guidebook
- Blueprint for STI policy design, monitoring and evaluation
- **STI** priority setting guidelines

Country technical assistance

- ❖ STI policy country projects (ex. Bhutan, Gambia, Ghana, Guinea, Kenya, Mongolia, Mozambique, Timor-Leste and Uzbekistan)
- Innovation and entrepreneurship projects

Capacity-building in STI policy

- Sub-regional and national trainings
- Joint UN courses
- Training modules

UN initiatives and STI Fora

- UN IATT on STI for SDGs
- Global programme on STI roadmaps
- ❖ Presence at international and regional STI Forums (UN STI Forum, Global Innovation Forum, CILAC, African STI Forum, UNCSTD....)

Actions in 2020-2021

Opening science to society

Promoting science diplomacy

Popularization of science

UNESCO Open Science Recommendation

- Consultations with Member states, networks of researchers, public and private scientific institutions
- Building of the OS community
- Communication

Science Diplomacy

- Horizon 2020 InsSciDe Project
- Science for Parliaments Programme
- Training programmes

Science communication

- **UNESCO** Kalinga Prize for popularization of science
- **❖ L'Oréal-UNESCO For Women in Science Awards**
- International Days (WSD; IDWGS)
- science centres/museums
- science journalists

Strategic Partnerships

UN partners: UNCTAD, UN-DESA, TBLDC, World Bank, UNIDO, UNU, UN Women, UN Regional economic commissions (ESCWA, ESCAP, ECA, ECLAC and ECE)

STI associations: International Science Council (ISC), American Association for the Advancement of Science (AAAS), Global Research Council (GRC), Association of Science and Technology Centres (ASTC), World Technopolis Association, Global Young Academy; World Technopolis Association (WTA); Gujarat Grassroots Innovation Augmentation Network (GGIAN), Chinese Association of Natural Science Museum

Regional Organizations: African Union Commission, AOSTI, DG for Research and Innovation of the European Commission (EC), JRC (European Commission)

Development Banks: Islamic Development Bank (IsDB), African Development Bank (AfDB), Inter-American Development Bank (IADB)

Universities, Networks and Chairs: UNESCO Chair in STI Policy, ENIT, Tunis, STEPRI – Ghana, SPRU UK, Manchester Business School, UNU-Merit, UNESCO Chair for Women in Sciences and Technology, Khartoum Sudan, UNESCO Chair on Gender Equality Policies in Science, Technology and Innovation Madrid, UNESCO Regional Chair on Women, Science and Technology and Innovation, Buenos Aires, Columbus Association of European and Latin American universities etc.

Private Foundations: L'Oréal Foundation, Kalinga Foundation



Questions for thoughts

- ➤ How to meet goals of environmental sustainability and at the same time economic growth?
- ➤ How to reframe STI policy from a unique economic rationale to SDGs perspective?
- What frameworks for STI are needed for inclusion in decisionmaking?
- ➤ What priority areas for action to embed SDGs within STI policy frameworks?
- ➤ How to define directionality and concrete mission goals responding to environmental and societal needs within STI policies?
- ➤ How to align STI governance structures to the global SDGs framework? (policy advice, steering and funding, co-ordination, and evaluation and monitoring...)

Thank you