

# Overview and Updates of Draft Guidebook

Special Session on STI For SDGs Roadmap: Country Experiences and  
International Partnerships  
Guilin, China

December 15, 2019

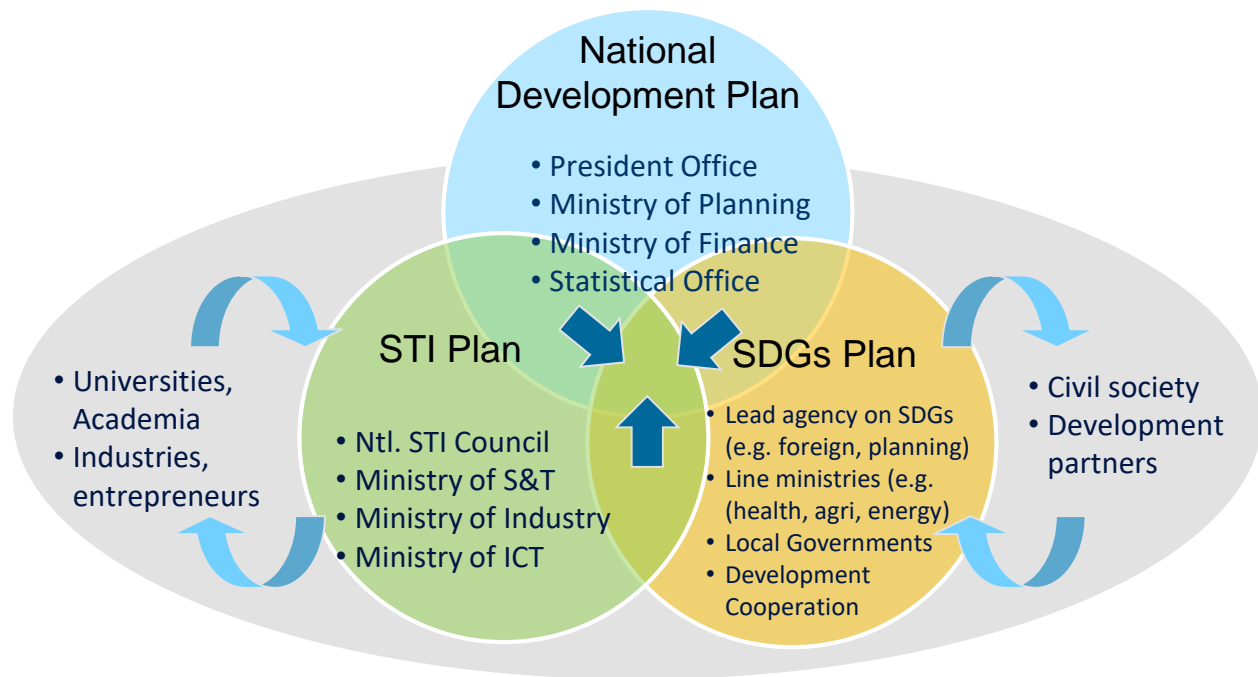
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# Objectives of this special session

- Present current state and future plans on the guidebook and on the global pilot program
- Share the initial experiences of the pilot countries and their IATT focal points/partners
- Discuss specific ways for the IATT to broaden/deepen multi-stakeholder engagements and promote international partnerships as part of the global program.

# National STI Roadmaps – What, Who and How?

## Policy frameworks and key actors



## Step-by-step guidance



# STI Roadmap Pilots: national and international system efforts

**Table 4.1 Five Countries Participating in the Global Pilot Program for STI for SDGs Roadmaps** (draft requiring alignment between IATT focal points and pilot counterparts)

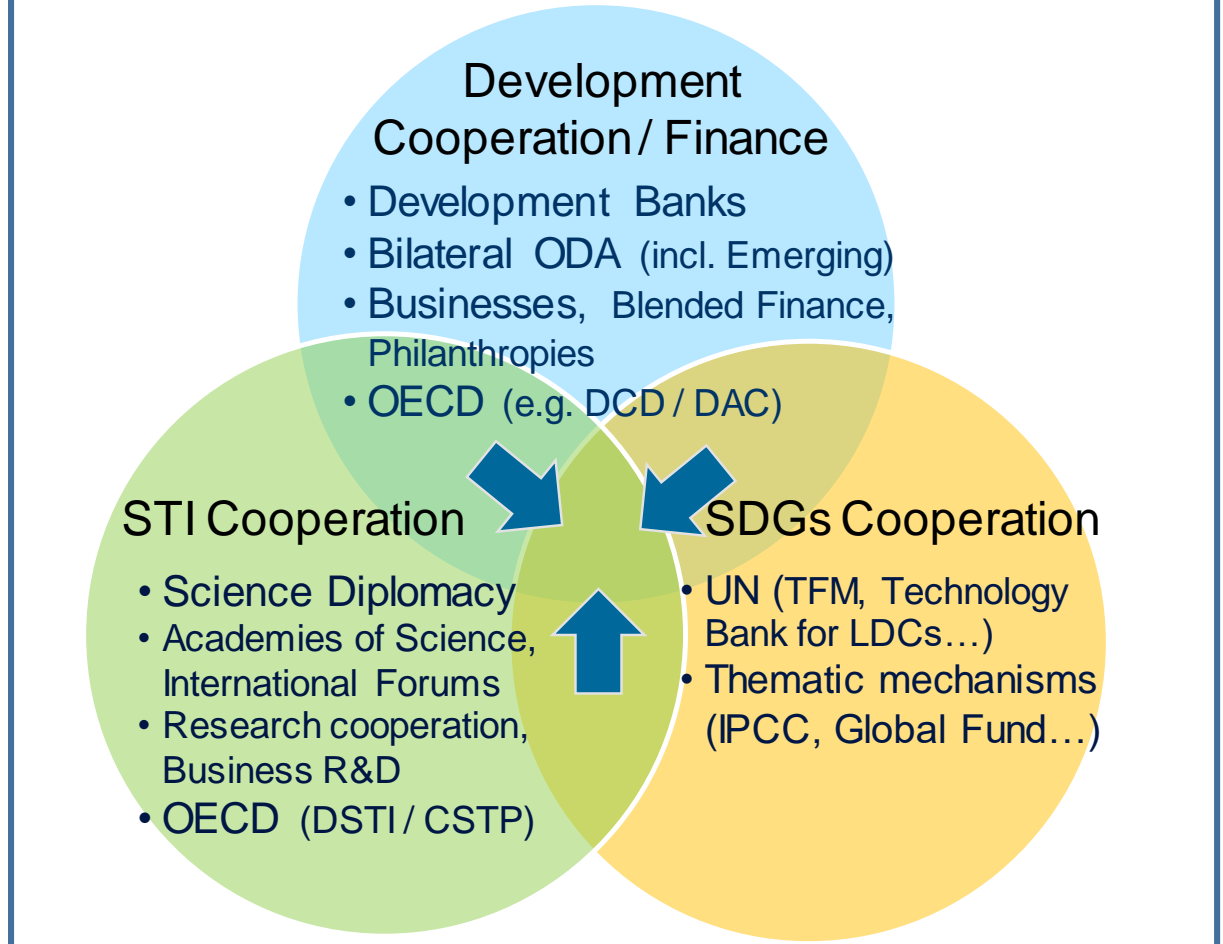
	Kenya	Ghana	Ethiopia	India	Serbia	
<b>Team structure</b>	<ul style="list-style-type: none"> <li>- Treasury, Dept of Planning</li> <li>- NACOSTI, ACTS</li> <li>- Line ministries (Edu S&amp;T, Foreign, ICT, Agri, Industry)</li> </ul>	<ul style="list-style-type: none"> <li>- Min of Env &amp; STI</li> <li>- CSIR-STEPRI</li> </ul>	<ul style="list-style-type: none"> <li>- Min of Inno &amp; Technology</li> </ul>	<ul style="list-style-type: none"> <li>- PSA Office</li> <li>- Niti Aayog, Min of ext. affairs, RIS</li> <li>- National Coordination Committee</li> </ul>	<ul style="list-style-type: none"> <li>- Min of Edu, S&amp;T; Ministry of Economy, Public Policy Secretariat; National Statistics office, National Patent Office; National Analytics team</li> </ul>	
<b>Underlying policy frameworks</b>	<ul style="list-style-type: none"> <li>- Kenya Vision 2030</li> <li>- MTP III 2018-22, Big Four</li> <li>- STI Policy, Research Priorities</li> <li>- Digital Economy Blueprint</li> </ul>	<ul style="list-style-type: none"> <li>- CPESDP 2017-24</li> <li>- National STI Policy 2017</li> </ul>	<ul style="list-style-type: none"> <li>- GTP III 2015-20</li> <li>- STI Policy 2012</li> </ul>	<ul style="list-style-type: none"> <li>- Strategy for New India@75</li> <li>- STI Policy 2013</li> </ul>	<ul style="list-style-type: none"> <li>- EU Accession Process and Smart Specialization</li> <li>- New STI and industrial policy under Prime Minister</li> </ul>	
<b>Scope and objectives of roadmap</b>	<ul style="list-style-type: none"> <li>- Big Four (agri, health, manufacturing, housing)</li> <li>- Agro-processing and ICT as an initial focus</li> </ul>	(tbd)	SDG 8 (Job creation)	<ul style="list-style-type: none"> <li>- Agri, energy, water, health; align with key initiatives (e.g. Doubling Farmers Income, Aadhar, Digital India)</li> <li>- Strong international focus – Africa and Far East</li> </ul>	<ul style="list-style-type: none"> <li>- defined smart specialization priority domains and horizontal actions</li> <li>- creative industries; food for the future; machines and production processes of the future; ICT</li> </ul>	
<b>Approach to pilot</b>	<ul style="list-style-type: none"> <li>- Sectoral deep-dive, target-driven (100% food and nutrition security by 2022)</li> <li>- R&amp;D &amp; adoption/diffusion</li> <li>- Aiming for an East Africa regional model</li> </ul>	<ul style="list-style-type: none"> <li>- Aim for investment proposals and institutional strengthening</li> </ul>	<ul style="list-style-type: none"> <li>- Sectoral: build on 24 technology roadmaps</li> </ul>	<ul style="list-style-type: none"> <li>- International national and subnational levels (Lighthouse India, cooperative federalism)</li> <li>- Data/Dashboard to be substantiated through STI-PER inputs</li> </ul>	<ul style="list-style-type: none"> <li>- work at national level, with the subnational and international dimension</li> <li>- mix of deep dives and horizontal activities</li> </ul>	
<b>Key milestones</b>		(tbd)		<ul style="list-style-type: none"> <li>- First 6 months (in India)</li> <li>- End 1<sup>st</sup> year (AfDB AMs?)</li> <li>- End 2<sup>nd</sup> year (in NY)</li> </ul>	<ul style="list-style-type: none"> <li>- adoption of S3 draft (December 2019)</li> </ul>	
<b>Partners</b>	IATT focal	<ul style="list-style-type: none"> <li>- WB (STI PER)</li> <li>- UNESCO (Saga, Go-SPIN)</li> </ul>	<ul style="list-style-type: none"> <li>- UNESCO</li> <li>- WB</li> </ul>	<ul style="list-style-type: none"> <li>- UNCTAD (STIP Review)</li> <li>- WB, UNESCO</li> </ul>	<ul style="list-style-type: none"> <li>- WB (STI PER)</li> <li>- ESCAP</li> </ul>	<ul style="list-style-type: none"> <li>- UNIDO</li> <li>- UNESCO</li> </ul>
	UN, Others	<ul style="list-style-type: none"> <li>- FAO (?)</li> <li>- Priv. partnership (Toyota)</li> </ul>	<ul style="list-style-type: none"> <li>- OECD</li> </ul>	<ul style="list-style-type: none"> <li>- UNDP, UNIDO (?)</li> </ul>	<ul style="list-style-type: none"> <li>- OECD</li> <li>- UNDP (?)</li> </ul>	<ul style="list-style-type: none"> <li>- EC/JRC (RIS3)</li> </ul>
AUC, RECs (?), Japan-India-Africa (?)						

# International cooperation to supplement national STI efforts - needing to connect the dots in parallel

## National Level: Policy Frameworks and Key Actors



## International STI Cooperation: Domains and Actors



# Three pillars to build, boost and broker international STI co-operation

**1. Build** country STI capacity

**2. Boost** international STI flows

**3. Broker** STI coalitions



- Develop human, institutional and policy capabilities of key STI actors, build STI infrastructures
- Help design STI for SDGs Roadmaps
- Support market and non-market flows of STI across countries
- Support cross-country STI collaboration to address local challenges
- Mobilize ambitious STI collective actions to address global critical gaps
- Transform global STI system toward acceleration of SDGs

# (Adapted) framework to build, boost and broker international STI co-operation

		Unit of intervention	Areas of international support (instruments and recipients)	Select examples
<b>Build</b> STI capability		Individuals	<ul style="list-style-type: none"> <li>- Researchers: scholarships, research grants</li> <li>- Farms/firms absorptive and innovation capacity: training, BDS, agricultural/management extension services</li> <li>- STI policymakers: training, peer-learning, learning-by-doing</li> </ul>	ASEAN-India S&T Development Fund
		Human capital base and institutions	<ul style="list-style-type: none"> <li>- STEM education, digital skills, basic and applied research institutes</li> <li>- Entrepreneurship/deployment system, intermediaries, networks</li> <li>- Public service delivery (e.g. health, education, water, conservation...)</li> </ul>	WB ACE
		Broader STI system	<ul style="list-style-type: none"> <li>- STI-related infrastructure (quality systems, connectivity...)</li> <li>- STI system diagnostics, policy advice / assistance to reforms</li> <li>- Sectoral R&amp;D and innovation systems (e.g. energy)</li> </ul>	UNEP TNA STIPR/Go-Spin/PER
<b>Boost</b> STI flows	Non-market	Link / strengthen existing STI for SDGs	<ul style="list-style-type: none"> <li>- University partnerships, exchange programs</li> <li>- Multi-stakeholder platforms, networks, communities of practitioners</li> </ul>	PASET AOSP
		Increase new STI for local challenges	<ul style="list-style-type: none"> <li>- Supply-push: joint research projects</li> <li>- Demand-pull: government procurement, prizes</li> </ul>	CGIAR, UK GCRF X Prize
	Market	Barriers to markets	<ul style="list-style-type: none"> <li>- Matchmaking STI supply and SDGs demands by online repository /platforms, challenge competitions, demonstration projects</li> </ul>	TFM online platform
		Trade and investment flows	<ul style="list-style-type: none"> <li>- Donor/IFI projects to crowd in and catalyze R&amp;D, technology transfer and innovation linkages through private capital and blended finance</li> <li>- Treaties and other agreements conducive to STI flows (e.g. IP)</li> </ul>	Lighting Africa US FtF
<b>Broker</b> STI coalitions		Norms, values, standards, statistics	<ul style="list-style-type: none"> <li>- Global visions, strategies, monitoring reports</li> <li>- Cross-country monitoring and evaluation systems</li> </ul>	UN Digital Cooperation Panel
		Coalitions addressing critical global gaps	<ul style="list-style-type: none"> <li>- Partnership/funding/governance frameworks</li> <li>- Mission-innovation programs, grand challenges</li> </ul>	US PEPFAR Africa Moonshot
		Transformative STI system (global/regional)	<ul style="list-style-type: none"> <li>- Joint or aligned fiscal/procurement/research policies</li> <li>- ...</li> </ul>	Horizon 2020

Source: Authors, informed by WB-OECD, the Background Paper on International Collaborations for STI for SDGs Roadmaps (forthcoming)

# Expectations for Workshop

- Learn from country pilot experience
  - extent to which guidebook is useful
  - understand which steps countries are finding most difficult
  - receive suggestions for how to improve the guidebook and international support.
- Discuss how to strengthen international cooperation and multi-stakeholder involvement in the pilot countries, including
  - how to more effectively coordinate the support from different international organizations and government
  - how to more effectively involve the private sector and civil society