MUTUAL LEARNING EXERCISE ON R&I STRATEGIES AND POLICIES





Session 6: Policy Monitoring & Evaluation Challenges for STI Policy Evaluation

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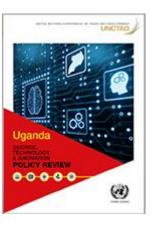
Addis Ababa, Ethiopia 14-17 February 2023





UNCTAD STI Policy Reviews

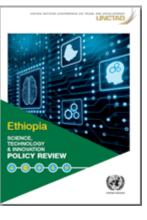
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- Ethiopia
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- 16. Angola



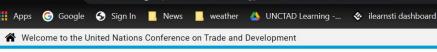




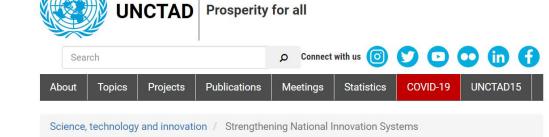








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Strengthening National Innovation Systems

Science, Technology and Innovation Policy Reviews (STIP Reviews) are undertaken by UNCTAD at the request of member States.

Through a STIP Review, a country's STI stakeholders can identify the key strengths and weaknesses of their innovation systems and establish strategic priorities for its development.

The STIP Review report published by UNCTAD includes a diagnosis of the national system of innovation (NSI), an assessment of the STI policies in place, and is normally complemented by in-depth studies of specific sectors, institutions or STI-related problems that are of particular relevance to the country under review.



The STIP Review process is also intended to raise awareness and to stimulate a policy dialogue among stakeholders about the role of STI in national development and to encourage the emergence of stronger linkages among the STI

Another key goal of the STIP Review process is to identify practical actions that favour technological capacity-building (the capacity to generate, absorb and diffuse knowledge and to create and support dynamic linkages and learning processes among STI stakeholders) and the strengthening of their innovation capabilities (the practical and productive materialization of science and technology into socially or commercially valuable products and services).

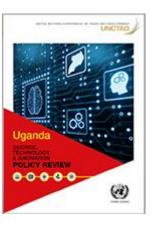
STIP Reviews can provide the basis for capacity-building activities targeting various elements of the innovation system In several beneficiary countries, STIP Reviews have ignited significant renewal in STI policy, helped raise its profile in national development strategies and facilitated the inclusion of STI activities in international cooperation plans.

Documents and Publications

Examen de las políticas de ciencia, tecnología e innovación: República Dominicana UNCTAD/DTL/STICT/2020/8 - 26 Apr 2021 Español

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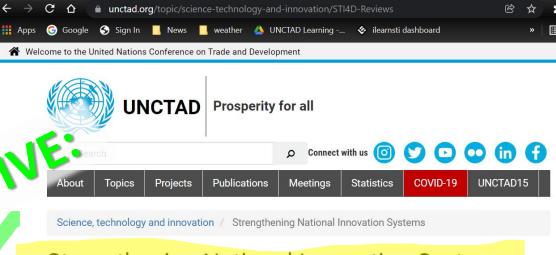








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Focus: Assisting policy making in STI

Situation: modest Monitoring & Evaluation process, ... but new policy being prepared or revised

- 1. Policy evaluation, assessment of NSI
- 2. Assessment of innovation performance
- 3. Goals and outcomes
- 4. How to move forward?

Focus: Assisting policy making

Situation: modest Monitoring & Evaluation process, ... but new policy being prepared or revised

- 1. Policy evaluation, NSI assessment
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1. Policy evaluation, NSI assessment

A. STI policy under review

- ✓ Coherence with national development strategy, SDGs?
- ✓ Development strategy recognises STI?
- ✓ Outreach to other policies?

B. All other policies

 \checkmark Acknowledgement of S, T and Innovation?

C. Are policies inter-related?

- ✓ Implementation matrix (who does what?)
- ✓ Collaboration, joint activities?

D. National System of Innovation (Innovation Ecosystem)

- ✓ Framework for policy design?
- ✓ Mapping of NSI?
- ✓ Information gatekeepers?

E. Reporting directions and information flows

- ✓ Within the STI policy?
- ✓ Among STI stakeholders? (horizontal flows)

F. Development of a consensus narrative – what works, what doesn't

- ✓ Cannot replace data, but may provide insight
- ✓ Data does not provide the narrative
- ✓ Discussions with a many diverse stakeholders

A. STI policy under review, does it ...

- ✓ Coherence with national development strategy, SDGs?
- ✓ Blueprint for a better and more sustainable future for all?
- ✓ Provide for directionality?



































Objective: Profound transformation driven by fast-evolving and converging technologies

- 1. No definitive list of technologies
- 2. Some common features of SDG technologies
 - Fast change, short adaptation cycles
 - Soft technology, mind frame change
 - Lower costs, more choices
 - Open science, technology and innovation
 - New forms of work and inclusiveness
 - Innovation addressing change, disruptive innovation, creative destruction

Current STI developments and SDGs

- Precision agriculture: SDGs 1, 2, 9, 12, 15
- Water management, wastewater treatment and nutrient recovery: SDGs 6, 9, 11, 15
- Circular economy: SDGs 6, 7, 13, 14, 15
 - > residual, waste = resource for products, energy
- Transformative technologies: SDGs 3, 4, 8, 9, 10
 - > exponential growth, impact, strong links with ICTs

(e.g.: AI, IoT, robotics, autonomous V, blockchain, 3D printing-additive mfg.)

4. How to move forward?

- Many UN and other International Organizations do policy reviews
- International consultancy firms, local research institutions
- Decisions are needed good will is not enough:
 - ✓ Address an underlying policy process
 - ✓ Define objectives, goals what is to be achieved?
 - ✓ Establish who are the STI stakeholders, map the NSI (names of specific organizations, firms and industries)
 - ✓ **Develop commitment**: timeline, funding and human resources
- Importance of external evaluation with no vested interests in the outcome
- Any/all IATT WS6 agencies can guide and help

