

Session 4:

Policy monitoring and evaluation: Challenges for STI Policy Evaluation

**On-line training session on STI policy
and policy instruments
for SDGs for Asia and the Pacific**

November 18-21, 2024

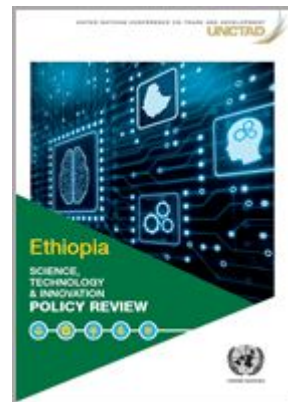
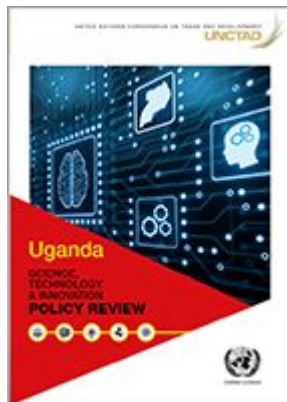
UN-IATT Workstream 6 on
Capacity-Building in STI for SDGs

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Knowledge base: UNCTAD STI Policy

Reviews

1. Seychelles*
2. Botswana
3. Angola
4. Zambia*
5. Dominican Republic
6. Uganda*
7. Ethiopia
8. Panama
9. Rwanda*
10. Iran
11. Thailand
12. Oman*
13. El Salvador
14. Ghana
15. Peru
16. Lesotho
17. Mauritania
18. Angola



unctad.org/topic/science-technology-and-innovation/STI4D-Reviews

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Science, technology and innovation / Strengthening National Innovation Systems

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 players.

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

[https://unctad.org/publications-search?f\[0\]=product%3A635](https://unctad.org/publications-search?f[0]=product%3A635)

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OBJECTIVE:

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Focus: Assisting policy making in STI

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

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revised

1. Policy evaluation, assessment of NSI
2. Assessment of innovation performance
3. Goals and outcomes

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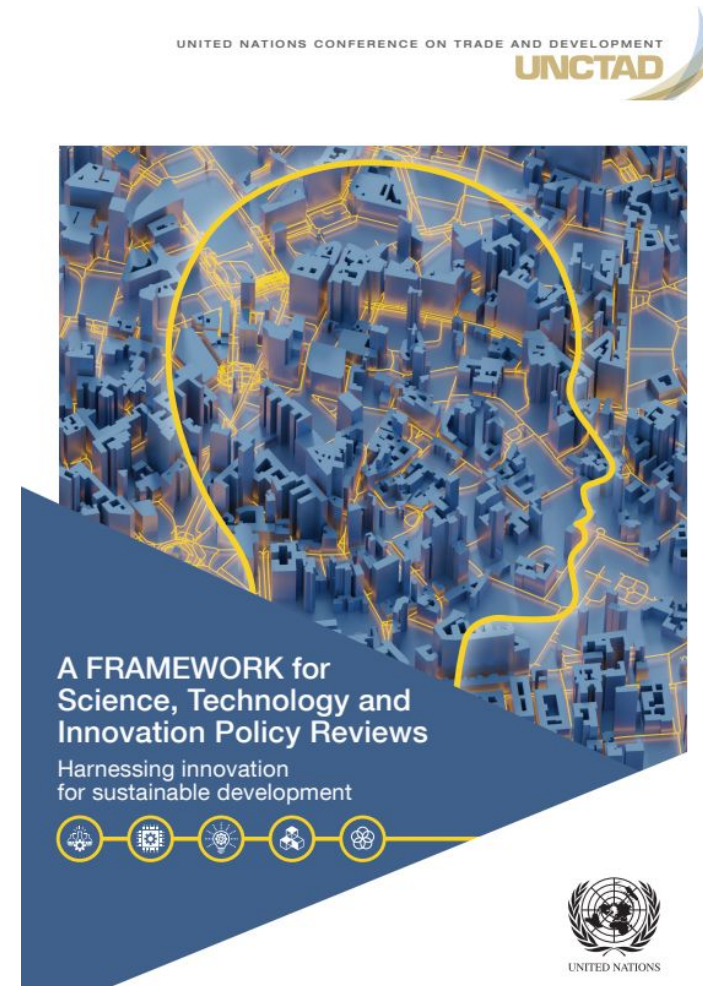
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1. Policy evaluation, assessment of NSI
2. Assessment of innovation performance
3. Goals and outcomes
4. How to move forward?

Focus: Assisting policy making in STI

A Framework for Science, Technology and Innovation Policy Reviews

<https://unctad.org/publication/framework-science-technology-and-innovation-policy-reviews>



4. How to move forward?

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

- ✓ 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, is it ...

- ✓ Coherent with national development strategy, SDGs?
- ✓ A **blueprint** for a better, more sustainable future for all?
- ✓ Provide for directionality, reflexivity – transformative impact?

✓ *Key challenges are interconnected!*



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

Thank you!

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.)

