

Science, Technology, and Innovation for Sustainable Development: National Policy Frameworks in Asia and the Pacific

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Background Paper
for the Second Regional workshop on Harnessing Science,
Technology and Innovation for Sustainable Development
United Nations Conference Centre, Bangkok
2 November 2015

Main questions

- What is the status of STI4SD policies across the Asia-Pacific region?
- What are the main policy gaps identified?
- How can those gaps be closed?
- Is there scope to regionalize selected policies?

What kinds of STI policies support and drive systemic transitions towards sustainability?

Conceptual framework

- Starting point: ESCAP memos from the 1st workshop
 - “A Conceptual Framework for Science, Technology and Innovation Driven Sustainable Development and the Role of ESCAP”
 - “Open Working Group proposal for Sustainable Development Goals.”
- Why innovation systems
 - identify system failures
 - strengths and weaknesses at the system level, which may be less noticeable at the product, process, or organizational levels.
 - mainly focus on sectoral innovation system and technological innovation system at the national level

Sustainable development in SDGs

- Very broadly defined
- Not only production, but includes consumption, livelihoods, and social justice issues
- SD is not limited to production of sustainable technologies by firms, and the adoption and consumption by firms and households
- SD is a process of systemic transitions of the whole socio-economic-technical systems towards sustainability

Innovation systems for STI4SD

Requires rethinking about innovation systems

- Objectives
 - Not just economic competitiveness → social well-being, environmental improvement, and social justice
- Boundary
 - Have to be beyond a sector, a group of technologies, and even a geographical boundary
- Systemic change
 - Incremental and minor improvement to existing ways of production, consumption, distribution is not enough
 - sustainable development requires systemic transformation
 - socio-technical transitions

Innovation systems for STI4SD

- Actors and networks
 - beyond triple helix: + civil society & NGOs + the media
 - Not just top-down approach to policy making → “democratization of innovation”
- Institutions
 - rules, norms, and incentives: beyond profitability
- Knowledge
 - may not be limited to commoditized knowledge
 - traditional knowledge, local wisdom

Innovation systems for STI4SD

Need to integrate three systems approaches to STI policies

- Sectoral innovation systems
- Technological innovation systems
- Socio-technical transitions

- Importance of overall sustainability policy and legal frameworks
- Policies that aim to enhance industrial competitiveness through sustainable production
- National focus, limited efforts in developing regional and local innovation systems
- Mixed roles of multinational firms in innovation systems

预览已结束，完整报告链接和二维码如下：

https://www.yunbaogao.cn/report/index/report?reportId=5_3872

