STI Policies: Lessons from Countries' Experiences

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STI Roadmaps for SDGs – Expert Group Meeting
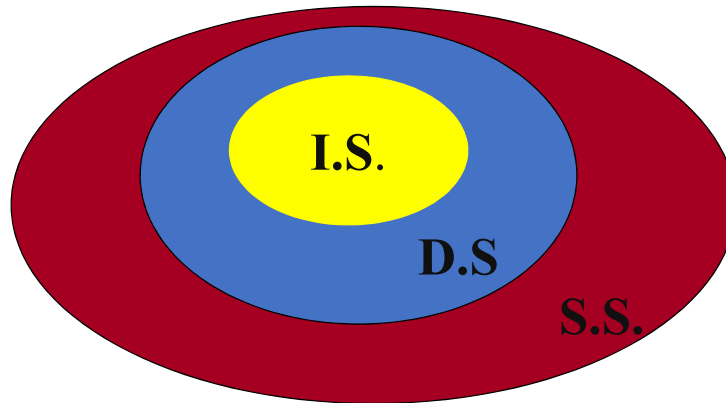
Tokyo, 8-9 May 2018

Presentation Contents
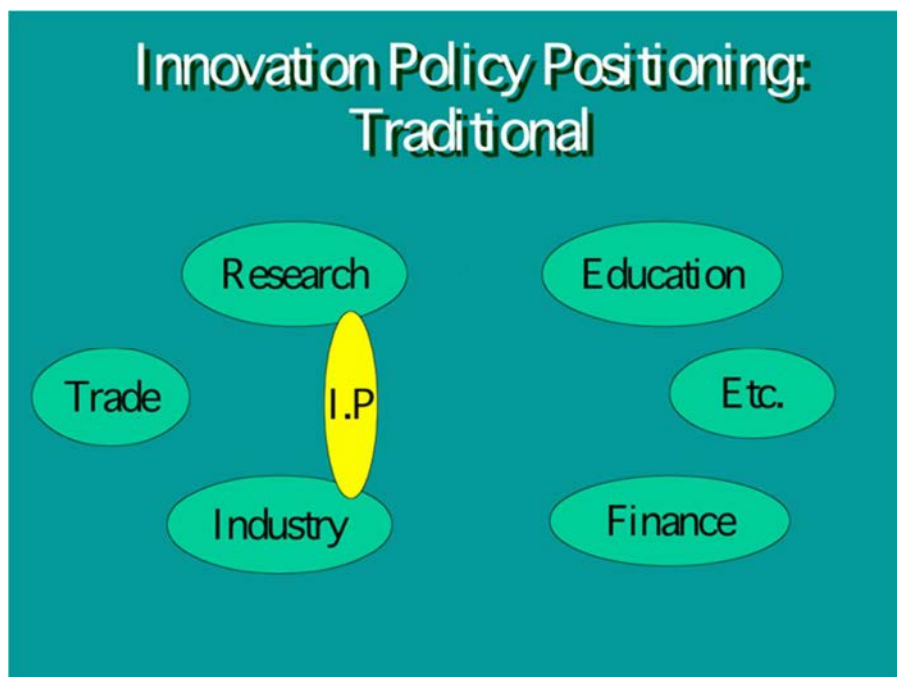# (guiding questions of session 2)

- ST/Innovation policies in broader societal contexts

- Successful STI Policies: key features

- Useful instruments for strenghtening STI policies

- Key stakeholders groups

- Conclusions

INNOVATION, DEVELOPMENT, SOCIETAL SYSTEMS

JEA World Bank Institute/OECD
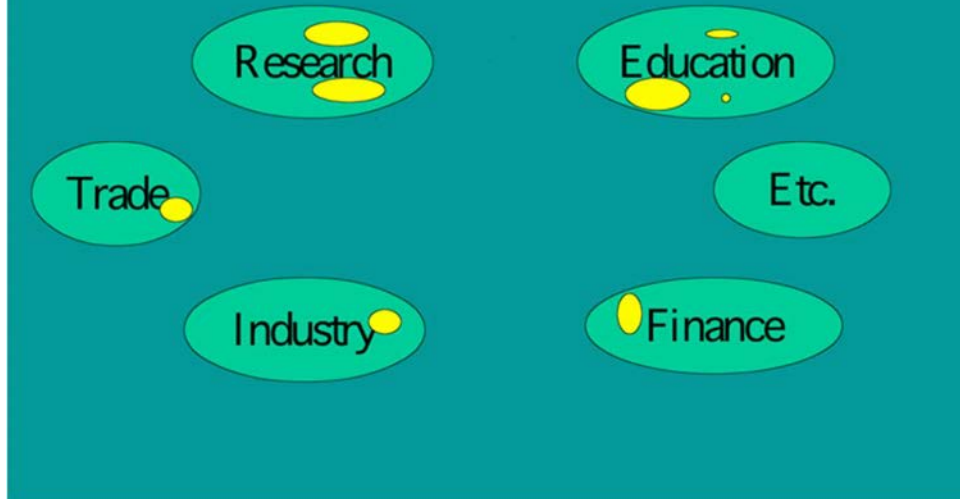
Successful STI policies

Key factors

- Inserted in a national vision and strategy
- Holistic/systemic approach
- Clear/focused priorities
- Concrete/visible achievements

Favorable conditions

- Vital pressures
- Voluntary leadership
- Societal preparedness
- Learning from international experience

STI policies: Two Success Stories

RWANDA – from 2000 to 2015

- STI inserted in a national long term development strategy/vision
- Multiple, coordinated action: e.g.
  - ICT
  - industrial/tech zones
  - Education at all levels
  - Science
  - Etc.
- ICT policy:
  - National Fiber Optic network
  - Schools equipment/training
  - Youth mobilization (ICT + youth Ministry)
- Education
  - Full literacy in primary schools
  - Major investment in vocational/professional training

FINLAND 1990s……..2010s

Early 1990s (Soviet Union Crisis)

- National STP Committee
- Major RD investment
- New innovation agency (Tekes)
- Future studies mobilization

Early 2010s (Nokia crisis)

- National Action Plan on Research and Innovation
- Reform of Public Research Centers (Team Strategy Finland)
- Bold university actions (Aalto university)
- Strong improvement of business environment for start ups/SME
- Green innovation program

Strengthening STI Policies: joint domestic and international actions

- **National Policy Reviews**: yes, if « bought » and « borne » by top of Government (avoid falling in trap of weak ministries).

- **Need for Innovation obstacles audits** (to identify obstacles or roadblocks related to regulations, monopolistic behaviors, lack of competences, etc.). So far no experiences of serious audits, possible lessons from WB Doing Business surveys, but need for « institutionalized » follow ups to remove identified obstacles.

- **Pilot projects**: to experiment, show success stories, etc.

- **Global innovation programs** to deal with global issues, commons, etc. (to be built)

# Strengthening STI Policies -- quantitative tools

- **S&T Statistics** : OECD standards (in focusing on key indicators both for inputs and outputs for innovation, when resources are limited)
- **Benchmarking**: GII indicators. But limit benchmarks to comparable countries
- **Experiment Testing**: comparative samples (Esther Duflot, MIT)
- **In the near future: use of « big data » and AI to trace behavioral changes** in economy and society. Need for prototyping (with help of international organizations for design and implementation).

Change agents: Receptive People and Groups at Several Levels in Society

- **Champions at top of government** (Advisors to President, Proactive ministers, etc.) to create visions and take major decisions
- **Head of operational agencies**: to implement programs and make things happening
- **Sector or local change makers**: to be mobilized through pilot projects
- **Public at large**: to be mobilized through medias (TV, local radios, social medias), or in ad hoc places (e.g. UNESCO Future literacy centers).
- **Academics**: to ensure rigor and continuity in analyzing and monitoring changes and policies

TIME-SEQUENCING AND SCALING UP:
HOW TO CREATE A VIRTUOUS CYCLE.
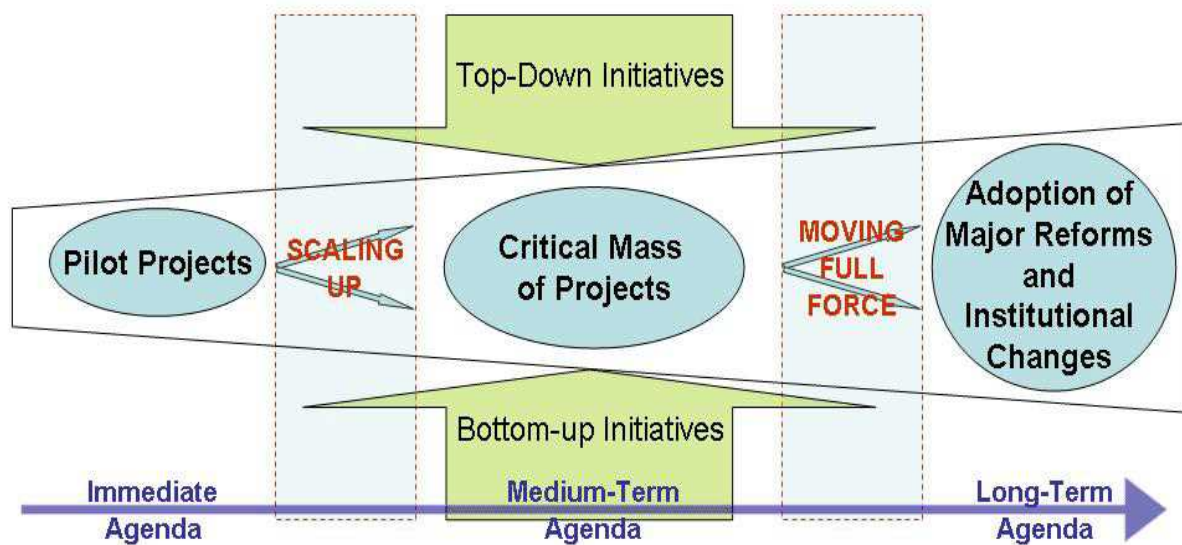
Conclusions: Apply suggestions above through the SDG Prism. E.G.:

- Make Joint STIP/SDG Reviews sponsored by top leadership of countries
- Design STI/SDGs-oriented policies with key efficiency principles (holistic approach, focused priorities, visible achievements)
- Monitor STI efforts/achievements in relation to SDGs (STI statistics)
- Launch « audits » of innovation obstacles in relation to specific SDGs (e.g. in key areas such as water, energy, health, etc.)
- Mobilize key STI stakeholders around SDGs through appropriate medias, ad hoc fora, and so on
- Begin designing global innovation programs (e.g. New cities to deal with migrations induced by droughts, lack of jobs, etc. in specific parts of Africa)

THANK YOU