Designing and implementing innovation policy: lessons from STI Policy Reviews on challenges facing developing country innovation policymakers

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Outline

• Challenges facing innovation policymakers
• Challenges in implementing policies
• Some solutions
• Conclusions
General challenges facing innovation policymakers in DCs (1)

- Ineffective institutional arrangements, missing institutions/roles
- Frequent leadership changes, policy discontinuity
- Many innovation system problems, weak links
- Economic structure - informal, natural-resource based
General challenges facing innovation policymakers in DCs (2)

- Difficult business environment
- Firm structure - micro, small firms dominate, some large oligopolies
- Technical skill shortages, skills mismatch (education)
- Weak absorptive capacity of firms
General challenges facing innovation policymakers in DCs (3)

• International ToT channels weak (trade, FDI, licensing, skilled migration, imitation/RE)
• Low R&D spending, commercialization
• Weak firm investment in innovation
• Small economies typically, limited demand stimulus
General challenges facing innovation policymakers in DCs (4)

• Economy is dominated by capital city - weak regional development
• Evidence base for policymaking is weak (few reliable indicators - R&D, innovation surveys)
• Weak innovation culture, risk-averse societies
• Weak evaluation culture in government
IP implementation challenges in DCs (1)

- High level support needed
- High level vision on innovation needed
- Junior position (influence)
- Cross-government consensus, coordination
- No integration into national development strategy
- Limited budget (direct support, fiscal incentives), manpower, experience
IP implementation challenges in DCs (2)

- Low priority in MoF
- Few indicators to guide policy
- Linear thinking dominates most ministries
- Challenges from "framework conditions"
- Policy dependence for impact - policy mix dominates outcomes
- Regional implementation an additional challenge (large country issue)
Ideas on IP implementation (1)

- Seek high level vision and direction (President, Prime Minister, Sultan, King)
- Establish high level coordination - innovation council, agency - that works
- Bring key ministers/vice ministers together (coordination - policy coherence)
- Get representation on key bodies (innovation council, council of ministers...)

Ideas on IP implementation (2)

• Split up innovation policy - (i) high level vision and policy direction, (ii) Strategic goals and policy design (iii) policy implementation

• Check for excessive overlaps among innovation agencies

• Think beyond R&D (T adoption, skills…)

• Hold policy workshops on innovation
Ideas on IP implementation (3)

• Pursue private sector dialogue
• Consider regional development aspect
• Start with experiments, monitor, then perhaps scale up
• Look for bottom up innovation activities, promote good ones
• International/regional collaboration - policy networks (ministerial, policy)
Ideas on IP implementation (4)

• Collaborate on regional (MENA) R&D labs and test labs, fab centers, R&D collaboration, education, centers of excellence

• Collect indicators (evidence-based analysis, evaluation)

• Start an evaluation culture, introduce performance measures (KPIs) for policies
Thailand STI system governance

Source: (Durongkaveroj, 2014a)
Singapore STI governance structure
Germany research and innovation governance
(source: erawatch Germany country report 2012)
Conclusions

• Many challenges, general and implementation specific
• Some ideas can help
• Experimentation and policy learning needed
• Country context is critical