Facilitating Development and Deployment of Clean and Environmentally Sustainable Technologies: Some Reflections

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Key issues:

- Gaps (in relation to objectives and needs)
- Fragmentation vs decentralization (functions and form)
- Bottom-up assemblage vs top-down design
- Role of different domains (technology – finance – policy)
- Going beyond pilots *[never seen a pilot that failed or scaled]*
Tech Devel Adapt/Demo Early Deployment Scale up

Main focus of existing activities (CGIAR exception)
Designing a Technology Facilitation Mechanism?

- Objectives - promote the development, transfer and dissemination of clean and environmentally sound technologies *(and inclusive?)*

- Functions

- Form (operations and governance)

- Strategy
Designing a Technology Facilitation Mechanism?

- **Objectives**
- **Functions** – vary by stage of the technology cycle (each stage involves very different activities, with very different requirements for capabilities and resources (technical, finance, organizational, policy);
- **Feedbacks** important (e.g., user-producer linkages);
- must address key gaps at that stage (vary by country and technology);
- **Cross-cutting issues** (e.g., human capability building; monitoring and assessment)
- **Form** (operations and governance)
- **Strategy**
**ACTIVITIES**

- R&D, proof of concept
- Adaptation for local user needs/context
- Market creation; risk mitigation for users; business model devt.
- Driving large-scale diffusion

**KEY SKILLS**

- Research & design; R&D management
- Adaptive engineering
- Coordinate technology, finance, business, policy domains (“systems” operation)
TECHNICAL CAPABILITIES
RISK
REQUIRED INVESTMENTS
IMPORTANCE OF LOCAL CONTEXT
Designing a Technology Facilitation Mechanism?

- Objectives
- Functions – vary by stage of the technology cycle (each stage involves very different activities, with very different requirements for capabilities and resources (technical, finance, organizational, policy);
- feedbacks important (e.g., user-producer linkages);
- must address key gaps at that stage (vary by country and technology);
- cross-cutting issues (e.g., human capability building; monitoring and assessment)
- Form (operations and governance)
- Strategy
Designing a Technology Facilitation Mechanism?

- Objectives
- Functions
- Form (operations and governance) – based on best practices for activities relevant to stage of technology cycle (e.g., organizing for tech devt based on state-of-art understanding on how to manage R&D/induce innovation)
  Building capacity for latter stages of tech cycle (i.e., dissemination) complex since local-context dependent; ‘systems’ perspective is key
- Strategy
Designing a Technology Facilitation Mechanism?

- Objectives
- Functions
- Form
- Strategy – start with selected focus areas/domains, emerging from SDGs? Initial focus on marginalized (e.g., poor, women...) communities?