Connecting STI to Finance: Experiences from ITAP

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National Science and Technology Development Agency (NSTDA)

• Established in 1991 under the NSTDA Act to be autonomous research organization of Thailand.

• Vision: To be **key partner** in **knowledge-based society** through **science and technology**

• Mission: Research and Development, Technology Transfer, Human Resources Development, Infrastructure Development

• Organization: Four national research centers: BIOTEC, MTEC, NECTEC and NANOTEC, and Technology Management Center
Innovation and Technology Assistance Program (ITAP)

• A program operated by Industrial Technology Development Department of Technology Management Center of NSTDA

• **Objective:** Stimulate economic growth of Thailand through the proper usage of technology and innovation.

• **Operation:** Provide [technical advisory services](#) and [financial assistance](#) to small and medium enterprises (SMEs) in Thailand via intermediary agent called Industrial Technology Advisor (ITA).
**Innovation Intermediary**

- **Definition:** An organization or body that acts as agent or broker in any aspect of the innovation process between two or more parties.

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**Diagram:**

- **Solution Seeker (SMEs)**
- **Innovation Intermediary (ITAP)**
- **Problem Solver (Experts)**

- Flow: Problem -> Solution -> Problem -> Solution

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**Technology Transfer Process**
Financing STI for SMEs in Thailand via ITAP

• ITAP provides 50% reimbursement of project cost for SMEs after the project is done and evaluated.

• ITAP introduces SMEs to other STI related support programs, some of which are related to financial support such as tax incentive for R&D activities, innovation coupon for technology upgrade.

• ITAP also connects SMEs with the partner financial institutions (e.g. Thailand SME Development Bank for loan for upgrading technology infrastructure, Thai Credit Guarantee Corporation for credit guarantees for viable SMEs)
Example Case of ITAP

• “Bubpha Kluay Tak” community enterprise: family-based dried banana production in Phitsanulok province in the north of Thailand.

• ITAP helped upgrade the traditional open-air sun drying production method to the use of greenhouse solar dryer, resulting in more efficient production and better quality products.

• Later, ITAP also connected the community enterprise with local bank for loan on operation expansion.
From “Dried Banana” to “Banana Society”

Old production method/ Traditional packaging

New production method/ Upgraded packaging
Tripple Helix Framework

- Industry (Bubpha Community Enterprise)
- University (Department of Food Technology, Silpakorn University)
- Government ITAP (Intermediary)

- Local banana farmers and workers
- Office of Small and Medium Enterprises Promotion
- Department of Physics
- Thailand Research Fund
- GMP & HACCP Certified Bodies
- Bangkok Bank
Conclusion

• SMEs have **limited resources** (time/money/personnel) – it is necessary for government to assist them in the beginning.

• However, the government cannot help all SMEs thus the assistance should come with capacity building for **sustainable growth** by themselves, especially financial resources should be according to the market mechanism.

• Technology Facilitation Mechanism (TFM) – **online** platform can be useful for innovation intermediary to utilize, however, **offline** component is still necessary.
Thank you

Any questions or comments, please contact me at
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