

Technology transfer in Thailand

The role of research and technology organizations in industrializing economies

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While conducting research is their core task, research and technology organizations (RTOs) have another important role to play, especially if they are located in newly industrializing economies. This is to transfer technology to the private sector. This article presents the case of an RTO in Thailand that is helping in different ways to accelerate the process of industrial development of the country. This case has important policy and planning implications for newly industrializing economies (NIEs).

Introduction

For several decades, many newly industrializing economies (NIEs), such as Thailand, Malaysia, Ireland, Mexico and Brazil, have attempted to move towards industrialization by attracting large amounts of capital inflows, heavily investing in physical facilities and importing foreign technologies.

At the initial stage of industrialization, the process of technology transfer (Box 1) is invariably a story of developed and developing countries, where developed countries are generators of technologies, which they then transfer to developing countries. However, several

studies^{1,2,3,4} show that these inflows of foreign technologies and technical knowledge are not automatically transferred into the economy. What are missing are market mechanisms, such as imports of machinery, equipment, technical agreements and know-how licensing.

One problem is usually the different levels of technical knowledge between the seller and the receiver of technology; the former generally being from an industrialized economy and the latter of course being from an NIE. Another is the lack of technological capability in the local enterprise and its inability to manage the technology transfer process.

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