

The Implementation of Science Park Policy and Their Impacts on Regional Economic Development in Emerging Economy Country: Case of Thailand

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Abstract : Science parks are an essential component of localized innovation ecosystems. Science Parks have played a critical role in enhancing local innovation ecosystems in developed market economies. Attempts have been made to replicate best practice in other national contexts. To our best knowledge, the study about the development of Science Parks has not been undertaken on the economic impact on the developing countries. Further research is required to understand the adoption of Science Park policies in developing and emerging economies. This study explores the implementation of Science Park policy and its impacts on economic growth and development in Thailand, focusing on the relationship between universities and businesses. The Thailand context is essential. Thailand's economy is dominated by agriculture and tourism. The Science Park policy is trying to develop an agriculturally orientated innovative ecosystem. Thailand established four Science Parks based on a policy that highlighted the importance of cooperation between government, HEIs, and businesses. These Science Parks are intended to increase small and medium enterprises' (SMEs) innovativeness, employment, and regional economic growth by promoting collaboration and knowledge transfer between HEIs and the private sector. This study explores one regional Science Park in Thailand with an emphasis on understanding the implementation and operation of a triple helix innovation policy. The analysis explores the establishment of the Science Park and its impacts on firms and the regional economy through interviews with Science Parks directors, firms, academics, universities, and government officials. The analysis will inform Science Park policy development in Thailand to support the national objective to develop an innovation ecosystem based on the integration of technology with innovation policy, supporting technology-based SMEs in the creation of local jobs. The finding shows that the implementation of the Science Park policy in Thailand requires support and promotion from the government. The regional development plan must be related to the regional industry development strategy, considering the strengths and weaknesses of local entrepreneurs. The long time in granting a patent is the major obstacle in achieving the government's aim in encouraging local economic activity. The regional Science Parks in Thailand are at the early stage of the operation plan. Thus, the impact on the regional economy cannot be measured and need further investigation in a more extended period. However, local businesses realize the vital of research and development (R&D). There have been more requests for funding support in doing R&D. Furthermore, there is the creation of linkages between businesses, HEIs, and government authorities as expected.

Keywords : developing country, emerging economy, regional development, science park, Thailand, triple helix

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