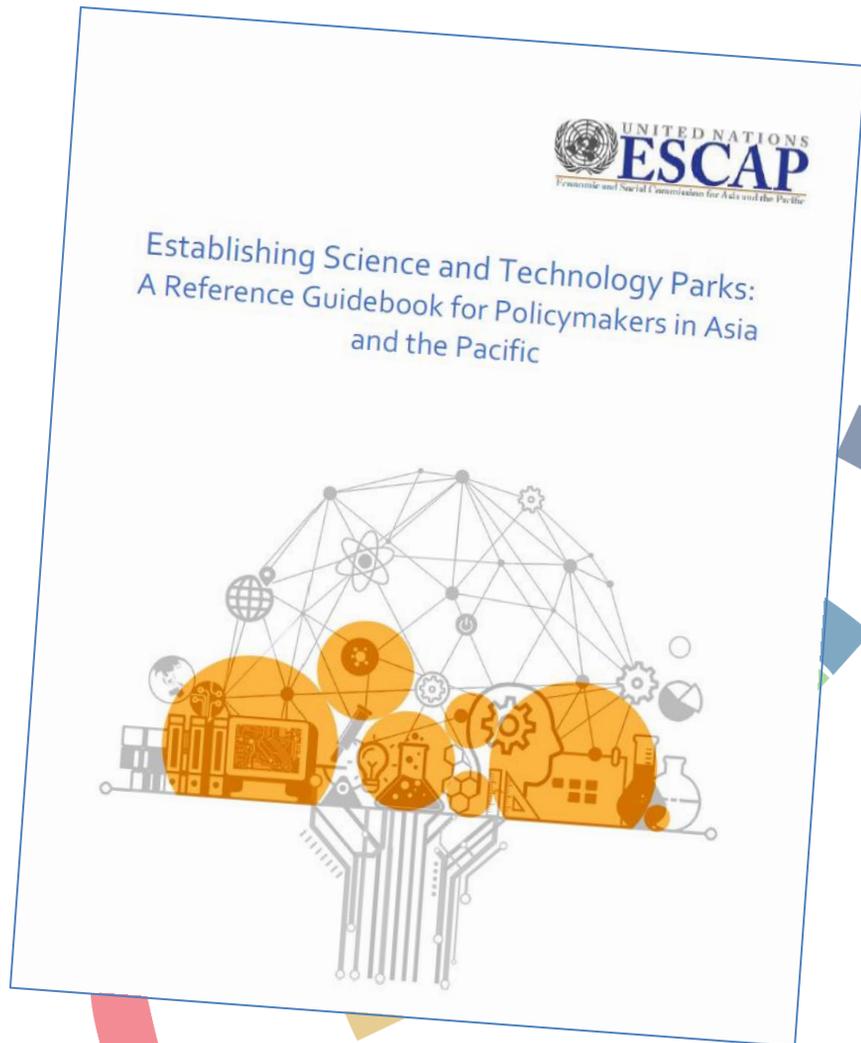


Establishing Science and Technology Parks: *A Reference Guidebook for Policymakers in Asia and the Pacific*

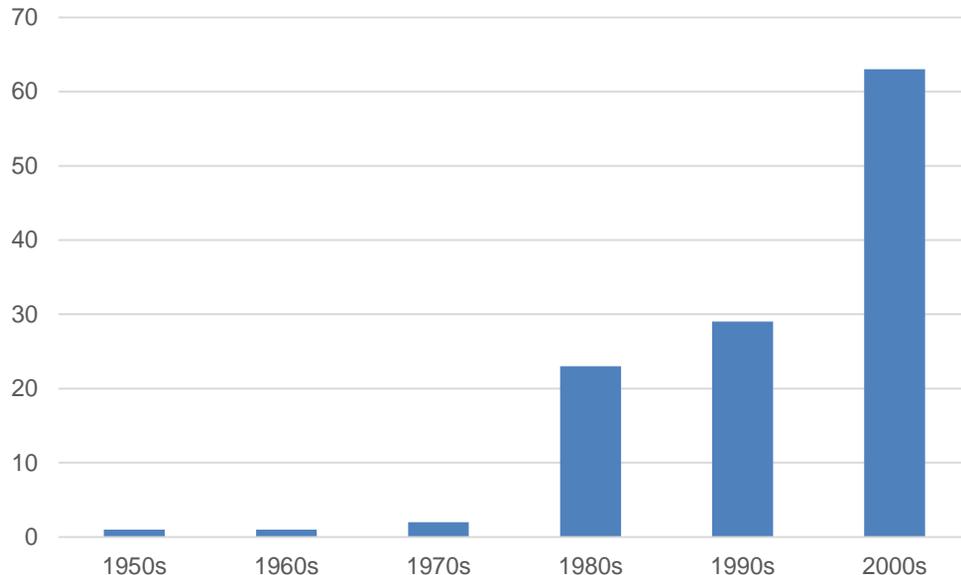
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Agenda

- Why do we need this guidebook?
- What is the structure of this guidebook?
- How was it prepared?
- What are some key recommendations?

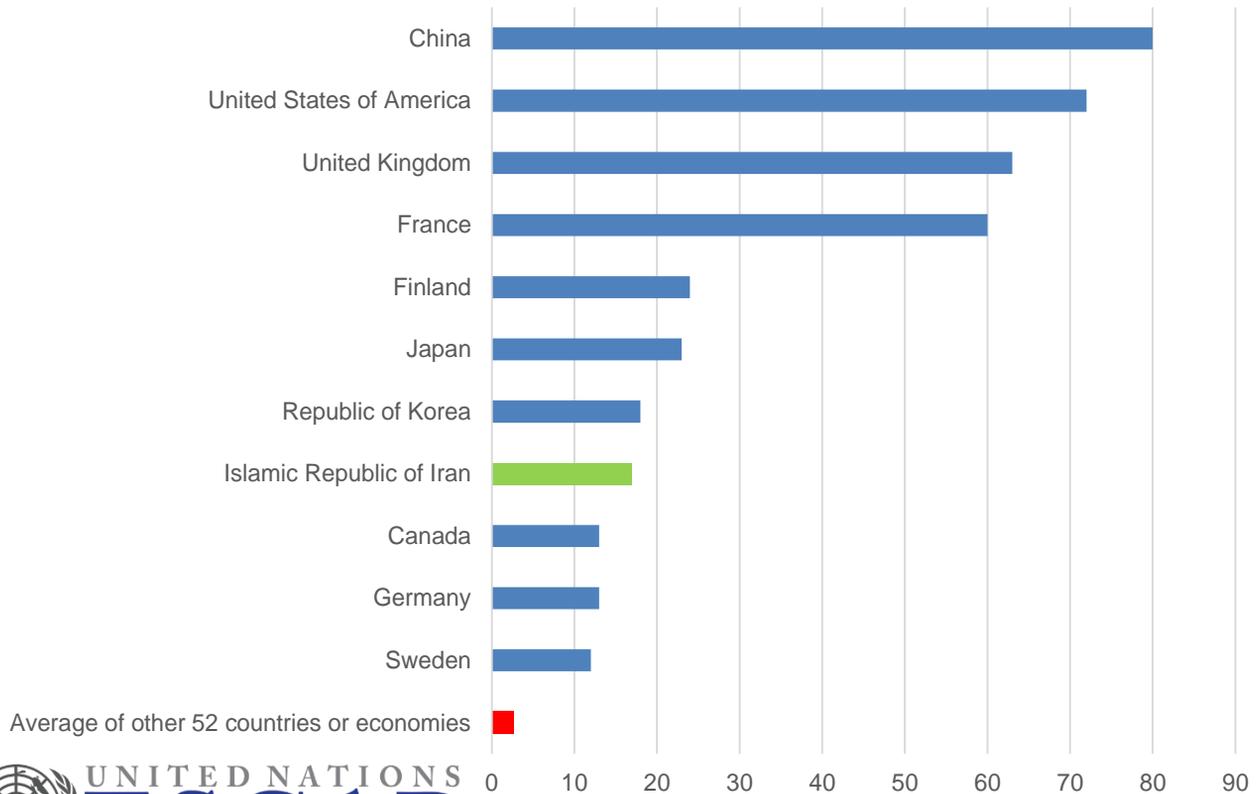
Science and technology parks launched in each decade



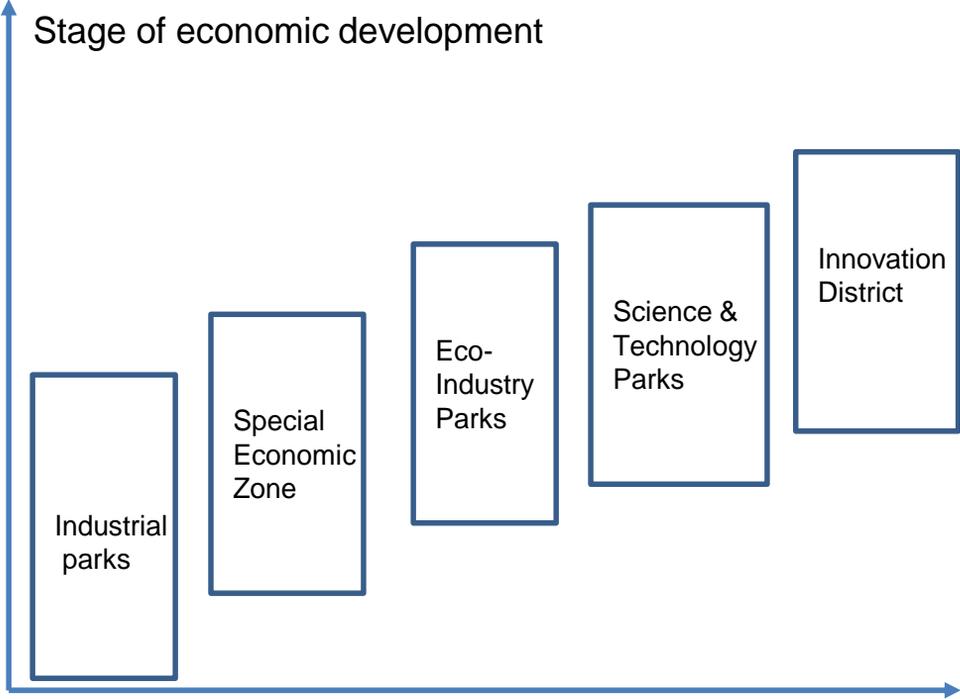
Source: Derived from a survey conducted by the International Association of Science Parks and Areas of Innovation, 2012.

Note: The survey covers 119 parks from 38 countries.

Number of Science Parks in a country or economy



Economic zones and stage of economic development



Not all science and tech parks are successful

One study found that a large percentage of science parks in the United States either ended as outright failures or contributed little to economic objectives, reporting that

- only 25% of science parks achieved their goals (such as attracting and fostering research and development activity, contributing to job creation and economic growth);
- another 25% became purely real estate operations that contributed little to economic objectives; and
- 50% failed.

Hong Kong Budget 2018-2019

All eyes on Hong Kong's Science Park after massive HK\$40 billion budget handout

Critics suggest setting up various committees to hold the park accountable on its criteria for handing out funds and called on it to set up key performance indicators and benchmarks to measure its achievements

PUBLISHED : Thursday, 01 March, 2018, 9:57pm

COMMENTS:

With Hong Kong's Science Park in charge of a massive **HK\$40 billion (US\$5.1 billion)** slice of the budget funding pie in an attempt to turn the city into an innovation and technology (I&T) hub, questions have arisen as to how it can spend the money wisely, will be able to churn out success stories and also be accountable to **a highly sceptical public**.

Source: South China Morning Post

Objective of this guidebook

This guidebook reviews the historical development of science and technology parks and discusses how they fit into the national policies in the region

It serves as a reference source for policymakers in charge of policy or planning related to the development of STPs in Asia and the Pacific.

Structure of this guidebook

Chapter 1 Introduction

Chapter 2 Nature and Characteristics of
Science and Technology Parks

Chapter 3 Policies on Science and
Technology Parks

Chapter 4 Case Studies of Science and
Technology Parks

Chapter 5 Adjustment of Science and
Technology Parks to the Digital World

Chapter 6 Conclusion

How was this guidebook prepared?

1. Background studies were carried out by the ESCAP secretariat, in collaboration with external researchers
2. An expert group meeting held in Bangkok in December 2018

Experts listed in alphabetical order

- Mr. Alfonso Pangan Alamban, Regional Director, Department of Science and Technology, Region X, the Philippines.
 - Mr. Ivan Bogdanov, Head of the Industrial Partnership Office, Skolkovo Institute of Science and Technology (Skoltech), Russian Federation.
 - Mr. Kei Iinuma, Incubation and Investment Manager, General Staff Manager, Incubation and Investment Division, KSP, Inc., Kanagawa Science Park, Japan.
 - Mr. Amin Reza Khaleghian, Director-General for International Affairs and Public Relations, Pardis Technology Park, the Islamic Republic of Iran.
 - Mr. Sunkook Kwon, Secretary-General, Asian Science Park Association.
 - Mr. M. Taghi Lotfi, Senior Advisor, Pardis Technology Park, the Islamic Republic of Iran.
 - Ms. Sri Setiawati, Director of the Center for Research, Science and Technology, Ministry of Research, Technology and Higher Education, Indonesia.
 - Ms. Chachanat Thebtaranonth, Independent expert, Thailand.
 - Ms. Watcharin Witthayaweerasak, General Manager, Thai Business Incubators and Science Park Association, Bangkok, Thailand.
3. Peer reviews



What are the key recommendations?

- To establish an STP is a means to an end, not an end in itself.
- Before an STP is developed, it is essential to check whether the precursory conditions are in place. (what should be the checklists?)
- The social investment in an STP needs to be justified by its social benefits.
- The effectiveness of the incubation and innovation programme offered by an STP needs to be better scrutinized.
- The five “Cs”, i.e., Capacity, Collaboration, Content, Capital, and Communication are important for STPs in an era of digital economy.

“A science park should be regarded as an organism. In addition to well-prepared internal functions, integration with the external environment is also very important for the organism (science park) to continue to grow and develop. The industries developed in the Science Park should be planned according to advantages and strengths of each country.

Asian Science Park Association(ASPA) welcomes the initiative by UNESCAP in preparing this guidebook, which is very useful for policymakers in charge of science, technology and innovation.”



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