Innovation Policies for Inclusiveness - Policy Cases

Technoparks

Country: Korea

1. Short Description

The *Technoparks* programme aims to support regions lagging behind in terms of infrastructure, innovation potential, and critical mass of economic and innovation activities. Technology parks provide infrastructures, incentives for R&D investments, and managerial and technical support.

This policy profile is part of a <u>policy toolkit on innovation policies for inclusiveness</u>. It is relevant for territorial inclusiveness.

2. Policy Characteristics

Basic Information Country and implementing Timeline: institution(s): 1997 to the present (as of December 2016) Republic of Korea Co-ordinated by the Regional Balanced There are 18 technoparks: 16 initiated by the **Growth Commission** government and two by private companies Different parks fall under the supervision (Gyounggi-Daejin TP and Seoul TP), established of different ministries and agencies. between 1997 and 2010.1 Target group Size and budget: Regions As of 2010, there are 18 technoparks in operation. **Budget:** Creation of space (1997-2008): total investment: USD 690 million - Central government – 37% (USD 256 million) - Regional government – 46% (USD 317 million) - Private investment – 17% (USD 117 million) (2004-2012): Institutional building total investment: USD 82 million - Central government – 49% (USD 40 million) - Regional government – 51% (USD 42 million)

The government established six pilot Technoparks (Songdo, Gyounggi, Chungnam, Jeonnam, Daegu and Gyeongbuk) in 1997, followed by a further ten.





Type of policy instrument(s)				Inclusiveness focus
Infrastructure, R&D funding, human resources, networking and venture funding				Territorial inclusiveness

Policy objectives

Technoparks function as an interface between firms, government, universities and research institutes (RIs). Their main roles are to:

- build infrastructure for regional innovation;
- promote regional industries;
- support businesses and link innovation actors;
- build academic-industry collaboration platforms for regional innovation.

Rationale

The main rational of technoparks is to support regions with lagging infrastructure, innovation potential and a critical mass of economic and innovation activities, especially given the existing gap between successful regions and the rest of the country. A technopark is a complex that combines universities, research organisations and businesses in an organic collaborative network for effective industrial development and technological innovation. It provides research, business incubation, training, support and production in a single place. The primary purpose for establishing technoparks in Korea was to found the Regional Innovation System. Universities or local government institutions with technological and administrative capacity were encouraged to build a complex adjacent to the technology developer, so as to promote the incubation of business and the development of new technology and products by small and medium-sized enterprises.

Policy target recipient and selection mechanism

Regions need to fulfil the following conditions to establish a technopark: (i) lack of infrastructure for high-tech industries, and (ii) a limited number of high-tech companies.

The central government has proposed a set of guidelines including the budget and types of programmes to be implemented. The regions take the lead in designing the programmes according to the guidelines and the 2010 Regional Industry promotion plan.

Policy instrument(s)

The key functions of technoparks are to:

- provide infrastructure (e.g. common business support facilities, incubators);
- provide R&D funding to R&D centres;
- support the development of human resources for strategic regional industries;



- promote networking by providing incentives for joint R&D projects and creating an information-sharing platform;
- provide funding to firms (e.g. credit for tech-based SMEs, start-up support, venture and seed capital);
- boost the regional economy through use of the academia-industry RIS to identify and nurture new companies with novel technology capacity, and help existing small and medium-sized companies to advance their technology and production;
- build an organic system of collaboration between regional universities, research organisations and businesses, to promote the technological advancement of special industries, and support and nurture business start-ups in the latest technology fields.

Policy challenges

- Ensuring the financial autonomy of technoparks
- Increasing collaborations among technoparks
- Ensuring efficient regional research and development governance (including improvement of R&D planning and management systems).

Actions undertaken to address challenges

• The Korea Technopark Association (KTPA) is a network established to assist member technoparks. With 18 regular members, the KTPA leads exchanges and co-operative activities between technoparks, serving as a channel for mediated communications among members, the central government and related organisations. Through the use of platform strategies, the KTPA strives to create a culture of mutual understanding and sharing, co-operation and connectivity via communications between central and regional entities, as well as inter-regional communications.

Evaluation and outcomes of the scheme

Major programme outcomes include the construction of a database on regional resources; the operation of councils of academia, industries and research organisations; and business support.

Sources

Chang-Hyun Nam, Keun-Ho Roh, and Young-Ju Shin (2015), "Chungbuk Technopark in Korea: role as the regional innovation hub and strategy for fostering new industry", *World Technopolis**Review, Vol. 4, pp. 168-178, www.wtanet.org/kor/ds/mgs/sub04/wtr12/WTR Issue12/3.pdf
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EC/OECD (2014), *International Science, Technology and Innovation Policy (STIP) Survey and Database*, edition 2014, <u>www.innovationpolicyplatform.org/sti-policy-database</u>.

Technopark (n.d.), website, Korea Technology Centre, Seoul, www.technopark.kr/index.php/main.



Background

This document is part of a repository of examples of innovation policies that have for explicit aim to contribute to territorial, industrial and social inclusiveness. The repository is part of an innovation policy toolkit developed for the Innovation for Inclusive Growth project and gathers national innovation policy programmes that:

- **A.** Explicitly target **lagging and less innovative regions** (outside of regions that are highly innovative) or by design are more likely to support these lagging / less innovative regions.
- **B.** Explicitly aim to include in innovation activities **individuals and groups that are not usually participating** in those activities and in support of broadening the group of innovators.
- C. Explicitly aim to foster innovation activities in non-innovative firms, in particular by targeting non-innovative sectors and non-innovative Small and Medium-sized Enterprises (SMEs).

Policies are searchable by inclusiveness type, objective and implementation challenge on: https://innovationpolicyplatform.org/inclusivetoolkit