How can middle-income economies mobilize their intellectual property systems to promote innovation?

Innovation plays a pivotal role in economic development: this is one important lesson of the past decades. The build-up of innovation capacities has been central to successful growth experiences. Intellectual property (IP) rights are important for building up those innovation capacities, and are even more pivotal to the knowledge economy where intangible assets are critical. How can policy optimise the contributions of national IP systems to innovation in a development context? The publication National Intellectual Property Systems, Innovation and Economic Development develops a framework to facilitate the analysis of national IP systems in middle-income countries aimed at defining policy recommendations to promote innovation. This publication also contains country analyses for Colombia and Indonesia based on this framework.

What constitutes IP systems? Mapping actors, policies and interrelationships

Nationals IP systems can be defined as the set of institutions, rules and bodies involved in the design, implementation and enforcement of IP in a national economy. This framework maps the full set of actors, conditions, policies and interrelationships that matter for IP systems and their contributions to innovation. Six key dimensions are identified (fig. 1), each of these contain a set of key issues as described in the publication. Incorporating explicitly the development dimension, the framework defines for each dimension a set of policy principles which provide a policy compass for navigating the map.

Critical dimensions for IP systems

It is important to determine the critical dimensions that allow to better mobilize the IP system. The framework identifies three focal points for IP systems' contributions to innovation:

1. Organisation of IP systems and “legal quality”

Application procedures, legal provisions in place for IP owners, and their actual conditions of enforcement are a pre-condition for IP systems to effectively incentivise inventions and support innovation. Key factors are adequate legal provisions, objective, high-quality and timely application processes, the effective enforcement of IP rights and reasonable costs for users. The resources allocated to the IP system by governments must, however, keep to reasonable levels, as the IP system partly competes with the innovation system for some of these resources (e.g. engineers who work as researchers in industry or as patent examiners). To ensure quality of the system while reducing cost, countries should seek international co-operation.

2. Taking into account developmental challenges

The development context is associated with a set of substantial contextual weaknesses: First, the realities in many emerging and developing countries are such that a small fraction of the population has access to wider resources and opportunities, while others lack access to the most basic resources. This has implications for innovation performance in that it implies substantial heterogeneities and often large informal sectors. Second, the private sector often plays a marginal role in innovation with public research institutes and universities taking on a more central role. Third, there are institutional weaknesses and market failures which challenge innovation performance and, in consequence, efforts aimed at commercialising IP. These dimensions have to be taken into account by policy if IP systems are to support national innovation performance as they condition the success of national IP policies.
3. Access for a wider group of users

No one type of actor matters exclusively in a development context. Rather it is essential to consider in each country different “stylised” groups as they all have a role to play for innovation. These are innovators in traditional and informal sectors, “catching-up” businesses, leading “frontier” businesses and research institutions and universities. IP policy opportunities and challenges differ including, for instance, the type of IP that will be most relevant (Table 1) among other factors.

Table 1. Types of innovations and relevant intellectual property policy issues

<table>
<thead>
<tr>
<th>Type of innovation</th>
<th>Traditional and informal sectors</th>
<th>Catching-up businesses</th>
<th>Leading “frontier” businesses</th>
<th>Research Institutions and universities</th>
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<tr>
<td></td>
<td>- Incremental based on traditional knowledge, existing technology and sometimes external scientific expertise</td>
<td>- Incremental based on innovation and technology (domestic and abroad)</td>
<td>- Identical to developed countries’ firms operating on global markets involving incremental and radical innovation</td>
<td>- Diverse, ranging from major scientific research and invention, support of local innovations to the introduction of technical innovation to communities</td>
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<td>Examples of IP policy principles</td>
<td>- Organise collective action efficiently to build economic value by supporting effective industry associations for GI and trademarks to protect handicrafts or food products  - Enable access for certain groups  - Organise awareness-raising activities for actors to use IP in support of their economic activities</td>
<td>- Ensure costs are kept low for small and medium-sized firms including enforcement costs  - Build awareness-raising activities for actors to use IP in support of their economic activities  - Facilitate licensing agreements to enable access to knowledge and raise opportunities for financing based on IP</td>
<td>- Provide support for obtaining IP abroad and strategic positioning with respect to international competitors, so as to tap into larger markets and foreign markets for technology  - Strategically use patent information to define fields for internationally competitive research for identifying such IP</td>
<td>- Ensure support for organisational context to help obtain IP, for example, efficient TTOs at regional level to exploit economies of scale  - Ensure researchers and their institutions have adequate incentives  - Ensure opportunities for commercialisation activities including markets for IP, linkages with industry and adequate regulatory frameworks</td>
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<tr>
<td>Possible types of IP of interest</td>
<td>- Geographical indications, trademarks, IP for agriculture, design rights</td>
<td>- Utility models, trademarks, design rights</td>
<td>- Patents (domestic and international), trademarks</td>
<td>- Patents (domestic and international) as well as others specific to research</td>
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4. Putting IP policies in the context of innovation policies: The Innovation Policy Platform

IP systems cover a wide range of economic, social and legal issues and complementary policies are crucial to tackle structural weaknesses affecting their performance. Horizontal cooperation between institutions becomes critical. That is why the creation of a strong co-ordinating body for IP with an explicit focus on innovation is a good way to achieve a successful IP policy for innovation. It is also critical to see IP policy within the context of innovation policy. In order to facilitate such a policy perspective, the framework has been implemented on the OECD-World Bank Innovation Policy Platform, a web-based, interactive space that provides access to learning resources. The IPP module on IP rights allows users to explore those linkages with the variety of innovation policy issues (innovationpolicyplatform.org). The next step will consist in developing policy diagnostics toolkits drawing on the various sources of information.

For more information

Project Website: [http://oe.cd/ip-studies](http://oe.cd/ip-studies) or [www.oecd.org/sti/inno/ip-studies.htm](http://www.oecd.org/sti/inno/ip-studies.htm)