National Intellectual Property Systems, Innovation and Economic Development

Indonesia's National Intellectual Property System

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The socio-economic and innovation context

- Indonesia is 4th most populated country in the world with 237 million inhabitants

Night lights: another perspective on development patterns

Images source: Google Maps
The socio-economic and innovation context

• Indonesia is 4th most populated country in the world with 237 million inhabitants

• Dynamic region of the world & strong growth performance (after Asian crisis)

→ attracting foreign capital offering potential opportunities

• Innovation has played limited role in development, GERD as % of GDP of 0.08%, but pockets of concentrated S&T and R&D expertise, particularly public sector institutes (bulk of R&D investments)

→ focus on leading public research institutions = greater opportunities for success of patents

• Low technology base & declining exports of high-tech products

→ Types of IP such as: Utility models, design rights and trademarks are worth exploring

• Poverty and inequality are substantial, informal sector (68%)

• Traditional industries and rich repository of traditional knowledge (including bhatik textiles and manufacturing)

→ IP policies should consider these activities
Applying the framework

**Innovation and IPR**
- Types of IPR (patents, utility models, trademarks, copyright, trade secrets, ...)
- Rationales of IP for innovation (incentives for invention, access to knowledge, access to finance, addressing information asymmetries, ...)

**Organisation of IP systems**
- Legal quality of IP
- IP operations and procedures
- IP law (substantive patent law, utility model law, trademark law, ...)
- IP enforcement and litigation
- International dimensions (agreements and bodies)
- IP skills and training

**IP users**
- Leading “frontier” businesses
- “Catching-up” businesses
- Innovators in traditional and informal sectors
- Universities and public research institutes

**IP, markets and diffusion**
- Open innovation
- Open source
- Licensing and markets for IP
- IP and markets for finance
- Competition (standards and IP, patent pools and antitrust, patent races, proliferation of patents)

**Fields of IP use**
- Innovation in biotechnology and pharmaceuticals
- Innovation in agriculture
- Creative industries
- Innovation in ICT

**IP policies in the context of innovation**
- Characteristics of IP policies relative to others
- Policy design (prioritization, compatibility and tradeoffs)
- Governance of IP
Regulatory framework reflects 1991 and 1995 WTO membership & Indonesia is a signatory of major international treaties.

**Task Force for IP Enforcement:** formal instance of inter-ministerial co-ordination

→ **A step in the right direction** as to date ministries have limited knowledge about IP policy enacted by their counterparts. More coordination is desirable to allow for bigger projects involving several bodies.
Legal and administrative conditions are crucial for the IP system to support innovation:

Indonesia still faces several challenges...

...but has taken steps towards addressing them including:

- **Efforts to improve efficiency of IP application processing** via automation with the collaboration of the WIPO
- **Creation of the Arbitration and Mediation Agency for IP rights** to offer faster, simpler and cheaper solutions for IP dispute resolution

### Summary of Indonesia’s challenges

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<tr>
<th>Application process</th>
<th>Examination process</th>
<th>Post-application process</th>
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<td>• User confidence and trust need strengthening</td>
<td>• Creating a comprehensive database can help raise efficiency</td>
<td>• Digitisation of IP applications and further efforts are needed to improve disclosure</td>
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<td>• Access to services beyond IP office headquarters is limited</td>
<td>• Examiners’ profiles that match applications can help bring improvements</td>
<td>• Enforcement and litigation challenges need further attention</td>
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<td>• Awareness about IP needs strengthening</td>
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Examination process: Digitisation of IP applications and further efforts are needed to improve disclosure. Enforcement and litigation challenges need further attention.

Post-application process: Digitisation of IP applications and further efforts are needed to improve disclosure. Enforcement and litigation challenges need further attention.
IP markets and diffusion

• Limited development of markets for IP (multiple factors including shortcomings in legal frameworks and regulations for licensing)

• Pioneering case of the Indonesian Agricultural Research and Development Institute for Agricultural Technology Transfer (very active in patenting, pushing for licensing, looking for international partners, etc.)
IP users ... a quick data perspective

- Relatively weak use of IP system by residents ... except for design rights and use of trademarks: trademark use in Indonesia is stronger than this of its neighbours (reflecting the dynamism of the service industry)

Trademark applications by China, Indonesia and India at USPTO, OHIM, JPO and national IP offices, 2000-02 and 2009-11 averages

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<th>Year</th>
<th>CHN</th>
<th>IDN</th>
<th>IND</th>
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<tr>
<td>2000-02</td>
<td>2.3 (USPTO)</td>
<td>0.3 (OHIM)</td>
<td>1.3 (JPO)</td>
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<tr>
<td>2009-11</td>
<td>996 (national TM office)</td>
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Trademark applications at foreign offices, thousands

Resident trademark applications for selected ASEAN offices

- However, international trademark applications are still low compared to those of other BRIICS countries

Source: WIPO Patent Statistics
The number of industrial design applications in Indonesia is remarkable compared to other types of IP (except trademarks), and is high for the region.

Source: WIPO Patent Statistics
Innovators in traditional and informal sectors

• In spite of potential, limited awareness among producers in traditional industries and their institutions

• GI seen as potentially relevant but still need to be exploited, management and benefit sharing systems are critical

• Traditional knowledge: joint database is being developed across several ministries and organisations → critical to help create system of benefit sharing to safeguard but even more if building opportunities
“Catching-up” businesses and leading “pioneer” businesses

- “Pioneer” business IP user case using traditional knowledge: Dexa Medica (building on traditional medicine)

- SMEs weak and limited uses of IP with some exceptions for quality consumer products (challenges of product quality in Indonesia)

- Possibly interesting to think about unregistered design rights for textiles producers
Research institutions and universities

• Concentration of research capacities → high potential for revenue-generating innovation that should be exploited

• All income generated from publicly-funded projects claimed by Ministry of Finance, no rewards for researchers, in some cases negative selection (researchers leaving if IP becomes success)

• Negative effects of certain well-intentioned support programmes: filing low-quality patents to receive support (for applications) but without increasing opportunities for commercialisation

• Limited & short-term resources: short-term budgetary allocations hinder commercialisation = projects abandoned en route

• Research quality & research projects not starting from the “state of the art” → screening patent information

• Technology transfer offices: created in many universities but often not formalised, limited funding sources & capacities → towards common services could be useful
Some conclusions

• **Legal and administrative reforms are needed** to improve the quality of the IP system.

• Efforts must be taken to **include** smaller entities and businesses in remote geographic areas (high potential gain from use of IP).

• High potential in the public research sector → IP policy also has to **address challenges that inhibit public research institutes from supporting the innovation system**

• **Better co-operation of IP policy for innovation** is needed to improve policy design
For further information…

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

• **Innovation Policy Reviews:**

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