

Measurement in the Arab region

MENA Innovation Scoreboard



CENTER for MEDITERRANEAN
INTEGRATION | CENTRE pour
l'INTÉGRATION en MÉDITERRANÉE
مركز التكامل المتوسطي



Where we started....



THE WORLD BANK

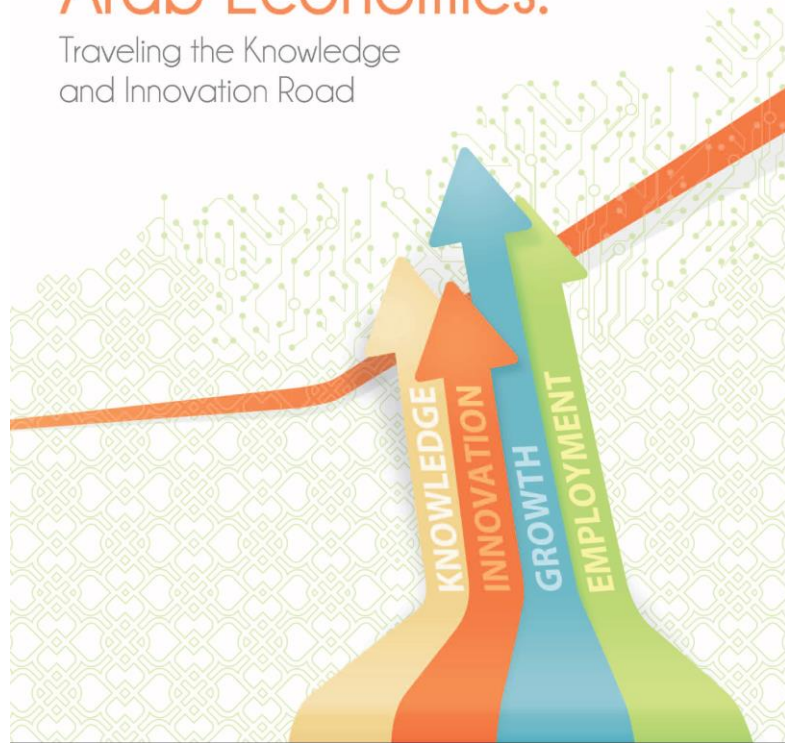


European Investment Bank

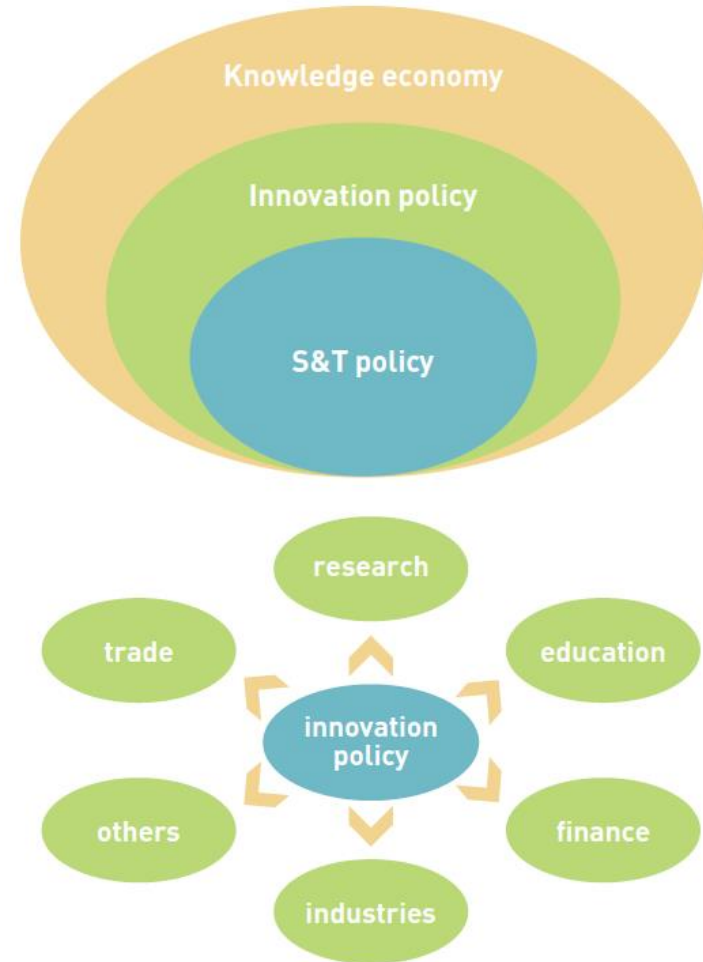


Transforming Arab Economies:

Traveling the Knowledge and Innovation Road



Innovation policy positioning



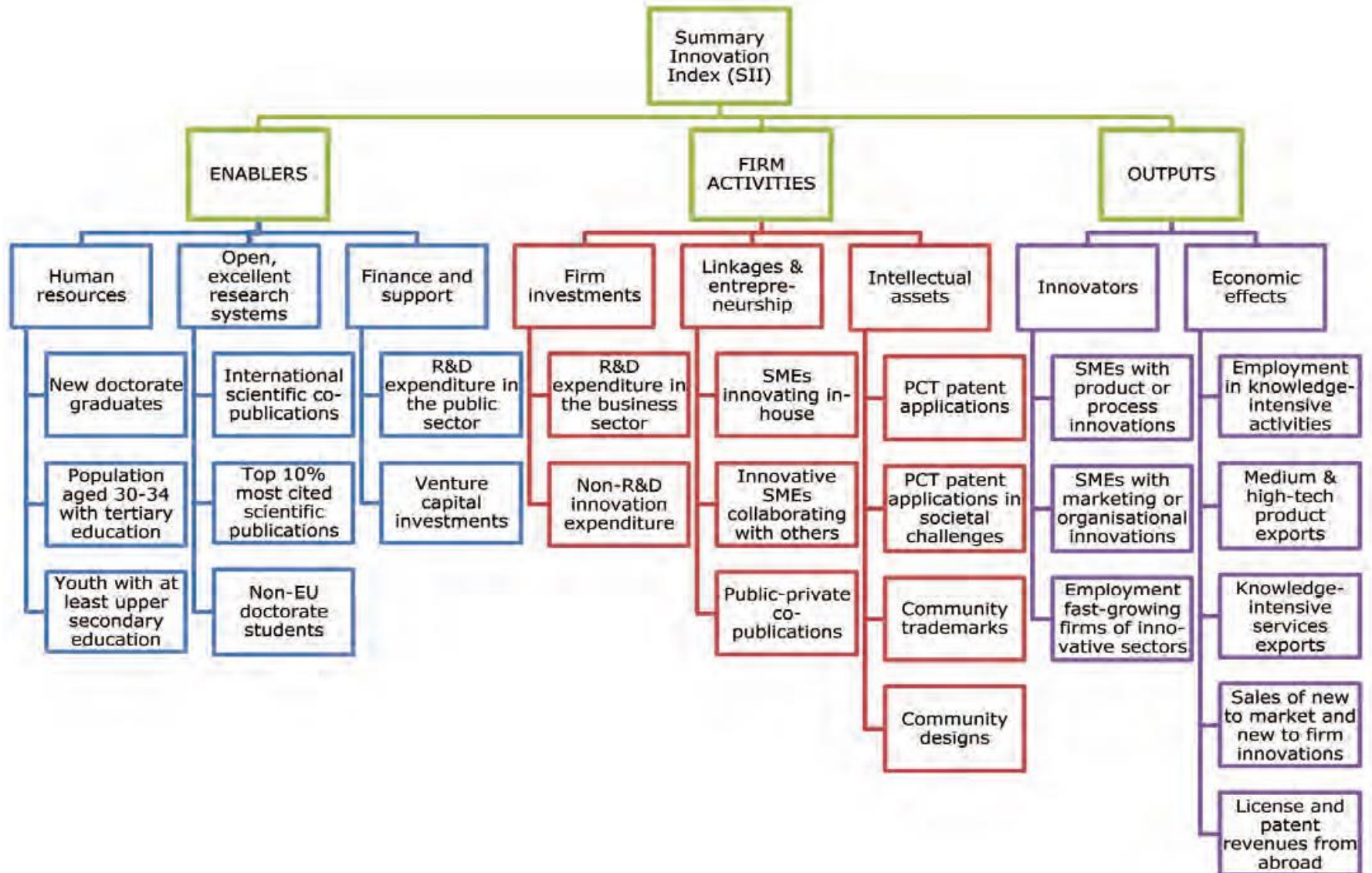
Source: World Bank 2010c.



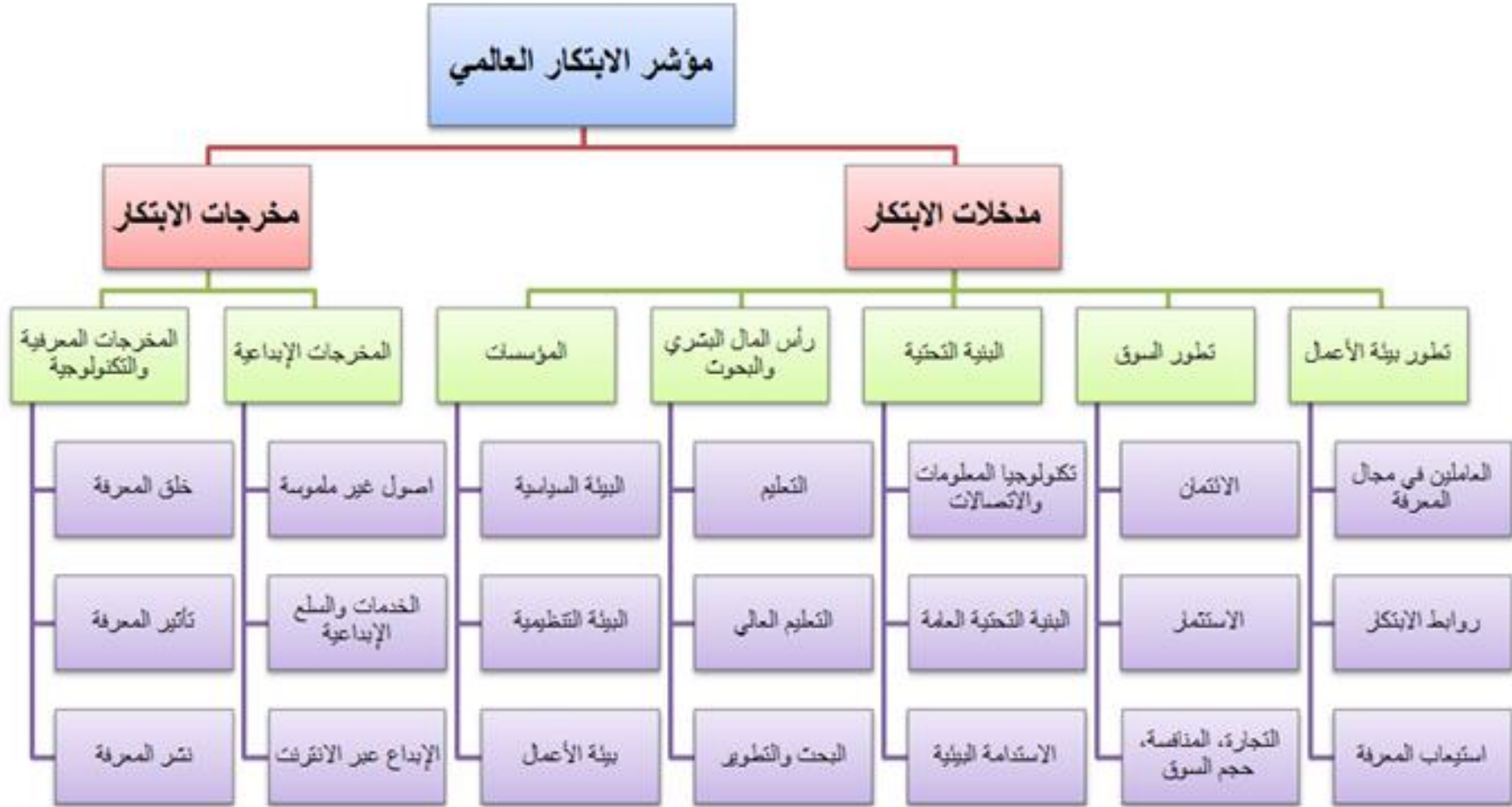
Example of innovation scoreboards:

- Innovation Union Scoreboard: http://ec.europa.eu/enterprise/policies/innovation/policy/innovation-scoreboard/index_en.htm
 - Global Innovation Index: <https://www.globalinnovationindex.org/content.aspx?page=GII-Home>
 - Asian Development Bank/EIU Creative Productivity Index: <http://www.adb.org/publications/creative-productivity-index-analysing-creativity-and-innovation-asia>
 - World Bank Knowledge Economy Index: http://info.worldbank.org/etools/kam2/KAM_page5.asp
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Europe's Innovation Index



مؤشر الابتكار العالمي 2017 (دولة 127)



Meetings for the formulation of the MENA Scoreboard

- European Investment Bank, Centre for Mediterranean Integration
- Islamic Educational Scientific and Cultural Organization (ISESCO),
- UN-ESCWA Technology Centre (ETC)
- Arab League Educational, Cultural and Scientific Organization (ALECSO)
- OECD & AIDMO attended some meetings



Amman, March 2014



Rabat, May 2016



Cairo, November 2014

The MENA Scoreboard

- The Innovation Meter relies mostly on recognized international resources for the definition of its indicators, including the United Nations (UNStats), UNESCO, the World Bank, ISO and selected business surveys.
- With the lack of timely data in the region, the index also uses 'alternative' indicators that measure the same phenomenon.

The MENA Scoreboard

- The **MENA Meter has 39 indicators** grouped under two pillars:
 - input and enablers,
 - output and impact.
- **Input and Enabler:**
 - human resources,
 - knowledge enablers
 - business enablers;
- **output and impact**
 - value-added potential of the private sector,
 - quality of scholastic output,
 - business impact
 - intellectual asset formation

"لوحة مؤشرات الابتكار"



INNOVATION METER FOR MENA-COUNTRIES	
INPUT AND ENABLERS	
1	HUMAN RESOURCES
1.1	Annual number of tertiary graduates as a % of the population 15-64 years:
1.2	Percentage of tertiary level graduates in technical / science curriculum - tertiary level
1.3	Total outbound tertiary level students as a % of tertiary graduates
1.4	Total personnel in R&D as a percentage of population aged between 15-64 years
1.5	% of secondary level students enrolled in vocational programmes
2	KNOWLEDGE ENABLERS
2.1	Inbound international tertiary level students as % of total tertiary graduates
2.2	Foreign Direct investment (BoP) net inflows as % of GDP
2.3	Gross national spending on R&D / GDP
2.4	GERD financed by business as % of GDP
2.5	Percentage of firms that licensed-in technology from foreign firms
3	BUSINESS ENABLERS
3.1	Domestic credit to the private sector (% of GDP)
3.2	Ease of getting credit (Credit registry coverage (% of adults))
3.3	Business Survey: Firms using banks to finance investments (% of firms)
3.4	Business Survey: Proportion of investments financed by banks
3.5	Private equity investment value as a % of GDP
3.5	Ease of starting a business (time required in days)
OUTPUT AND IMPACT	
4	VALUE ADDED POTENTIAL BY ENTREPRENEURIAL SECTOR
4.1	Sum total of ISO certification type 9001, 14001 and 22000 last available year related to GDP
4.2	New business registration per 1000 population 15-64 years, latest available year
4.3	Industry value added as percentage of GDP
4.4	ICT Service exports as % of GDP
4.5	Agriculture value added per worker (2005 US\$)
4.6	Charges for the use of intellectual property, receipts (BoP, current US\$) as % of GDP
5	QUALITY OF SCHOLASTIC OUTPUT
5.1	8th grade achievements sum total math and science scores
5.2	GMAT-score last available year
5.3	Total of GRE scores in last available year
5.4	H-index for citation impact last available year
5.5	International Scientific co-publication per million inhabitants
5.6	Number of universities in QS-1000 rankings per thousand inhabitants
6	BUSINESS IMPACT
6.1	Firms with ICT enabling business model creation (% of total)
6.2	High-Tech merchandize exports as % of merchandized exports
6.3	Medium Tech exports as % of exported merchandized goods
6.4	ICT goods exports (% of total goods exports), last figure 2013
6.5	% of firms (> 10 empl) introducing new products or services
6.6	% firms (>10 empl) introducing new manufacturing methods and service delivery methods
7	INTELLECTUAL ASSET FORMATION
7.1	Resident patent applications / million inhabitants 15-64 years
7.2	International PCT Applications via WIPO Administered Treaties / million inhabitants 15-64 years
7.3	U.S. PATENT AND TRADEMARK OFFICE: Utility Patent granted / million inhabitants 15-64 years
7.4	Resident Trademarks registrations per million inhabitants 15-64 years
7.5	Industrial design registrations per million inhabitants 15-64 years
7.6	Citable documents per million inhabitants 15-64 years

Innovation Meter for MENA Countries

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Innovation Measurement in the Arab region

- **Innovation Indexes** combine many indicators
 - Comparing performance of countries' Innovation
 - Rankings should be considered with caution
- Recognized major **indicators**
 - Spending levels on R&D
 - Innovation carried out by firms
 - Exports of high-tech products
 - Patenting
 - Quantity and quality of graduates particularly in technical and scientific disciplines.

Innovation Measurement in the Arab region

- Arab countries should **improve their statistical data collection** for innovation indicators particularly as regards firms' innovation surveys and detailed spending levels on R&D
- **Specific indicators** addressing Arab countries gaps should be developed (e.g., educational outcomes, vocational training and brain drain)
- Urgent need to **adopt the MENA Meter at the highest level and commit to collect the national data**

Thank you very much