The Global Innovation Index (GII) ranks world economies according to their innovation capabilities.

Consisting of roughly 80 indicators, grouped into innovation inputs and outputs, the GII aims to capture the multi-dimensional facets of innovation.

Morocco ranking in the Global Innovation Index 2023

> Morocco ranks **70th** among the 132 economies featured in the GII 2023.

> Morocco ranks **8th** among the 37 lower-middle-income group economies.

> Morocco ranks **11th** among the 18 economies in Northern Africa and Western Asia.

> **Morocco GII Ranking (2020-2023)**

The table shows the rankings of Morocco over the past four years. Data availability and changes to the GII model framework influence year-on-year comparisons of the GII rankings. The statistical confidence interval for the ranking of Morocco in the GII 2023 is between ranks 64 and 76.

<table>
<thead>
<tr>
<th>GII Position</th>
<th>Innovation Inputs</th>
<th>Innovation Outputs</th>
</tr>
</thead>
<tbody>
<tr>
<td>2020</td>
<td>75th</td>
<td>85th</td>
</tr>
<tr>
<td>2021</td>
<td>77th</td>
<td>84th</td>
</tr>
<tr>
<td>2022</td>
<td>67th</td>
<td>87th</td>
</tr>
<tr>
<td>2023</td>
<td>70th</td>
<td>90th</td>
</tr>
</tbody>
</table>

Morocco performs better in innovation outputs than innovation inputs in 2023.

This year Morocco ranks 90th in innovation inputs. This position is lower than last year.

Morocco ranks 55th in innovation outputs. This position is higher than last year.
Expected vs. observed innovation performance

The bubble chart below shows the relationship between income levels (GDP per capita) and innovation performance (GII score). The trend line gives an indication of the expected innovation performance according to income level. Economies appearing above the trend line are performing better than expected and those below are performing below expectations.

Relative to GDP, Morocco is performing above expectations for its level of development.

Innovation overperformers relative to their economic development

GII Score

GDP per capita, PPP logarithmic scale (thousands of $)
Effectively translating innovation investments into innovation outputs

The chart below shows the relationship between innovation inputs and innovation outputs. Economies above the line are effectively translating costly innovation investments into more and higher-quality outputs.

Morocco produces more innovation outputs relative to its level of innovation investments.

Relationship between innovation inputs and outputs

[Graph showing the relationship between innovation inputs and outputs with Morocco highlighted.]
Overview of Morocco’s rankings in the seven areas of the GII in 2023

The chart shows the ranking for each of the seven areas that the GII comprises. The strongest areas for Morocco are those that rank above the GII (shown in blue) and the weakest are those that rank below.

- **55th Creative outputs**
- **65th Knowledge and technology outputs**
- **70th Global Innovation Index**
- **80th Market sophistication**
- **83rd Institutions**
- **86th Human capital and research**
- **94th Infrastructure**
- **107th Business sophistication**

**Highest rankings**

Morocco ranks highest in Creative outputs (55th) and Knowledge and technology outputs (65th).

**Lowest rankings**

Morocco ranks lowest in Business sophistication (107th), Infrastructure (94th) and Human capital and research (86th).

The full WIPO Intellectual Property Statistics profile for Morocco can be found on this link.
Benchmark of Morocco against other country groupings for each of the seven areas of the GII Index

The charts show the relative position of Morocco (blue bar) against other country groupings (grey bars), for each of the seven areas of the GII Index.

### Lower-Middle-Income economies
Morocco performs above the lower-middle-income group average in Knowledge and technology outputs, Creative outputs, Market sophistication, Human capital and research, Infrastructure, Institutions.

### Northern Africa And Western Asia
Morocco performs below the regional average in Knowledge and technology outputs, Business sophistication, Market sophistication, Human capital and research, Infrastructure, Institutions.

#### Knowledge and technology outputs
- **Top 10 | Score: 58.96**
- **NAWA | Score: 24.01**
- **Morocco | Score: 23.00**
- **Lower middle income | Score: 17.21**

#### Creative outputs
- **Top 10 | 56.09**
  - **Morocco | 29.77**
  - **NAWA | 24.51**
  - **Lower middle income | 16.36**

#### Business sophistication
- **Top 10 | 64.39**
  - **NAWA | 29.44**
  - **Lower middle income | 22.71**
  - **Morocco | 20.40**

#### Market sophistication
- **Top 10 | 61.93**
  - **NAWA | 36.12**
  - **Morocco | 30.72**
  - **Lower middle income | 28.01**

#### Human capital and research
- **Top 10 | 60.28**
  - **NAWA | 32.72**
  - **Morocco | 25.59**
  - **Lower middle income | 21.73**

#### Infrastructure
- **Top 10 | 62.83**
  - **NAWA | 41.60**
  - **Morocco | 30.05**
  - **Lower middle income | 27.83**

#### Institutions
- **Top 10 | 79.85**
  - **NAWA | 53.39**
  - **Morocco | 45.33**
  - **Lower middle income | 39.43**
Global Innovation Index 2023

→ Innovation strengths and weaknesses in Morocco

The table below gives an overview of the indicator strengths and weaknesses of Morocco in the GII 2023.

> Morocco’s main innovation strengths are Industrial designs by origin/bn PPP$ GDP (rank 10), High-tech manufacturing, % (rank 23) and Graduates in science and engineering, % (rank 24).

<table>
<thead>
<tr>
<th>Strengths</th>
<th>Weaknesses</th>
</tr>
</thead>
<tbody>
<tr>
<td>Rank</td>
<td>Code</td>
</tr>
<tr>
<td>------------</td>
<td>-------</td>
</tr>
<tr>
<td>10</td>
<td>7.1.4</td>
</tr>
<tr>
<td>23</td>
<td>6.2.4</td>
</tr>
<tr>
<td>24</td>
<td>2.2.2</td>
</tr>
<tr>
<td>26</td>
<td>3.2.3</td>
</tr>
<tr>
<td>30</td>
<td>6.3.4</td>
</tr>
<tr>
<td>33</td>
<td>4.3.2</td>
</tr>
<tr>
<td>34</td>
<td>4.1.2</td>
</tr>
<tr>
<td>34</td>
<td>1.3.1</td>
</tr>
<tr>
<td>38</td>
<td>7.1.2</td>
</tr>
<tr>
<td>42</td>
<td>3.1.1</td>
</tr>
</tbody>
</table>
Morocco's innovation system

As far as practicable, the plots below present unscaled indicator data.

Innovation inputs in Morocco

2.2.2 Graduates in science and engineering, %
was equal to 28.9% of total tertiary graduates in 2021, up by 8.51 percentage points from the year prior – and equivalent to an indicator rank of 24.

2.3.1 Researchers, FTE/mn pop.
was equal to 1,073.54 FTE/mn pop. in 2016, up by 4.8% from the year prior – and equivalent to an indicator rank of 51.

2.3.4 QS university ranking, top 3
was equal to an average score of 0 for the top 3 universities in 2022, equivalent to an indicator rank of 71.

3.1.1 ICT access
was equal to a score of 9.1 in 2021, up by 0.33% from the year prior – and equivalent to an indicator rank of 42.

4.1.1 Finance for startups and scaleups
was equal to an average perception score of 3.79 in 2022, equivalent to an indicator rank of 63.

4.2.4 VC received, value, % GDP
was equal to 0.00005% GDP in 2022, down by 0.000064 percentage points from the year prior – and equivalent to an indicator rank of 86.
4.3.2 Domestic industry diversification was equal to an index score of 0.122 in 2019, down by 51.33% from the year prior – and equivalent to an indicator rank of 33.

5.1.1 Knowledge-intensive employment, % was equal to 8.15 % in 2021, equivalent to an indicator rank of 111.
6.1.1 Patents by origin
was equal to 0.25 Thousands in 2021, up by 1.6% from the year prior – and equivalent to an indicator rank of 69.

6.1.5 Citable documents H-index
was equal to an index value of 252 in 2022, up by 8.62% from the year prior – and equivalent to an indicator rank of 69.

6.2.2 Unicorn valuation, % GDP
was equal to 0% GDP in 2023 – and equivalent to an indicator rank of 48.

6.2.3 Software spending, % GDP
was equal to 0.244% GDP in 2022, up by 0.018 percentage points from the year prior – and equivalent to an indicator rank of 61.

6.2.4 High-tech manufacturing, %
was equal to 42.82% of total manufacturing output in 2019, up by 32.93 percentage points from the year prior – and equivalent to an indicator rank of 23.

6.3.1 Intellectual property receipts, % total trade
was equal to 0.002% total trade in 2021, down by 0.023 percentage points from the year prior – and equivalent to an indicator rank of 86.
6.3.2 Production and export complexity
was equal to a score of -0.332 in 2020, up by 35.95% from the year prior – and equivalent to an indicator rank of 79.

6.3.3 High-tech exports
was equal to 1,132,107,298 USD in 2021, up by 33.19% from the year prior – and equivalent to an indicator rank of 57.

7.1.1 Intangible asset intensity, top 15, %
was equal to 61.59% in 2022, down by 3.55 percentage points from the year prior – and equivalent to an indicator rank of 35.

7.1.3 Global brand value, top 5,000
was equal to 2.001 bn USD in 2023, down by 10.67% from the year prior – and equivalent to an indicator rank of 50.

7.2.1 Cultural and creative services exports
was equal to 215,103,000 USD in 2021, up by 21.45% from the year prior – and equivalent to an indicator rank of 59.

7.2.2 National feature films/mn pop. 15-69
was equal to 0.313 films/mn pop. 15–69 in 2021, down by 47.28% from the year prior – and equivalent to an indicator rank of 76.
7.3.4 Mobile app creation/bn PPP$ GDP

was equal to 103,219.03 Apps/bn PPP$ GDP in 2022, down by 39.087% from the year prior – and equivalent to an indicator rank of 64.
Morocco's innovation top performers

7.1.1 Top 15 intangible-asset intensive companies in Morocco

<table>
<thead>
<tr>
<th>Rank</th>
<th>Firm</th>
<th>Intensity, %</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>ITISSALAT AL-MAGHRIB</td>
<td>86.91</td>
</tr>
<tr>
<td>2</td>
<td>ATTJARIWAFA BANK</td>
<td>33.73</td>
</tr>
<tr>
<td>3</td>
<td>LAFARGEHOLOM MAROC SA</td>
<td>74.53</td>
</tr>
</tbody>
</table>

Note: Brand Finance only provides within economy ranks.

7.1.3 Top 5,000 companies in Morocco with highest global brand value

<table>
<thead>
<tr>
<th>Rank</th>
<th>Brand</th>
<th>Industry</th>
<th>Brand Value, mn USD</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>MAROC TELECOM</td>
<td>Telecoms</td>
<td>655.4</td>
</tr>
<tr>
<td>2</td>
<td>ATTJARIWAFA BANK</td>
<td>Banking</td>
<td>487.9</td>
</tr>
<tr>
<td>3</td>
<td>BANQUE POPULAIRE DU MAROC</td>
<td>Banking</td>
<td>408.9</td>
</tr>
</tbody>
</table>

Note: Rank corresponds to within economy ranks.
Data availability

The following tables list indicators that are either missing or outdated for Morocco.

Morocco has missing data for eight indicators and outdated data for six indicators.

Missing data for Morocco

<table>
<thead>
<tr>
<th>Code</th>
<th>Indicator name</th>
<th>Economy Year</th>
<th>Model Year</th>
<th>Source</th>
</tr>
</thead>
<tbody>
<tr>
<td>2.1.1</td>
<td>Expenditure on education, % GDP</td>
<td>n/a</td>
<td>2021</td>
<td>UNESCO Institute for Statistics</td>
</tr>
<tr>
<td>2.1.2</td>
<td>Government funding/pupil, secondary, % GDP/cap</td>
<td>n/a</td>
<td>2019</td>
<td>UNESCO Institute for Statistics</td>
</tr>
<tr>
<td>2.3.2</td>
<td>Gross expenditure on R&amp;D, % GDP</td>
<td>n/a</td>
<td>2021</td>
<td>UNESCO Institute for Statistics; Eurostat; OECD; RICYT</td>
</tr>
<tr>
<td>5.1.3</td>
<td>GERD performed by business, % GDP</td>
<td>n/a</td>
<td>2021</td>
<td>UNESCO Institute for Statistics; Eurostat; OECD; RICYT</td>
</tr>
<tr>
<td>5.1.4</td>
<td>GERD financed by business, %</td>
<td>n/a</td>
<td>2020</td>
<td>UNESCO Institute for Statistics; Eurostat; OECD; RICYT</td>
</tr>
<tr>
<td>5.2.3</td>
<td>GERD financed by abroad, % GDP</td>
<td>n/a</td>
<td>2020</td>
<td>UNESCO Institute for Statistics; Eurostat; OECD; RICYT</td>
</tr>
<tr>
<td>6.1.3</td>
<td>Utility models by origin/bn PPP$ GDP</td>
<td>n/a</td>
<td>2021</td>
<td>World Intellectual Property Organization; International Monetary Fund</td>
</tr>
</tbody>
</table>

Outdated data for Morocco

<table>
<thead>
<tr>
<th>Code</th>
<th>Indicator name</th>
<th>Economy Year</th>
<th>Model Year</th>
<th>Source</th>
</tr>
</thead>
<tbody>
<tr>
<td>2.3.1</td>
<td>Researchers, FTE/mn pop.</td>
<td>2016</td>
<td>2021</td>
<td>UNESCO Institute for Statistics; Eurostat; OECD; RICYT</td>
</tr>
<tr>
<td>4.3.2</td>
<td>Domestic industry diversification</td>
<td>2019</td>
<td>2020</td>
<td>United Nations Industrial Development Organization</td>
</tr>
<tr>
<td>5.1.1</td>
<td>Knowledge-intensive employment, %</td>
<td>2021</td>
<td>2022</td>
<td>International Labour Organization</td>
</tr>
<tr>
<td>5.1.5</td>
<td>Females employed w/advanced degrees, %</td>
<td>2021</td>
<td>2022</td>
<td>International Labour Organization</td>
</tr>
<tr>
<td>Code</td>
<td>Indicator name</td>
<td>Economy Year</td>
<td>Model Year</td>
<td>Source</td>
</tr>
<tr>
<td>-------</td>
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<td>------------</td>
<td>------------------------------------------------------------------------</td>
</tr>
<tr>
<td>5.3.5</td>
<td>Research talent, % in businesses</td>
<td>2016</td>
<td>2021</td>
<td>UNESCO Institute for Statistics; Eurostat; OECD; RICYT</td>
</tr>
<tr>
<td>6.2.4</td>
<td>High-tech manufacturing, %</td>
<td>2019</td>
<td>2020</td>
<td>United Nations Industrial Development Organization</td>
</tr>
</tbody>
</table>
The Global Innovation Index (GII) is published by the World Intellectual Property Organization (WIPO), a specialized agency of the United Nations.

Recognizing that innovation is a key driver of economic development, the GII aims to provide an innovation ranking and rich analysis referencing around 130 economies. Over the last decade, the GII has established itself as both a leading reference on innovation and a “tool for action” for economies that incorporate the GII into their innovation agendas.

The Index is a ranking of the innovation capabilities and results of world economies. It measures innovation based on criteria that include institutions, human capital and research, infrastructure, credit, investment, linkages; the creation, absorption and diffusion of knowledge; and creative outputs.

The GII has two sub-indices: the Innovation Input Sub-Index and the Innovation Output Sub-Index, and seven pillars, each consisting of three sub-pillars.