

Atelier : Utilisation de l'outil de simulation des indices internationaux (ISPAR) pour faciliter la politique publique au Maroc

Nathalie PICASSO GRAND, Data Scientist, ESCWA
13-14 June 2023, Rabat, Morocco



UNITED NATIONS

الاسواق
ESCWA

Shared Prosperity **Dignified Life**



Session II: The Indices Simulator Tool for Policymakers in the Arab Region (ISPAR)

Coverage and features of the ISPAR tool for evidence-based policymaking

Session II: The Indices Simulator Tool for Policymakers in the Arab Region (ISPAR)

What are the goals of developing ISPAR?

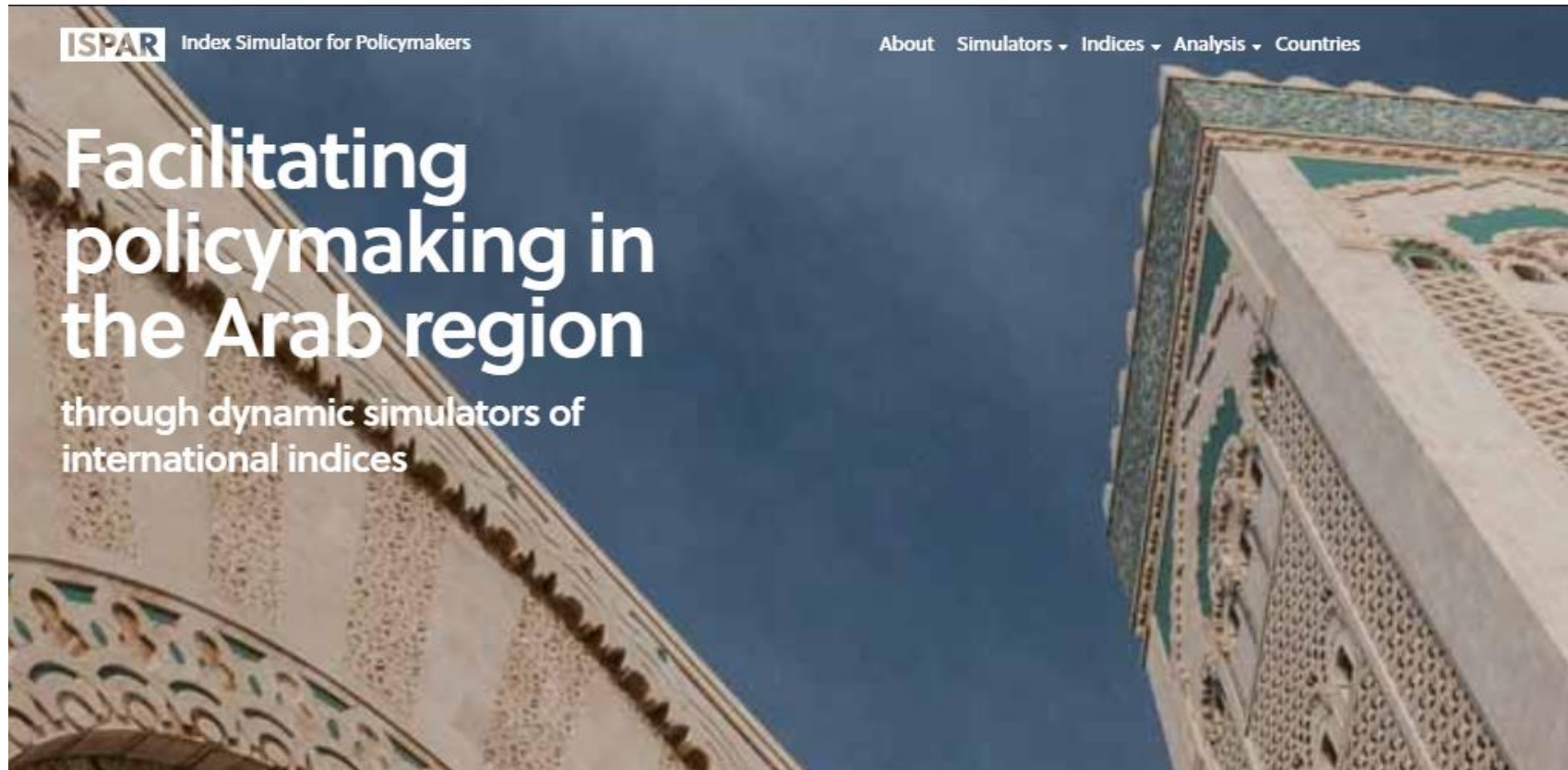
What is its coverage?

What are the main features?

of the indexes simulation tool for evidence-based policymaking

<https://ispar.unescwa.org/>

Indices Simulation Tool for Policy Makers in the Arab Region (ISPAR)



Indices Simulation Tool for Policy Makers in the Arab Region (ISPAR)

ضمن أكثر 10 دول تراجعاً على مستوى العالم

«إيكونوميست»:

بيئة أعمال الكويت بين الأسوأ... في المنطقة

العالمية، والارتفاع المفاجئ في مستويات التضخم وأزمة غلاء المعيشة، والمزيج الحالي من التخفيف المالي والتشديد النقدي والتباطؤ الاقتصادي. ويقيس معدل مؤشر «إيكونوميست إنتلجنس» جاذبية بيئة الأعمال في 82 دولة على أساس ربع سنوي، باستخدام إطار تحليلي قياسي مؤلف من 91 مؤشراً. ويُظهر ترتيبها للربع الثاني من عام 2023 أن أميركا الشمالية ودول غرب أوروبا لا تزالان أفضل الأماكن في العالم لممارسة الأعمال التجارية، فيما تحتل آسيا المرتبة الثالثة متقدمة على دول شرق أوروبا، بينما تفوقت أميركا اللاتينية بشكل هامشي على الشرق الأوسط وأفريقيا.

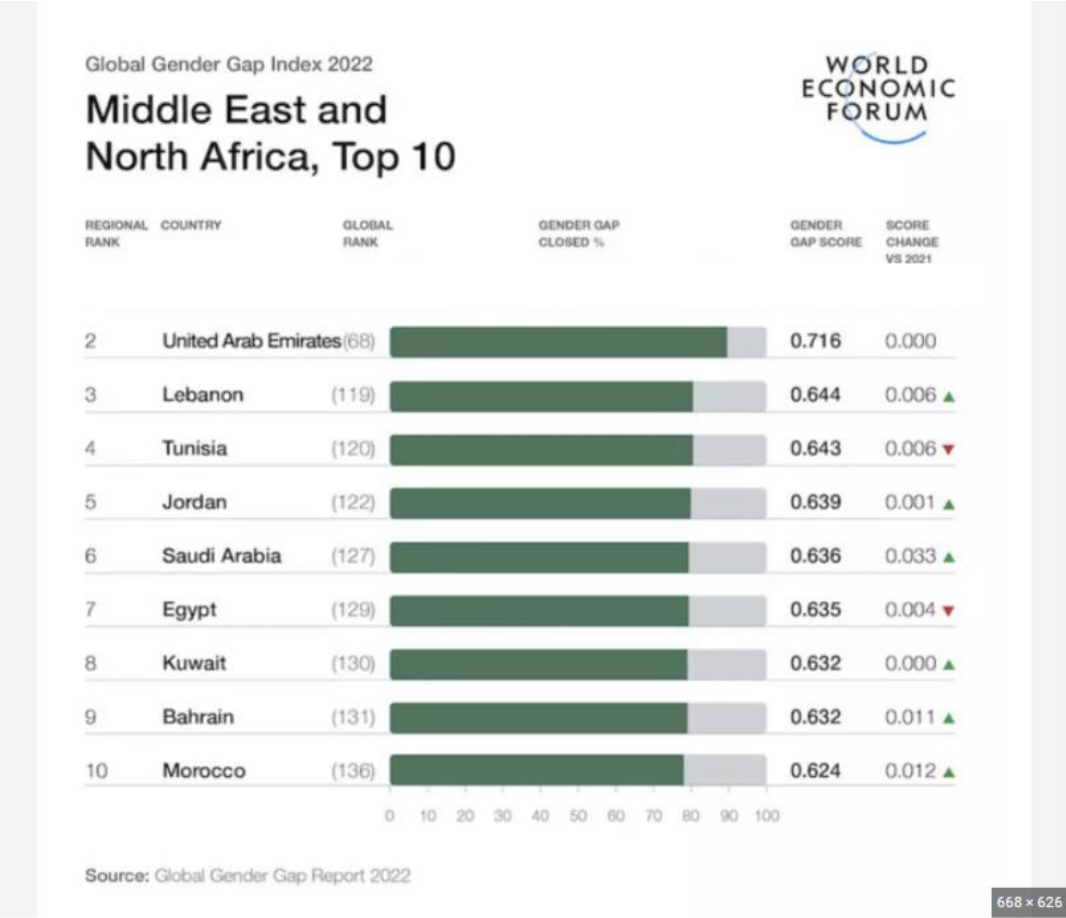
الشركات والبيئة الرقابية، فضلاً عن ضعف تدريب القوى العاملة، وفي بلدان مثل أنغولا ونيجيريا ودول الخليج. ويعتبر الاعتماد المفرط على قطاع الطاقة من أبرز نقاط الضعف. ومع ذلك، يمكن أن تكون معدلات العائد مرتفعة على الاستثمار بالنسبة للشركات التي تتقن المناخ السياسي والتنظيمي المعقد في المنطقة. وأشارت إلى أن أيًا من بلدان الشرق الأوسط أو أفريقيا لم يسجل تحسناً في الدرجات المسجلة بمناطق أخرى. وتوضح التغييرات في تصنيفات «إيكونوميست إنتلجنس» لبيئة الأعمال خلال العام الماضي تأثير الحرب في أوكرانيا على بيئات التشغيل

هذا الأمر البلدان إلى دعم الإصلاحات الملائمة للأعمال، مثل تحسين أطر الشركات بين القطاعين العام والخاص والاستثمار الأجنبي. وحسب «إيكونوميست إنتلجنس» تعتبر دول الخليج من الدول التي تحتل المرتبة الأولى في المنطقة، حيث تحسنت نتائجها في السنوات الأخيرة تماشياً مع ارتفاع أسعار النفط وتزايد القدرة الاستثمارية للاستثمارات الجديدة. وفيما تتوقع أن تتحسن بيئة الأعمال في قطر والسعودية والإمارات بشكل أكبر في 2023 و2027، أوضحت الوحده أن كل من الشرق الأوسط وأفريقيا يعاني عادة من ضعف حوكمة

والإصلاحات أثر هو الآخر على نتائج بيئة الأعمال بالكويت. وأضافت أن النتيجة الإجمالية لدول الشرق الأوسط وأفريقيا في تصنيفات بيئة الأعمال الأدنى من أي منطقة، إذ لا يزال ترتيب هذه البلدان متأثراً بالحوكمة السيئة وانعدام الأمن، بما في ذلك امتداد الصراعات في سورية واليمن وليبيا، إلى جانب الاضطرابات السياسية في عدد من البلدان، بما في ذلك العراق ولبنان. وأدت التخفيضات في الإنفاق الرأسمالي في سياق التشديد المالي بعد الجائحة إلى تقييد نتيجة الاقتصاد الكلي للمنطقة، ولكن من الناحية الإيجابية، دفع

أظهر مؤشر تصنيف بيئة الأعمال الصادر أخيراً عن وحده «إيكونوميست إنتلجنس» تراجع الكويت 6 مراتب، لتكون بين الأسوأ أداءً على صعيد منطقة الشرق الأوسط وأفريقيا، إلى جانب البحرين التي تراجعت 9 مراتب، عدا عن أن الكويت بين أكثر 10 دول تراجعاً في بيئة الأعمال على مستوى العالم. وبينت الوحده أن سبب تراجع الكويت يعود إلى تدهور نقاطها في مؤشر فرص السوق نتيجة انخفاض أسعار النفط العالمية (وإن كانت لا تزال مرتفعة نسبياً)، والتي تمثل حصة كبيرة من الإيرادات المالية وعائدات التصدير، فضلاً عن أن عدم إحراز تقدم في اللوائح

Indices Simulation Tool for Policy Makers in the Arab Region (ISPAR)



With the second-largest gender gap yet to close, the MENA region must take action now, urges new WEF report – and the business case is compelling

It's no secret that the pandemic and its economic fallout has had a truly regressive effect on gender equality. Nor that little action is being taken to counter these effects.

Recent [research](#) by the University of Washington revealed that the greatest and most persistent gender gap has been seen in employment, with 26% of women reporting loss of work compared with 20% of men globally – clear evidence that Covid-19 has exacerbated previously existing social and economic disparities.

And, according to the [London School of Economics](#), 64 million women globally lost their jobs during the pandemic, with women's jobs nearly two times more vulnerable than men's.

And just as we begin to recover from the impact of the pandemic, the cost-of-living crisis kicks in, once more putting women in the firing line – and potentially putting to bed hopes that gender equality can build back.

Urgent action needed in MENA region to close gender gap | Business Chief EMEA

Visit

Indices Simulation Tool for Policy Makers in the Arab Region (ISPAR)

Member States showed concerns about international indices used to assess their performances

«المرصد الوطني» يطالب بـ «كوتا» نسائية في البرلمان.. وزيادة تعيينهن في مناصب قيادية 8 توصيات لتقليص الفجوة بين الجنسين في الكويت

تقديم تسهيلات
بنكية بضمانات
حكومية للشركات
الملتزمة تعيين
النساء

إدراج المساواة
بين الجنسين ضمن
منهج التربية
الوطنية بوزارة
التربية

تأمين حكومي
يغطي كل
احتياجات المرأة
الصحية لإطالة
أعمار النساء



مطلأ، وطرح مقرر دراسي إلزامي بالخوض نفسه ضمن مقررات جامعة الكويت
8 طرح برامج صحية للمرأة ضمن برامج التنمية، كبرامج الكشف المبكر عن سرطان الثدي والأمراض

6 رفع نسبة مشاركة النساء في مجال البحث العلمي والدراسات العليا، من خلال إقرار ضمانات لتخفيف الخدمات التي تواجه المرأة في الأورثية

4 السماح بنسبة المرأة بزيادة للأستاذة كاترول، وتقسيم المجالات الاجتماعية المختصة للزوج والآناء بين الزوج والزوجة لتحقيق المساواة التامة بينهما
5 زيادة عدد النساء العاملات في مجالي العلوم والتكنولوجيا والهندسة والرياضيات STEM وتكنولوجيا المعلومات والاتصالات بتقديم حوافز مالية وإدارية، وزيادة تمثيلها في المواقع المسؤولة والقيادية في هذه المجالات

7 إدراج المساواة بين الجنسين وتمكين المرأة، بما يتناسب مع قيم المجتمع، ضمن منهج التربية الوطنية بوزارة التربية، ابتداء من الصف السابع

ابراهيم محمد

في محاولة منه لتقليص أو سد الفجوة بين الجنسين في الكويت، أصدر المرصد الوطني للتربية المستدامة عدداً من التوصيات، التي من شأنها أن تساهم في تحسين ترتيب الكويت بمؤشر الفجوة بين الجنسين، الصادر عن المنتدى الاقتصادي العالمي، والذي تقيس فيه الكويت بالمركز 130 عالمياً، والمرتبة السابعة عربياً والثالثة خليجياً، حيث يقس المؤشر المساواة بين المرأة والرجل في مجالات الصحة والتعليم والاقتصاد، والسياسة في 146 دولة في العالم، وقد احتلت الكويت المرتبة قبل الأخيرة عالمياً 145 في التمكن السياسي، والمركز 123 عالمياً في المشاركة الاقتصادية وحرص العمل بين الجنسين، 47 في التحصيل العلمي، و89 في الصحة.

8 توصيات

وجاءت توصيات تحسين التصنيف كالتالي:
1- رفع نسبة التمثيل النسائي البرلماني إلى ما يقارب 20% من خلال تطبيق نظام الكوتا لتعزيز تمثيل المرأة سياسياً.
2- رفع نسبة تعيين النساء بالمناصب الوزارية والوظائف القيادية العليا لزيادة مشاركتها بمواقع صنع القرار بما لا يقل عن 40%.
3- تشجيع الحكومة للقطاع الخاص على زيادة نسبة توظيف النساء والزامة ببلاتون مساواتهن في الأجور، من خلال تقديم بعض المحفزات الاقتصادية، كالإعفاءات الضريبية أو تخفيض الرسوم، أو تقديم تسهيلات بنكية بضمانات حكومية.



Indices Simulation Tool for Policy Makers in the Arab Region (ISPAR)



The Project's Goal

Improving policymaking effectiveness using a series of international indices

assist Member States in **understanding the impact of specific policies** and **identifying effective and efficient procedures** that could be implemented in the **short, medium and long term** to **enhance country's ranking in selected international indicators** and impact the **socio-economic development** on national level.

The ISPAR project's goal: develop a tool so International Composite Indicators can be used for evidence-based policymaking

<https://ispar.unescwa.org/about.aspx>

Are Indices as they are useful for policymaking?



- **Data** used for performance assessment are **not accurate or not updated, or missing**
- **Transparency** (methodology)
 - how data are collected, how surveys are administered
 - the weight of experts' judgment
 - other discretionary decisions

First issue : The DATA

Are Indices as they are useful for policymaking?



- What is the **impact of changes in policies** on ranking?
 - and in turn on **economic and social performances or SDGs**

Second issue :
no SIMULATION of change in policy is possible

Are Indices as they are useful for policymaking?



- How to benefit from the **experience** of other countries?
- How can countries learn from past experiences?

Third issue : Policy Recommendations

How ESCWA addressed the issues with Composite Indexes?

Morocco

Global Gender Gap Index

Country description
Morocco is a lower middle income country. It has a GDP per capita of around 3.82 Thousand USD (2021) and HDI value of 0.68 (2021)

Index description
Gender parity has a fundamental bearing on whether or not economies and societies thrive. Developing and deploying one-half of the world's available talent has a huge bearing on the growth, competitiveness and future-readiness of economies and businesses worldwide.

[Learn more about the Global Gender Gap Index](#)

Results for Morocco

Save to profile Shareable Link Export to Excel Export to PDF

Index Global Highlights

Global

Group your Countries

Simple Average

Global Details

| | |
|-----------------------------------|---------------------|
| Global Average | 0.71 |
| Developed Economies Average | 0.76 |
| Developing Economies Average | 0.69 |
| Highest Ranked Country | Country Iceland |
| | Score 0.91 |
| | Global Rank 1 |
| Lowest Ranked Country | Country Afghanistan |
| | Score 0.44 |
| | Global Rank 146 |
| Highest Ranked Developed Country | Country Iceland |
| | Score 0.91 |
| | Global Rank 1 |
| Lowest Ranked Developed Country | Country Japan |
| | Score 0.65 |
| | Global Rank 116 |
| Highest Ranked Developing Country | Country Rwanda |
| | Score 0.81 |
| | Global Rank 6 |

2022

| KPI | Aspirational value | Morocco | | | | |
|--|--------------------|---------|-------|--------|------|-------|
| | Female | Male | Ratio | Female | Male | Ratio |
| Economic Participation and Opportunity | | | | | | |
| | | | | | | |
| Educational Attainment | | | | | | |
| | | | | | | |
| Health and Survival | | | | | | |
| | | | | | | |
| Political Empowerment | | | | | | |
| | | | | | | |

2022

| KPI | Aspirational value | Morocco | | | | |
|--|--------------------|---------|-------|--------|------|-------|
| | Female | Male | Ratio | Female | Male | Ratio |
| Economic Participation and Opportunity | | | | | | |
| | | | | | | |
| Educational Attainment | | | | | | |
| | | | | | | |
| Health and Survival | | | | | | |
| | | | | | | |
| Political Empowerment | | | | | | |
| | | | | | | |

- Monitoring and accuracy of performance assessment : **the governance of data** production and diffusion
 - **Development of Simulators** to evaluate the impact of policy changes on achievements and rank
- Go beyond the composite index and design a **comprehensive strategy**: Which aspects of the problem at hands are missing
 - **Policy recommendation**
 - **Tools for goals prioritization**
- **Tool for assessment of linkages** between Composite indexes and the SDGs and the set developmental goals

Thank you for your time!

Economic and Social Commission for Western Asia

Workshop on the Use of the "Indices Simulation Tool for Policy Makers in Morocco"

Nathalie PICASSO-GRAND, Data Scientist, ESCWA
12-13 June 2023, Rabat, Morocco



UNITED NATIONS

الاسواق
ESCWA

Shared Prosperity **Dignified Life**



Session III: Introduction to global indicators in various fields

This session aims to introduce participants to global indicators in the economic and social fields in general and those that are included on the ISPAR tool.

Session III: Introduction to global indicators in various fields

Generate a profile

Carry a first benchmarking analysis

Discover the various fields covered by the tool

Understand the linkages between Composite Indices

Generating a profile

Gender entry point

Go to <https://gender.unescwa.org>

Click on the 'Countries' tab (up right corner)

select your country (flag)

select "View the international index rankings"

More general entry point

Go to <https://ispar.unescwa.org/>

Click on the 'Countries' tab (up right corner)

select your country (flag)

select "View the international index rankings"

Generate a profile

Technology readiness and innovation

Global Cybersecurity Index

Ranking

50

Score

82.41

Year: 2020

ICT Development Index

Ranking

100

Score

4.77

Year: 2017

Network Readiness Index

Ranking

81

Score

46.06

Year: 2021

Global Innovation Index

Ranking

67

Score

28.8

Year: 2022



Morocco

Morocco is a lower middle income country. It has a [GDP per capita](#) of around 3.82 Thousand USD (2021) and [HDI](#) value of 0.68 (2021)

Compare with other countries

Explore the index simulator

Share



Brief description of the country. The same information is provided for all countries to facilitate comparisons

View performances on multiples indices in one page

Score and rank are provided

And the year of publication of the index. This is very important

Generating a profile

Go to <https://ispar.unescwa.org/gender/>
Click on the 'Countries' tab (up right corner)
select your country (flag)
select "View the international index rankings"

It shows the **country's performances** and which
Indices are available **for which year**. For these
indices, a **policy impact simulator is available**.
Comparison with other countries **is possible**


Generate a profile

ESCWA Sign in / Register

ISPAR Index Simulator for Policymakers About Simulators Indices Analysis Countries

Technology readiness and innovation

| | | | | |
|----------------------------|--------------|--|------------|---|
| Global Cybersecurity Index | | | | + |
| Ranking | Score | | Year: 2020 | |
| 50 | 82.41 | | | |
| ICT Development Index | | | | + |
| Ranking | Score | | Year: 2017 | |
| 100 | 4.77 | | | |
| Network Readiness Index | | | | + |
| Ranking | Score | | Year: 2021 | |
| 81 | 46.06 | | | |
| Global Innovation Index | | | | + |
| Ranking | Score | | Year: 2022 | |
| 67 | 28.8 | | | |






Morocco ▾

Morocco is a lower middle income country. It has a **GDP per capita** of around 3.82 Thousand USD (2021) and **HDI** value of 0.68 (2021)

[Compare with other countries](#)

[Explore the index simulator](#)

Share   

Compare with other countries

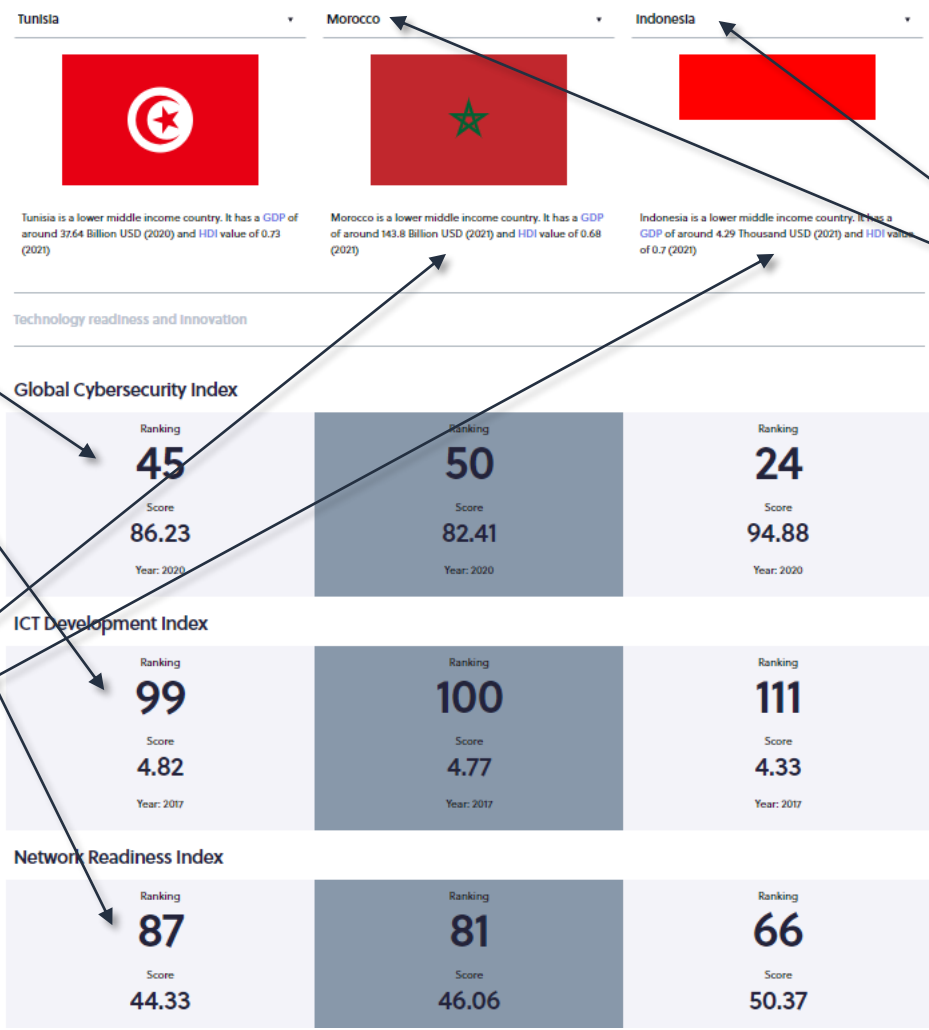
Generate a profile

View performances on multiples indices in one page

Compare with other countries.

By default, two countries with similar HDI and/or GDP per capita are randomly selected

Select benchmark using relevant info



A first general benchmarking can be done here

Which benchmark is best for Morocco upon you?

What are the benchmark countries' performances?

Which best benchmark for ST, MT, LT?

**A more informative benchmarking should be
done at the KPIs level and reflect the
envisioned policies**

ISPAR coverage

For now

- ✓ Gender Gap Index
- AI readiness Index
- ✓ Doing Business index
- ✓ Competitiveness index
- ITU ICT Development Index
- e-Government Index
- Global Cybersecurity Index
- Global Innovation Index
- Digital Accessibility Rights Evaluation Index
- ✓ Women peace and Security index
- Network Readiness Index
- ✓ Women Business and the Law Index
- Development Challenge Index
- Global knowledge Index
- B2C E-commerce Index
- E-participation Index
- Globalisation Index
- Open Data Inventory Index

Recently added

- FDI restrictiveness index
- ✓ Financial Inclusiveness index
- Food security index
- Human capital index

Are engendered

**Wider than
Gender Issues**

**22 indices
included**

The indexes are linked to each other

Or because the same KPIs are used to assess country's performance

Or because of spillover effects across indices

That need to be assessed to hasten the achievement of sought goals

Go to <https://ispar.unescwa.org/> and click on Analysis and then correlations

<https://gender.unescwa.org>

Then click on 'Gender analysis'

Understand and evaluate spillover effects

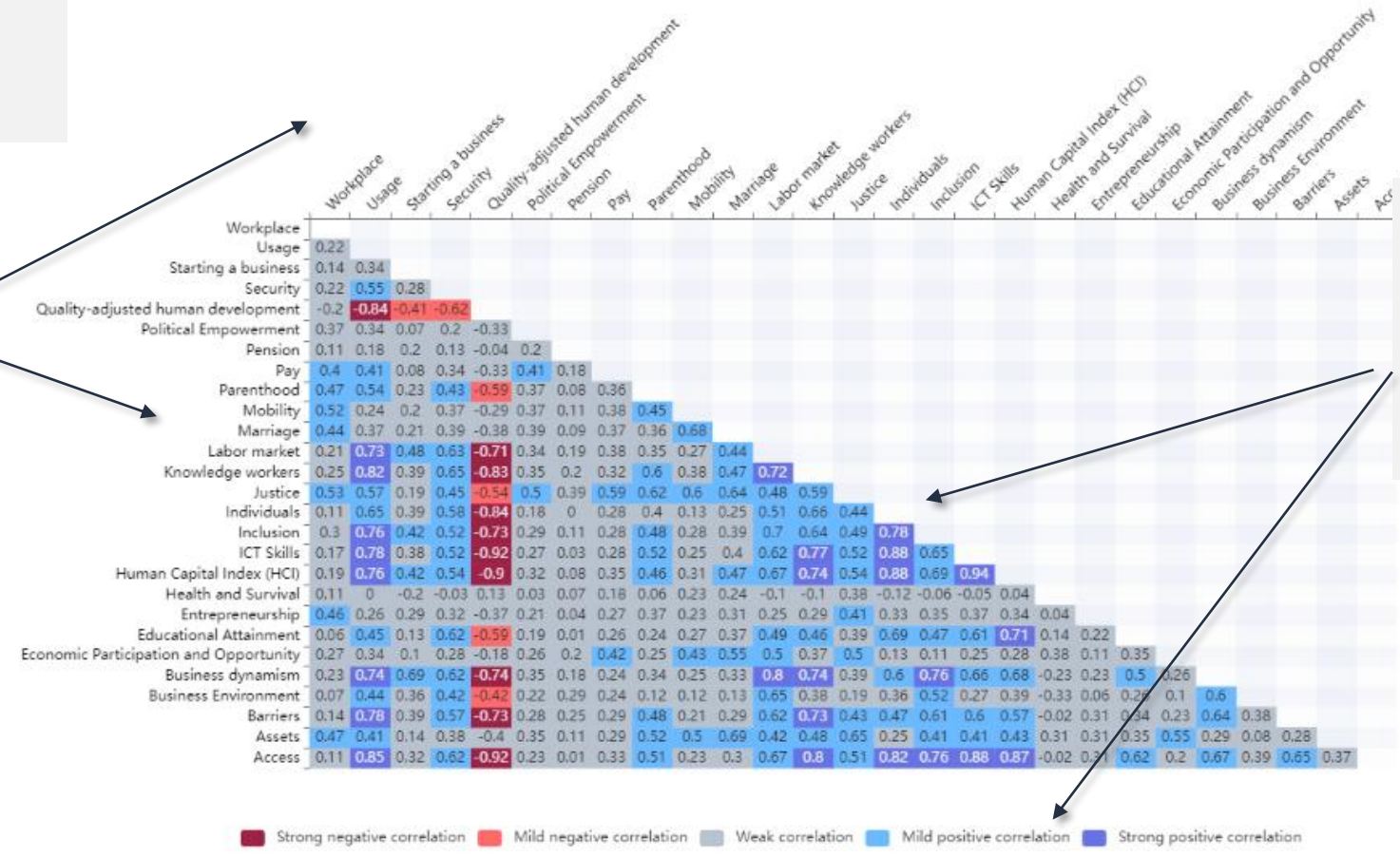
Correlation Score of the countries Spread of the countries Node analysis

Correlation Matrix - Gender

Select 'Correlations'

Correlations of all indices against each other

Correlations measure how closely indices move together, hence the spillover effects



Understand and evaluate spillover effects

Correlation Score of the countries Spread of the countries Node analysis

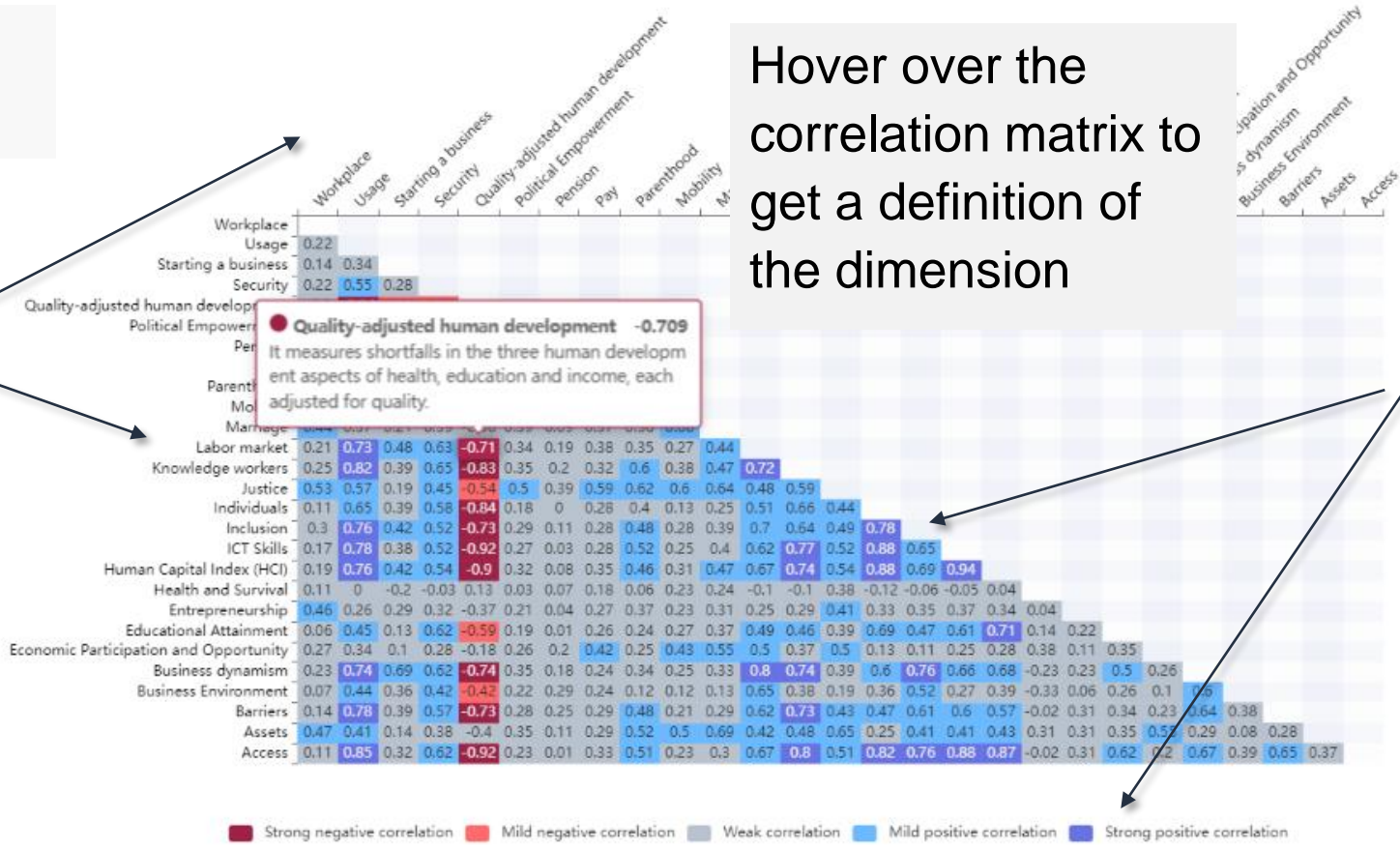
Correlation Matrix - Gender

Select 'Correlations'

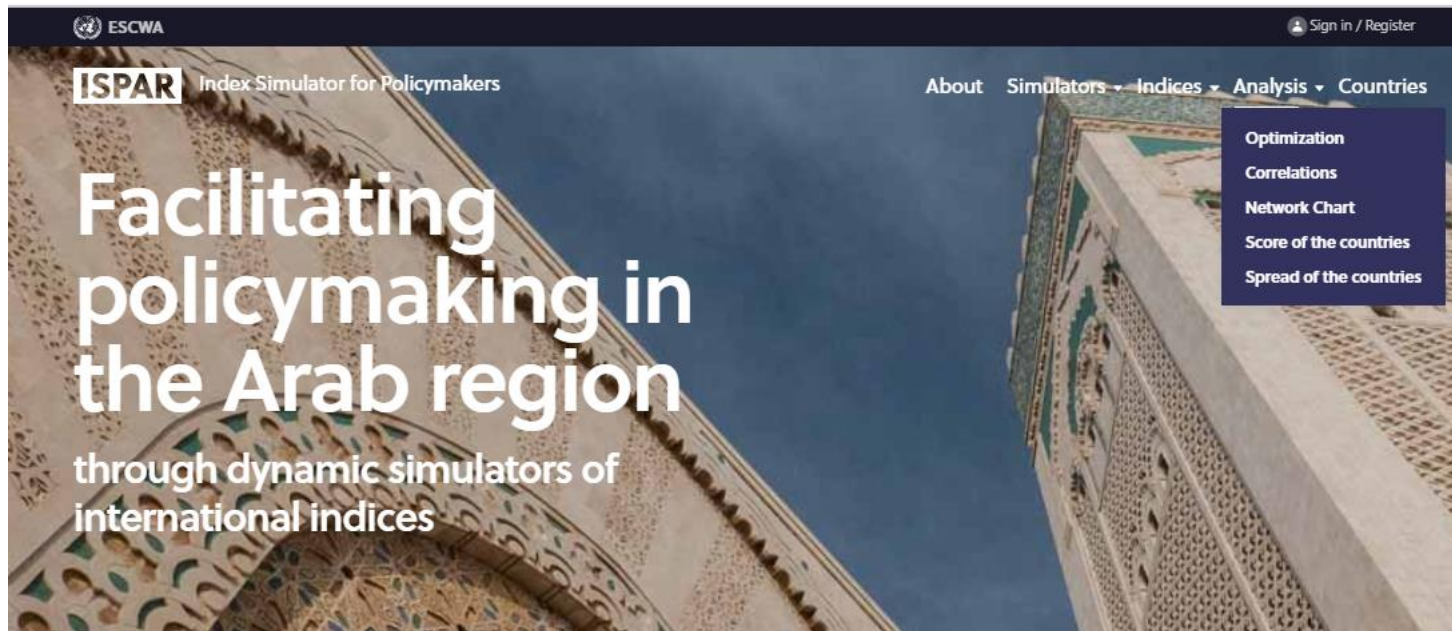
Correlations of all indices against each other

Hover over the correlation matrix to get a definition of the dimension

Correlations measure how closely indices move together, hence the spillover effects



**For a more comprehensive view of linkages
across indexes go to the main tool**



Go to
<https://ispar.unescwa.org/>

Understand and evaluate spillover effects

Under the tab 'Analyses'

Correlations

- Correlation between all Indices
- WEO Correlation
- Correlation by Theme
- Network chart
- Score of the Countries
- Spread of the countries



Correlations measure how closely indices move together, hence the spillover effects

Under 'Correlations' select 'Correlations between all indices'

Correlations of all indices against each other

Correlation is a statistical measure that describes the relationship between two indices. A positive correlation means that both indices are increasing or decreasing in parallel. A negative correlation indicates that when a country's performance improves on one index it worsens on the other. The relation is strong if the correlation coefficient is greater than 0.7 (smaller than -0.7), it is mild if the coefficient is between 0.4 and 0.7 (or -0.7 and -0.4). Correlation coefficients, that appear on the table, can be used to assess how performances across indices tend to be linked to each other.

However, correlation must not be confused with causality. If two indices/indicators are correlated, it does not imply that one index/indicator causes the changes in another one. Correlation only assesses relationships between indices/indicators, and different factors may lead to the relationships. Causation may be a reason for the correlation, but it is not the only possible explanation.

Select the gender index you like

Question 1: How strongly correlated is the Gender Index (dimension level) you selected to other Gender indices?

Through which channel upon you?

Question 2: How will an improvement on the index you selected affect the capacity of the country to innovate?

To become more competitive?

Question 3: Is there any negative correlation of the index you selected with another index?

Why, upon you?

How to best use this negative correlation?

Understand and evaluate spillover effects

Under the tab 'Analyses'

Correlations

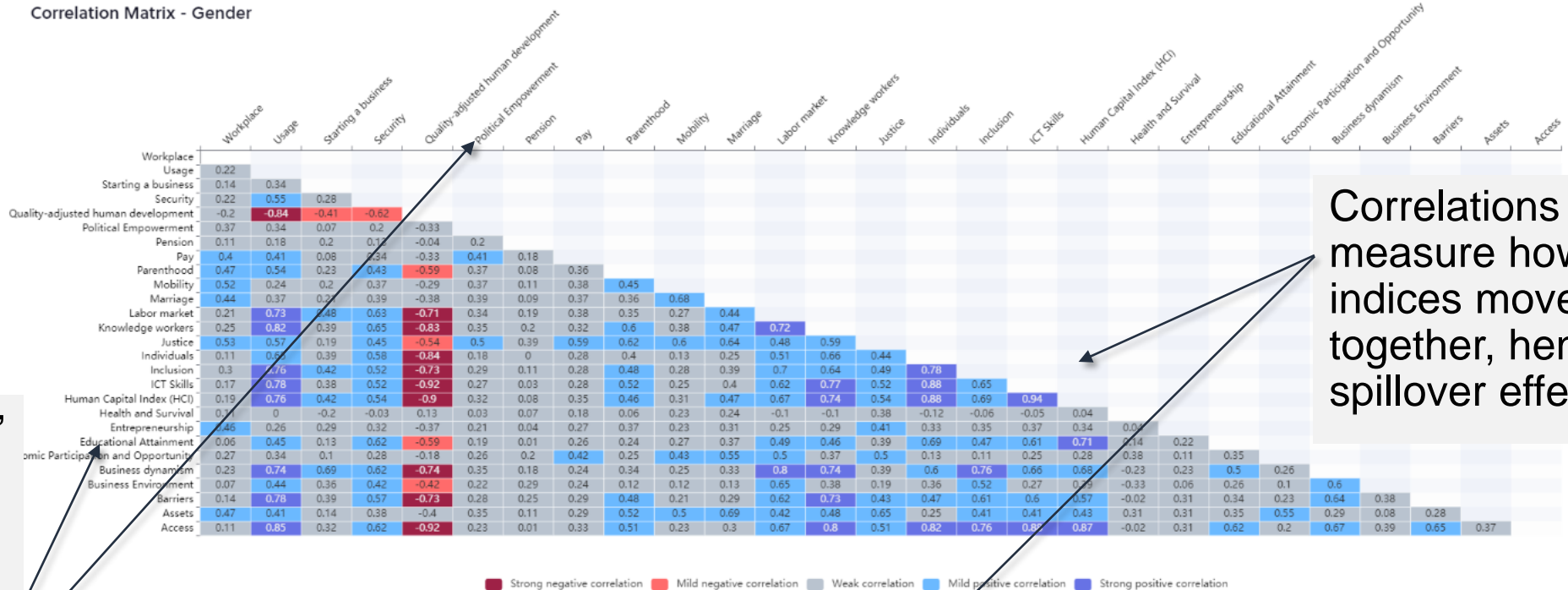
- Correlation between all Indices
- WEO Correlation
- Correlation by Theme
- Gender

Network chart

Score of the Countries

Spread of the countries

Correlation Matrix - Gender



Correlations measure how closely indices move together, hence the spillover effects

Under 'Correlations' select 'Correlations by Theme' and 'Gender'

Correlations of all sub-dimensions of all gender indices

Correlation is a statistical measure that describes the relationship between two indices. A positive correlation means that both indices are increasing or decreasing in parallel. A negative correlation indicates that when a country's performance improves on one index it worsens on the other. The relation is strong if the correlation coefficient is greater than 0.7 (smaller than -0.7), it is mild if the coefficient is between 0.4 and 0.7 (or -0.7 and -0.4). Correlation coefficients, that appear on the table, can be used to assess how performances across indices tend to relate to each other.

Correlation must not be confused with causality. If two indices/indicators are correlated, it does not imply that one index/indicator causes the changes in another one. Correlation only assesses relationships between indices/indicators, and different factors may lead to the same relationships. Causation may be a reason for the correlation, but it is not the only possible explanation.

Select the gender index you like

Question 1: How strongly correlated is the Gender Index you selected to important macroeconomic indicators?

Through which channel upon you?

Question 2: Is there any negative correlation of the index you selected with another index?

Is it a good or a bad thing?

Correlations analysis: Help identify

1. The potential for cooperation across Ministries
2. How each can contribute to the achievements of another Ministry's goals

Example: if a country improving on its ranking on the **Women Business and the Law Index** will positively affect its **performances on a series of other indices** (first column of the 'all indices' matrix) from innovation to competitiveness and so forth.

Economic and Social Commission for Western Asia

Workshop on the Use of the "Indices Simulation Tool for Policy Makers in Morocco"

Nathalie PICASSO-GRAND, Data Scientist, ESCWA
12-13 June 2023, Rabat, Morocco



UNITED NATIONS

الاسواق
ESCWA

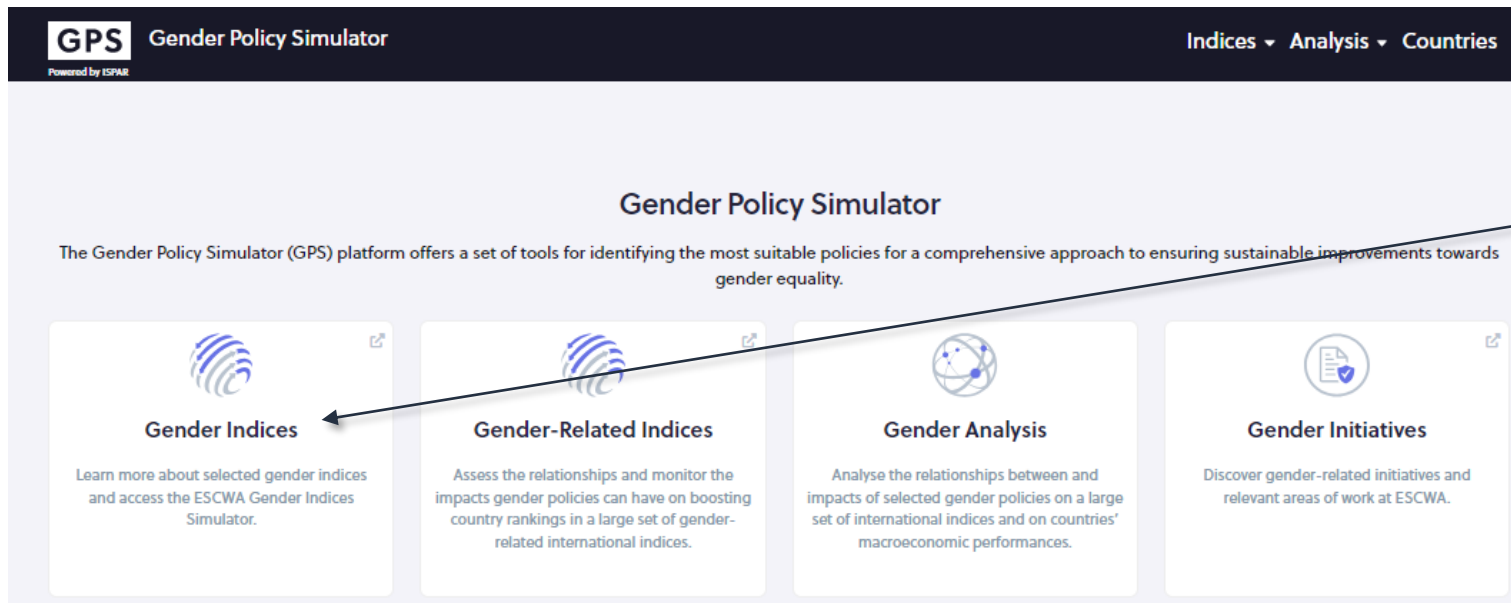
Shared Prosperity **Dignified Life**



Session IV: Human Development Index

This session will introduce the UN Development Programme's Human Development Index and the Gender Development Index and allow participants to use the ISPAR tool to retrieve country results. Participants will then present their experience around the use of ISPAR to analyse their rankings and scores.

First simulation: UNDP Human Development Index/Gender Development Index



From

<https://gender.unescwa.org>

Click on 'Gender Indices'

For this first simulation, we will use a simulator that is not engendered, which reduces the number of KPIs and is easier to use

Human Development Index

ISPAR

Index Simulator for Policymakers

About Simulators ▾ Indices ▾ Analysis ▾ Countries

The Index Simulator

This simulator is for advanced users who have an understanding of the [indices](#) and have reviewed their [country's ranking](#) in those indices. The Index Simulator allows you to imagine how a change in your country's performance in an index KPI would alter its overall ranking, and to select other countries for comparison.

[Go to the theme simulator →](#)

Select a country ▾

Select an index ▾


Select your country

Select "Human Development Index"

Human Development Index

Brief description of the country for benchmarking

Morocco



Country description
Morocco is a lower middle income country. It has a **GDP per capita** of around 3.82 Thousand USD (2021) and **HDI** value of 0.68 (2021)

Human Development Index

Index description
The Human Development Index is a summary composite measure of a country's average achievements in three basic aspects of human development: long and healthy life, knowledge and standard of living.

[Learn more about the Human Development Index](#)

Brief description of the selected index

Year of the last ranking available
Rank and score



Results for Morocco [Save to profile](#) [Shareable Link](#) [Export to Excel](#) [Export to PDF](#)


| | | |
|-------|------|----------------------|
| | 2021 | Simulator projection |
| Rank | 124 | |
| Score | 0.68 | |


Comparison Benchmarks

Country benchmarks | Multinational benchmarks

Compare to: [Top 3 in Income Group](#) [Top 3 in Region](#) | Compare to: [Income Group](#) [Region](#)

KPI   2021

Aspirational value  Morocco

Health 

Rank 69 / Score 0.83

Index Global Highlights

- Global
- Group your Countries
- Simple Average

Global Details

| | |
|------------------------------|----------------------|
| Global Average | 0.72 |
| Developed Economies Average | 0.91 |
| Developing Economies Average | 0.68 |
| Highest Ranked Country | Country: Switzerland |
| | Score: 0.96 |
| | Global Rank: 1 |
| Lowest Ranked Country | Country: South Sudan |
| | Score: 0.39 |
| | Global Rank: 191 |

Link to the webpage of the selected index

Dimensions with rank and score per dimension

Scroll down...

Human Development Index

Country's name

Morocco ▼ Human Development Index ▼

Score 0.68

Comparison benchmarks

Country benchmarks ▼ Multinational benchmarks ▼

Compare to: [Top 3 in Income Group](#) [Top 3 in Region](#) Compare to: [Income Group](#) [Region](#)

Index's name

Click on the dimension's name to see the KPIs

2021

Aspirational value ⓘ Morocco

Health ⓘ
Rank 69 / Score 0.83

Life expectancy at birth ⓘ

74.04
65.3%

Education ⓘ
Rank 131 / Score 0.59

Expected years of schooling ⓘ

14.15
55.5%

Mean years of schooling ⓘ

5.92
31.74%

Standard of living ⓘ
Rank 124 / Score 0.65

Gross national income (GNI) per capita ⓘ

7302.8
4.5%

Actual values of the KPIs

| Simulator Projection | |
|----------------------|-----------|
| 2021 | Simulated |
| Rank: 124 | |
| Score: 0.68 | |

| Global | | |
|-----------------------------------|---------|-------------|
| Group your Countries | | |
| Simple Average | | |
| Global Rank | | 1 |
| Lowest Ranked Country | Country | South Sudan |
| | Score | 0.39 |
| Highest Ranked Developed Country | Country | Switzerland |
| | Score | 0.96 |
| Global Rank | | 1 |
| Lowest Ranked Developed Country | Country | Bulgaria |
| | Score | 0.79 |
| Global Rank | | 68 |
| Highest Ranked Developing Country | Country | Singapore |
| | Score | 0.94 |
| Global Rank | | 12 |
| Lowest Ranked Developing Country | Country | Niger |
| | Score | 0.4 |
| Global Rank | | 189 |

Box in which the impact of the rank and score will be shown. For now, the year of the last ranking, the rank and score are provided for reference

Input your aspirational values...

Human Development Index

Slide the cursor
Or input your data

Click on the icon next to the KPI's name to see the definition

Actual values of the KPIs are duplicated for reference

Aspirational values appear in RED

Global Ranking Table:

| Category | Country | Score | Global Rank |
|-----------------------------------|-------------|-------|-------------|
| Global Rank | 1 | | |
| Lowest Ranked Country | South Sudan | 0.39 | 191 |
| Highest Ranked Developed Country | Switzerland | 0.96 | 1 |
| Lowest Ranked Developed Country | Bulgaria | 0.79 | 68 |
| Highest Ranked Developing Country | Singapore | 0.94 | 12 |
| Lowest Ranked Developing Country | Niger | 0.4 | 189 |

Simulator Projection Table:

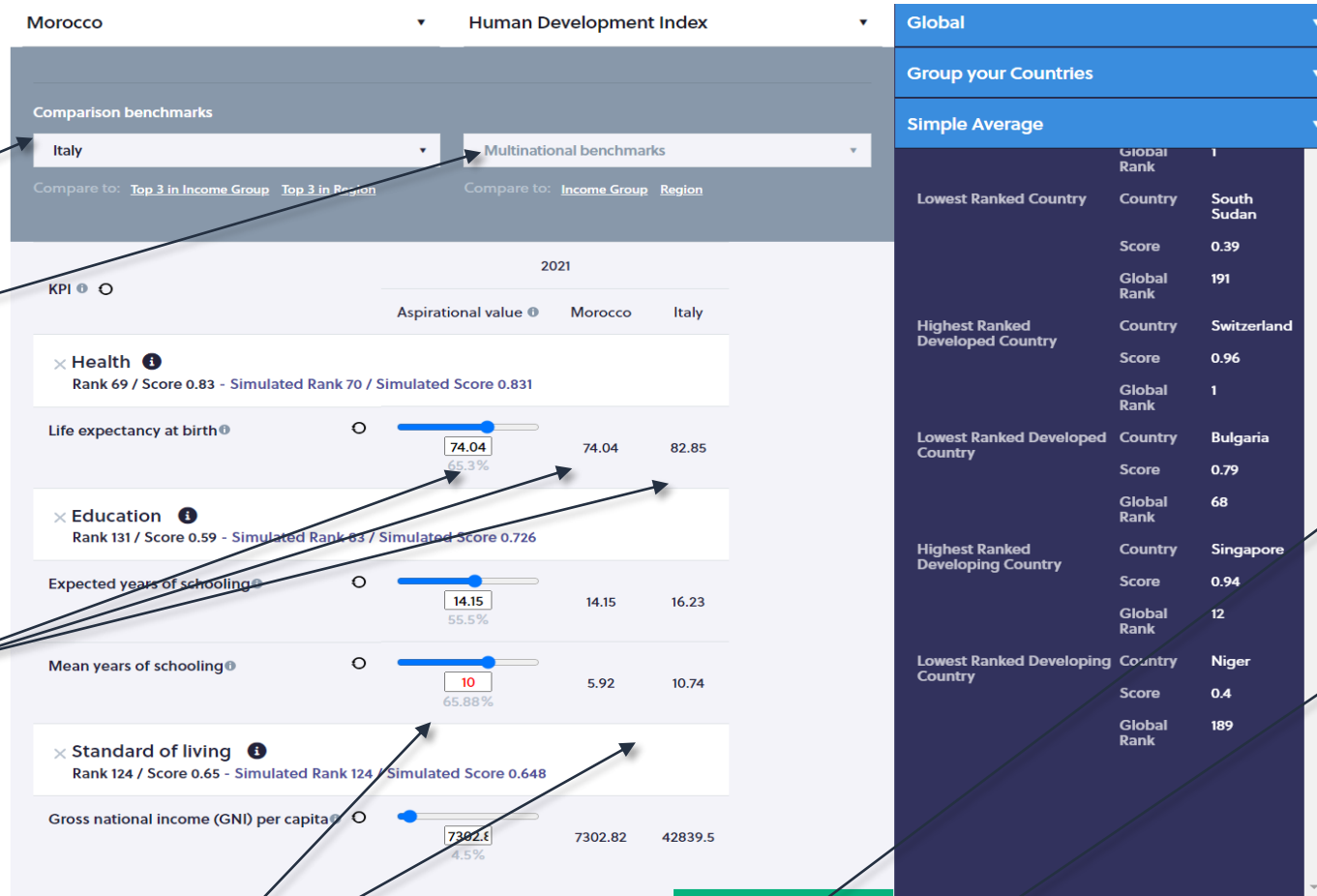
| | 2021 | Simulated |
|--------|------|-----------|
| Rank: | 124 | 102 |
| Score: | 0.68 | 0.72 |

The year of the last ranking, the rank and score are provided for reference

The simulated rank and score are displayed

Select aspirational values using benchmarks...

Human Development Index



Select benchmark countries
Or group

Actual KPIs values for the selected country and benchmarks are displayed

Aspirational values are selected in RED compared to benchmark

The year of the last ranking, the rank and score are provided for reference

The simulated rank and score are displayed

A strategy for a short, medium and long term can be designed

This index is now engendered

Gender Development Index

Morocco ▾ Human Development Index ▾ Global ▾

Group your Countries ▾

Simple Average ▾

Comparison benchmarks

Italy ▾

Compare to: [Top 3 in Income Group](#) [Top 3 in Region](#)

KPI ⓘ ○

Aspiration

× Health ⓘ
Rank 69 / Score 0.83 - Simulated Rank 70 / Simulated S

Life expectancy at birth ⓘ ○

× Education ⓘ
Rank 131 / Score 0.59 - Simulated Rank 83 / Simulated S

Expected years of schooling ⓘ ○

Mean years of schooling ⓘ ○

× Standard of living ⓘ
Rank 124 / Score 0.65 - Simulated Rank 124 / Simulated

Gross national income (GNI) per capita ⓘ ○

Indices

- AI Readiness Index
- B2C E-Commerce Index
- Development Challenges Index
- Digital Accessibility Rights Evaluation
- Doing Business Index
- E-Government Development Index
- E-Participation index
- FDI Restrictiveness Index
- Financial Inclusiveness Index
- Food Security Index
- Gender Development Index
- Global Competitiveness Index
- Global Cybersecurity Index
- Global Gender Gap Index
- Global Innovation Index
- Global Knowledge Index
- Globalization Index
- Human Capital Index
- Human Development Index
- ICT Development Index
- Network Readiness Index
- Open Data Inventory Index
- Open Data Policies
- Women Business and the Law index
- Women Peace and Security Index

| Category | Country | Score | Global Rank |
|-----------------------------------|-------------|-------|-------------|
| Lowest Ranked Country | South Sudan | 0.39 | 191 |
| Highest Ranked Developed Country | Switzerland | 0.96 | 1 |
| Lowest Ranked Developed Country | Bulgaria | 0.79 | 68 |
| Highest Ranked Developing Country | | | |
| Lowest Ranked Country | | 0.4 | 189 |

Select 'Gender Development Index'

Gender Development Index

Brief description of the country for benchmarking

Morocco

Country description
Morocco is a lower middle income country. It has a **GDP per capita** of around 3.82 Thousand USD (2021) and **HDI** value of 0.68 (2021)

Gender Development Index

Index description
The Gender Development Index (GDI) tracks gender disparities in achievement across three fundamental areas of human development: health (measured by life expectancy at birth), education (measured by expected years of schooling for children and mean years of schooling for adults ages 25 and older), and control of economic resources (measured by estimated earned income for women and men).

[Learn more about the Gender Development Index](#)

Brief description of the selected index

Year of the last ranking available
Rank and score

Results for Morocco [Save to profile](#) [Shareable Link](#) [Export to Excel](#) [Export to PDF](#)

2021 Simulator projection

| | |
|-------|------|
| Rank | 165 |
| Score | 0.86 |

Comparison benchmarks

Italy Multinational benchmarks

Compare to: [Top 3 in Income Group](#) [Top 3 in Region](#) Compare to: [Income Group](#) [Region](#)

Index Global Highlights

Global

Group your Countries

Simple Average

Global Details

| | |
|------------------------------|-------------------|
| Global Average | 0.95 |
| Developed Economies Average | 0.99 |
| Developing Economies Average | 0.94 |
| Highest Ranked Country | Country Barbados |
| | Score 1.03 |
| | Global Rank 1 |
| Lowest Ranked Country | Country Yemen |
| | Score 0.5 |
| | Global Rank 178 |
| Highest Ranked Developed | Country Lithuania |

Link to the webpage of the selected index

Dimensions with rank and score per dimension

KPI Aspirational value Morocco Italy

+ Health-female
Rank 83 / Score 0.83

Scroll down...

Gender Development Index

Country's name

Morocco

Gender Development Index

Index's name

- Global
- Group your Countries
- Simple Average

Comparison benchmarks

Italy

Multinational benchmarks

Compare to: Top 3 in Income Group Top 3 in Region

Compare to: Income Group Region

2021

KPI

Aspirational value Morocco Italy

Health-female
Rank 83 / Score 0.83

Life expectancy at birth-female
76.4 76.4 85.1

Health-male
Rank 63 / Score 0.84

Life expectancy at birth-male
71.89 71.89 80.52

Education-female
Rank 139 / Score 0.55

Expected years of schooling-female
13.91 13.91 16.57

Mean years of schooling-female
4.99 4.99 10.61

Education-male
Rank 123 / Score 0.63

Mean years of schooling-male
6.87 6.87 10.89

Expected years of schooling-male
14.39 14.39 15.9

Simulator Projection

2021 Simulated

Rank: 165

Score: 0.86

| | |
|-----------------------------------|---------------------|
| Developed Economies Average | 0.99 |
| Developing Economies Average | 0.94 |
| Highest Ranked Country | Country Barbados |
| | Score 1.03 |
| | Global Rank 1 |
| Lowest Ranked Country | Country Yemen |
| | Score 0.5 |
| | Global Rank 178 |
| Highest Ranked Developed Country | Country Lithuania |
| | Score 1.03 |
| | Global Rank 3 |
| Lowest Ranked Developed Country | Country Switzerland |
| | Score 0.97 |
| | Global Rank 88 |
| Highest Ranked Developing Country | Country Mongolia |
| | Score 1.03 |
| | Global Rank 2 |
| Lowest Ranked Developing Country | Country Yemen |
| | Score 0.5 |
| | Global Rank 178 |

Click on the dimension's name to see the KPIs

Actual values of the KPIs

Box in which the impact of the rank and score will be shown. For now, the year of the last ranking, the rank and score are provided for reference

Input your aspirational values...

Gender Development Index

Slide the cursor
Or input your data

Click on the icon next to the KPI's name to see the definition

Actual values of the KPIs are duplicated for reference

Aspirational values appear in RED

Comparison benchmarks
Italy | Multinational benchmarks

Compare to: Top 3 in Income Group | Top 3 in Region | Income Group | Region

2021
Aspirational value | Morocco | Italy

| KPI | Actual Value | Aspirational Value | Italy Value |
|--|--------------|--------------------|-------------|
| Health-female Life expectancy at birth-female | 76.4 | 76.4 | 85.1 |
| Health-male Life expectancy at birth-male | 71.89 | 71.89 | 80.52 |
| Education-female Expected years of schooling-female | 13.91 | 13.91 | 16.57 |
| Education-female Mean years of schooling-female | 8 | 8 | 10.61 |
| Education-male Mean years of schooling-male | 6.87 | 6.87 | 10.85 |
| Education-male Mean years of schooling-male | 14.39 | 14.39 | 15.9 |

Simulator Projection

| Year | Rank | Score |
|-----------|------|-------|
| 2021 | 165 | 0.86 |
| Simulated | 136 | 0.91 |

Global Summary Table:

| Category | Country | Score | Global Rank |
|-----------------------------------|-------------|-------|-------------|
| Developed Economies Average | | 0.99 | |
| Developing Economies Average | | 0.94 | |
| Highest Ranked Country | Barbados | 1.03 | 1 |
| Lowest Ranked Country | Yemen | 0.5 | 178 |
| Highest Ranked Developed Country | Lithuania | 1.03 | 3 |
| Lowest Ranked Developed Country | Switzerland | 0.97 | 88 |
| Highest Ranked Developing Country | Mongolia | 1.03 | 2 |
| Lowest Ranked Developing Country | Yemen | 0.5 | 178 |

The year of the last ranking, the rank and score are provided for reference

The simulated rank and score are displayed

First simulation HDI and GDI: Help identify key indicators

1. At the national level
2. And per gender

Help defining targeted actions

Example: action targeting education can help improve rapidly on the ranking, **especially the means years of schooling**

Specific actions have to target female achievements

Workshop on the Use of the "Indices Simulation Tool for Policy Makers in Morocco"

Nathalie PICASSO-GRAND, Data Scientist, ESCWA
12-13 June 2023, Rabat, Morocco



UNITED NATIONS

الاسواق
ESCWA

Shared Prosperity **Dignified Life**



Session V: Global Gender Gap Index

This session will introduce the World Economic Forum's Global Gender Gap Index and allow participants to use the ISPAR tool to retrieve country results. Participants will then present their experience around the use of ISPAR to analyse their rankings and scores.

The difficulties of an engendered index using ratios

Back to <https://gender.unescwa.org>

Select 'Gender indices'

Select your country

Select Gender Gap Index

The Global Gender Gap Index

Select a country

Select the index

See the country's score and rank over time

The KPIs for 'female', 'male' and the ratio are displayed

Short description of the index

Link to the website of the index publisher

Change the values of the KPIs for female...

Country description
Morocco is a lower middle income country. It has a GDP per capita of around 3.82 Thousand USD (2021) and HDI value of 0.68 (2021)

Index description
Gender parity has a fundamental bearing on whether or not economies and societies thrive. Developing and deploying one-half of the world's available talent has a huge bearing on the growth, competitiveness and future-readiness of economies and businesses worldwide.

[Learn more about the Global Gender Gap Index](#)

Results for Morocco

| | 2019 | 2021 | 2022 | Simulator projection |
|-------|------|------|------|----------------------|
| Rank | 143 | 144 | 136 | |
| Score | 0.6 | 0.61 | 0.62 | |

Comparison benchmarks

Country benchmarks | Multinational benchmarks

Compare to: Top 3 in Income Group | Top 3 in Region | Income Group | Region

2022 KPI Breakdown

| KPI | Aspirational value | Morocco | | | | |
|--|--------------------|---------|-------|-----------------------|------|-------|
| | Female | Male | Ratio | Female | Male | Ratio |
| Economic Participation and Opportunity | | | | Rank 139 / Score 0.45 | | |
| Educational Attainment | | | | Rank 114 / Score 0.94 | | |
| Health and Survival | | | | Rank 131 / Score 0.96 | | |
| Political Empowerment | | | | Rank 99 / Score 0.14 | | |

Index Global Highlights

- Global
- Group your Countries
- Simple Average

Global Details

| | |
|-----------------------------------|----------------------|
| Global Average | 0.71 |
| Developed Economies Average | 0.76 |
| Developing Economies Average | 0.69 |
| Highest Ranked Country | Country: Iceland |
| | Score: 0.91 |
| | Global Rank: 1 |
| Lowest Ranked Country | Country: Afghanistan |
| | Score: 0.44 |
| | Global Rank: 146 |
| Highest Ranked Developed Country | Country: Iceland |
| | Score: 0.91 |
| | Global Rank: 1 |
| Lowest Ranked Developed Country | Country: Japan |
| | Score: 0.65 |
| | Global Rank: 116 |
| Highest Ranked Developing Country | Country: Rwanda |
| | Score: 0.81 |
| | Global Rank: 6 |

The Global Gender Gap Index

Open the tab:

Check the coverage of the dimension (I icon)

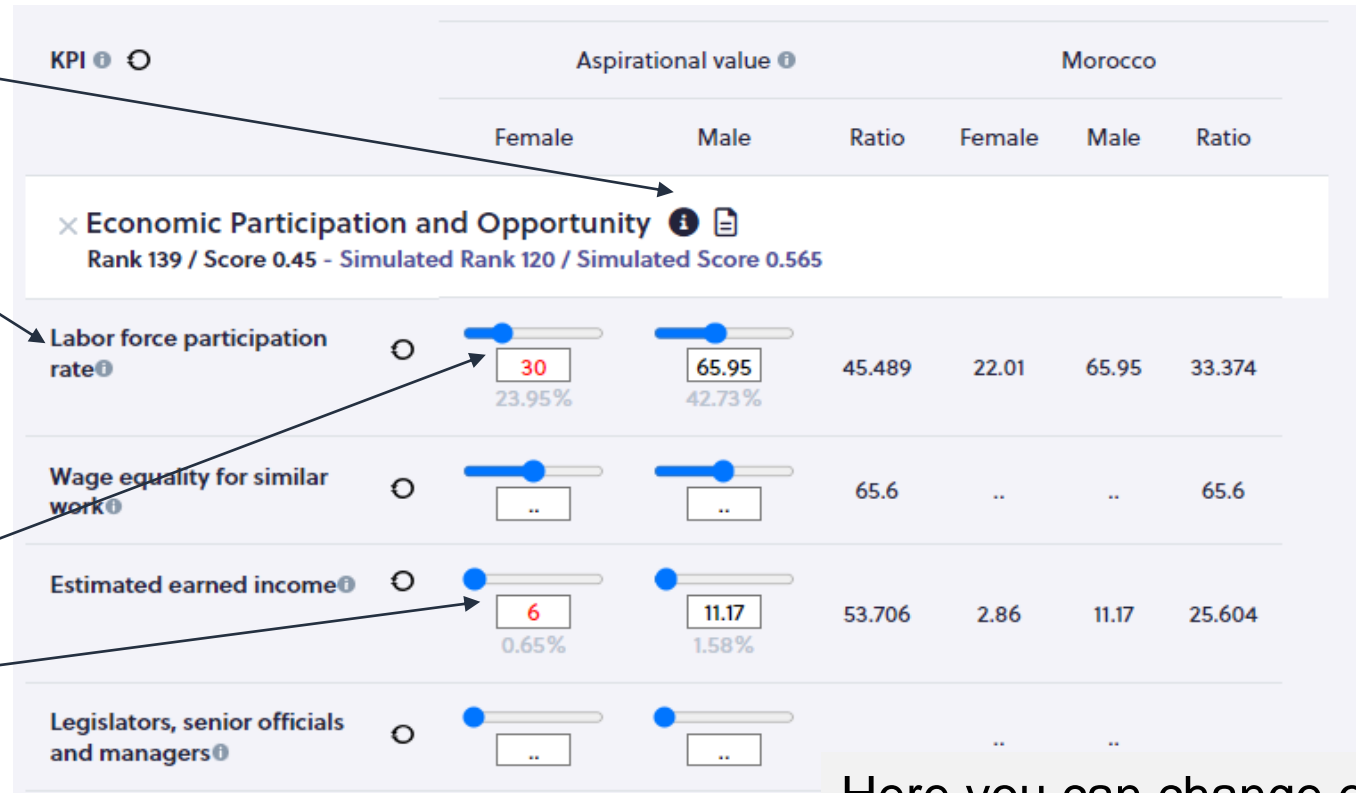
you can see now all the KPIs

Enter your aspirational values per KPIS

or by sliding the cursor

or entering numbers

The modified KPIS appear in **RED**



Here you can change only the value of the KPIS for the 'female' population

The Global Gender Gap Index

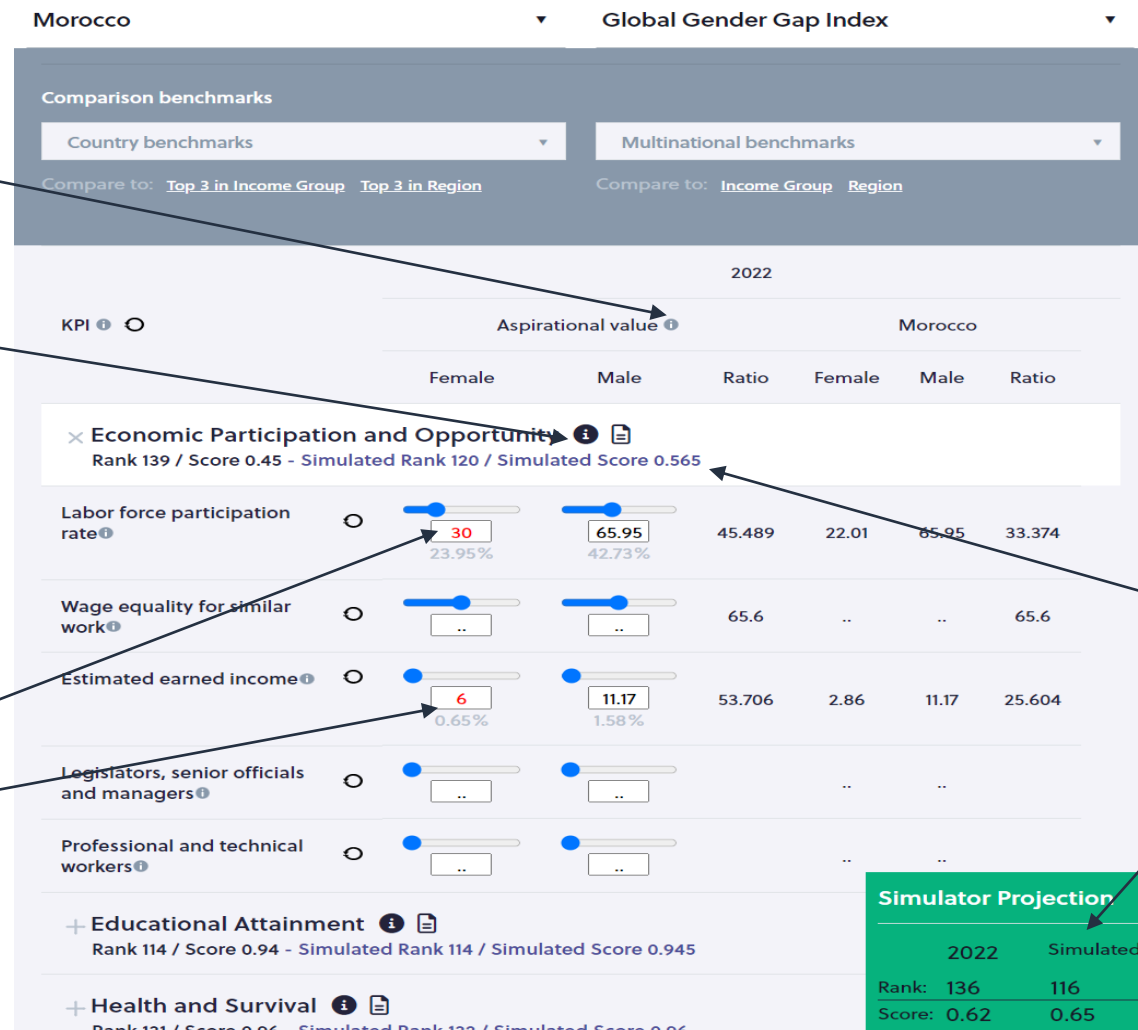
Open the tab:

Check the coverage of the dimension (I icon) you can see now all the KPIs

Enter your aspirational values per KPIS

or by sliding the cursor or entering numbers

The modified KPIS appear in **RED**



Impact on score and rank will show here

pillar score and rank overall rank and score

The Global Gender Gap Index

Be careful:

Open t
you can
KPIs

If, for some KPIs, values are not available for your country then entering aspirational values is not possible and/or will not be reflected in the recalculations of the rank and score

Enter y
values

or by
or entering numbers

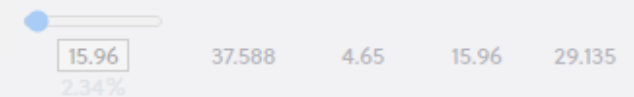
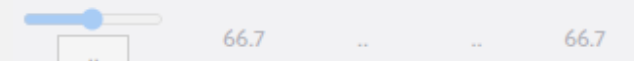
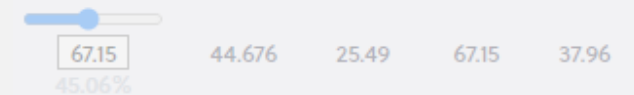
The modified KPIS
appear in **RED**

tional value 0

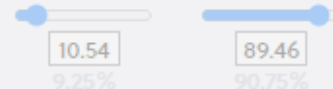
Tunisia

| Male | Ratio | Female | Male | Ratio |
|------|-------|--------|------|-------|
|------|-------|--------|------|-------|

ated Score 0.477



Legislators, senior officials
and managers

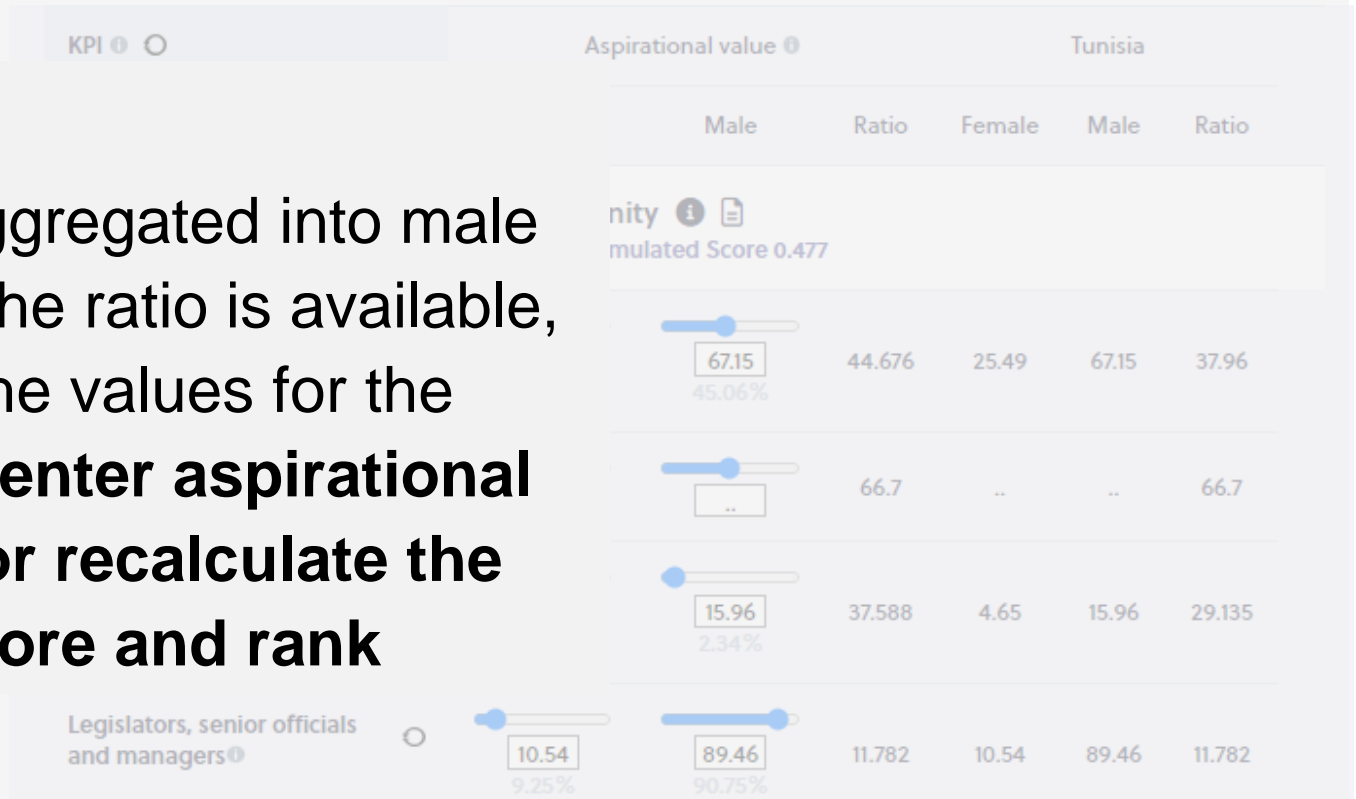


The Global Gender Gap Index

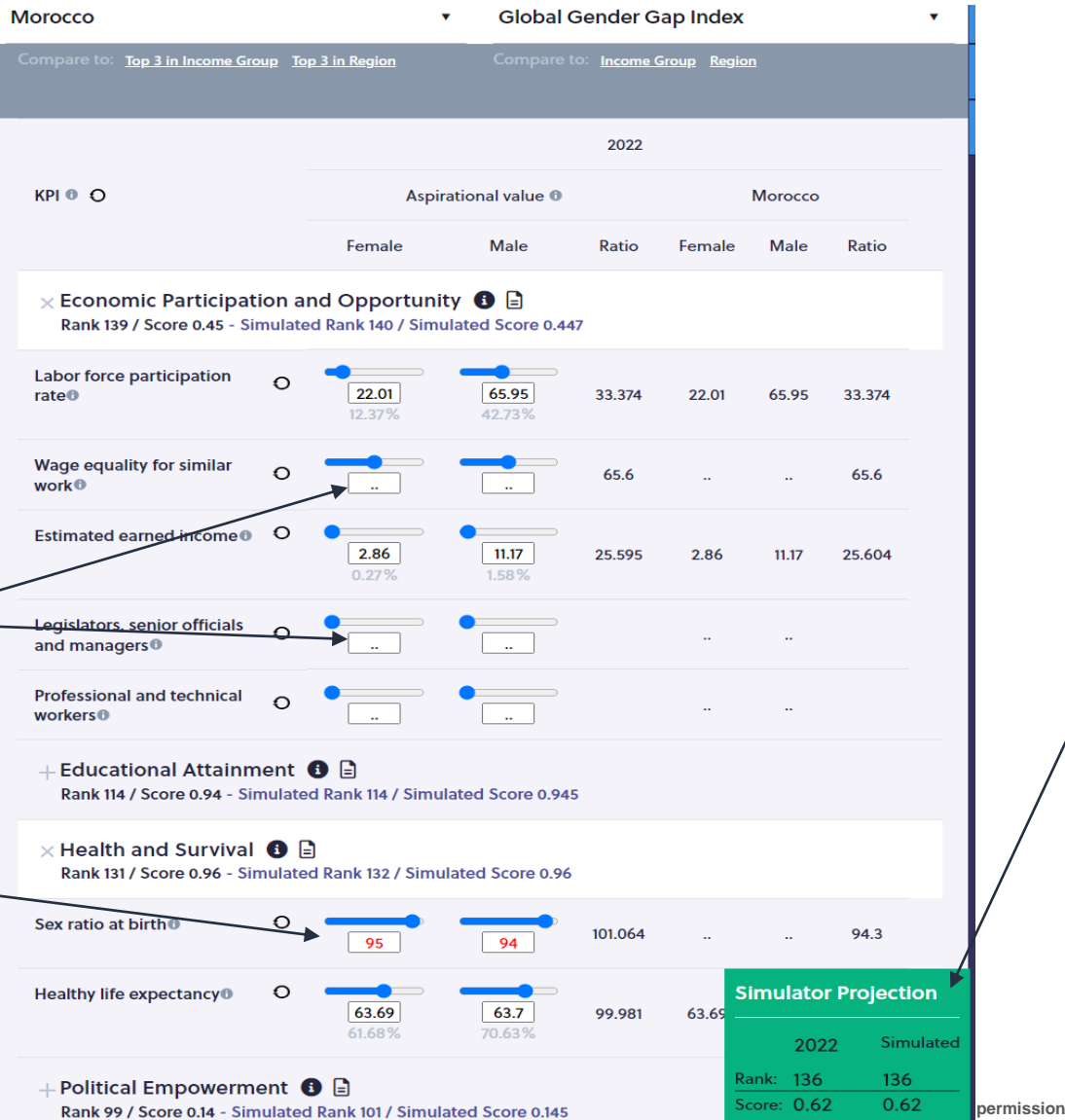
Open Be careful!

you KPIs
 Enter valu
 If values are not disaggregated into male and female and only the ratio is available, you can still change the values for the male and female and **enter aspirational values. The simulator recalculate the ratio and the new score and rank**

The modified KPIS appear in **RED**



The Global Gender Gap Index



Open the tab:

you can see now all the KPIs

For those KPIs, no data is available, so it is impossible to enter aspirational values

For the sex ratio at birth, data for female and male are not available but the ratio is, hence data for male and female can be entered on the simulator

Impact on score and rank will show here

The Global Gender Gap Index

Oper **Be careful:**

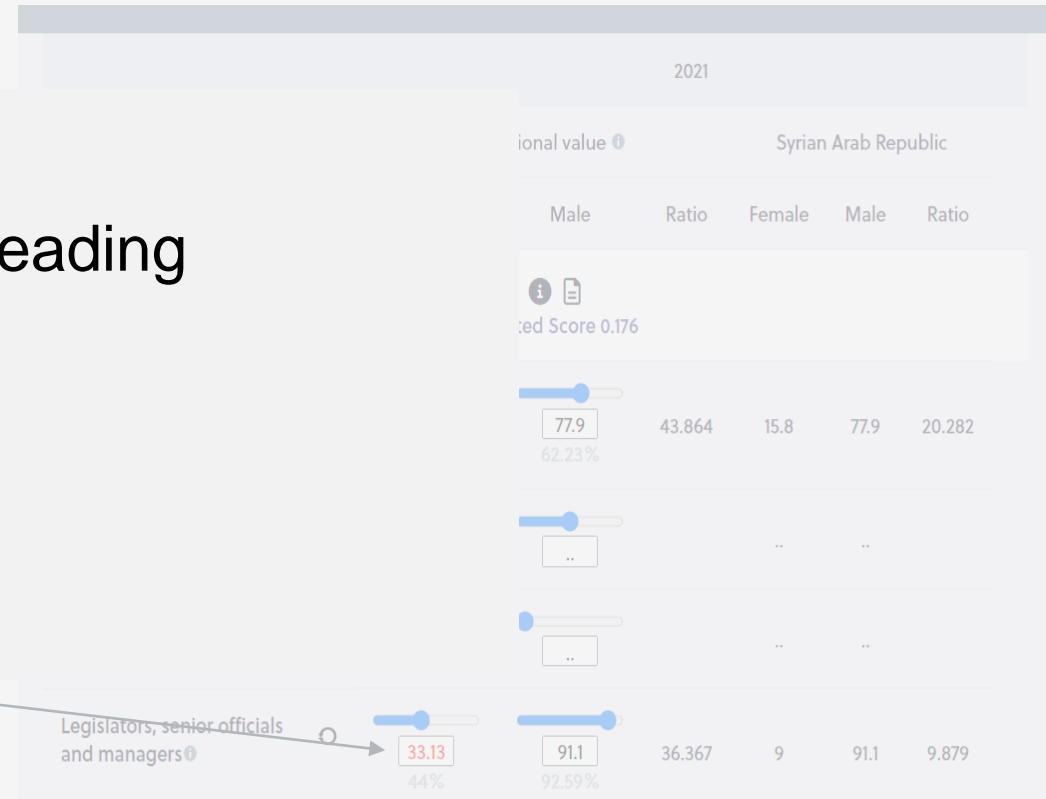
you c
KPIs Using ratios can be misleading

Ente
value

or

or entering numbers

The modified KPIS
appear in **RED**



Develop your own strategy

Question 1: What is the impact of the quality, accuracy, availability of data on the ranking ?

Question 2: Which indicators/KPIs used to calculate the index are included in the NDP/Vision?

If the country meet the set expectations, what will be its ranking?

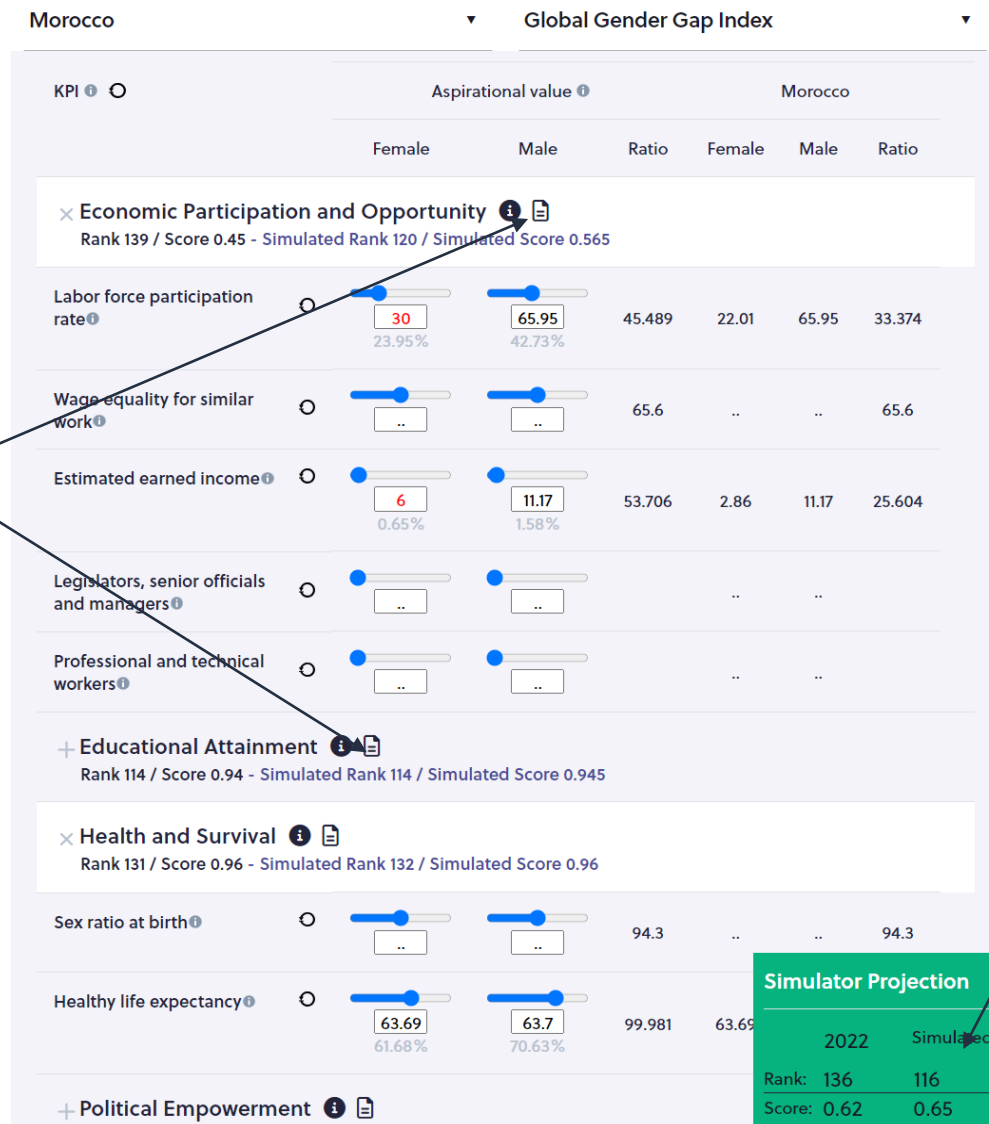
Question 3: Based on the strategy you are preparing, which progress can be achieved


in the short run?

in the medium run?

In the long run?

The Global Gender Gap Index



Follow the icon  to get **policy recommendations**

Impact on score and rank will show here

Conclusion: an engendered index using ratios

- 1. May be misleading**
- 2. Indicators in LEVEL need to be used to complement the ratio of indicators to get a good picture of performances**

Workshop on the Use of the "Indices Simulation Tool for Policy Makers in Morocco"

Nathalie PICASSO-GRAND, Data Scientist, ESCWA
12-13 June 2023, Rabat, Morocco



UNITED NATIONS

الاسواق
ESCWA

Shared Prosperity **Dignified Life**



Session VII: The Global Index on Women, Peace and Security

This session will introduce the Global Index on Women, Peace and Security Index and allow participants to use the ISPAR tool to retrieve country results. Participants will then present their experience around the use of ISPAR to analyse their rankings and scores.

Women, Peace and Security Index: The need to adopt a comprehensive approach

For this index, the methodology was developed so a comprehensive approach of the issue at hand must be developed for policy changes to have an impact on the ranking.

The screenshot shows the top navigation bar of the Gender Policy Simulator (GPS) website. The header includes the GPS logo, the text "Gender Policy Simulator", and the text "Powered by ISPAR". On the right side of the header, there are navigation links: "Indices", "Analysis", and "Countries".

The main content area features the title "Gender Policy Simulator" and a descriptive paragraph: "The Gender Policy Simulator (GPS) platform offers a set of tools for identifying the most suitable policies for a comprehensive approach to ensuring sustainable improvements towards gender equality." Below this, there are four interactive cards:

- Gender Indices**: A blue card with the text "Learn more about selected gender indices and access the ESCWA Gender Indices Simulator." and a share icon.
- Gender-Related Indices**: A white card with the text "Assess the relationships and monitor the impacts gender policies can have on boosting country rankings in a large set of gender-related international indices." and a share icon.
- Gender Analysis**: A white card with the text "Analyse the relationships between and impacts of selected gender policies on a large set of international indices and on countries' macroeconomic performances." and a share icon.
- Gender Initiatives**: A white card with the text "Discover gender-related initiatives and relevant areas of work at ESCWA." and a share icon.

Simulations

Go to

<https://gender.unescwa.org>

Click on 'Gender Indices'

Women, Peace, and Security Index

Brief description of the country for benchmarking

Morocco



Country description
Morocco is a lower middle income country. It has a **GDP per capita** of around 3.82 Thousand USD (2021) and **HDI** value of 0.68 (2021)

Women Peace and Security Index

Index description
Women, Peace, and Security Index provides important insights into patterns and progress on women's status and empowerment around the world in the three dimensions inclusion, justice, and security using 11 indicators.

[Learn more about the Women Peace and Security Index](#)

Brief description of the selected index

Year of the last ranking available
Rank and score

Results for Morocco [Save to profile](#) [Shareable Link](#) [Export to Excel](#) [Export to PDF](#)

| | | |
|-------|------|----------------------|
| | 2021 | Simulator projection |
| Rank | 138 | |
| Score | 0.62 | |

Comparison benchmarks

Country benchmarks | Multinational benchmarks

Compare to: [Top 3 in Income Group](#) [Top 3 in Region](#) | [Income Group](#) [Region](#)

KPI Aspirational value Morocco

+ Inclusion
Rank 150 / Score 0.41

+ Justice
Rank 119 / Score 0.78

Index Global Highlights

- Global
- Group your Countries
- Simple Average

Global Details

| | |
|----------------------------------|----------------------|
| Global Average | 0.72 |
| Developed Economies Average | 0.86 |
| Developing Economies Average | 0.7 |
| Highest Ranked Country | Country: Norway |
| | Score: 0.92 |
| | Global Rank: 1 |
| Lowest Ranked Country | Country: Afghanistan |
| | Score: 0.11 |
| | Global Rank: 170 |
| Highest Ranked Developed Country | Country: Norway |
| | Score: 0.92 |
| | Global Rank: 1 |

Link to the webpage of the selected index

Dimensions with rank and score per dimension

Scroll down...

Women, Peace, and Security Index

Country's name

Index's name

Click on the dimension's name to see the KPIs

Select benchmarks

Actual values of the KPIs

Aspirational values of the KPIs in Red

Simulator Projection

| | 2021 | Simulated |
|--------|------|-----------|
| Rank: | 138 | 114 |
| Score: | 0.62 | 0.67 |



Box in which the impact of the rank and score will be shown. For now, the year of the last ranking, the rank and score are provided for reference

Exploring the interlinkages among KPIs...

The need to have a comprehensive approach

- 1. Improving on one indicator may have a quite small if any impact on the ranking while others have large impact on the ranking**
- 2. Actions must be taken at various level to see a meaningful improvement on the ranking**
- 3. Stresses the need for cooperation across Ministries**

Workshop on the Use of the "Indices Simulation Tool for Policy Makers in Morocco"

Nathalie PICASSO-GRAND, Data Scientist, ESCWA
12-13 June 2023, Rabat, Morocco



UNITED NATIONS

الاسواق
ESCWA

Shared Prosperity **Dignified Life**



Session VIII: The World Bank's Women, Business and the Law Index

This session will introduce the World Bank's Women, Business and the Law Index and allow participants to use the ISPAR tool to retrieve country results. Participants will then present their experience around the use of ISPAR to analyse their rankings and scores.

Women Business and the Law Index: The specificities of a 'discrete' index

This index uses bullion indicators which take the value 0 or 1. It captures the content of the law and its intent through surveys.

It is important to identify the low-hanging fruits.

The screenshot shows the top navigation bar of the Gender Policy Simulator (GPS) website. The header includes the GPS logo, the text "Gender Policy Simulator", and the text "Powered by ISPAR". On the right side of the header, there are navigation links for "Indices", "Analysis", and "Countries".

The main content area features the title "Gender Policy Simulator" and a descriptive paragraph: "The Gender Policy Simulator (GPS) platform offers a set of tools for identifying the most suitable policies for a comprehensive approach to ensuring sustainable improvements towards gender equality." Below this, there are four interactive cards:

- Gender Indices**: Learn more about selected gender indices and access the ESCWA Gender Indices Simulator.
- Gender-Related Indices**: Assess the relationships and monitor the impacts gender policies can have on boosting country rankings in a large set of gender-related international indices.
- Gender Analysis**: Analyse the relationships between and impacts of selected gender policies on a large set of international indices and on countries' macroeconomic performances.
- Gender Initiatives**: Discover gender-related initiatives and relevant areas of work at ESCWA.

Simulations

Go to

<https://gender.unescwa.org>

Click on 'Gender Indices'

Women, Business and the Law

Brief description of the country for benchmarking

Morocco



Country description
Morocco is a lower middle income country. It has a **GDP per capita** of around 3.82 Thousand USD (2021) and **HDI** value of 0.68 (2021)

Women Business and the Law index

Index description
Women, Business and the Law identifies how laws and regulations impact women's life, and economic opportunities. The index is structured around the main elements shaping women's life : Mobility, Workplace, Pay, Marriage, Parenthood, Entrepreneurship, Assets and Pension.

[Learn more about the Women Business and the Law index](#)

Brief description of the selected index

Year of the last ranking available
Rank and score

Results for Morocco [Save to profile](#) [Shareable Link](#) [Export to Excel](#) [Export to PDF](#)

| | 2022 | 2023 | Simulator projection |
|-------|-------|-------|----------------------|
| Rank | 117 | 118 | |
| Score | 75.62 | 75.62 | |

Comparison benchmarks

Country benchmarks: [Top 3 in Income Group](#) [Top 3 in Region](#)

Multinational benchmarks: [Income Group](#) [Region](#)

KPI: **Mobility** Rank 1 / Score 100

Index Global Highlights

- Global
- Group your Countries
- Simple Average

Global Details

| | |
|------------------------------|---|
| Global Average | 77.09 |
| Developed Economies Average | 96.02 |
| Developing Economies Average | 73.87 |
| Highest Ranked Country | Country: Belgium, Score: 100, Global Rank: 1 |
| Lowest Ranked Country | Country: State of Palestine, Score: 26.25, Global Rank: 190 |

Link to the webpage of the selected index

Regularly updated

Scroll down...

Women, Business and the Law

Country's name

Morocco

Women Business and the Law index

Index's name

Click on the dimension's name to see the KPIs

+ Mobility

+ Workplace

× Pay

+ Marriage

+ Parenthood

+ Entrepreneurship

+ Assets

+ Pension

KPI

Aspirational value

Morocco

2023

Rank 1 / Score 100 - Simulated Rank 1 / Simulated Score 100

Rank 1 / Score 100 - Simulated Rank 1 / Simulated Score 100

Rank 120 / Score 50 - Simulated Rank 72 / Simulated Score 75

Does the law mandate equal remuneration for work of equal value? 100% 1

Can a woman work at night in the same way as a man? 100% 1

Can a woman work in a job deemed dangerous in the same way as a man? 100% 0

Can a woman work in an industrial job in the same way as a man? 50% 0

Rank 143 / Score 60 - Simulated Rank 143 / Simulated Score 60

Rank 36 / Score 80 - Simulated Rank 36 / Simulated Score 80

Rank 1 / Score 100 - Simulated Rank 1 / Simulated Score 100

Rank 155 / Score 40 - Simulated Rank 155 / Simulated Score 40

Rank 73 / Score 75 - Simulated Rank 73 / Simulated Score 75

Simulator Projection

| | 2023 | Simulated |
|--------|-------|-----------|
| Rank: | 118 | 104 |
| Score: | 75.62 | 78.75 |

Global

Group your Countries

Simple Average

Developed Economies Average 96.02

Developing Economies Average 73.87

Highest Ranked Country Country Belgium

Score 100

Global Rank 1

Lowest Ranked Country Country State of Palestine

Score 26.25

Global Rank 190

Highest Ranked Developed Country Country Belgium

Score 100

Global Rank 1

Lowest Ranked Developed Country Country Japan

Score 78.75

Global Rank 104

Highest Ranked Developing Country Country Peru

Score 95

Global Rank 25

Lowest Ranked Developing Country Country Yemen

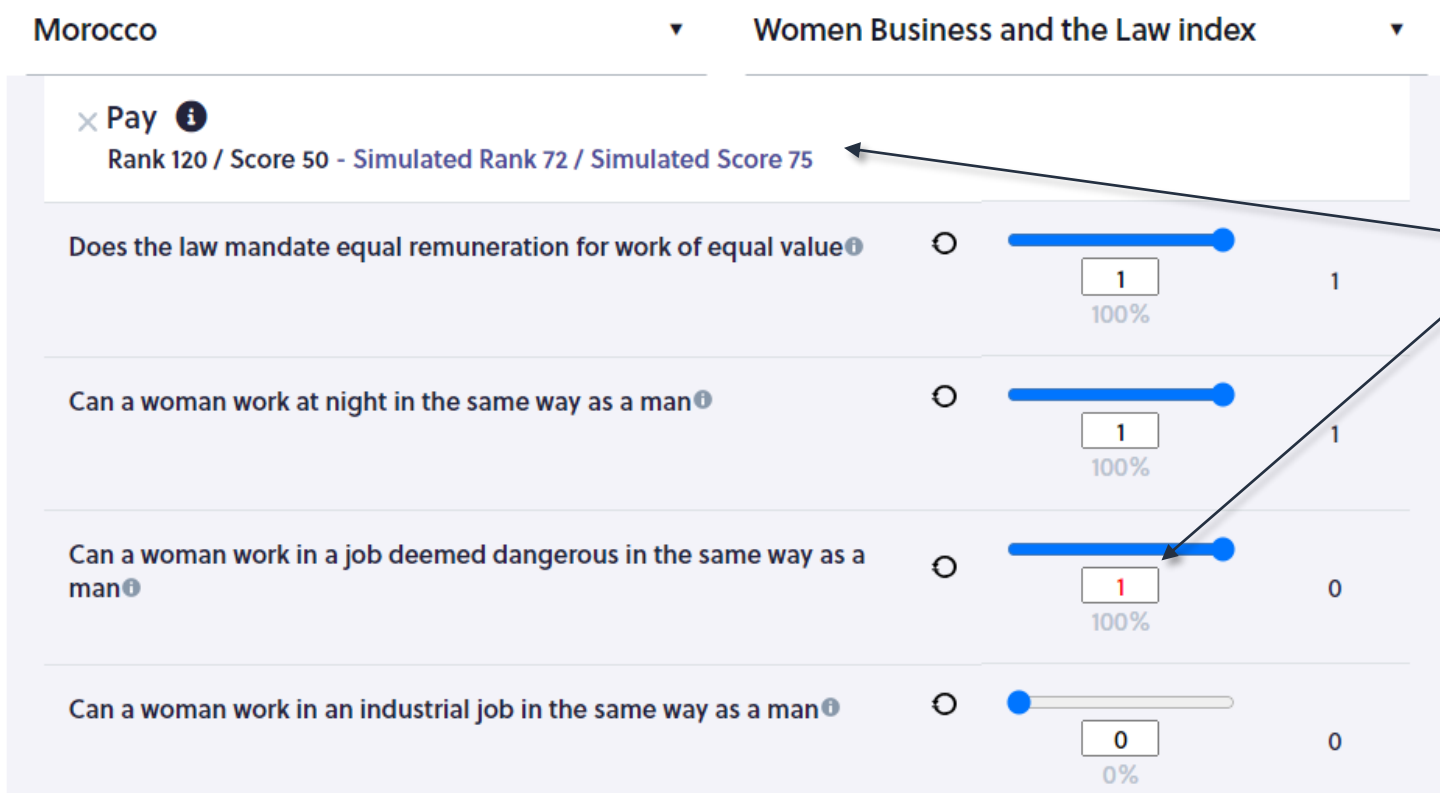
Score 26.88

Global Rank 189

Box in which the impact of the rank and score will be shown. For now, the year of the last ranking, the rank and score are provided for reference

Actual values of the KPIs

Women, Business and the Law



Due to the methodology used to calculate this index, improving on one KPIs increase the dimension score and rank by 20 to 25% depending on the number of KPIS per dimension

But here, the obstacles are laws which requires efforts and time to change

Women Business and the Law Index: The specificities of a 'discrete' index

To improve on this kind of ranking, developing short, medium, and long-term strategies is crucial as it takes time to improve due to the very nature of the obstacles that can be administrative, legislative, cultural and religious.

The advantage of ISPAR is that the tool allows to identify the NATURE of the obstacles and set a timeline for rankings improvement

Having multiple Composite Indices on the platform allows developing a short-, medium-, and long-term strategy across all the Indices.

Workshop on the Use of the "Indices Simulation Tool for Policy Makers in Morocco"

Nathalie PICASSO-GRAND, Data Scientist, ESCWA
12-13 June 2023, Rabat, Morocco



UNITED NATIONS

الاسواق
ESCWA

Shared Prosperity **Dignified Life**



Session XI: The interdependence of global indicators

This session discusses how developmental indicators intersect with gender equality indicators, such as in education, health, and the economy, and explains how strengthening policies and legislation related to gender equality may influence other areas of development.

Let's summarize what we have seen

1. How to generate a profile and compare our performances to other countries'
2. How to carry simulations and how the methodology used calls for a certain type of strategy
3. And how to use the platform to develop a short, medium and long-term strategy depending on the nature of the obstacles

**As part of the background you may prepare for
your note/report/brief or any other document,**

You can use tools to

Visualize performances


ESCWA Sign in / Register

GPS Gender Policy Simulator Indices ▾ Analysis ▾ Countries

Powered by ISPAR


Gender Policy Simulator

The Gender Policy Simulator (GPS) platform offers a set of tools for identifying the most suitable policies for a comprehensive approach to ensuring sustainable improvements towards gender equality.




Gender Indices

Learn more about selected gender indices and access the ESCWA Gender Indices Simulator.




Gender-Related Indices

Assess the relationships and monitor the impacts gender policies can have on boosting country rankings in a large set of gender-related international indices.



Gender Analysis

Analyse the relationships between and impacts of selected gender policies on a large set of international indices and on countries' macroeconomic performances.



Gender Initiatives

Discover gender-related initiatives and relevant areas of work at ESCWA.

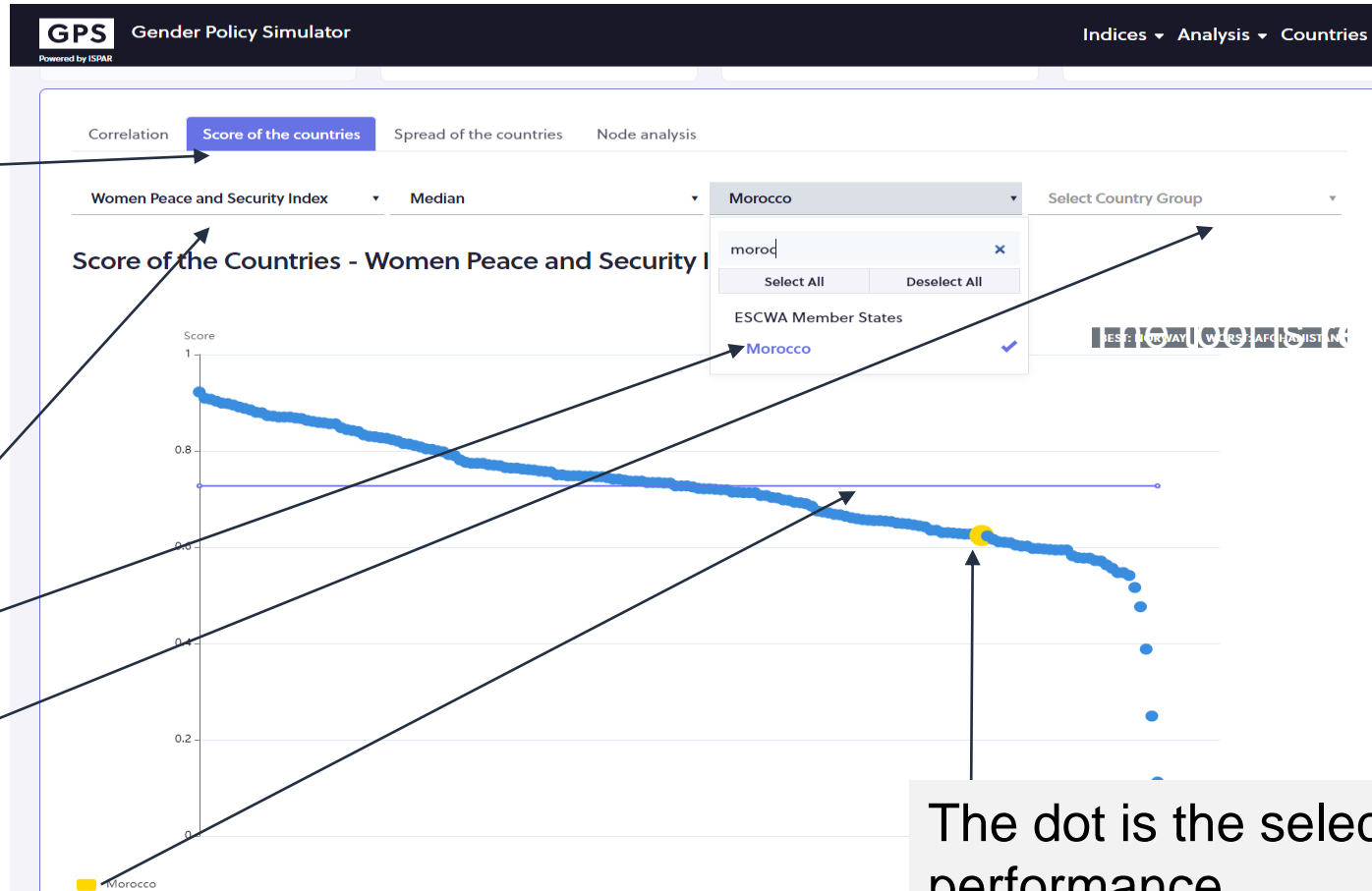
Simulations

Go to

<https://gender.unescwa.org>

Click on 'Gender Analysis'

Quick visualization of performances



Click on 'Score of the countries'

Select

The index of interest

A country

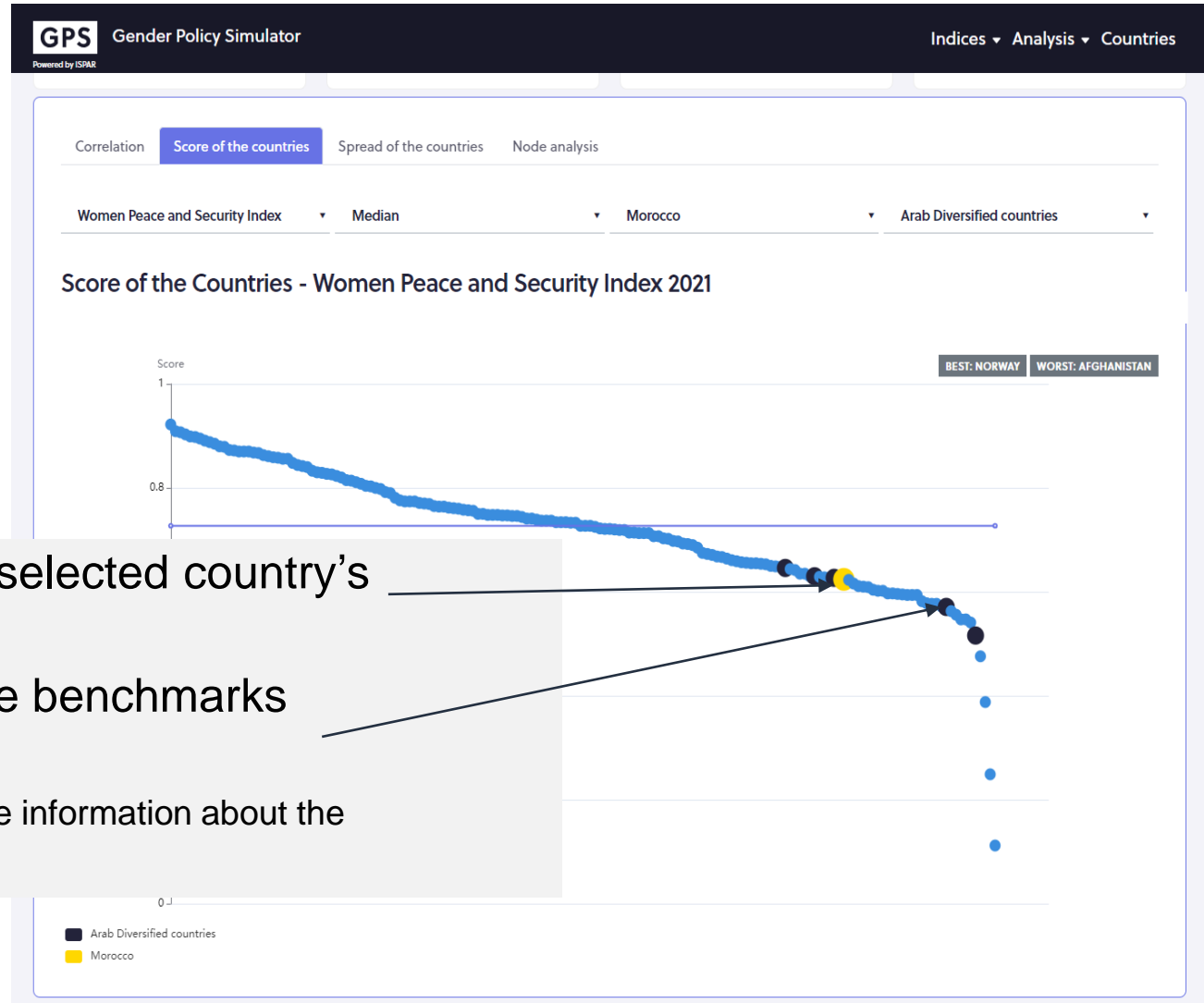
A benchmark group

The line indicate the performance for which half countries perform better, and half perform less well

The dot is the selected country's performance

Scroll over the dots and a line will appear, making it easier to read

Quick visualization of performances



The **yellow dot** is the selected country's performance

The **black dots** are the benchmark performances

Scroll over the dots to get more information about the benchmark's performances

Quick visualization of performances



Now click on 'Spread of the countries'

Select

The index of interest

A country

A benchmark group

The **yellow** dot is the selected country's performance

The **black** dots are the selected country's performance

Scroll over the yellow dots and a line will appear, making it easier to read, scroll over the dots to get more information on the benchmarks' performances

The dimensions of the index appear on the x axis

Let's summarize what we have seen

1. **How to generate a profile and compare our performances to other countries'**
2. **How to carry simulations and how the methodology used calls for a certain type of strategy**
3. **And how to use the platform to develop a short, medium and long-term strategy depending on the nature of the obstacles**
4. **How Composite Indices are linked together, hence the need to use Indices beyond the ones focusing on gender to evaluate potential for cooperation and trickledown effects**

What else the platform can help with?

As a same KPIs appear in more than one index, there is a need to understand interlinkages to get a full picture of the impact of gender policies on rankings




The Thematic simulators

only redundancy of KPIs plays a role in the country's performance improvement across indices

GPS Gender Policy Simulator Indices ▾ Analysis ▾ Countries
Powered by ISPAR


Gender Policy Simulator

The Gender Policy Simulator (GPS) platform offers a set of tools for identifying the most suitable policies for a comprehensive approach to ensuring sustainable improvements towards gender equality.




Gender Indices

Learn more about selected gender indices and access the ESCWA Gender Indices Simulator.




Gender-Related Indices

Assess the relationships and monitor the impacts gender policies can have on boosting country rankings in a large set of gender-related international indices.



Gender Analysis

Analyse the relationships between and impacts of selected gender policies on a large set of international indices and on countries' macroeconomic performances.



Gender Initiatives

Discover gender-related initiatives and relevant areas of work at ESCWA.

Simulations

Go to

<https://gender.unescwa.org>

Click on ‘Gender-related Indices’

The Gender Simulator

This simulator is for advanced users who have an understanding of the [indices](#) and have reviewed their [country's ranking](#) in those indices. The Index Simulator allows you to imagine how a change in your country's performance in an index KPI would alter its overall ranking, and to select other countries for comparison.

The tool is ready

[Go to the index simulator →](#)

Morocco ▾

- Algeria
- Bahrain
- Comoros
- Djibouti
- Egypt

Gender ▾

Select a Theme ▾

Selected your country

The theme is preselected (gender)


Selected a sub-theme

Thematic Simulators

GPS Gender Policy Simulator
Powered by ISPAR

Indices ▾ Analysis ▾ Countries
[Go to the Index simulator →](#)

Morocco ▾ Gender ▾ Education ▾

 **Country description**
Morocco is a lower middle income country. It has a [GDP per capita](#) of around 3.82 Thousand USD (2021) and [HDI](#) value of 0.68 (2021)

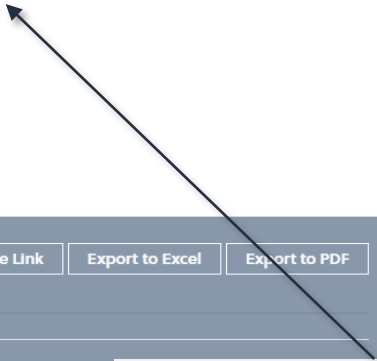
Results for Morocco Save to profile Shareable Link Export to Excel Export to PDF

| | Rank | Score | Simulated Rank |
|---------------------------------------|------|-------|----------------|
| Global Gender Gap Index (2022) | 136 | 0.62 | |
| ICT Development Index (2017) | 100 | 4.77 | |
| Network Readiness Index (2021) | 81 | 46.06 | |
| E-Government Development Index (2022) | 101 | 0.59 | |
| Women Peace and Security Index (2021) | 138 | 0.62 | |

Comparison benchmarks

Country benchmarks ▾ Multinational benchmarks ▾

Compare to: [Income Group](#) [Region](#)

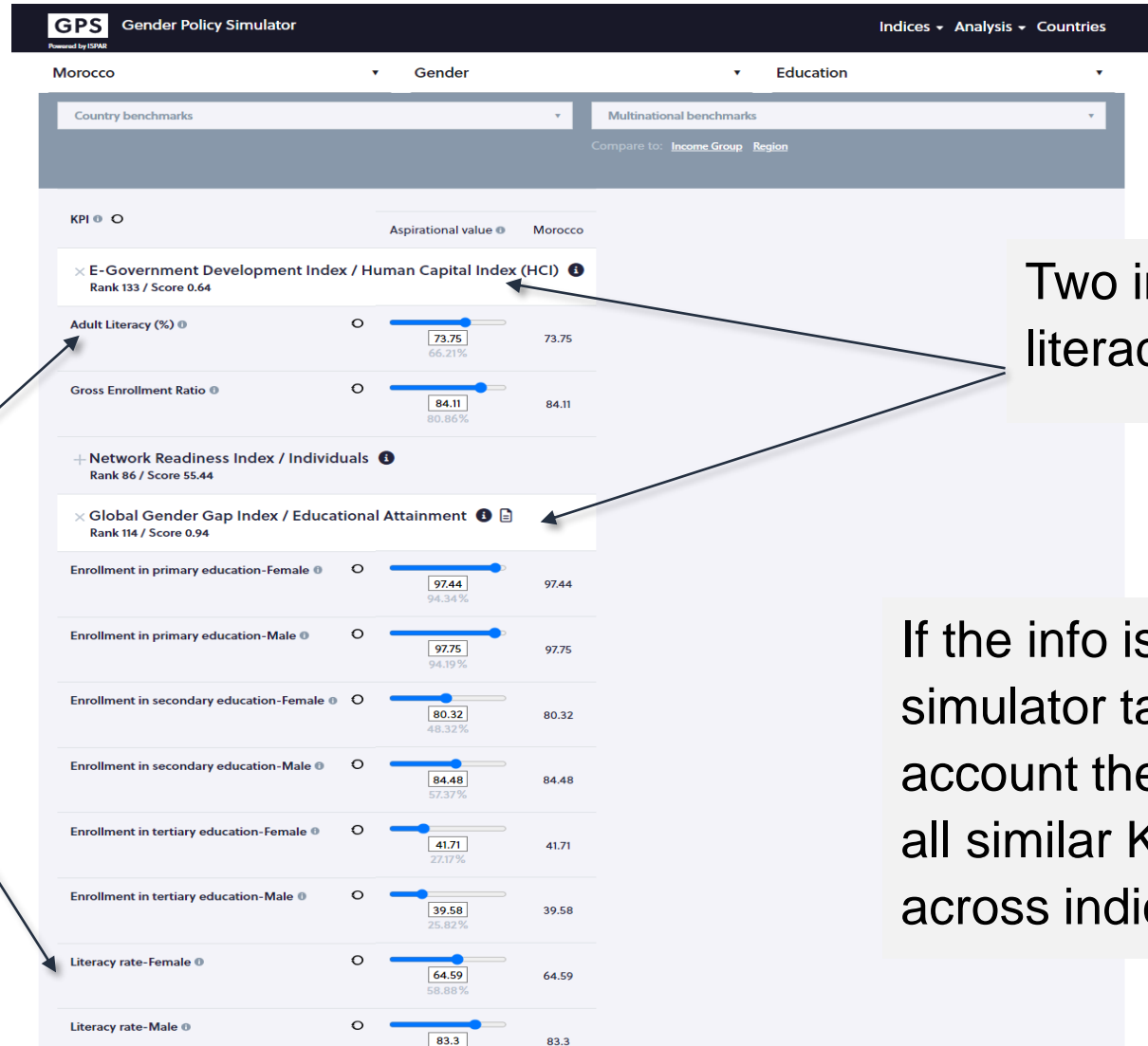


Chose a sub-theme (education)

View indices that use education engendered or not KPIs



Thematic Simulators



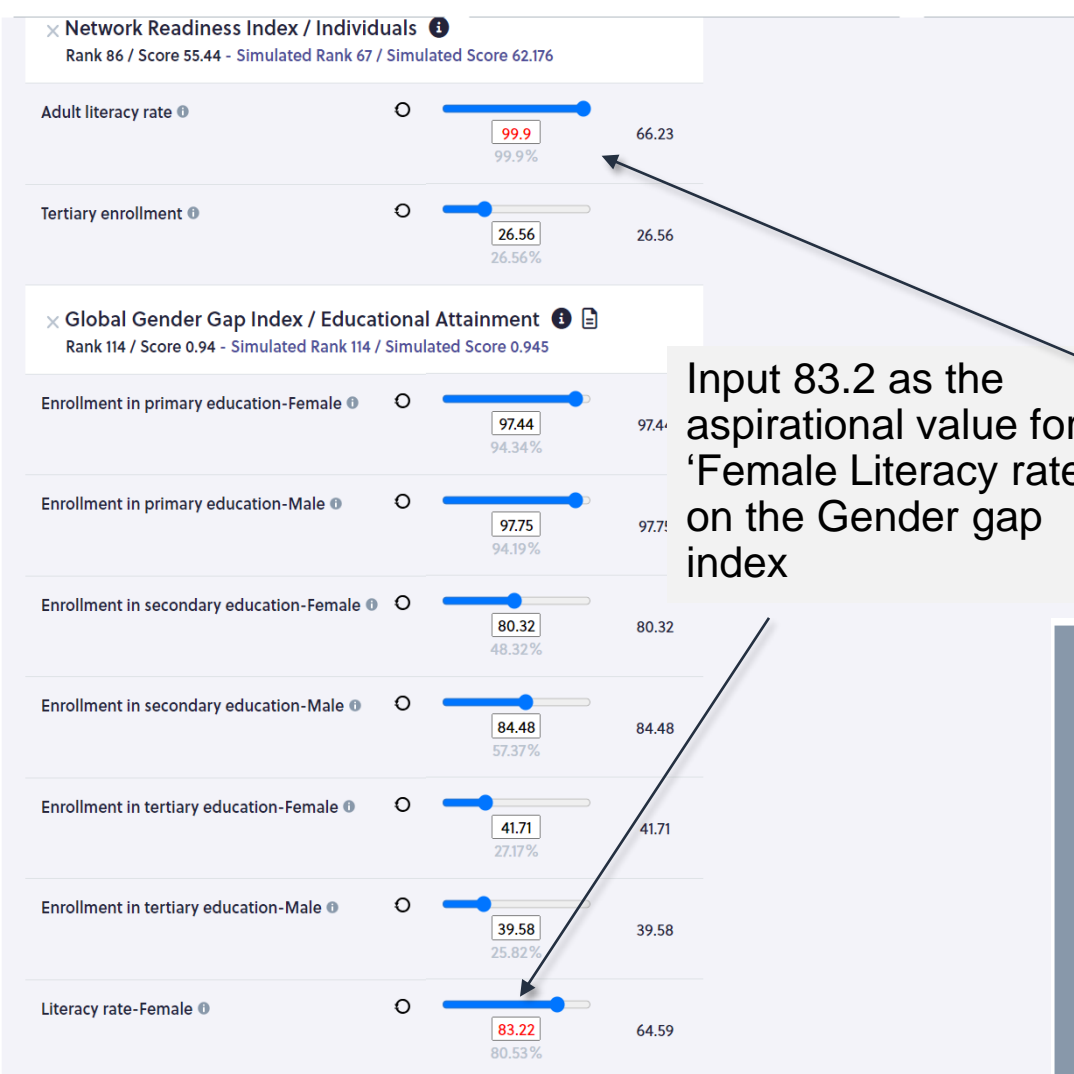
One engendered, the other not

Two indices use literacy rate.

If the info is available the simulator takes into account the impact across all similar KPIS, hence across indices

Thematic Simulators

Morocco Gender Education



Input 83.2 as the aspirational value for 'Female Literacy rate' on the Gender gap index

Changes will be made here and here

The impact of the policy across indices is

Results for Morocco

Save to profile Shareable link Export to Excel Export to PDF

| | Rank | Score | Simulated Rank | Simulated Score |
|---------------------------------------|------|-------|----------------|-----------------|
| Global Gender Gap Index (2022) | 136 | 0.62 | 102 | 0.68 |
| ICT Development Index (2017) | 100 | 4.77 | | |
| Network Readiness Index (2021) | 81 | 46.06 | 79 | 46.62 |
| E-Government Development Index (2022) | 101 | 0.59 | 96 | 0.63 |
| Women Peace and Security Index (2021) | 138 | 0.62 | | |

Thematic Simulators

The screenshot shows the GPS interface for Morocco. The main navigation bar includes 'Indices', 'Analysis', and 'Countries'. The selected country is Morocco, the theme is Gender, and the sub-theme is Economic opportunities. A callout box points to the 'Economic opportunities: Getting a Job' dropdown menu, stating 'Chose a sub-theme (education)'. Another callout box points to the 'Gender' dropdown menu, stating 'Select a theme (gender)'. A third callout box points to the table of results, stating 'All indices using KPIs related to getting a job'. A fourth callout box points to the table, stating 'In order to develop a comprehensive strategy related to women economic opportunities several elements must be covered and are listed under the sub-theme'. The table shows the following data:

| | Rank | Score | Simulated Rank | Simulated Score |
|---|------|-------|----------------|-----------------|
| Global Gender Gap Index (2022) | 136 | 0.62 | | |
| Global Innovation Index (2022) | 67 | 28.8 | | |
| Global Competitiveness Index (2020) | 75 | 60.01 | | |
| Women Business and the Law index (2023) | 118 | 75.62 | | |
| Women Peace and Security Index (2021) | 138 | 0.62 | | |

Select a theme (gender)

Chose a sub-theme (education)

All indices using KPIs related to getting a job

In order to develop a comprehensive strategy related to women economic opportunities several elements must be covered and are listed under the sub-theme

What did we learn in this session so far?

As a same KPIs appear in more than one index, there is a need to understand interlinkages to get a full picture of the impact of gender policies on rankings

On the thematic simulators, only redundancy of KPIs plays a role in the country's performance improvement across indices

BUT do not forget to **take a look at** the correlations and the performance improvement due to **the indirect impact of policy changes across indices**

And what about policy recommendations?

As Morocco performances are compared to more than 140 other countries, a policymaking tool should provide policy recommendations, lessons learnt and other countries experience regarding the dos and don'ts. So, where to find them on GPS or ISPAR?


The Global Gender Gap Index

Morocco Global Gender Gap Index

Country description
Morocco is a lower middle income country. It has a [GDP per capita](#) of around 3.82 Thousand USD (2021) and [HDI](#) value of 0.68 (2021)

Index description
Gender parity has a fundamental bearing on whether or not economies and societies thrive. Developing and deploying one-half of the world's available talent has a huge bearing on the growth, competitiveness and future-readiness of economies and businesses worldwide.

[Learn more about the Global Gender Gap Index](#)

Policy recommendations can be found by clicking on the icon 

Results for Morocco [Save to profile](#) [Shareable Link](#) [Export to Excel](#) [Export to PDF](#)









| | 2019 | 2021 | 2022 | Simulator projection |
|-------|------|------|------|----------------------|
| Rank | 143 | 144 | 136 | |
| Score | 0.6 | 0.61 | 0.62 | |

Comparison benchmarks

Country benchmarks Multinational benchmarks

Compare to: [Top 3 in Income Group](#) [Top 3 in Region](#) Compare to: [Income Group](#) [Region](#)

2022

| KPI | Aspirational value | | | Morocco | | | |
|--|--------------------|------|-------|---------|------|-------|---|
| | Female | Male | Ratio | Female | Male | Ratio | |
| + Economic Participation and Opportunity | | | | | | |   |
| Rank 139 / Score 0.45 | | | | | | | |
| + Educational Attainment | | | | | | |   |
| Rank 114 / Score 0.94 | | | | | | | |
| + Health and Survival | | | | | | |   |
| Rank 131 / Score 0.96 | | | | | | | |
| + Political Empowerment | | | | | | |   |
| Rank 99 / Score 0.14 | | | | | | | |

Index Global Highlights

Global

Group your Countries

Simple Average

Global Details

| | |
|-----------------------------------|---------------------|
| Global Average | 0.71 |
| Developed Economies Average | 0.76 |
| Developing Economies Average | 0.69 |
| Highest Ranked Country | Country Iceland |
| | Score 0.91 |
| | Global Rank 1 |
| Lowest Ranked Country | Country Afghanistan |
| | Score 0.44 |
| | Global Rank 146 |
| Highest Ranked Developed Country | Country Iceland |
| | Score 0.91 |
| | Global Rank 1 |
| Lowest Ranked Developed Country | Country Japan |
| | Score 0.65 |
| | Global Rank 116 |
| Highest Ranked Developing Country | Country Rwanda |
| | Score 0.81 |
| | Global Rank 6 |

What else the platform can help with?

1. As a same KPIs appear in more than one index, there is a need to understand interlinkages to get a full picture of the impact of gender policies on rankings
2. How to learn from other countries experience?
3. How to evaluate the impact of an improvement on a ranking on end developmental goals?

Understand and evaluate spillover effects

Under the tab 'Analyses'

Correlations

- Correlation between all Indices
- WEO Correlation
- Correlation by Theme

Network chart

Score of the Countries

Spread of the countries

Correlation Matrix - WEO

| | Volume of imports of goods and services | Volume of exports of goods and services | Current account balance | Employment | Unemployment rate | General government revenue | General government total expenditure | General government gross debt | Gross domestic product per capita, current | Gross domestic product per capita, constant | Output gap in percent of potential GDP | Gross national savings | Total investment | Inflation, end of period consumer prices |
|----------------------------------|---|---|-------------------------|------------|-------------------|----------------------------|--------------------------------------|-------------------------------|--|---|--|------------------------|------------------|--|
| Women Peace and Security Index | 0.25 | -0.01 | 0.05 | -0.07 | -0.33 | -0.04 | -0.04 | -0.03 | -0.03 | 0.4 | 0.24 | -0.04 | 0.01 | |
| Women Business and the Law index | 0.29 | 0.04 | 0.01 | -0.18 | -0.2 | -0.13 | -0.14 | -0.11 | -0.11 | 0.09 | 0.06 | -0.11 | 0.02 | |
| Open Data Policies | 0.16 | -0.03 | 0.03 | 0.21 | -0.29 | 0.13 | 0.08 | 0.13 | 0.08 | 0.13 | 0.2 | 0.06 | 0.02 | |
| Open Data Inventory Index | 0.23 | -0.05 | 0.05 | 0.06 | -0.19 | 0 | -0.01 | -0.02 | -0.02 | -0.01 | 0.18 | 0.2 | 0.02 | |
| Network Readiness Index | 0.16 | 0.07 | 0.07 | 0.32 | -0.35 | -0.01 | -0.02 | -0.02 | -0.02 | -0.02 | 0.32 | 0.2 | 0.02 | |
| ICT Development Index | 0.17 | 0.05 | 0.07 | 0.17 | -0.34 | 0.01 | 0 | 0.01 | 0.01 | 0.01 | 0.41 | 0.2 | 0.02 | |
| Human Development Index | 0.26 | 0.07 | 0.07 | 0.07 | -0.4 | 0.02 | 0.02 | 0.02 | 0.02 | 0.03 | 0.4 | 0.2 | 0.02 | |
| Human Capital Index | 0.25 | 0.09 | 0.09 | -0.09 | -0.51 | 0.03 | 0.03 | 0.02 | 0.02 | 0.04 | 0.28 | 0.2 | 0.02 | |
| Globalization Index | 0.15 | 0.15 | 0.06 | -0.4 | -0.24 | -0.08 | -0.08 | -0.09 | -0.07 | -0.07 | 0.26 | 0.2 | 0.02 | |
| Global Knowledge Index | 0.24 | 0.1 | 0.06 | 0.2 | -0.46 | -0.02 | -0.03 | -0.03 | -0.03 | -0.02 | 0.54 | 0.2 | 0.02 | |
| Global Innovation Index | 0.18 | 0.06 | 0.07 | 0.36 | -0.34 | 0 | -0.01 | -0.01 | -0.01 | 0 | 0.27 | 0.2 | 0.02 | |
| Global Gender Gap Index | 0.15 | 0.05 | 0 | -0.15 | -0.06 | -0.11 | -0.11 | -0.12 | -0.09 | -0.1 | 0.26 | 0.2 | 0.02 | |
| Global Cybersecurity Index | 0.2 | -0.06 | 0.06 | 0.25 | -0.22 | 0.09 | 0.08 | 0.07 | 0.05 | 0.28 | -0.34 | 0.2 | 0.02 | |
| Global Competitiveness Index | 0.21 | 0.07 | 0.09 | 0.39 | -0.34 | -0.01 | -0.02 | -0.02 | -0.03 | -0.02 | 0.19 | 0.2 | 0.02 | |
| Food Security Index | 0.33 | 0.08 | 0.07 | 0.14 | -0.46 | 0.01 | 0 | 0.01 | -0.01 | 0 | 0.37 | 0.2 | 0.02 | |
| Financial Inclusiveness Index | 0.15 | -0.01 | 0.06 | 0.33 | -0.32 | 0 | 0.01 | 0.01 | 0 | 0.3 | 0.3 | 0.2 | 0.02 | |
| DI Restrictiveness Index | 0.05 | 0.43 | 0.03 | 0.07 | -0.14 | 0.16 | 0.23 | 0.08 | 0.1 | 0.16 | 0.1 | 0.2 | 0.02 | |
| E-Participation Index | 0.37 | -0.01 | 0.04 | 0.31 | -0.37 | 0.02 | 0.01 | 0 | -0.01 | 0.02 | 0.28 | 0.2 | 0.02 | |
| Government Development Index | 0.3 | 0.01 | 0.06 | 0.22 | -0.42 | 0.03 | 0.03 | 0.02 | 0.02 | 0.04 | 0.38 | 0.2 | 0.02 | |
| Doing Business Index | 0.26 | -0.02 | 0.06 | 0.22 | -0.34 | 0.01 | 0.01 | -0.01 | -0.01 | 0.01 | 0.41 | 0.2 | 0.02 | |
| Accessibility Rights Evaluation | 0.24 | -0.16 | 0 | 0.14 | -0.05 | 0.02 | 0.02 | -0.03 | -0.04 | -0.05 | 0.23 | -0.16 | 0.1 | |
| Development Challenges Index | -0.23 | -0.01 | -0.06 | -0.01 | 0.28 | 0.02 | 0.02 | 0.03 | 0.02 | -0.23 | -0.23 | 0.07 | 0.01 | |
| B2C E-Commerce Index | 0.25 | 0.05 | 0.07 | 0.22 | -0.39 | 0.04 | 0.04 | 0.04 | 0.05 | 0.28 | 0.36 | 0.01 | 0.02 | |
| AI Readiness Index | 0.23 | -0.01 | 0.07 | 0.54 | -0.4 | 0.03 | 0.02 | 0.01 | 0 | 0.02 | 0.27 | 0.38 | 0.01 | 0.04 |

■ Strong negative correlation
 ■ Mild negative correlation
 ■ Weak correlation
 ■ Mild positive correlation
 ■ Strong positive correlation

Correlations measure how closely indices move together, hence the spillover effects

Under 'Correlations' select 'WEO Correlations'

Correlations of indices and macroeconomic outcomes

Correlation is a statistical measure that describes the relationship between two indices. A positive correlation means that both indices are increasing or decreasing in parallel. A negative correlation indicates that when a country's performance improves on one index it worsens on the other. The relation is strong if the correlation coefficient is greater than 0.7 (smaller than -0.7). It is mild if the coefficient is between 0.4 and 0.7 (or -0.7 and -0.4). Correlation coefficients, that appear on the table, can be used to assess how performances across indices tend to be linked to each other.

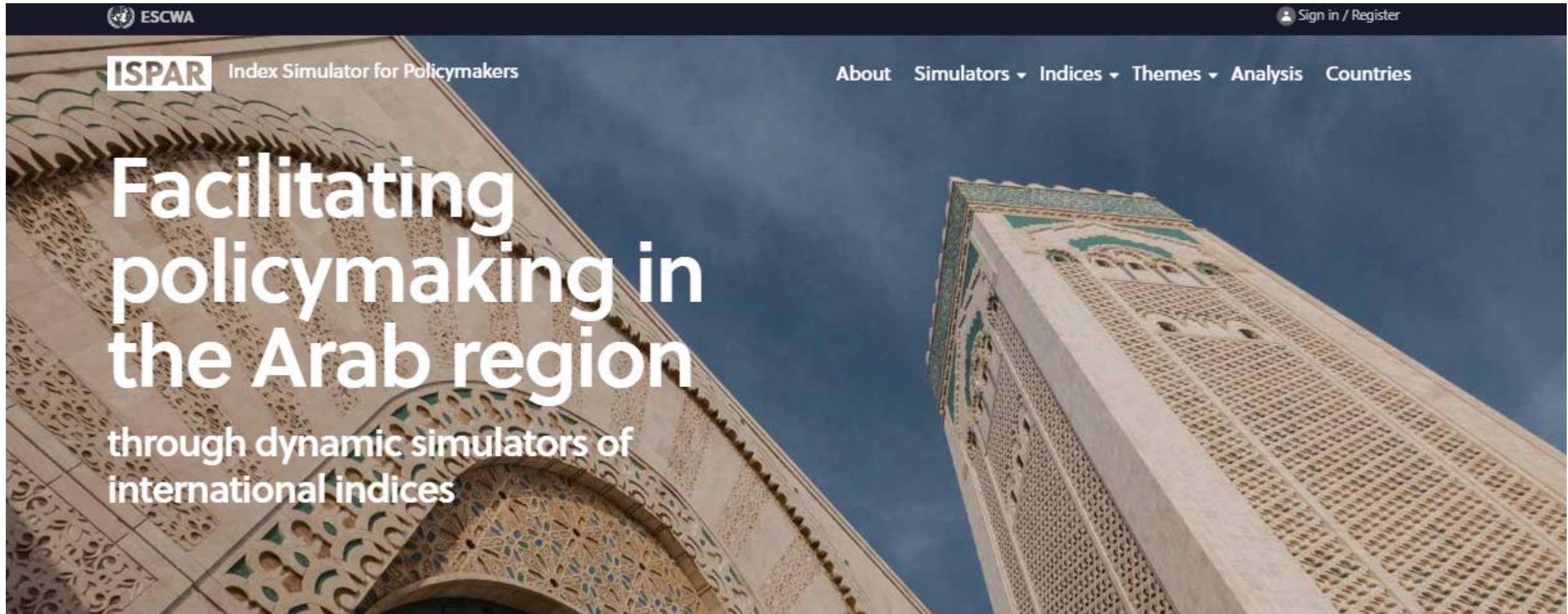
However, correlation must not be confused with causality. If two indices/indicators are correlated, it does not imply that one index/indicator causes the changes in another one. Correlation only assesses relationships between indices/indicators, and different factors may lead to the relationships. Causation may be a reason for the correlation, but it is not the only possible explanation.

Build your own scenario

Thanks for your time
[Nathalie GRAND_grand@un.org](mailto:Nathalie.GRAND_grand@un.org)
request.unescwa.org

Nadya Khalife
Nadya.khalife@unescwa.org

Thank you for your time!

The image shows a screenshot of the ISPAR website. The background is a low-angle photograph of a tall, ornate minaret with intricate geometric and floral patterns, set against a clear blue sky. The website's header is dark, featuring the ESCWA logo on the left and a 'Sign in / Register' link on the right. Below the header, the 'ISPAR Index Simulator for Policymakers' logo is on the left, and a navigation menu with links for 'About', 'Simulators', 'Indices', 'Themes', 'Analysis', and 'Countries' is on the right. The main content area contains the title 'Facilitating policymaking in the Arab region' in large white text, with the subtitle 'through dynamic simulators of international indices' below it.

ESCWA

Sign in / Register

ISPAR Index Simulator for Policymakers

About Simulators ▾ Indices ▾ Themes ▾ Analysis Countries

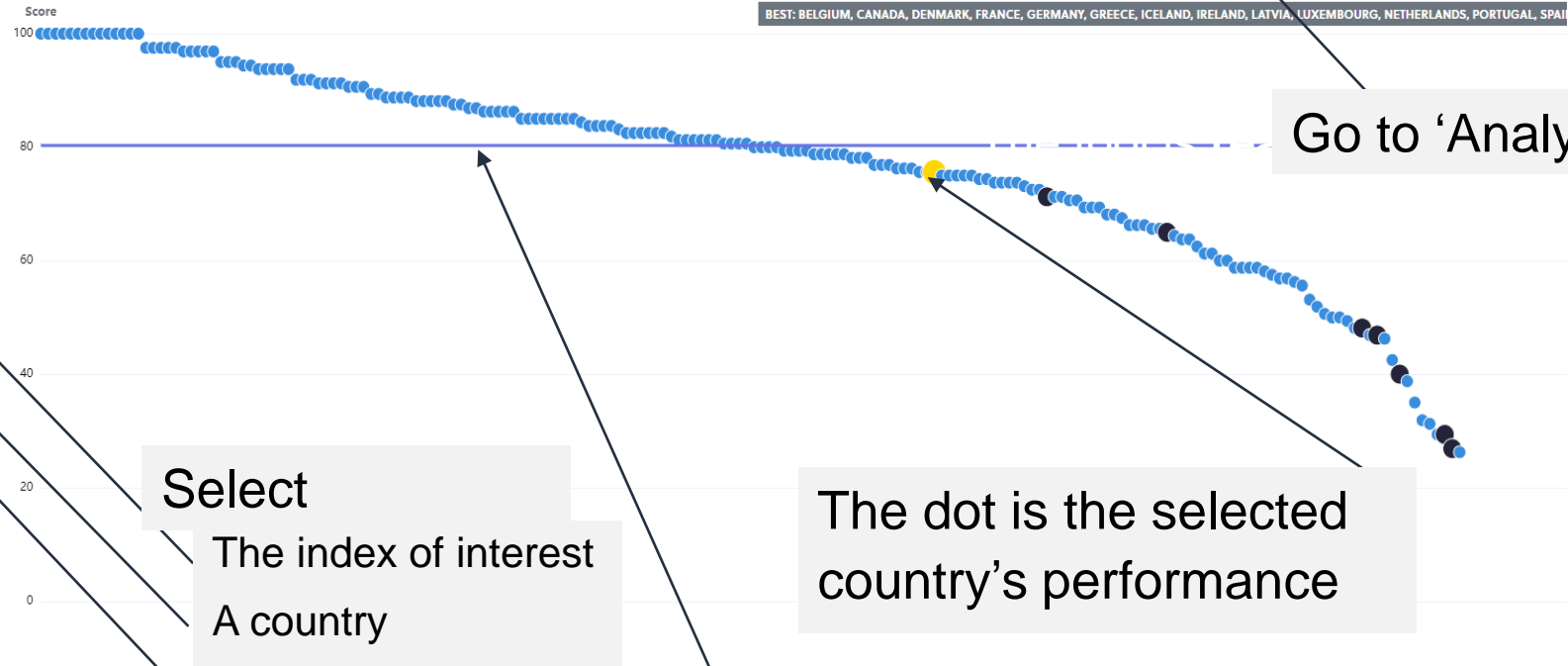
Facilitating policymaking in the Arab region

through dynamic simulators of
international indices

Quick visualization of performances

- Correlations
- Network chart
- Score of the Countries
 - Women Business and the Law index
 - Median
 - Morocco
 - Arab LDC
- Spread of the Countries
- KPIs Trend

Score of the Countries - Women Business and the Law index 2023



Go to 'Analysis'

Click on 'Score of the countries'

Select

- The index of interest
- A country
- A benchmark group

The dot is the selected country's performance

The line indicate the performance for which half countries perform better, and half perform less well

Quick visualization of performances



Go to 'Analysis'

Click on 'Spread of the countries'

Select
The index of interest
A country
A benchmark group

Horizontal axis :
dimensions of the index.
Vertical axes: countries
performances

The dot is the selected country's
performance
Scroll over the dots and a line will appear, making
it easier to read