

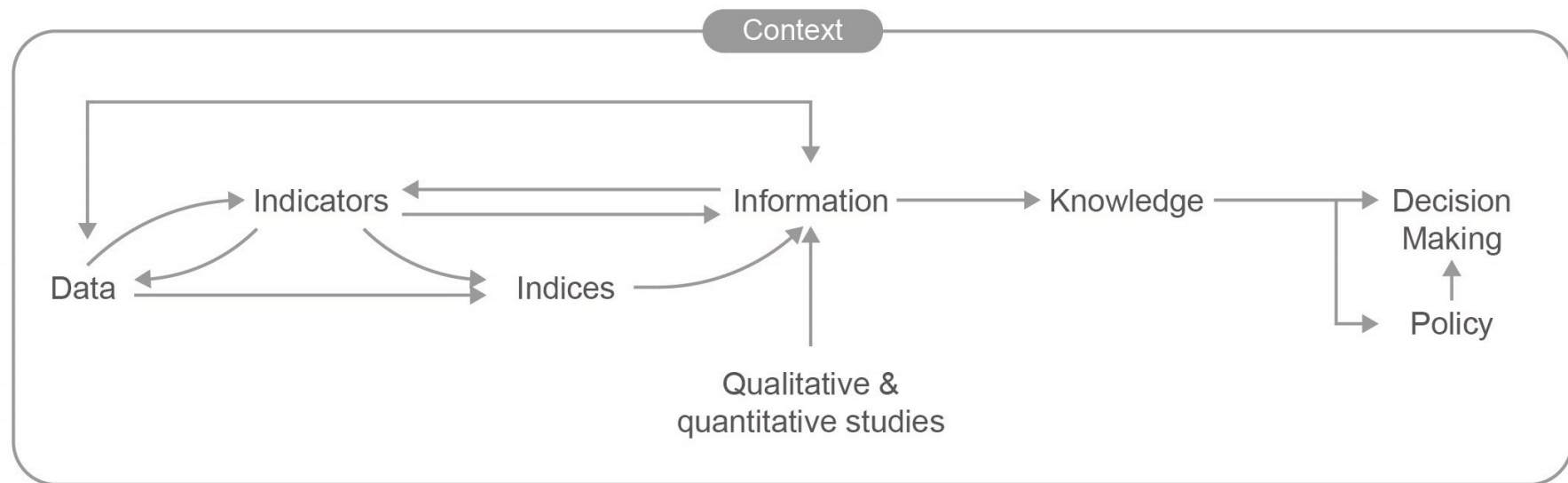


A tool to explore nexus interactions



<https://wef-tools.un-ihe.org/home>





What is an indicator?

“... an indicator is a **quantitative or a qualitative measure derived from a series of observed facts that can reveal relative positions** (e.g. of a country) in a given area.

When evaluated at regular intervals, an indicator can point out the direction of change across different units and through time.”

(OECD/JRC (2008). *Handbook on Constructing Composite Indicators*)

Indicator databases



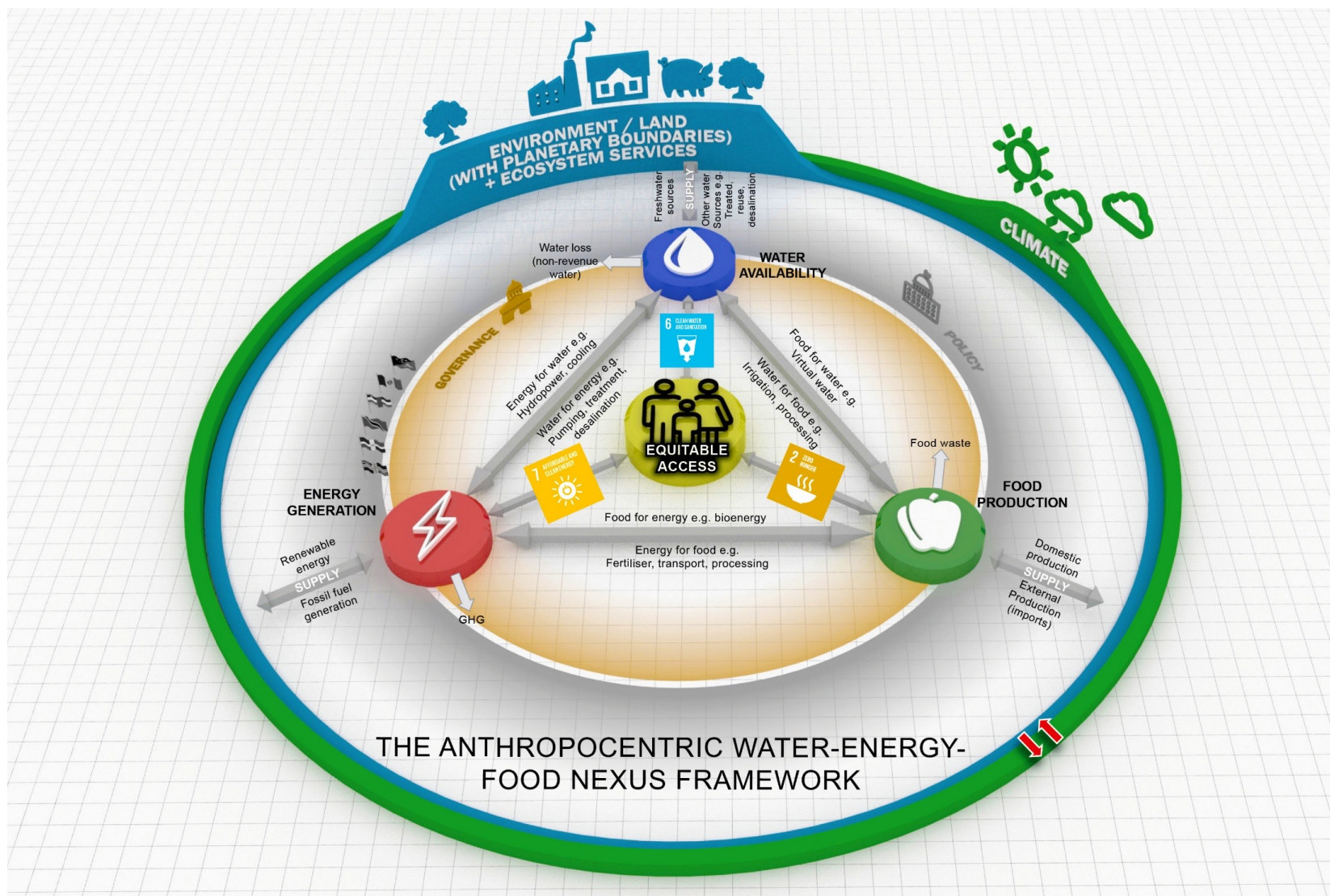
UN Environment-DHI Centre
on Water and Environment



World Health Organization

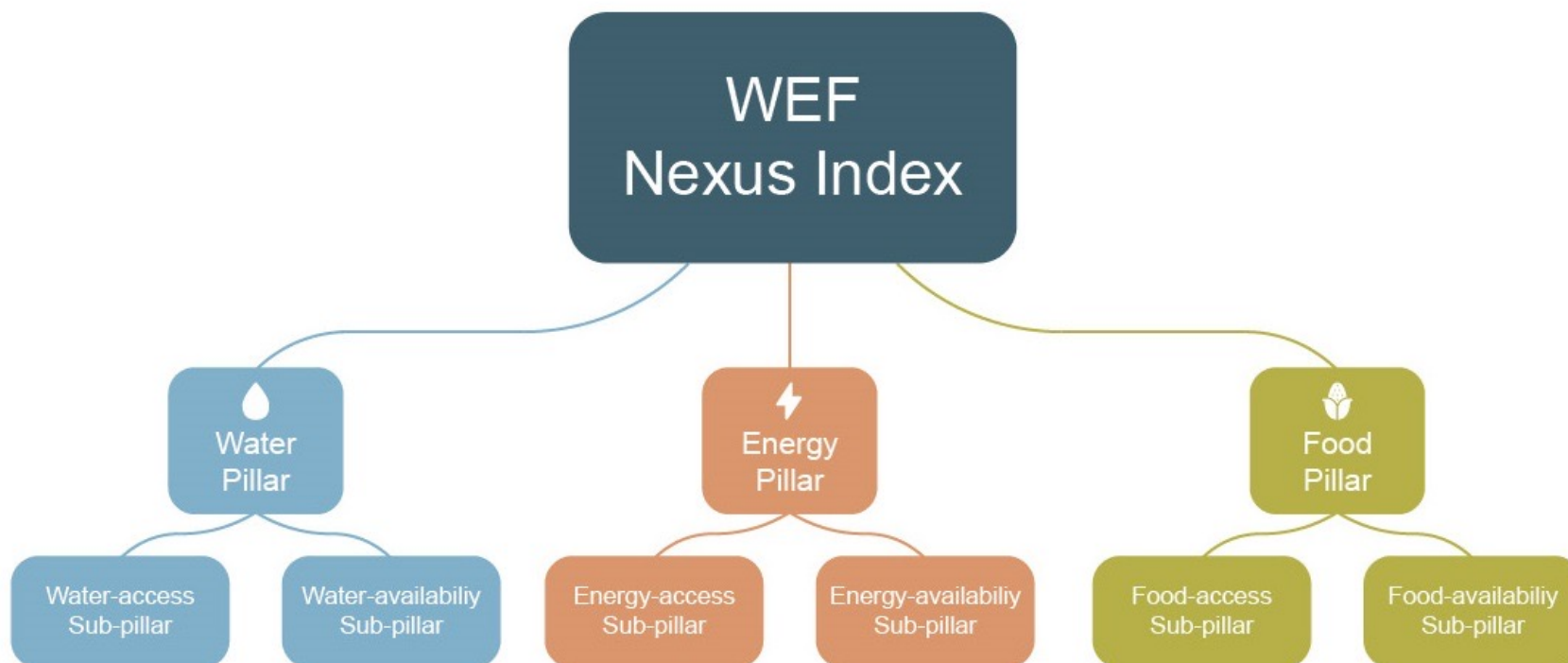
Video





Simpson, Jewitt, Becker, Badenhorst and Neves (2020).
<https://doi.org/10.31219/osf.io/tdhw5>

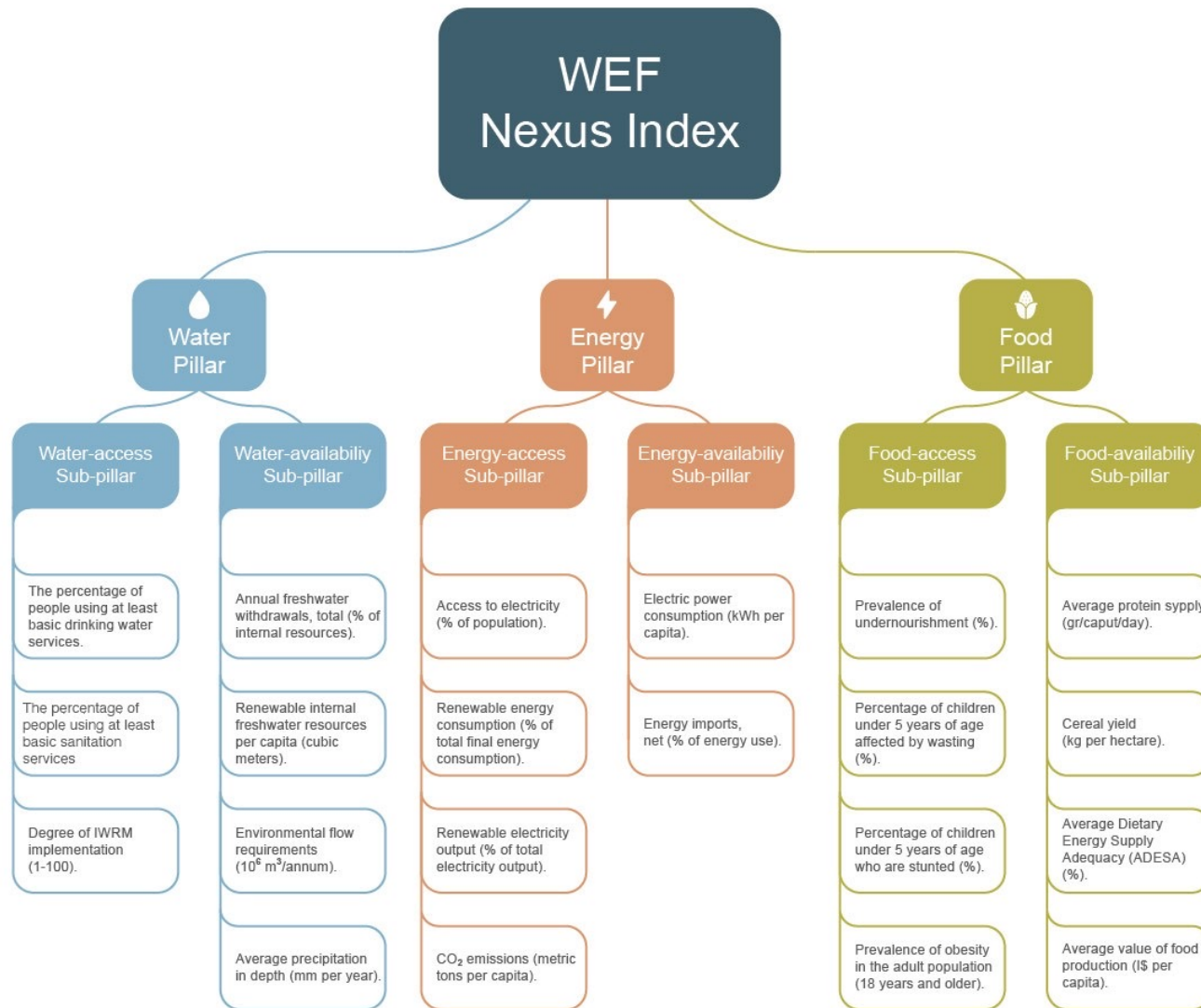




Simpson, Jewitt, Becker, Badenhorst and Neves (2020).

<https://doi.org/10.24018/2474-8675.1000057>





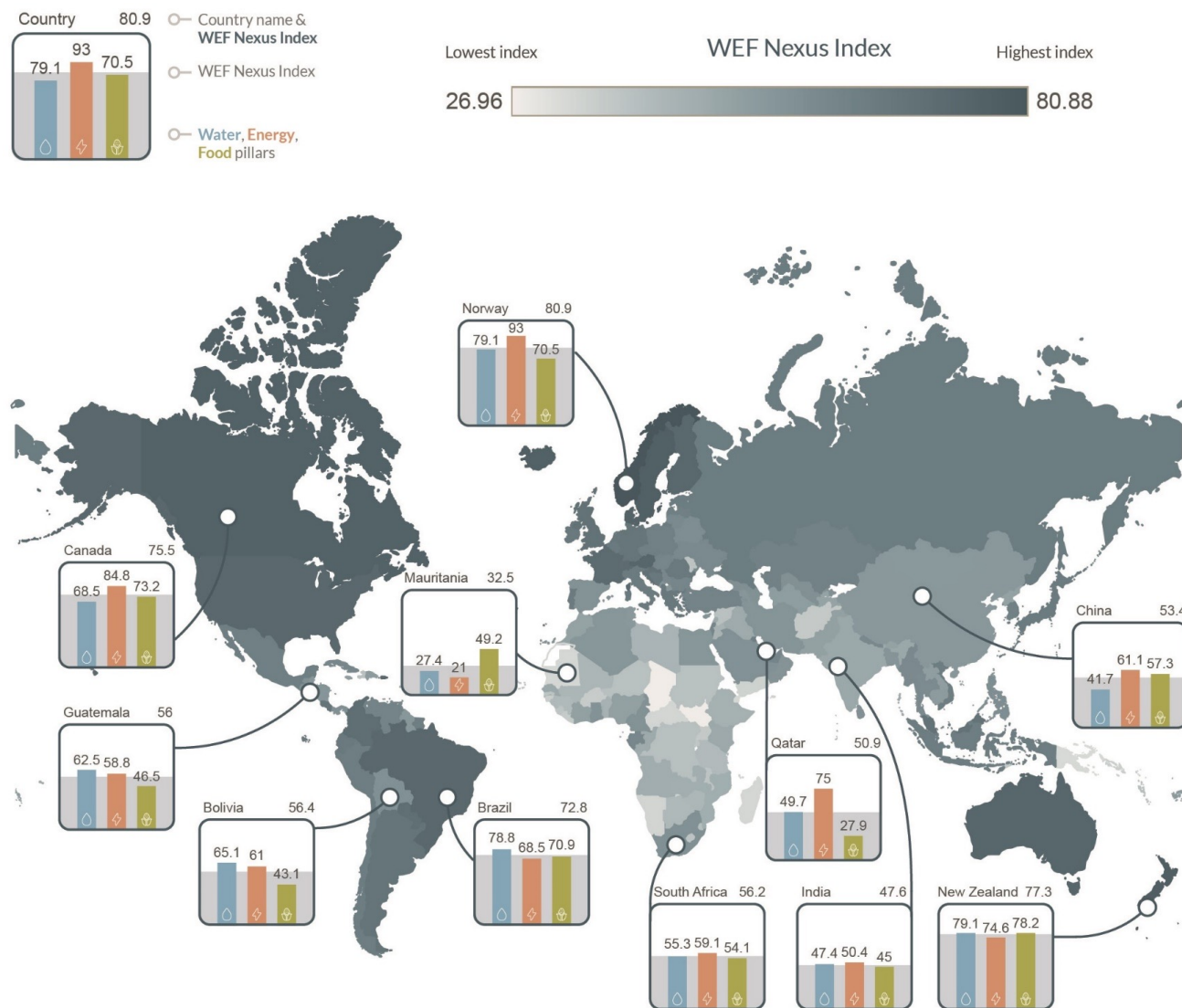
Simpson, Jewitt, Becker, Badenhorst and Neves (2020).

https://doi.org/10.24018/2474-2457.100005

Indicator	Indicator weight in the index	Sub-pillar	Sub-pillar weight in the index	Pillar	Pillar weight in the index
1	0.056	Water- access	$\frac{1}{6}$	Water	$\frac{1}{3}$
2	0.056				
3	0.056				
4	0.042	Water- availability	$\frac{1}{6}$		
5	0.042				
6	0.042				
7	0.042				
8	0.083	Energy- access	$\frac{1}{6}$	Energy	$\frac{1}{3}$
9	0.028				
10	0.028				
11	0.028	Energy- availability	$\frac{1}{6}$		
12	0.083				
13	0.083				
14	0.056	Food- access	$\frac{1}{6}$	Food	$\frac{1}{3}$
15	0.028				
16	0.028				
17	0.056	Food- availability	$\frac{1}{6}$		
18	0.042				
19	0.042				
20	0.042				
21	0.042				

Simpson, Jewitt, Becker, Badenhorst and
Neves (2020).
<https://doi.org/10.31219/osf.io/tdhw5>





Simpson, Jewitt, Becker, Badenhorst and Neves (2020).
<https://doi.org/10.31219/osf.io/tdhw5>



Energy pillar and 43 for the Food pillar.

 Print page

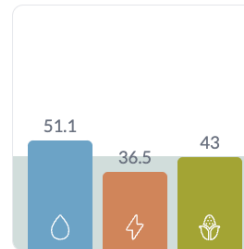
WEF Nexus Index

43.5

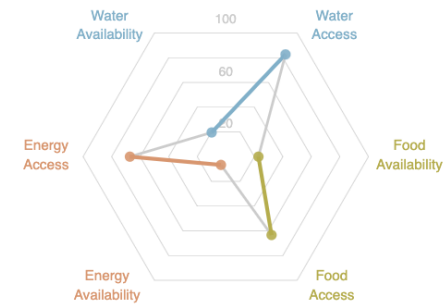
149th world rank in 2022
vs 143rd in 2021



The Index includes three pillars



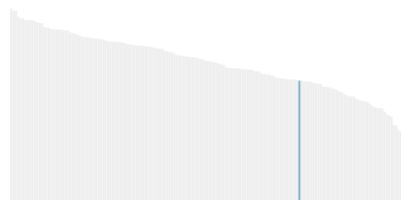
Each pillar includes two sub-pillars



Water pillar

51.1

123rd world rank in 2022
vs 119th in 2021



Access & Availability

Energy pillar

36.5

133rd world rank in 2022
vs 134th in 2021



Access & Availability

Food pillar

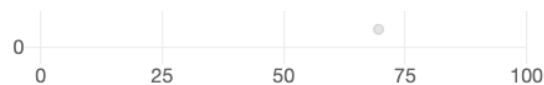
43

135th world rank in 2022
vs 127th in 2021



Access & Availability





Access

Indicator values

Each sub-pillar is composed of relevant indicators

Access

- 01 The percentage of people using at least basic drinking water services (%) 98.9
- 02 The percentage of people using at least basic sanitation services (%) 82.3
- 03 Degree of IWRM implementation (1-100). 70

Availability

- 04 Annual freshwater withdrawals, total (% of internal resources) 132.5
- 05 Renewable internal freshwater resources per capita (m³). 68.4
- 06 Environmental flow requirements (10⁶ m³/annum). 0
- 07 Average precipitation in depth (mm/annum). 111



Access

Indicator values

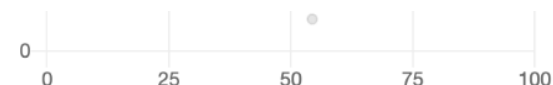
Each sub-pillar is composed of relevant indicators

Access

- 08 Access to electricity (% of population). 99.9
- 09 Renewable energy consumption (% of total final energy consumption). 8.2
- 10 Renewable electricity output (% of total electricity output). 1
- 11 CO₂ emissions (metric tons per capita). 2.4

Availability

- 12 Electric power consumption (kWh/capita). 1,864.9
- 13 Energy imports, net (% of energy use). 96.8



Access

Indicator values

Each sub-pillar is composed of relevant indicators

Access

- 14 Prevalence of undernourishment (%). 9.5
- 15 Percentage of children under 5 years of age affected by wasting (%). -
- 16 Percentage of children under 5 years of age who are stunted (%). 7.3
- 17 Prevalence of obesity in the adult population (18 years and older). 35.5

Availability

- 18 Average protein supply (grams/capita/day). 66.3
- 19 Cereal yield (kg/hectare). 1,506.4
- 20 Average Dietary Energy Supply Adequacy (ADESA) (%). 108
- 21 Average value of food production (I\$/capita). 48

Groups for the Week

1	Rami Jacob Kakish	Jordan
	Nataly AlNimri	Jordan
	Hanaa Mohamed El-Monaieri	Egypt
	Emma Louise Moll	Jordan
	Meriem Soussi	Tunes
	Ghadah Saad Alameri	Iraq
2	Eman Hamada	Jordan
	Ayat Said AlQudah	Jordan
	MUNTASIR ZAID ALKAILANI	Jordan
	Nahla Mohamed Abdelhady	Egypt
	Nishai Moodley	Uganda
	Ghizlane EL MAJDOUBI	Morocco
3	Rashed Manna	Jordan
	Jumana Abdel Aziz Alwadi	Jordan
	Rawan AlQudah	Jordan
	Sawsan Abdul-Jalil	Sudan
	Joseph Nyingi	Kenya
	Nada Essameldin Fathy Barakat	Egypt

Group Work

In your groups:

1. Select a rapporteur.
2. Go to wefnexusindex.org
 - Spend a few minutes exploring the web site.
 - Make sure you look at the trends and correlations tabs too!
3. Select two countries that your group is familiar with:
 - a. Does the WEF nexus index reflect the situation in those country(s)?
 - b. Explain this....
 - E.g. do the indicators reflect your own experience; are the trends reflected correct?
 - c. What other indicators could be useful?
 - d. How could you use this tool?
 - List three aspects of the WEF Nexus that you felt were highlighted by the Index.

Group feedback in plenary – Max 3 slides per group.

Upload presentation to OCW platform