WEF NEXUS Index

A tool to explore nexus interactions

European Commission

COIN

Competence Centre on Composite Indicators and Scoreboards

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

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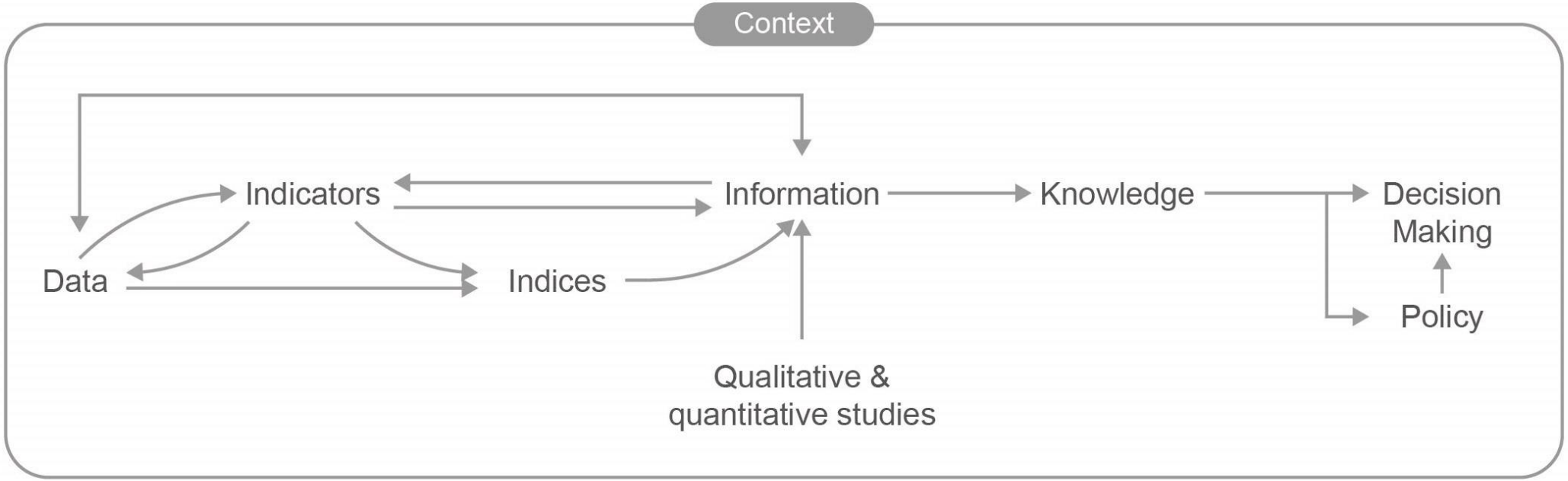


Simpson, Jewitt, Becker, Badenhorst and Neves (2020).
https://doi.org/10.31219/osf.io/tdhw5

What is an indicator?

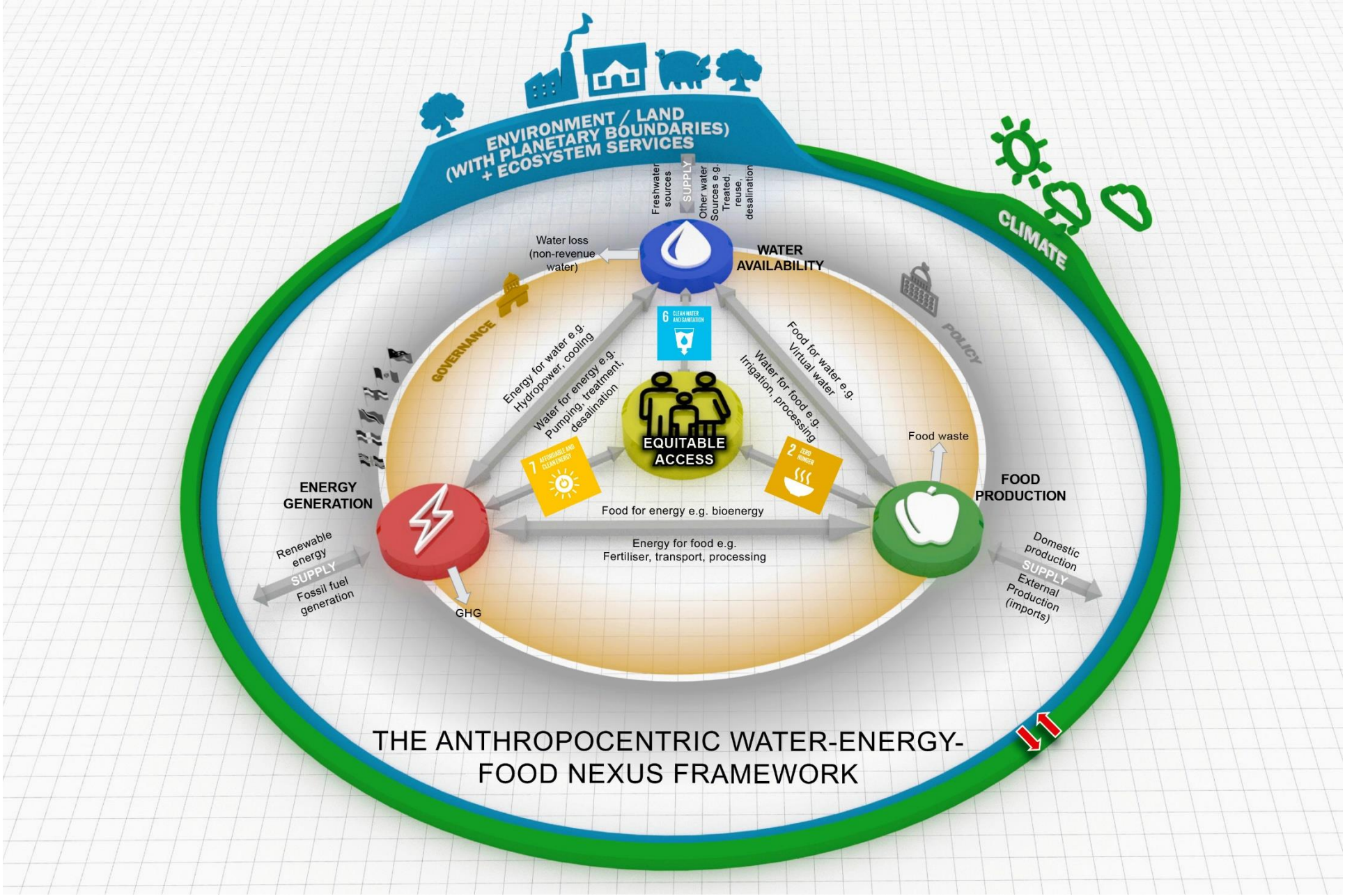
"… an indicator is a **quantitative or a qualitative measure derived from a series of observed facts that can reveal relative positions** (e.g. of a country) in a given area.

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

Video



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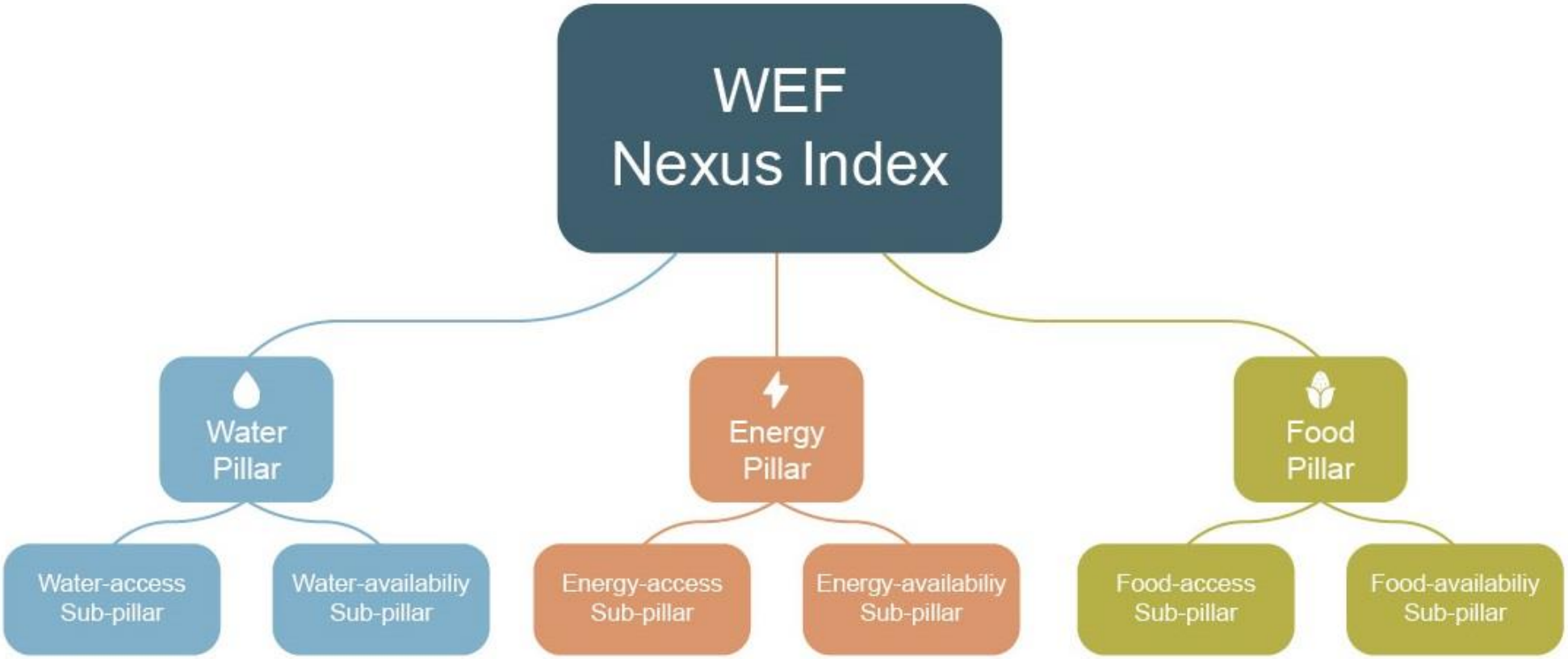

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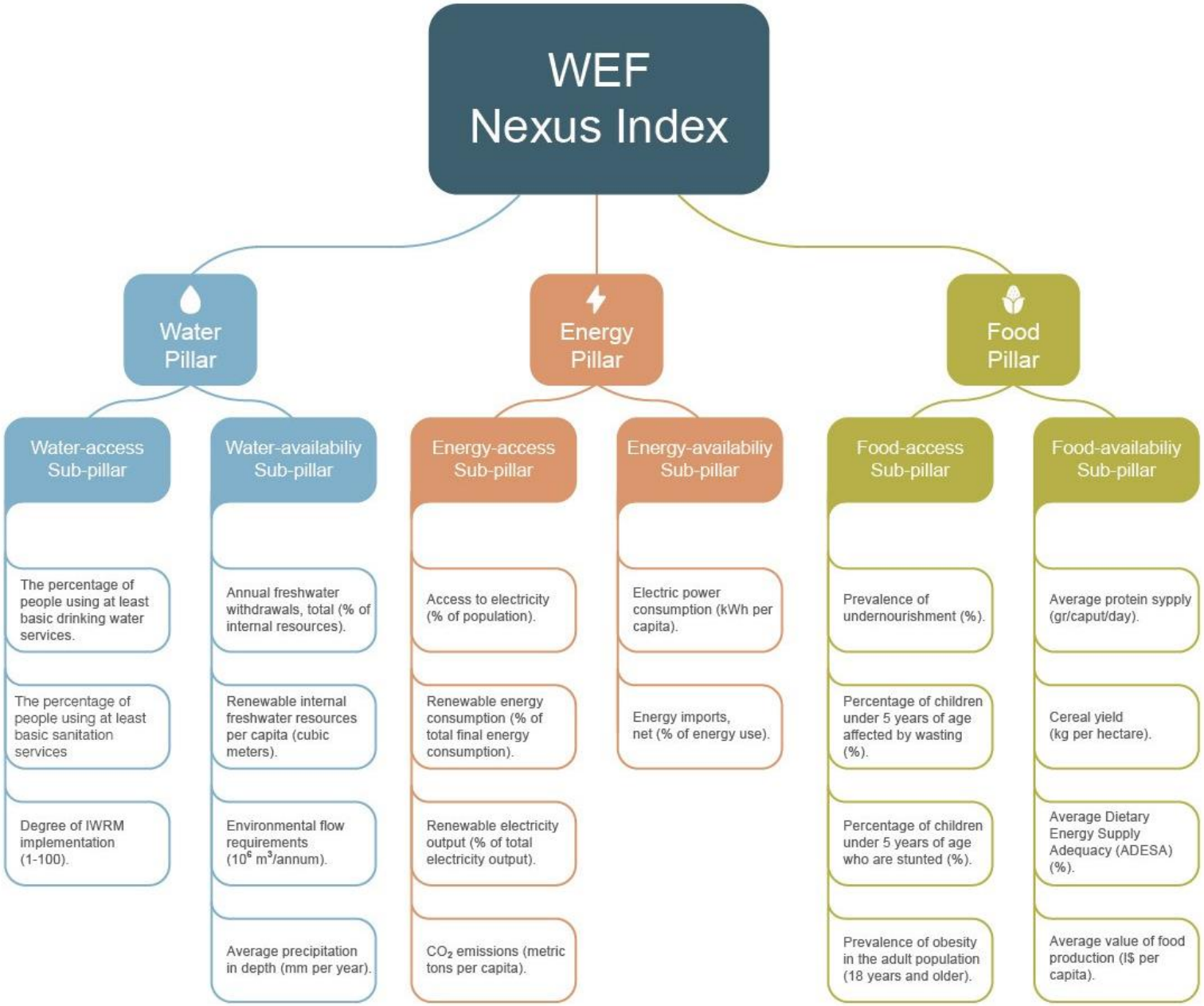

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Indicator	Indicator weight in the index	Sub-pillar	Sub-pillar weight in the index	Pillar	Pillar wieght in the index
1	0.056	Water-access	$\frac{1}{6}$	Water	$\frac{1}{3}$
2	0.056				
3	0.056				
4	0.042	Water-availability	$\frac{1}{6}$		
5	0.042		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

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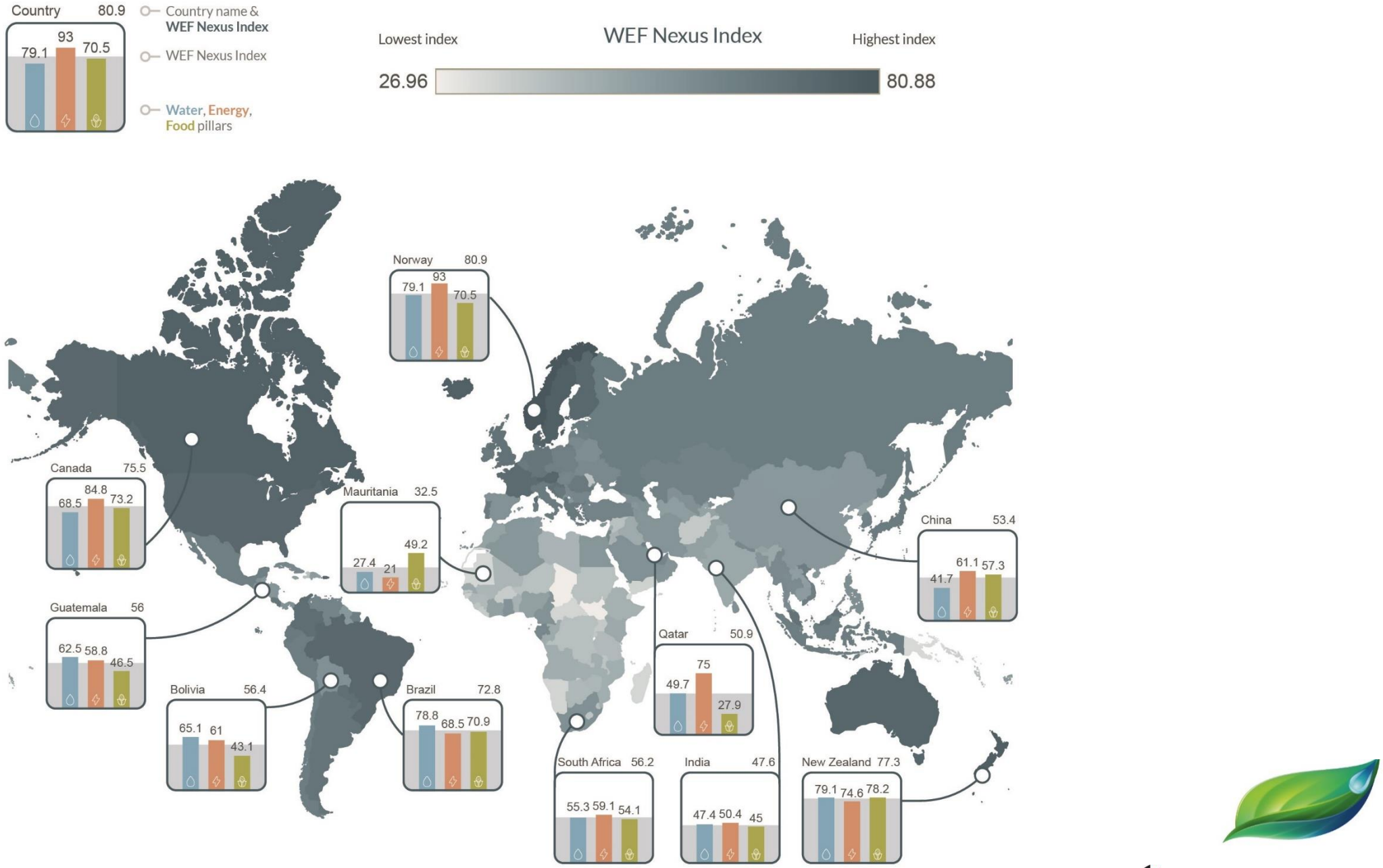

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Jordan in 2022

Energy pillar and **43** for the Food pillar.

Print page

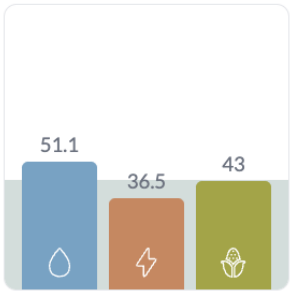
WEF Nexus Index

43.5

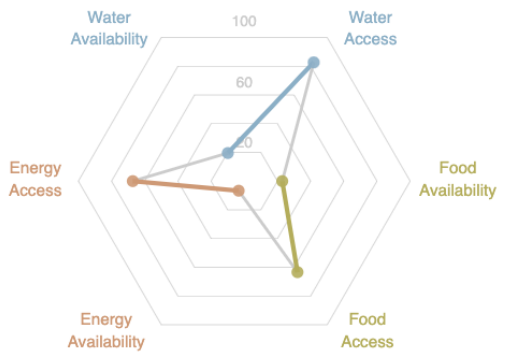
149th world rank in 2022

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

Simpson, Jewitt, Becker, Badenhorst
Neves (2020).
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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 (m^3).	68.4
06	Environmental flow requirements (10^6 m^3/annum).	0
07	Average precipitation in depth (mm/annum).	111

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	CO_2 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

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

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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.