

Impact of weighting of scores

Before calculating an average, e.g. the average score of indicator 12 for 151 countries, one has to consider whether to give all scores an equal weight or to differentiate in the weights. Since the SSI focuses primarily on countries, we have given the score of each country an equal weight, i.e. we have used unweighted scores.

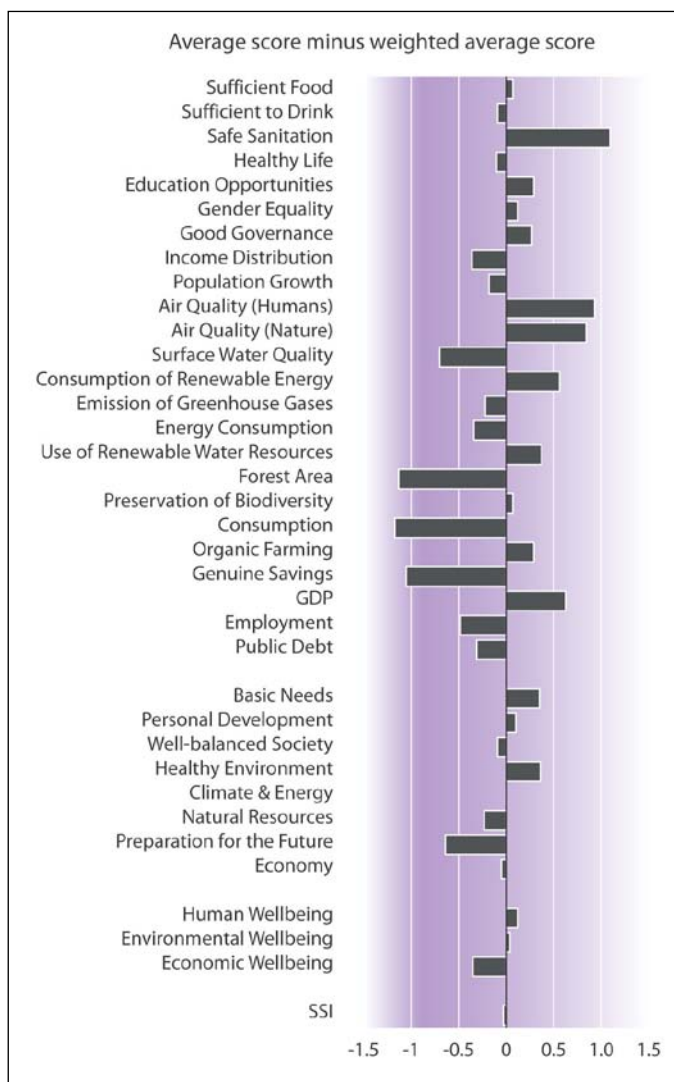
However, one may decide to give different weights to the scores. For instance, one may differentiate with respect to the population size of a country, or the population density, or the area of a country, or the total Gross Domestic Product, or...

In the table below, we have presented the impact of weighting the scores by a country's population size. It appears that there are substantial differences for a number of scores. The impact decreases – of course – for the aggregated values. The more aggregated, the less impact.

	Average of 151 countries, unweighted	Average of 151 countries, weighted by population size	Average minus weighted average
Sufficient Food	8.77	8.70	0.07
Sufficient to Drink	8.62	8.71	-0.09
Safe Sanitation	7.22	6.13	1.09
Healthy Life	6.56	6.66	-0.10
Education Opportunities	7.27	6.98	0.29
Gender Equality	6.73	6.62	0.12
Good Governance	4.81	4.54	0.27
Income Distribution	4.58	4.93	-0.36
Population Growth	5.85	6.03	-0.18
Air Quality (Humans)	6.35	5.43	0.93
Air Quality (Nature)	4.91	4.07	0.84
Surface Water Quality	6.26	6.96	-0.70
Consumption of Renewable Energy	3.18	2.62	0.56
Emission of Greenhouse Gases	5.96	6.19	-0.22
Energy Consumption	8.20	8.54	-0.34
Use of Renewable Water Resources	7.91	7.54	0.37
Forest Area	5.97	7.10	-1.13
Preservation of Biodiversity	5.95	5.88	0.07
Consumption	4.75	5.92	-1.17
Organic Farming	0.66	0.37	0.29
Genuine Savings	6.87	7.91	-1.05
GDP	4.65	4.02	0.63
Employment	4.10	4.57	-0.48
Public Debt	6.56	6.87	-0.31

Basic Needs	8.20	7.85	0.35
Personal Development	6.85	6.75	0.10
Well-balanced Society	5.08	5.17	-0.09
Healthy Environment	5.84	5.48	0.36
Climate & Energy	5.78	5.78	0.00
Natural Resources	6.61	6.84	-0.23
Preparation for the Future	4.09	4.73	-0.64
Economy	5.10	5.16	-0.05
Human Wellbeing	6.71	6.59	0.12
Environmental Wellbeing	6.08	6.04	0.04
Economic Wellbeing	4.60	4.94	-0.35
SSI	5.94	5.97	-0.03

The differences between weighted and unweighted scores are presented in the next graph also.



Sustainable Society Foundation

January 2011

www.ssfindex.com

geurt.vandekerk@ssfindex.com