Sustainable Society Index
SSI-2012

SSI, your compass to sustainability

Sustainable Society Index 2012

For all people who care about life on earth, today as well as in the near and distant future.

SSI, your compass to sustainability

A sustainable society is a society

- ☐ that meets the needs of the present generation,
- ☐ that does not compromise the ability of future generations to meet their own needs,
- ☐ in which each human being has the opportunity to develop itself in freedom, within a well-balanced society and in harmony with its surroundings.

The earth offers enough for everyone's need, not for everyone's greed
Mahatma Gandhi

SSI-2012

Sustainable Society Index 2012

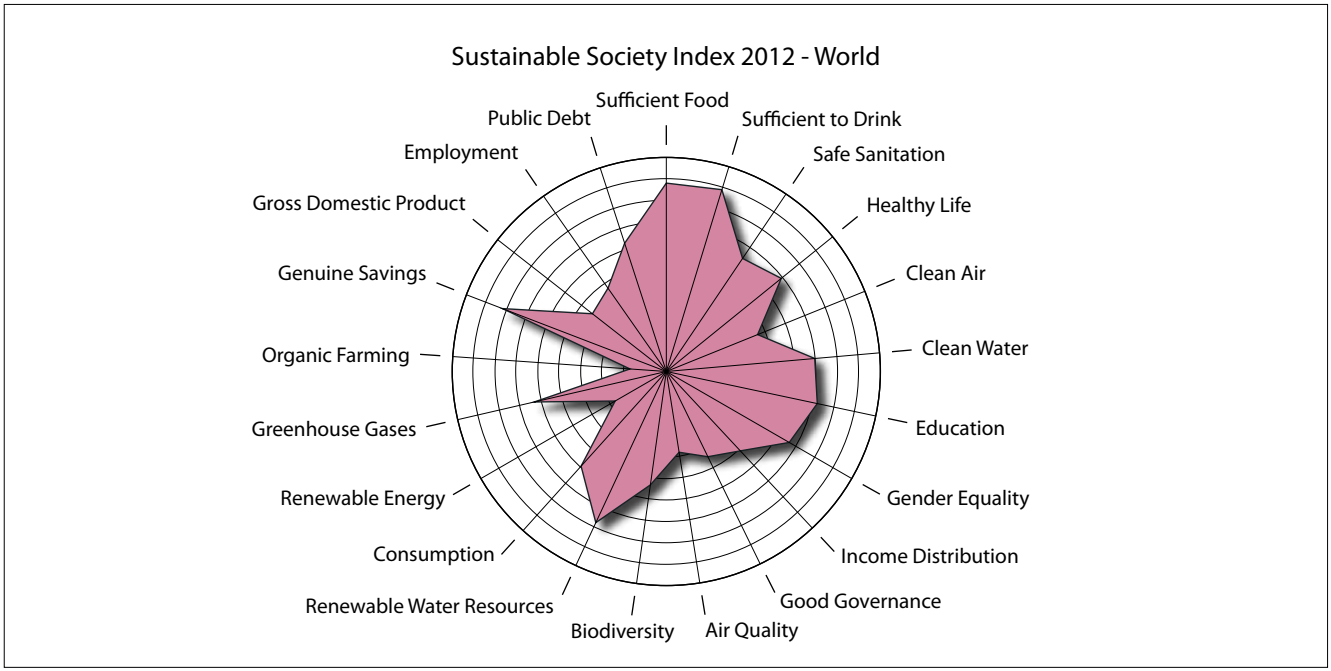
The SSI shows at a glance the level of sustainability
of 151 countries.

Geurt van de Kerk

Arthur Manuel

with a foreword of
Prof Dr Rob de Wijk
Director The Hague Centre of Strategic Studies

Sustainable Society Foundation



The spider web graphs in this publication show the level of sustainability. The outer circle expresses full sustainability, a score of 10 (on a scale of 1 to 10); the inner circle of the web expresses no sustainability at all, a score of 1. The target for each indicator is the outer circle, a sustainable 10.

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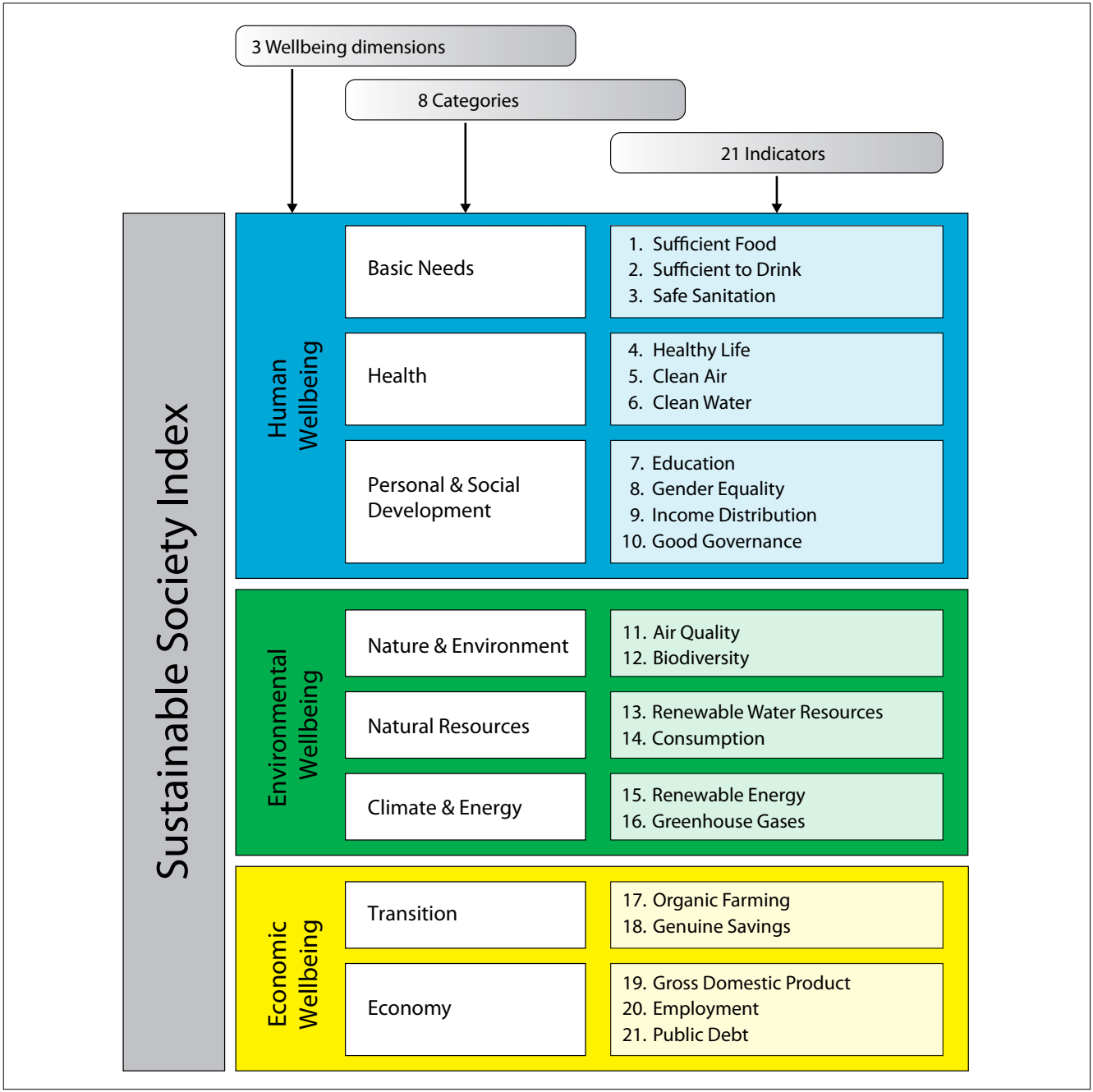
New framework of the SSI

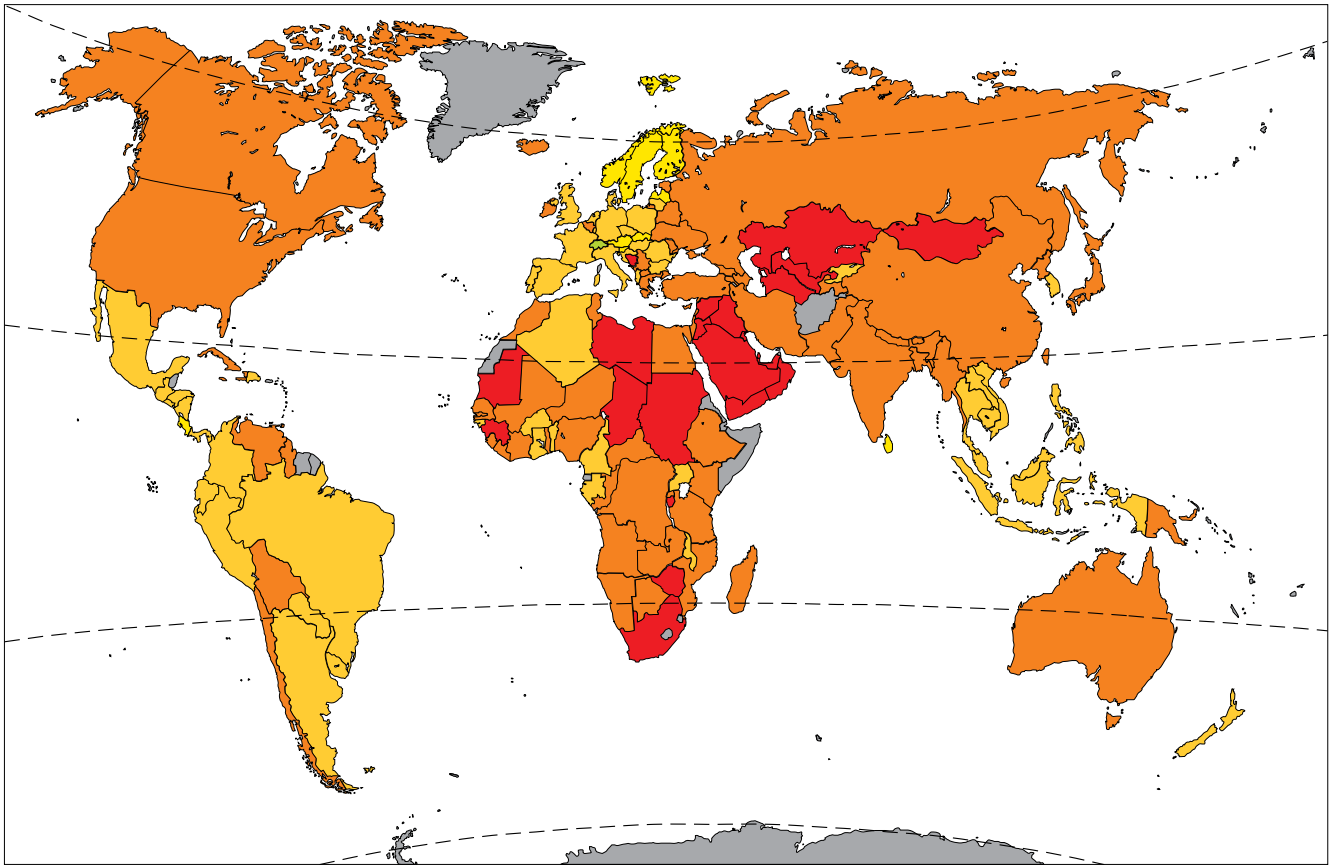


Legend

The colours used in the various graphs, facilitate a quick assessment of the actual situation. Each colour corresponds with a score range:

- 8 or higher
- 7 to 8
- 6 to 7
- 5 to 6
- 4 to 5
- 4 or lower

SSI-2012 - World



Development towards sustainability will be as well the guide as the touchstone for our policy.

Attila Koródi
Minister of Environment and Sustainable Development
Romania, 2008

Foreword

Since the launch of the first report in 2006, the Sustainable Society Index (SSI) has become a respected and widely consulted source of wisdom on global sustainability. The SSI indicates whether the world is becoming more sustainable using three dimensions - human wellbeing, environmental wellbeing and economic wellbeing. This year's SSI has again numerous remarkable results. On the positive side, the authors of the SSI conclude that the overall global sustainability score is moving in the right direction.

Interestingly, the authors show that global human wellbeing is developing satisfactorily. At the same time, environmental wellbeing is on the decline. This comes as no surprise. The financial crisis, the rising demand from fast growing economies such as China, and the political impact of climate scepticism affect progress in this field. But action is urgently needed, because environmental sustainability is crucial for the survival of our planet.
An essential issue is the development of renewables. However, there is a clear danger that the development of sustainable alternatives for raw materials and energy will slow down. The industrial world struggles with the financial crisis, while fast-growing, emerging powers favour economic growth over sustainability .

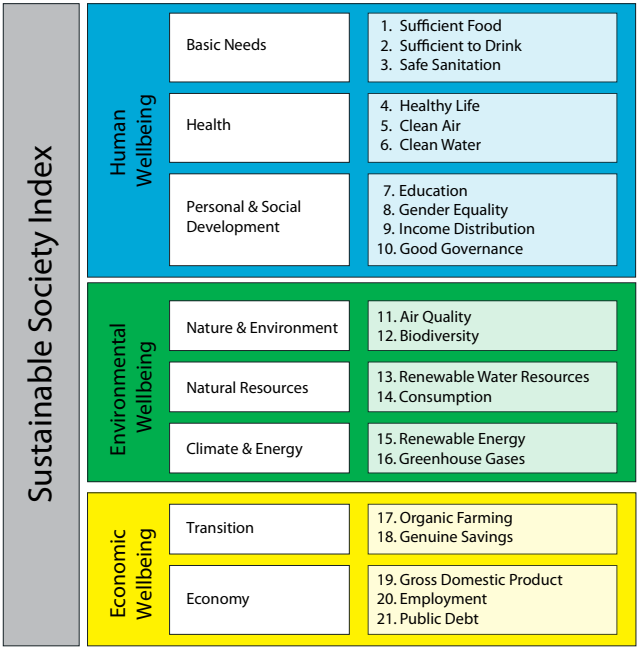
Obviously, economic wellbeing is a precondition for the two other dimensions of wellbeing. But here we see the greatest uncertainties. At the time of writing, the financial crisis is far from over. Thus, the real test for the future of global sustainability is the way politicians and technocrats solve the worst crisis in generations.
The SSI-2012 will provide both policy makers and opinion leaders with the arguments that not acting is counterproductive.

Prof Dr Rob de Wijk
Director The Hague Centre for Strategic Studies

Summary

Is the glass half full or is it half empty? Well, to be precise, it is none of both. As we all know, our one and still only planet as a whole is far from sustainable. The results of the new update SSI-2012, showing the actual level of Human Wellbeing, Environmental Wellbeing and Economic Wellbeing as well as the overall score of the Sustainable Society Index (SSI) of 151 countries, confirm this opinion.

The SSI was developed in 2006 in order to provide a tool to measure the level of sustainability of a country in absolute terms and in comparison with 150 other countries. Through two-yearly updates progress can be monitored. The current report presents the fourth edition: the 2012 update.



Audit of the SSI

In 2012 the Joint Research Centre of the European Commission (JRC) has audited the SSI. This resulted in a number of recommendations for further improvement of the SSI. The new framework of the SSI now comprises 21 indicators, 8 categories and 3 wellbeing dimensions. All recommendations have been implemented in this new update.

The conclusion of JRC is 'that the revised SSI framework is conceptually coherent and meets the statistical requirements set by JRC. The SSI is well suited to assess nation's development towards sustainability in its broad sense: Human, Environmental and Economic Wellbeing.'

World totals SSI-2012

SSI-2012	scores (scale 1 – 10)	progress 2006-2012
HW	6.2	0.3
EW	4.5	-0.1
EcW	3.8	0.1
SSI	4.7	0.1

The new SSI-2012 shows that of the three wellbeing dimensions which define the SSI, Human Wellbeing (HW) achieves the highest score, a 6.2. With a score of 4.5 and 3.8 Environmental Wellbeing (EW) and Economic Wellbeing (EcW) are not even halfway on the road towards sustainability. The resulting overall score for the SSI is a meagre 4.7.

Over the last 6 years the world's overall score has increased by 0.13 or about 0.02 per year. Thus we are moving in the right direction. However, if we don't speed up, it will take over 200 years to achieve a sustainable society. But that is just theory. Either we will accelerate the progress, or we'll have to face disasters, which may prevent us from ever achieving the required sustainability.

The progress of the three wellbeing dimensions is quite different. Human Wellbeing shows the largest progress. Environmental Wellbeing is slightly in decline, due to poor performance of Climate & Energy and Natural Resources. Economic Wellbeing, considered to be the precondition for achieving Human and Environmental Wellbeing, shows a slight increase over the 6 years since SSI-2006. These outcomes cannot satisfy anybody. They are way too poor to just sit back and wait for things to improve on their own. They ought to provoke immediate and decisive action.

Fortunately, there also is some good news. The scores for all three indicators for Basic Needs, i.e. Sufficient Food, Sufficient to Drink and Safe Sanitation, show increases over time. Certainly not enough, since over eight hundred million people are undernourished and/or have no access to safe drinking water; more than 1.8 billion people have no access to Safe Sanitation. But there is progress, in absolute figures as well as percentage wise. Indicators which are performing worst are Renewable Energy – in spite of the need felt world-wide for a rapid change to renewables – and Organic Farming. And contrary to all good intentions, the amounts of Greenhouse Gases emissions have increased, resulting in lower scores.

Regions

The regional differences are still large. The regions of Europe as well as North America are performing best on Human Wellbeing; the lowest scores are for Middle, East and West Africa. For Environmental Wellbeing the picture is – roughly spoken – quite opposite.
All regions have made progress in Human Wellbeing, most in East and Central Asia, Middle and South Africa and South America. East Europe is bringing up the rear with hardly any progress at all.

With respect to Environmental Wellbeing, South and North Europe as well as North America show the strongest progress. Nevertheless, the scores of these regions for Environmental Wellbeing are low. It is remarkable that, among other regions, Environmental Wellbeing in West and East Europe is in decline. The largest decline is found in East Asia.
South America and North and Middle Africa present the largest progress in Economic Wellbeing. On the other hand, North Europe and North America show the largest decrease in their scores for Economic Wellbeing.

Income classes

Looking at the differences in progress of countries per income class, we found that all four income classes show progress on Human Wellbeing, most for the upper middle income countries. The latter present, on the other hand, the largest decline in Environmental Wellbeing.

Income class	Scores SSI-2012				Progress 2006-2012			
	HW	EW	EcW	SSI	HW	EW	EcW	SSI
High	8.1	3.2	4.7	4.9	0.23	0.09	-0.32	0.02
Upper middle	6.2	4.3	4.2	4.9	0.60	-0.17	0.30	0.23
Lower middle	5.1	5.4	3.0	4.5	0.17	-0.13	0.19	0.09
Low	4.1	7.1	2.5	4.4	0.42	-0.06	0.49	0.42

And finally, good news is also that low income countries have the largest increase for Economic Wellbeing, as stated earlier a precondition to achieve Human and Environmental Wellbeing.

Preface

Don't say that 2012 has been a dull year. Maybe it has been even more 'eventful' than usual: many armed conflicts, many troubles and much misery for individuals as well as for countries due to the financial and economic crisis. And there was Rio+20, the largest UN summit ever. That international conference with leaders of 134 states, 193 countries which signed the Rio+20 declaration and over 50,000 participants, was expected to be a real turning point on the road towards sustainability. Opinions with respect to the actual outcomes are mixed, to express it positively.

One needs very dedicated politicians to keep on working on development towards sustainability in economically less prosperous circumstances. Fortunately, there are some. Alas just some. These days businesses take the lead, either stimulated by consumers or by a self-defined policy to safeguard a prosperous future for their business.

The Rio+20 Declaration states inter alia: 'We recognize that there is a need for global, integrated and scientifically-based information on sustainable development' (statement 251). Well, the Sustainable Society Index (SSI) is ready to serve this purpose. Even more so, since the Joint Research Centre of the European Commission, JRC, has audited the SSI and has approved the framework and the methodology of the SSI.

We developed the concept of the SSI in 2006 in order to provide a tool to measure the level of sustainability of a country in absolute terms and in comparison with 150 other countries. Through two-yearly updates progress can be monitored. Based upon the recommendations of JRC we have implemented a number of adjustments to the original concept, to meet the requirements set by JRC. The concept of the SSI and its focus on measuring sustainability in its broad sense – comprising Human, Environmental and Economic Wellbeing – stays unchanged. It is remarkable that the SSI still is the only index that covers all three wellbeing dimensions for over 99% of the world population.

Among others, JRC recommended to use a different way of aggregation so as to diminish the compensation of low scores for one indicator by high scores for other indicators. All recommendations have been implemented in the new edition SSI-2012. And of course, the results of all three previous editions have been updated as well, in accordance to the new set-up.

Lack of data availability and data reliability still remain serious concerns, particularly so since the SSI covers so many countries worldwide. In 2009 the Stiglitz Commission made a call for improvement of statistics. Unfortunately it will take quite some years to achieve better statistics worldwide, also since many countries face more urgent challenges these days. Nevertheless, it is necessary to know where you stand if you want to decide where to go. Or could it be that some politicians prefer not to know so?

Better measurements
lead to better policies

We sincerely hope the SSI will support your efforts to achieve a sustainable society for all of us, now and in the near and distant future.

Autumn 2012

Geurt van de Kerk
President Sustainable Society Foundation

Part I

Our objective in 2006 of developing a new index and set of indicators was to have an easy and transparent instrument at hand to measure the level of sustainability of a country and to monitor progress to sustainability. This index, the Sustainable Society Index – SSI, was presented for the first time in 2006. In 2008 and 2010 the first two-yearly updates were published.

Human Wellbeing	Environmental Wellbeing	Economic Wellbeing

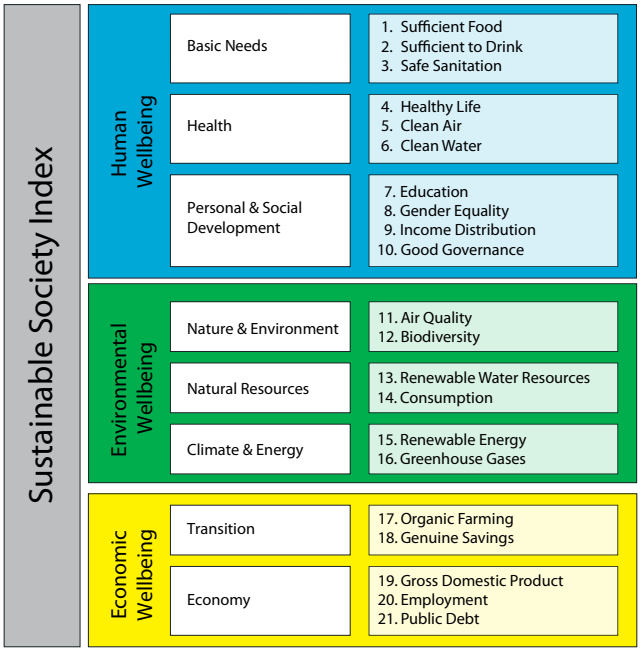
The SSI integrates Human Wellbeing and Environmental Wellbeing. That is the way to look at development to a sustainable world, as confirmed by the Rio+20 declaration of the United Nations. Human and Environmental Wellbeing are the goals we are aiming at. Human Wellbeing without Environmental Wellbeing is a dead end, Environmental Wellbeing without Human Wellbeing makes no sense, at least not from an anthropocentric point of view. Economic Wellbeing is not a goal in itself. It is a precondition to achieve Human and Environmental Wellbeing. It can be considered as a safeguard to wellbeing.

The SSI is based on a solid definition of sustainability, the worldwide respected definition of the Brundtland Commission (WCED, 1987). To make explicitly clear that sustainability includes Human Wellbeing as well as Environmental Wellbeing, we have extended the definition of Brundtland with a third sentence, so it runs as follows: A sustainable society is a society

- that meets the needs of the present generation,
- that does not compromise the ability of future generations to meet their own needs,
- in which each human being has the opportunity to develop itself in freedom, within a well-balanced society and in harmony with its surroundings.

This year, 2012, the Joint Research Centre of the European Commission, JRC, has audited the SSI. This resulted in a number of recommendations by JRC. All recommendations have been implemented in the new framework and the corresponding way of calculation of the SSI. To enable comparisons over the years, the previous editions have been re-calculated, in accordance to the new concept. All data and results can be found on the website www.ssfindex.com.

The next figure presents the new framework.

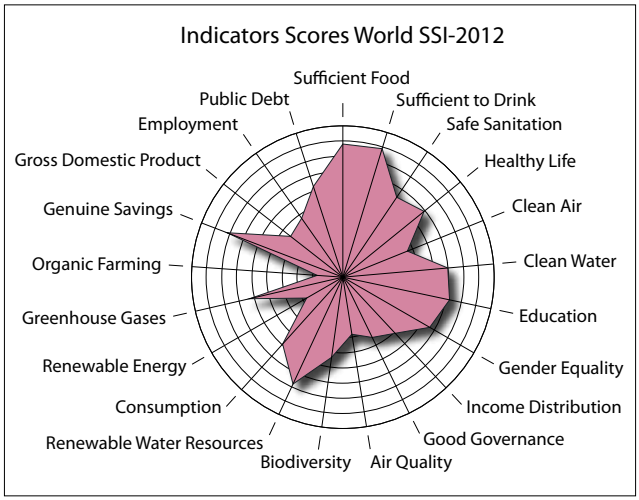


N.B. In this report all totals – be it world totals, regional totals or income class totals – are weighted for population size. This means that an inhabitant of Iceland (317,000 people) has an equal weight as one of China (1,344,130,000 people).

2.1 World totals 2012

Indicator scores

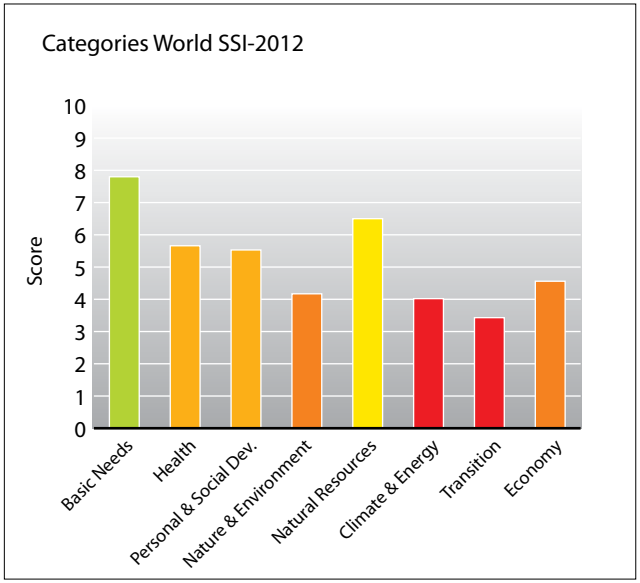
The spider web below presents the world average scores for the 21 indicators. The inner circle of the spider web represents a score of 1, meaning no sustainability at all, and the outer ring a perfect score of 10 or full sustainability.



The spider web shows at a glance that the world is far from sustainable. The best scores are for two of the basic needs: Sufficient Food and Sufficient to Drink. Notwithstanding the scores of 8.80 and 8.88 respectively, a huge number of people – hundreds of millions! – still have to stay alive without the daily minimum amount of calories and access to safe drinking water. And many more are lacking Safe Sanitation. It is remarkable that the score for Sufficient to Drink improved rather more – 8.30 to 8.88 – than for Sufficient Food – 8.67 to 8.80 – over the years between SSI-2006 and SSI-2012.

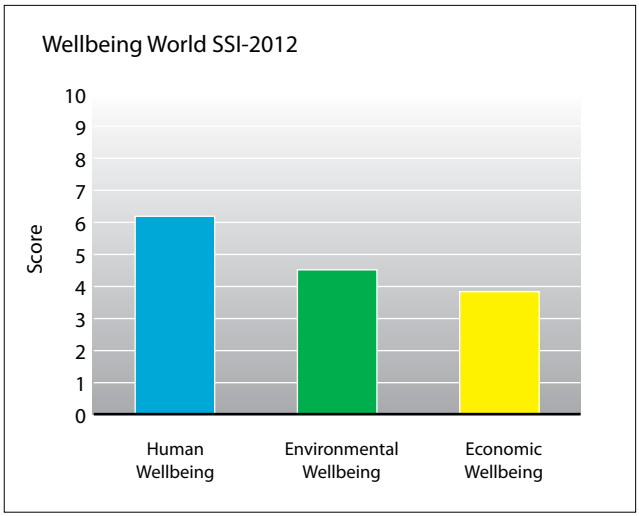
The minimum scores for the world as a whole are for Renewable Energy and Organic Farming. Looking at the spider web one sees at a glance which indicators need attention most urgently.

Category scores



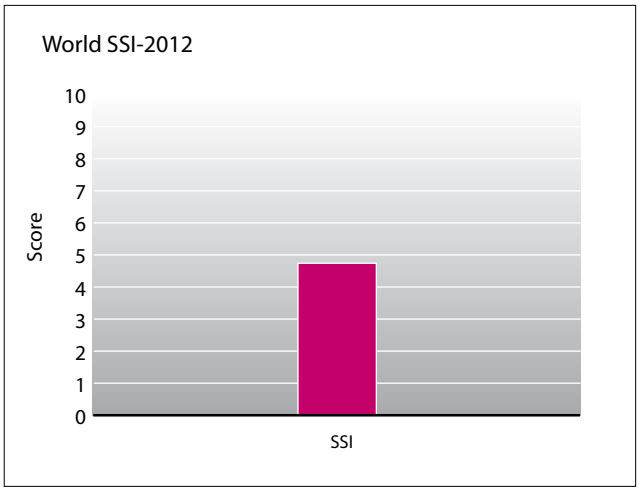
In spite of the alarming numbers of people who are lacking Basic Needs, the world score is – on average – the highest of the eight categories. Natural Resources is second best, thanks to a comparatively high score for Renewable Water Resources. That would be OK if the distribution of water resources would be more equal around the globe, which is not the case. On the contrary. Once more, this emphasizes the necessity to always look at the underlying figures as well!

Wellbeing scores



The level of Human Wellbeing is notably the highest one of the three wellbeing dimensions. In spite of a comparatively good score for Natural Resources, Environmental Wellbeing scores very low, due to low scores for Nature & Environment and – even more – Climate & Energy. Economic Wellbeing has by far the lowest score.

SSI score

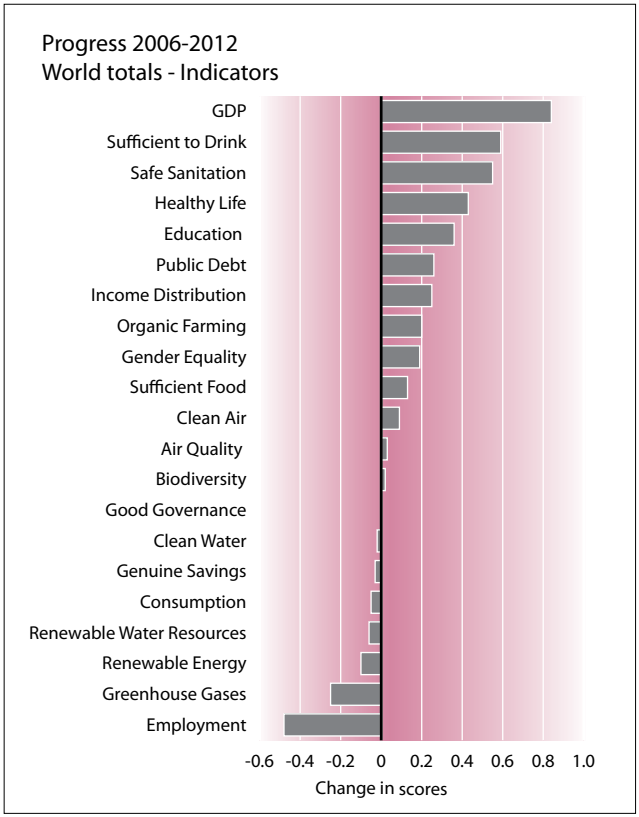


The graph doesn't require further explanation. The world is not even half way towards a sustainable society. Those who already follow the SSI from the very beginning in 2006, may notice that the figure 4.74 for the SSI is lower than one might have expected. The geometric average we are using now for aggregation sharply diminishes the compensation of low scores by high scores.

2.2 World totals – Progress 2006 – 2012

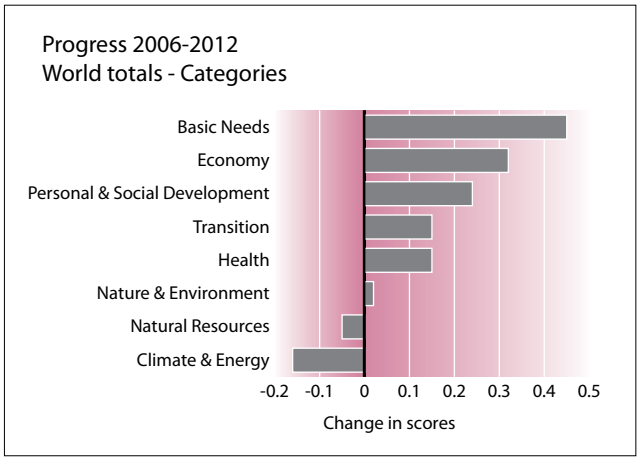
Now that four editions of the SSI have been published, one can see to what extent progress has been achieved on the way towards a sustainable society during a 6 year period.

Indicators – progress



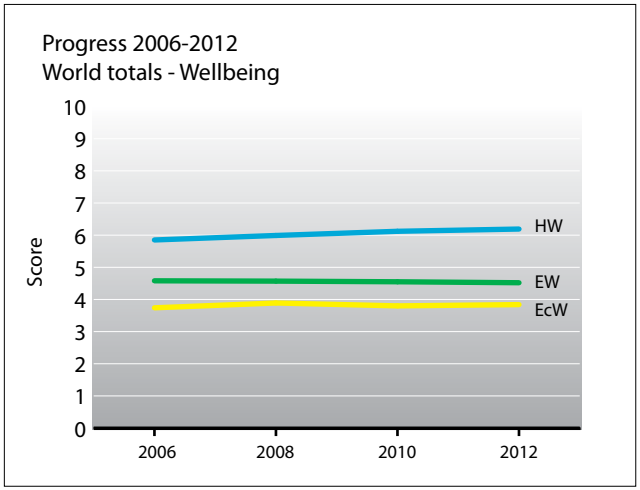
13 indicators have made progress, 7 are in decline and 1 stayed equal. GDP by far has grown most of all indicators, followed at some distance by Sufficient to Drink and Safe Sanitation.
In this period the unemployment rate has rather strongly increased. It is (not?) surprising that the indicator values of Greenhouse Gases and Renewable Energy are also in decline, in spite of all good intentions.

Categories – progress

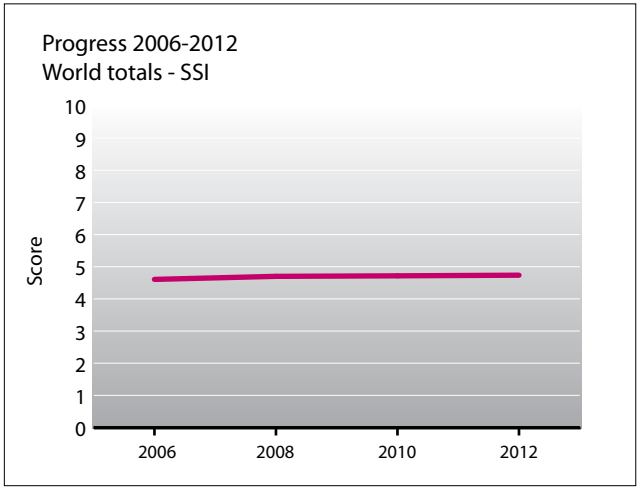


Progress of the categories is the result of progress – or the lack of progress – of the underlying indicators. Thus, Basic Needs shows the largest progress, while the category Climate & Energy is in decline most of all.

Wellbeing dimensions – progress
Human Wellbeing has made a progress of 5.7% in 6 years, from a score of 5.9 to 6.2. Environmental Wellbeing was slightly in decline, by 1.4%, whereas Economic Wellbeing increased by 2.6%. Apparently, the strong increase of GDP per capita of nearly 24% - by far the largest increase of any indicator – has been beneficial for Human Wellbeing but not for Environmental Wellbeing.



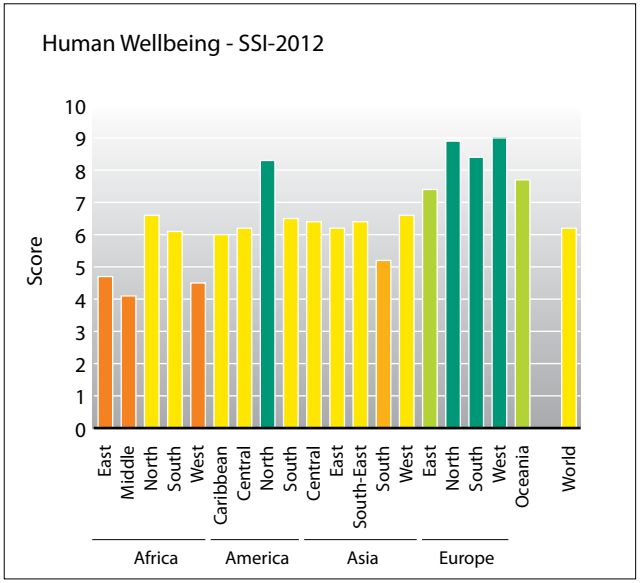
SSI – progress



The score for the world's overall sustainability has slightly though steadily increased by 0.13 in 6 years, i.e. by 0.02 per year. Let's be happy there is progress towards a sustainable society. And let's realise a progress of 0.02 per year is very, very little. Theoretically, at that pace it will require over 200 years to achieve a sustainable society. Fortunately, that is only theory. Either we will accelerate the progress, or we'll have to face disasters, which may prevent us from ever achieving the required sustainability.

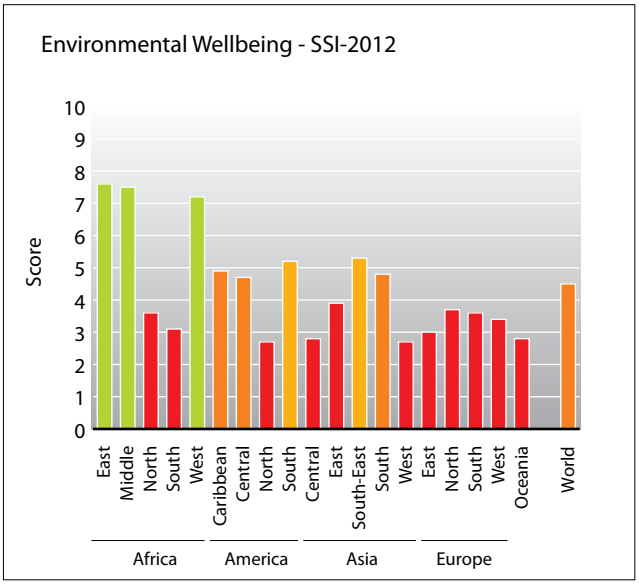
2.3 Regional totals 2012

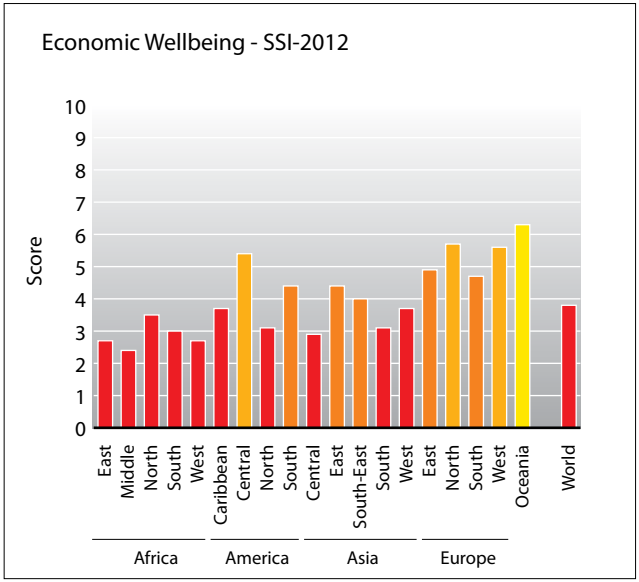
Quite another perspective is looking at regional differences. The scores for the 3 wellbeing dimensions are shown in the graphs below.



Not surprisingly, Europe (North, West and South) and North America show the highest scores for Human Wellbeing. Africa (Middle, West and East) has by far the lowest scores.

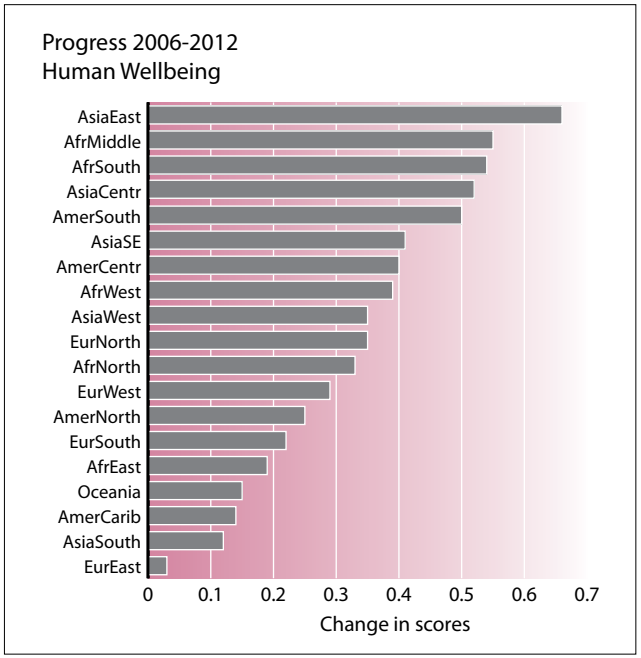
The picture for Environmental Wellbeing is totally different from the one for Human Wellbeing. Africa is performing - comparatively - rather well. West and Central Asia, with many oil rich countries, North America and Oceania show the lowest scores.

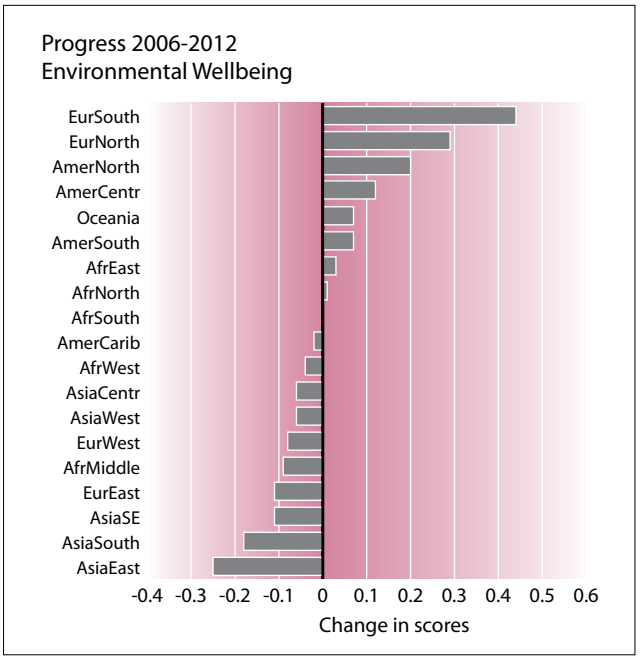




Economic Wellbeing again presents a different picture, with lowest scores for West and Middle Africa and the highest scores for Oceania, Northern Europe and Central America.

2.4 Regional totals – Progress 2006 – 2012

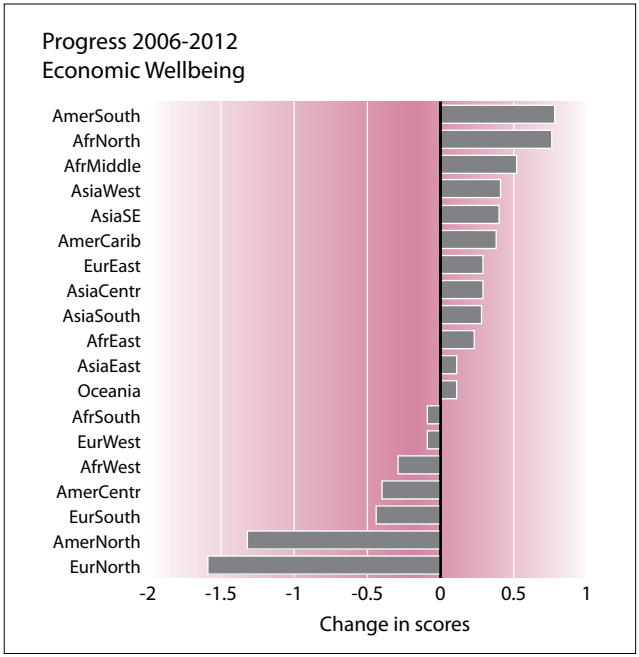




All regions show progress in Human Wellbeing. The largest progress is achieved in Asia (East and Central), Africa (Middle and South) and South America. South Asia presents the second smallest progress, while East Europe brings up the rear, showing hardly any progress.

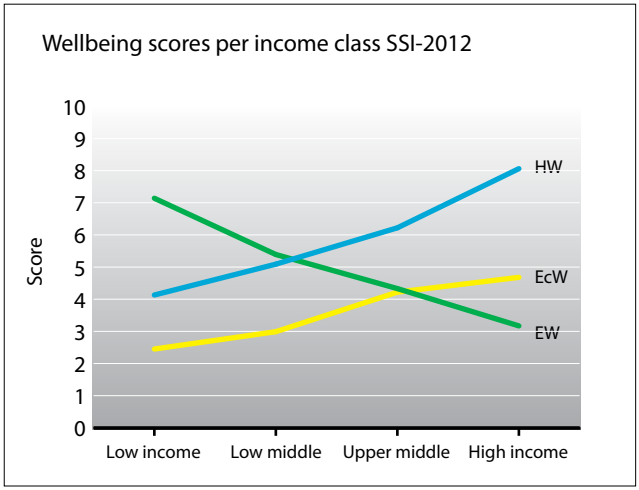
As could be expected by those who have looked at the pictures above, Europe (South and North) and North America present the largest progress for Environmental Wellbeing. Asia (South-East, South and East) show the largest decline.

With respect to Economic Wellbeing the highly developed countries, particularly those in North America and North Europe, present by far the steepest decline. Less developed countries are performing much better with respect to Economic Wellbeing.



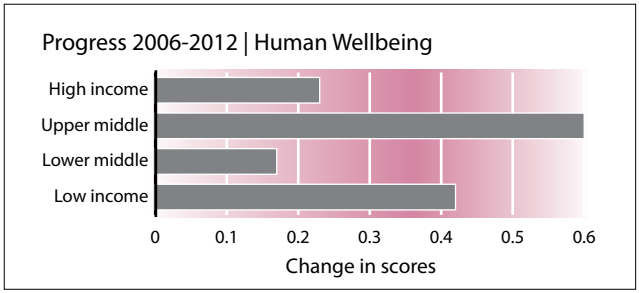
2.5 Totals per income class 2012

One may wonder how the scores are related to the average income level in the various countries, according to the definition of income classes by the World Bank (World Bank, 2012).

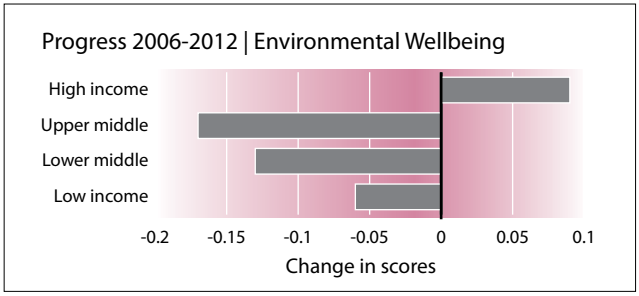


On average higher income correlates with higher Human Wellbeing and lower Environmental Wellbeing. This is exactly what one would expect. That would suggest that – on average – an increase in income would result in degradation of the environment. That may be what one expects but it is not a nice prospect, to say the least. It suggests that Human Wellbeing and Environmental Wellbeing are at collision course.

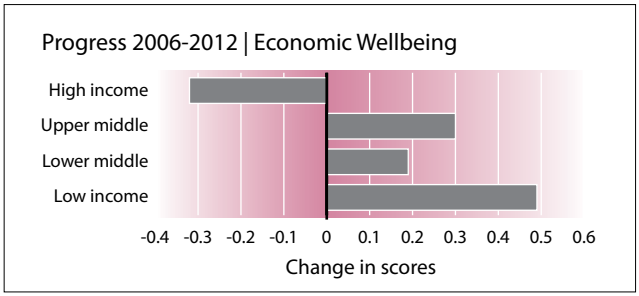
2.6 Totals per income class - Progress 2006 – 2012



The good news is that Human Wellbeing has increased for all income classes. It is remarkable that the Lower middle income class presents the smallest progress.



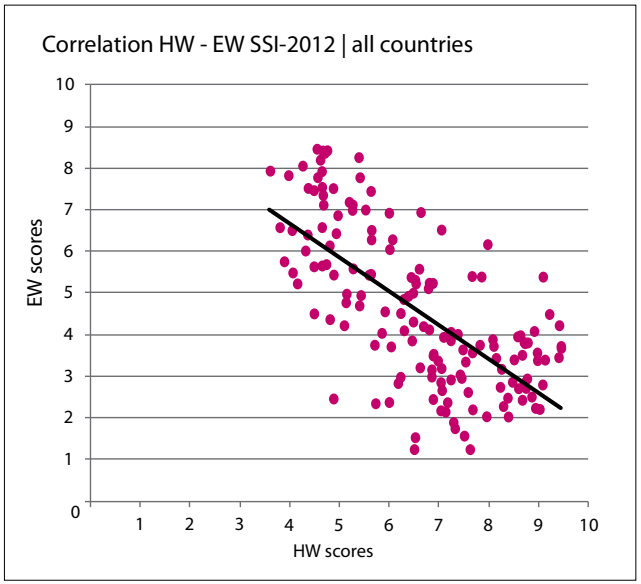
The bad news is that Environmental Wellbeing is in decline for all income classes except High income. The – little – progress of the latter is due to improved scores for Biodiversity and Emission of Greenhouse Gases. The decline of Environmental Wellbeing of the Upper middle income class countries is mainly due to a worse score for Emission of Greenhouse Gases.



The comparatively large progress of Low income countries for Economic Wellbeing is mainly the result of a sharp increase of the score for Public Debt and, to a lesser extent, of an increase of the Genuine Savings score. On the other hand, High income countries present opposite results for these two indicators.

2.7 Correlation Human Wellbeing and Environmental Wellbeing

The scores for Human Wellbeing and Environmental Wellbeing for all 151 countries included in the SSI, are presented in the next graph.



In this figure a linear trend line has been inserted. This line shows a distinct downward trend for Environmental Wellbeing at higher scores for Human Wellbeing. This lends credibility to the common opinion that Human Wellbeing and Environmental Wellbeing are indeed at collision course. However, many countries do not perform in accordance with the average trend. Moreover, this figure does not reveal the path along which countries are developing. So a detailed study would be required to reveal the role that various aspects play in the correlation between Human Wellbeing and Environmental Wellbeing. It should also answer the question whether a collision between Human Wellbeing and Environmental Wellbeing can be avoided and if so, how this can be achieved.

After having celebrated its fifth anniversary, time had come to audit the SSI. The Econometrics and Applied Statistics Unit of European Commission's Joint Research Centre (JRC) in Ispra (Italy) was invited by the Sustainable Society Foundation to take up this assignment and to audit the SSI with respect to

- The conceptual coherence of the structure of the SSI
- The statistical coherence of the structure of the SSI
- The impact of key modelling assumptions on the SSI scores and ranks over 2006-2012.

JRC assessed the SSI over the period January to September 2012, based on the data and framework of the SSI-2010. The importance of the indicators and categories within the SSI was calculated via Karl Pearson's 'correlation ratio'.

The main findings of JRC and the resulting recommendations have led to a number of adjustments:

1. Air Quality (humans) appeared to correlate more with Human Wellbeing than with Environmental Wellbeing. Thus it has been relocated to the Human Wellbeing dimension and renamed Clean Air, to avoid possible confusion with Air Quality (nature), which has been renamed Air Quality.
2. Surface Water Quality better correlated with Human Wellbeing than with Environmental Wellbeing, so it also has been relocated to the Human Wellbeing dimension and renamed Clean Water.
3. Clean Air and Clean Water make up, together with Healthy Life, a new category Health, which is part of Human Wellbeing.
4. Consumption turned out to correlate negatively with Economic Wellbeing and positively with Environmental Wellbeing. Thus it has been relocated to the latter dimension.
5. Forest Area appeared to have a weak correlation with its category Natural Resources and even a negative correlation with Environmental Wellbeing. Thus we had to remove it as an indicator of the SSI.
6. The sub-indicator Threatened Species of the indicator Biodiversity appeared to have a nearly random correlation with its category. Moreover, since there are difficulties with the collection of reliable data, we decided to leave this sub-indicator out. This means that Biodiversity is now only expressed by Protected Areas.
7. The aggregation method which we used so far, i.e. the arithmetic average, offers the possibility of compensation: low scores for one indicator can be compensated by high scores for a different indicator. Since sustainability, i.e. strong sustainability, doesn't allow compensation, a better aggregation method is to use the geometric average, which suppresses this compensation.
8. More emphasis should be given to the scores of the three wellbeing dimensions than to the overall score SSI.

These recommendations stimulated us to redefine the framework of the SSI. This has been done in close cooperation with the experts of JRC. Beside the adjustments we already mentioned above, we decided to some more changes:

1. Population Growth has been left out in view of (i) keeping the framework as simple as possible, (ii) having not too many indicators in Human Wellbeing compared to Environmental Wellbeing and (iii) since countries usually don't set policy on this issue.
2. Energy Consumption has been left out – in spite of being a valuable policy indicator – due to the overlap with Emission of Greenhouse Gases.

3. Beside Basic Needs and Health, the third category of Human wellbeing, has been renamed Personal & Social Development.
4. The 6 indicators which make up Environmental Well-being, are distributed over three, partly renamed categories: Nature & Environment, Natural Resources and Climate & Energy.

Altogether, this has resulted in the new framework, which has already been presented in Chapter 1.

With JRC's recommendations having been implemented as described above in the new update SSI-2012, the overall conclusions of the audit are:

1. The revised SSI framework is conceptually coherent.
2. The revised SSI framework meets the statistical requirements set by JRC.
3. The SSI is well suited to assess nation's development towards sustainability in its broad sense: Human, Environmental and Economic Wellbeing.

The final report on the audit Sustainable Society Index (SSI) will be published by JRC end 2012.

One may use the information of the SSI in various ways, depending on one's role and position in society, and of course depending on one's interest, time and ambitions. Some possibilities are briefly outlined in this chapter.

Policymakers, government officials

1. Use this information to show the public the actual situation concerning sustainability, not in a impressive but overwhelming report, but just at a glance, very transparently and easy to understand.
2. Use the 21 indicators – maybe complemented by additional indicators one may require for a specific situation – to set the policy with respect to sustainability. For instance, at national level, each indicator can be assigned to a specific ministry. This ministry will be responsible for the development towards sustainability with respect to this indicator.
3. The SSI can monitor the results of projects and programmes with respect to the contribution to sustainability. For example, what is the current progress towards sustainability? Will the targets set by the government be met in time? This will be an input for the revision of projects and strategies.
4. Use the SSI as a benchmark instrument for comparing countries and regions, and thus stimulating each other to make progress on the way towards sustainability.

Individuals

1. See how your own country performs with respect to development towards sustainability, where are the best possibilities for improvement, where is the necessity most urgent etc.?
2. Compare your country with neighbouring countries and see on which aspects these are performing better or worse than your own country. Why is this, what can you learn by this information?
3. Use the information to urge yourself and your community to take measures to speed up progress towards sustainability.
4. Tell your representatives and politicians what you expect them to do to enhance the level of sustainability, on short term as well as in the long run.

Education institutes

1. Include sustainability and development towards sustainability in the curricula at all levels, in schools as well as at university level. Use the information from the SSI to illustrate what is happening in the world around us.
2. Assign further research projects, using the information from the SSI, to pupils in secondary schools and students in high schools and universities.

NGOs

1. Evaluate your sustainability strategy using the SSI-information and adjust this if necessary. Communicate this new strategy to the public.
2. Monitor the development and implementation of the national sustainability policies using the SSI and hold politicians responsible in case of underperformance.

Industry

1. Use the SSI-information to increase your own awareness of the current level of sustainability in countries where your firm is operating.
2. Improve your own performance with respect to sustainability and corporate social responsibility.
3. Introduce further innovations. An example is the development of a tailor-made sustainability index for greenhouse cultures in the Netherlands, based on the concept of the SSI.

Cities

1. A new set of indicators to measure and monitor sustainability at city level is under construction. The start of this index is planned for the second half of 2013.

Acknowledgements 5

For this edition of the SSI, again many people have contributed to our work. In various ways: by supplying data, by being a sparring partner, by offering suggestions, by making comments, by examining drafts, by stimulating us to keep on going. All in different ways, in different measures, but all important to make the update successful.

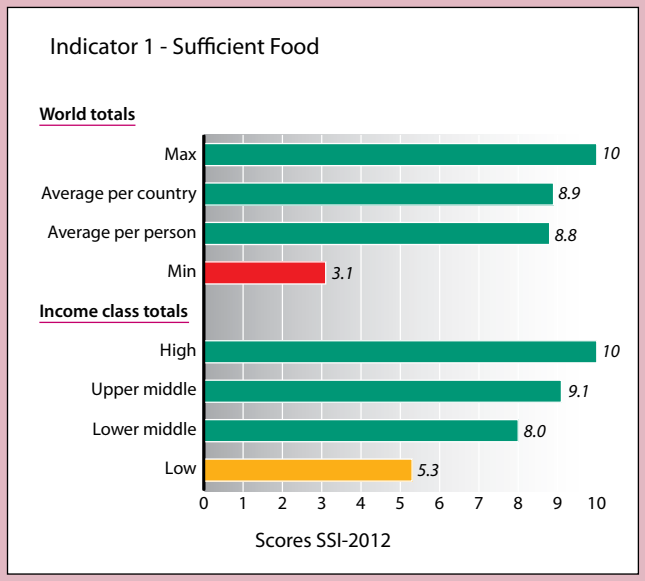
For all this we are thankful to Aidan Kennedy, Alesco Adigra, Annika Lindblom, Candice Stevens, Christine Fiebig, Craig Hilton-Taylor, Daniella Farinelli, David Moore, Dionysios Philippas, Esther G. Naikal, Glenn-Marie Lange, Helene Connor, Helga Willer, Henk Simons, Jon Hall, Jyri Seppälä, Karen Frenken, Karen Treanton, Kelly Hodgson, Kenneth MacDicken, Laura Williamson, Laurens Brandes, Lex van Deursen, Michaela Saisana, Milorad Kovacevic, Nina Campbell, Pekka Leskinen, Peter van Sluijs, Sabrina Barker, Sauli Rouhinen, Shaohua Chen, Soumalia Karambiri, Tanja Srebotnjak, Vali Mara.

However, our contributors cannot be held responsible for the results, for opinions nor for mistakes in this publication. The responsibility for these lies solely with the authors.

Part II

Results per

- indicator
- category
- wellbeing dimension
- SSI-2012

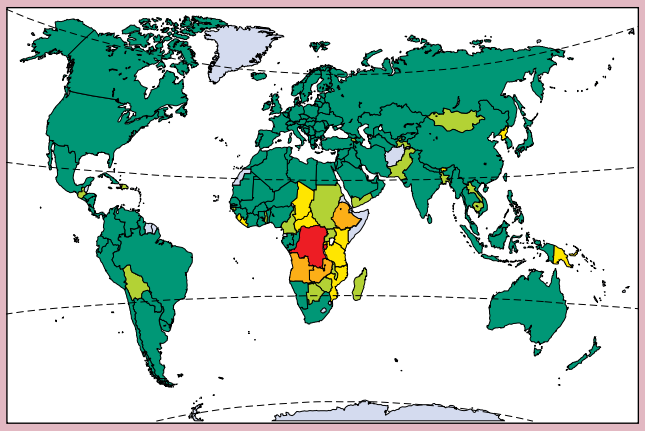


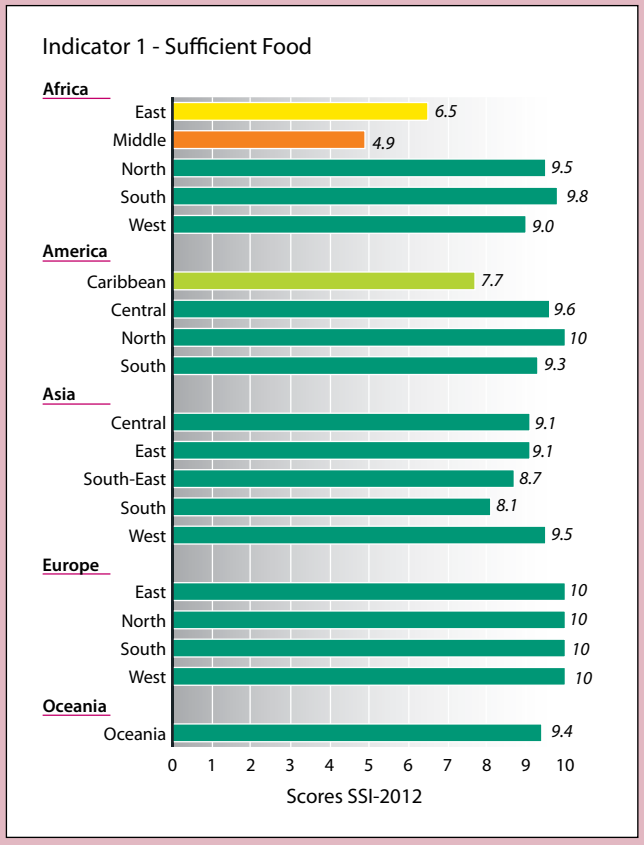
Indicator: number of undernourished people in % of total population

Source: FAO

Year of data: 2006 – 2008

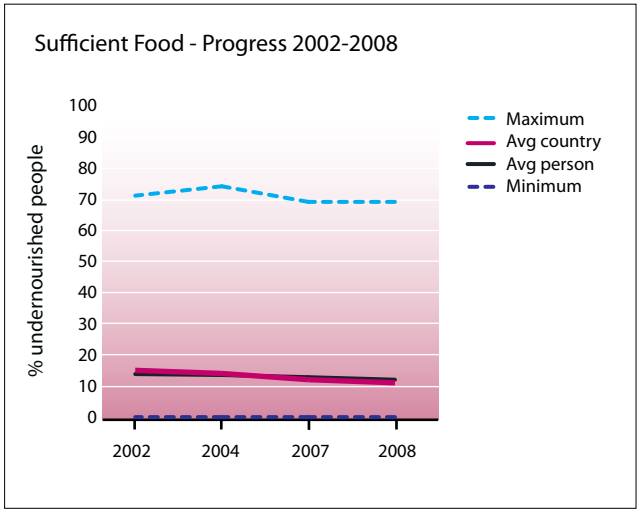
Target: 0% undernourished people



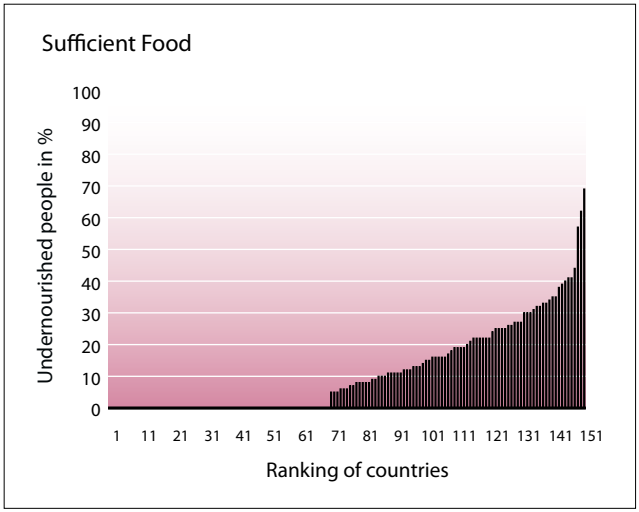


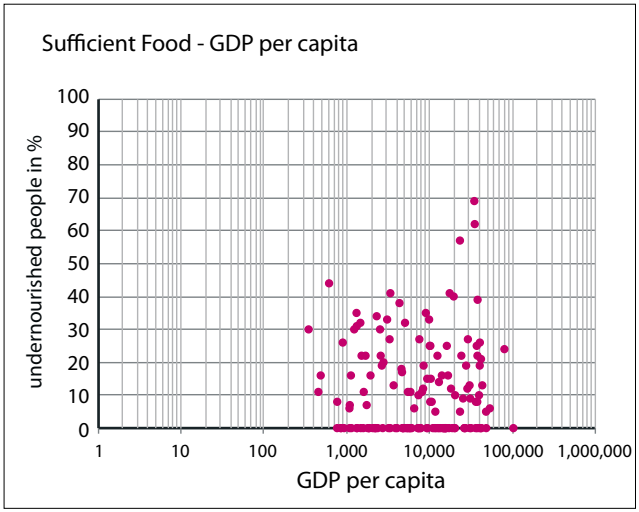
Sufficient food is defined as the availability of at least the minimum level of dietary energy for each person. It is one of the very basic conditions for people for proper development.

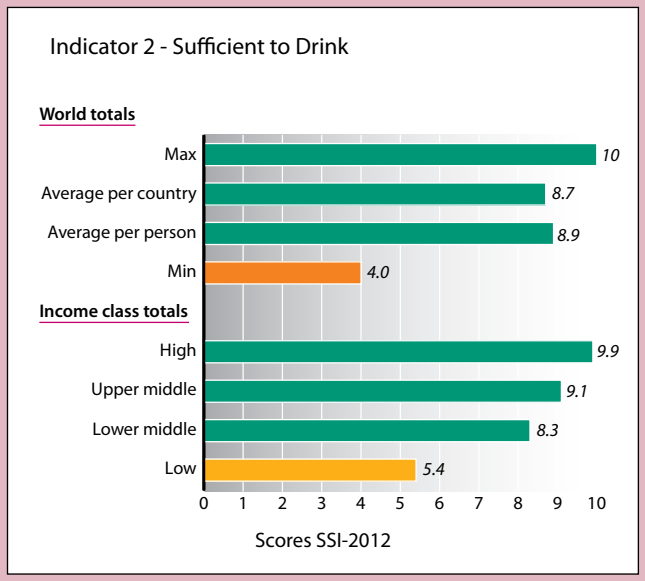
Top 5 and bottom 5 countries Sufficient Food (% of undernourished people)					
		SSI-2006	SSI-2008	SSI-2010	SSI-2012
Rank	Year of data	2000-2002	2002-2004	2005-2007	2006-2008
1	Albania	6	6	5	0
2	Algeria	5	4	4	0
3	Argentina	2	3	3	0
4	Australia	0	0	0	0
5	Austria	0	0	0	0
147	Ethiopia	46	46	41	41
148	Zambia	49	46	43	44
149	Haiti	47	46	57	57
150	Burundi	68	66	62	62
151	Congo Dem. Rep.	71	74	69	69

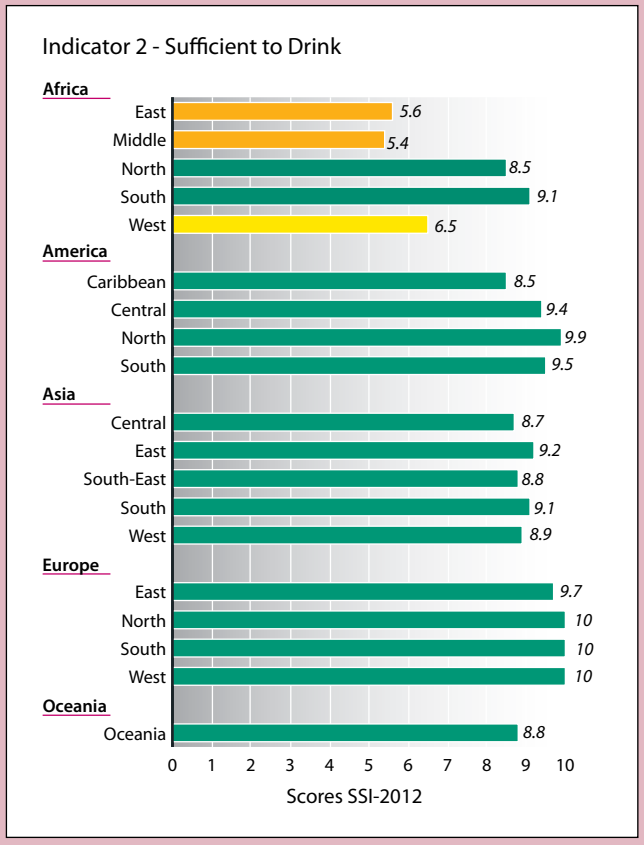


70 countries report less than 5% undernourished people. Due to lack of a more precise figure, the raw data of all these countries, listed in alphabetical order, have been given the value 0.

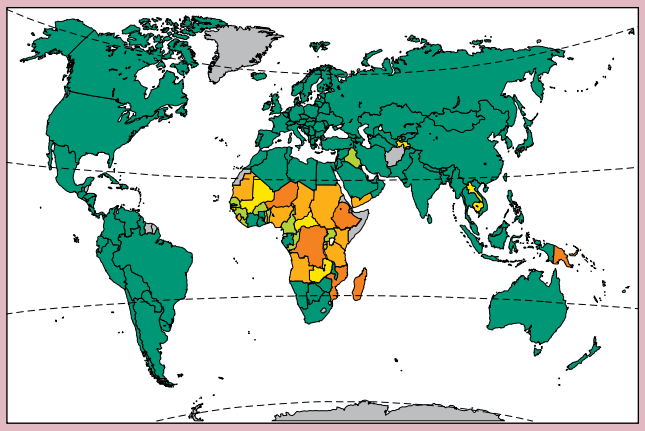






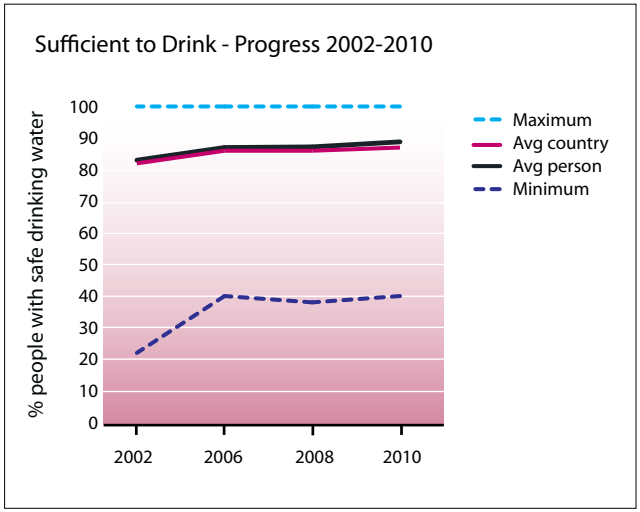


Indicator: number of people as % of the total population, with sustainable access to an improved water source.
Source: WHO - Unicef Joint Monitoring Programme
Year of data: 2010
Target: 100%

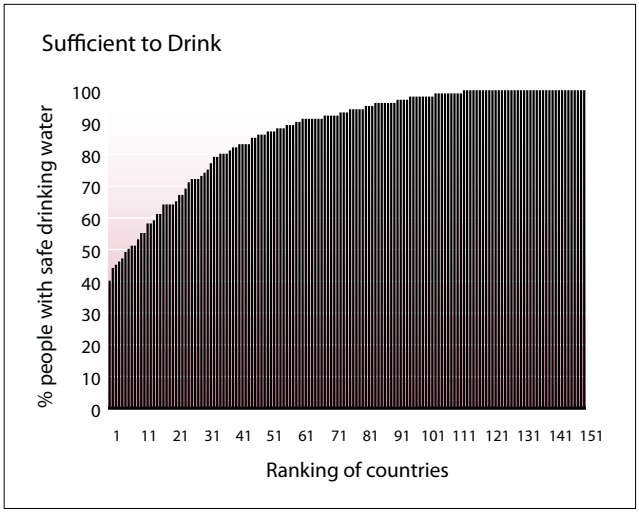


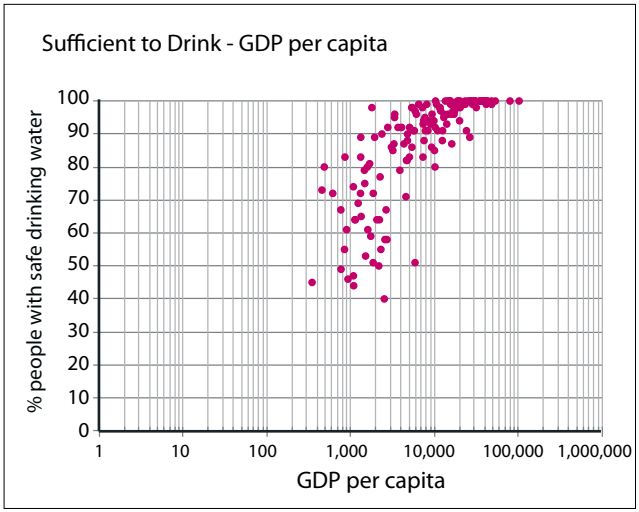
According to the definition of WHO, access to an improved water source means that at least 20 litres of safe drinking water per person per day should be available within one kilometre of a user's dwelling. An improved water source includes: household connections, public standpipes, boreholes, protected dug wells, protected springs and rainwater collection.

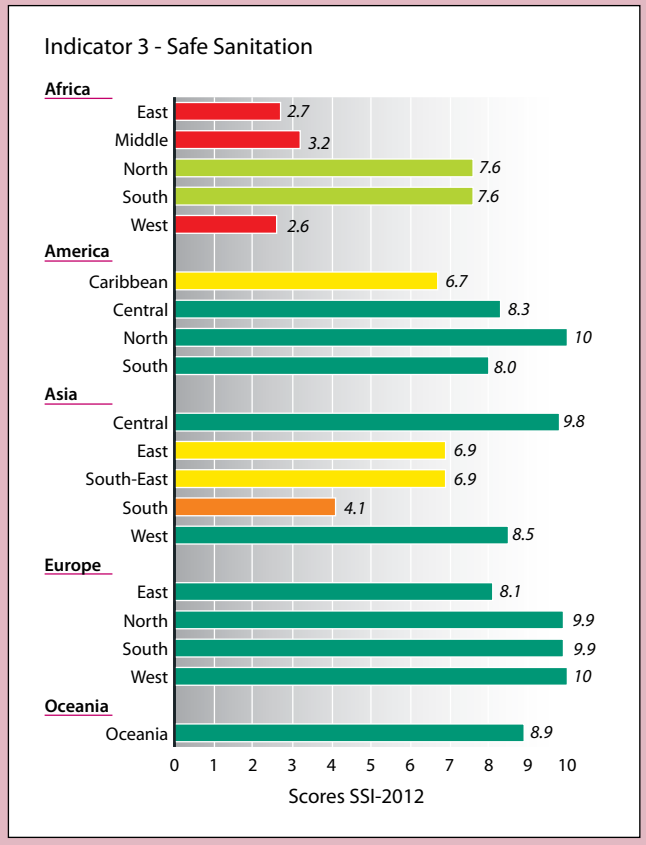
Top 5 and bottom 5 countries Sufficient to Drink (% of people with safe drinking water)					
		SSI-2006	SSI-2008	SSI-2010	SSI-2012
Rank	Year of data	2002	2006	2008	2010
1	Australia	100	100	100	100
2	Austria	100	100	100	100
3	Belarus	100	100	100	100
4	Belgium	100	100	100	100
5	Bulgaria	100	99	100	100
147	Mozambique	42	42	47	47
148	Madagascar	45	47	41	46
149	Congo Dem. Rep.	46	46	46	45
150	Ethiopia	22	42	38	44
151	Papua New Guinea	39	40	40	40



39 countries, listed in alphabetical order, report 100% people with safe drinking water.





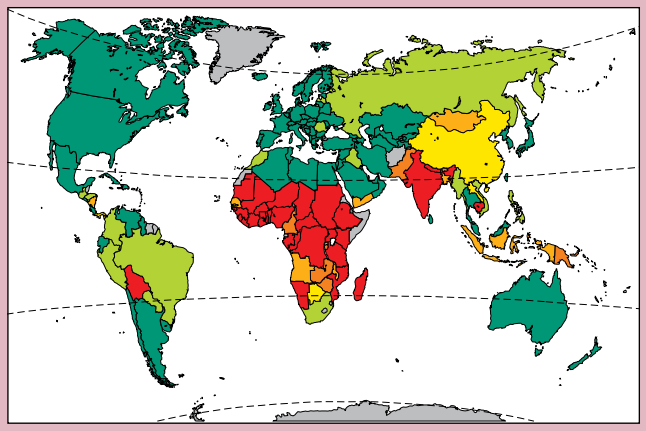


Indicator: number of people in % of total population, with sustainable access to improved sanitation

Source: WHO – Unicef Joint Monitoring Programme

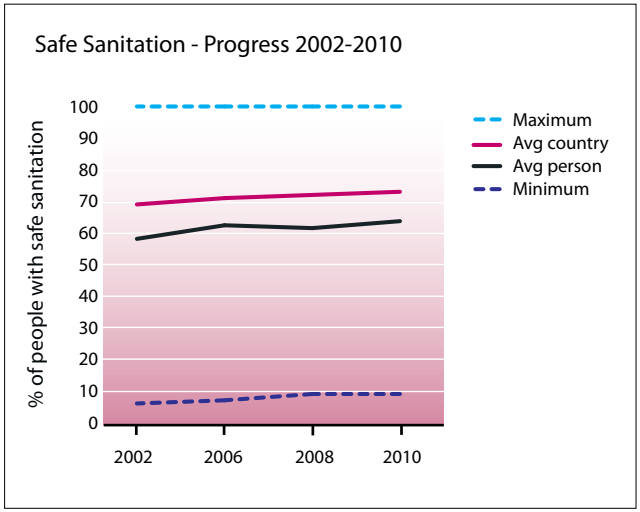
Year of data: 2010

Target: 100%

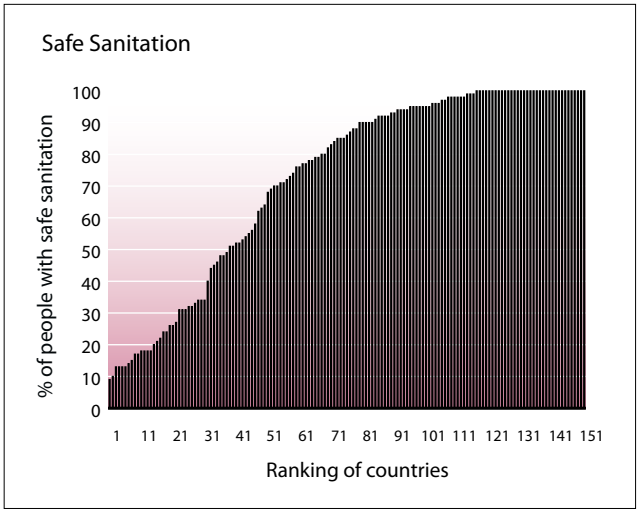


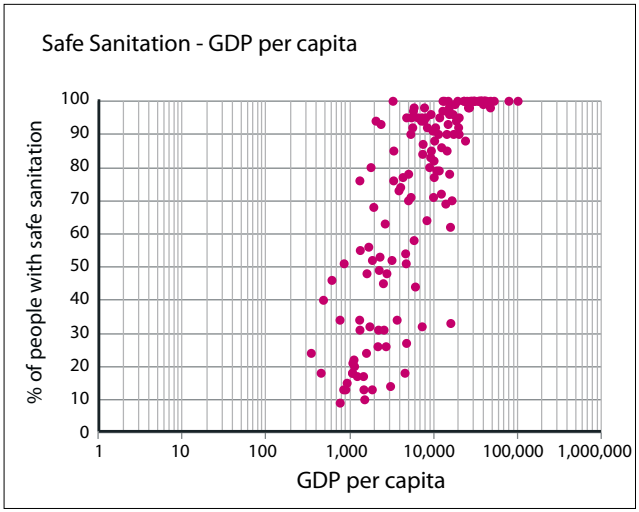
Sanitation means the collection, transport, treatment and disposal or reuse of human excreta or domestic wastewater, whether through collective systems or by installations serving a single household or undertaking. Improved sanitation includes any of the following excreta and waste water disposal facilities: connection to a public sewer, connection to a septic tank, pour-flush latrine, simple pit latrine and ventilated improved pit latrine.

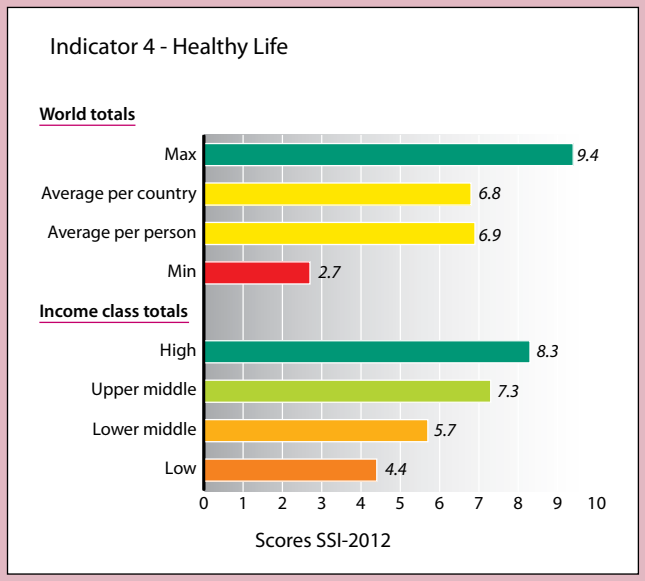
Top 5 and bottom 5 countries Safe Sanitation (% of people with safe sanitation)					
		SSI-2006	SSI-2008	SSI-2010	SSI-2012
Rank	Year of data	2002	2006	2008	2010
1	Australia	100	100	100	100
2	Austria	100	100	100	100
3	Belgium	100	100	100	100
4	Bulgaria	100	99	100	100
5	Canada	100	100	100	100
147	Chad	8	9	9	13
148	Sierra Leone	39	11	13	13
149	Togo	34	12	12	13
150	Tanzania	46	33	24	10
151	Niger	12	7	9	9



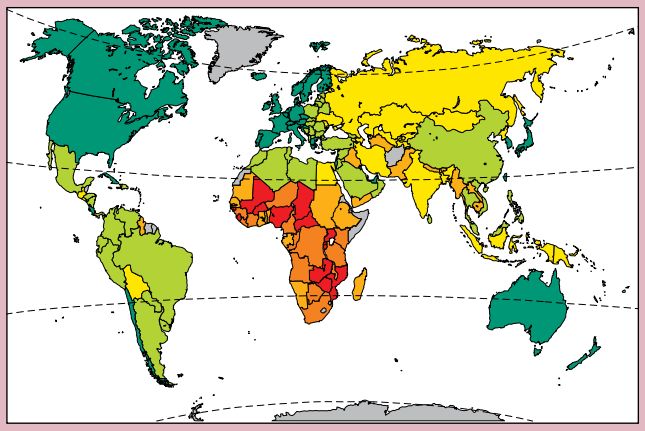
35 countries, listed in alphabetical order, report 100% people with safe sanitation.

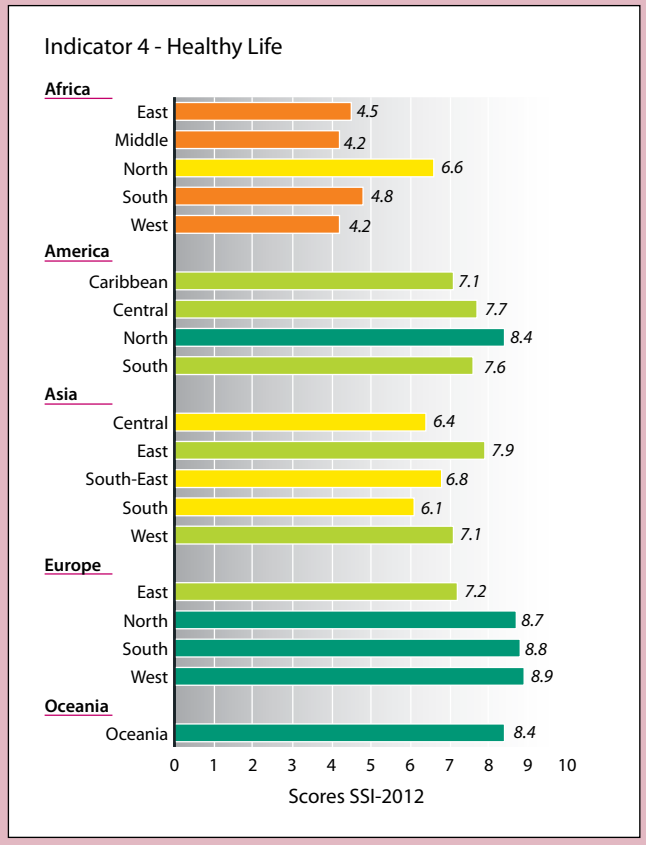






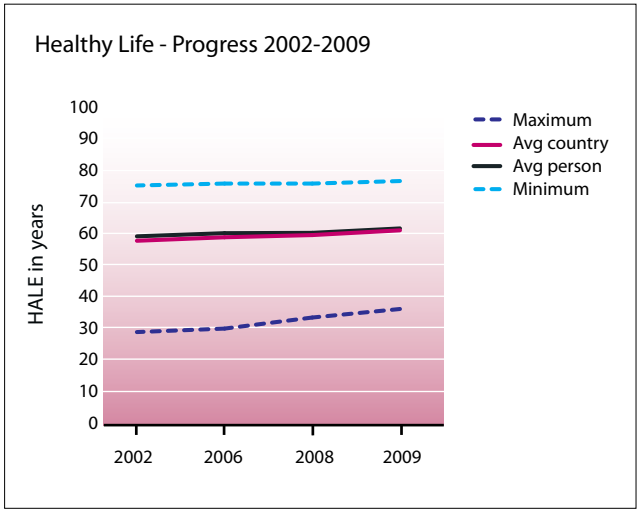
Indicator: Life expectancy at birth in number of healthy life years (HALE – Health Adjusted Life Expectancy)
Source: WHO and UN Population Division
Year of data: 2009
Target: the actual maximum

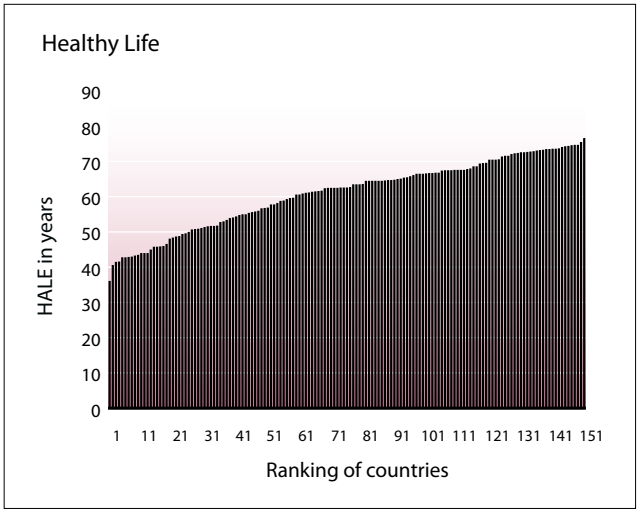


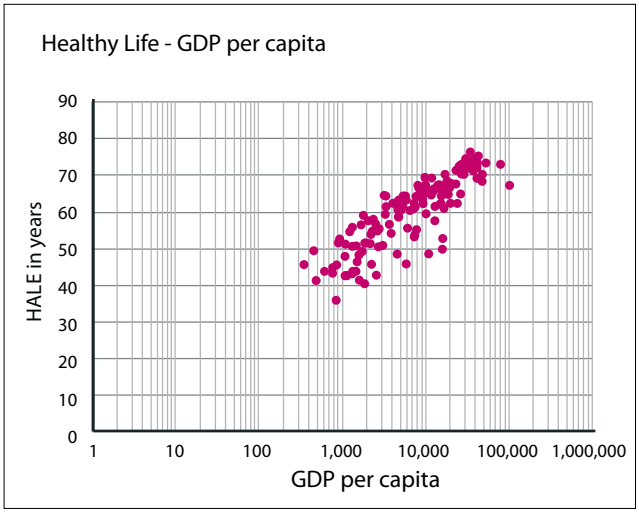


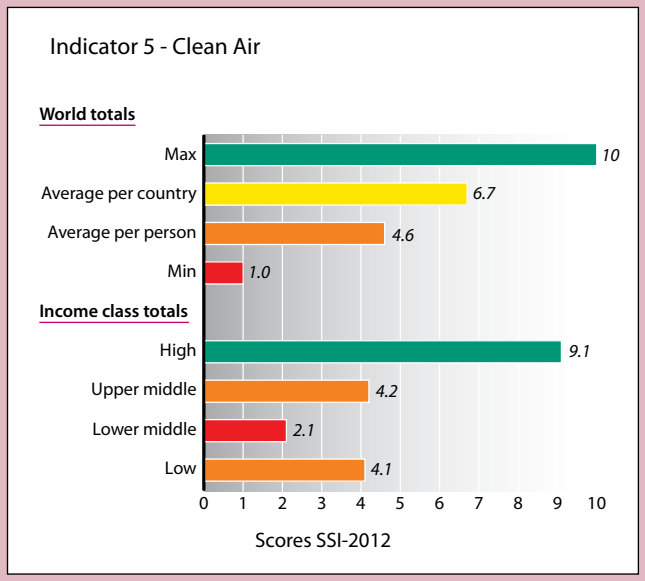
Commonly, life expectancy at birth is used as a measure for the level of a country's health care. However, WHO has refined this measure in 2002, resulting in the Health Adjusted Life Expectancy (HALE). This is the number of years that a newborn is expected to live minus the number of years spent in poor health. HALE thus not only takes into account the average number of years people are living, but also their health. After the presentation of the HALE figures in 2002, there has been no update, so an estimate has been made for more actual HALE values.

Top 5 and bottom 5 countries Healthy Life (HALE (in years))					
		SSI-2006	SSI-2008	SSI-2010	SSI-2012
	Year of data	2002	2006	2008	2009
1	Japan	75.0	75.6	75.6	76.4
2	Switzerland	73.2	74.1	74.6	75.3
3	Spain	72.6	73.4	73.6	74.5
4	Sweden	73.3	74.0	74.3	74.5
5	Iceland	72.8	73.5	73.3	74.4
147	Mozambique	36.9	35.3	40.2	42.6
148	Zambia	34.9	37.7	40.4	41.4
149	Zimbabwe	33.6	36.5	37.1	41.3
150	Chad	40.7	40.9	39.2	40.4
151	Sierra Leone	28.6	29.7	33.2	35.9







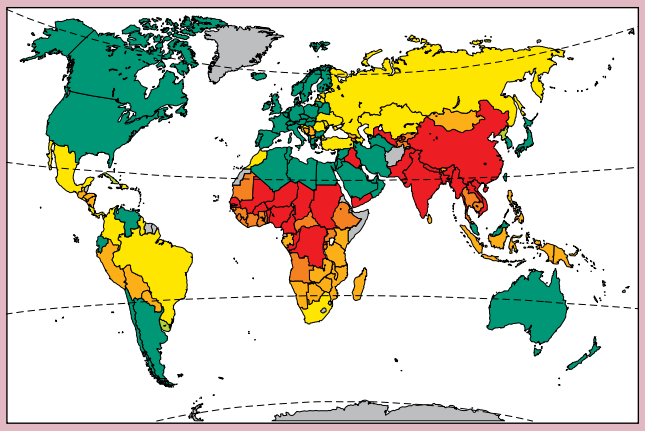


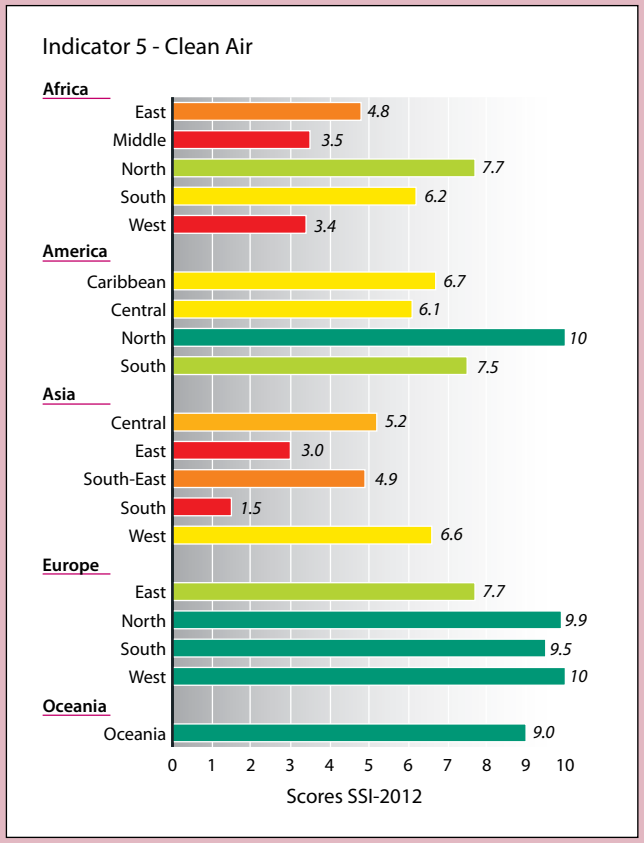
Indicator: Air pollution in its effects on humans

Source: Environmental Performance Index, EPI 2012

Year of data: 2007 or MRYA

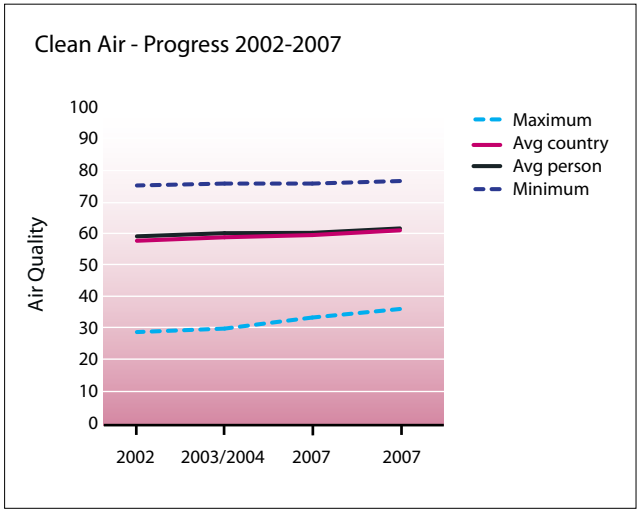
Target: 100



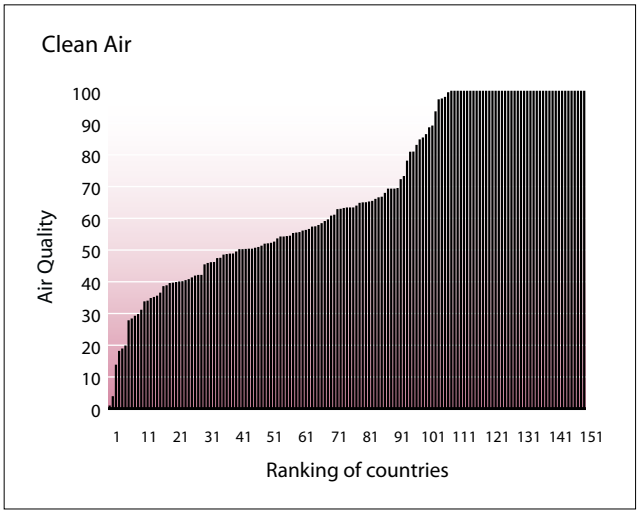


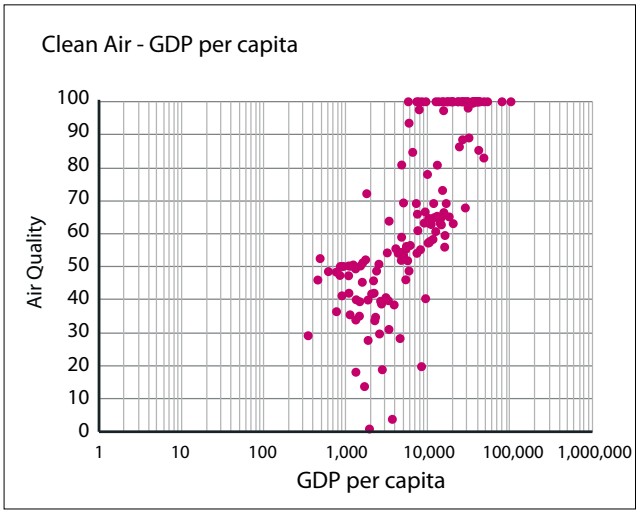
Clean Air is measured by indoor air pollution, caused by burning of solid fuel (defined as the household combustion of coal or biomass, such as dung, charcoal, wood, or crop residues) and urban particulate matters, PM2.5. Due to lack of an update of these data, we have used the same data as in the SSI-2010.

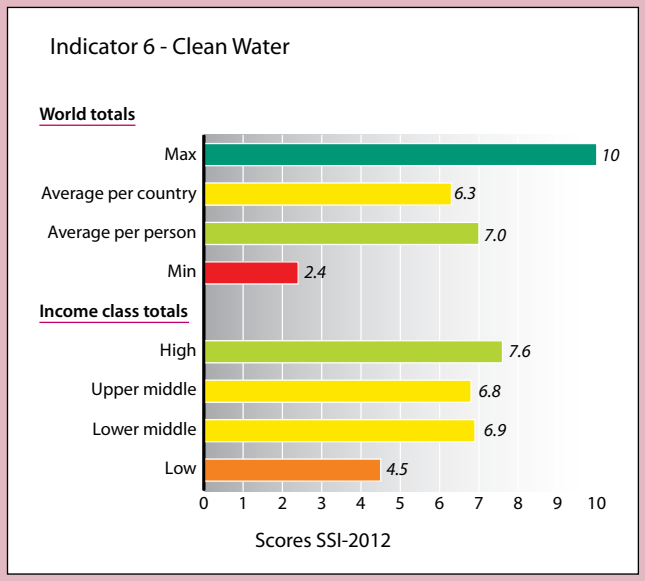
Top 5 and bottom 5 countries Clean Air (EPI scores)					
		SSI-2006	SSI-2008	SSI-2010	SSI-2012
Rank	Year of data	2002	2003/2004	2007	2007
1	Albania	100.0	100.0	100.0	100.0
2	Algeria	81.3	100.0	100.0	100.0
3	Argentina	90.5	100.0	100.0	100.0
4	Australia	100.0	100.0	100.0	100.0
5	Austria	100.0	100.0	100.0	100.0
147	Pakistan	18.8	18.1	18.8	18.8
148	Nepal	20.8	17.9	18.0	18.0
149	Bangladesh	16.7	15.7	13.7	13.7
150	India	6.9	4.7	3.7	3.7
151	Gambia	1.4	0.8	0.8	0.8



43 countries, listed in alphabetical order, received a EPI score of 100 for Clean Air.





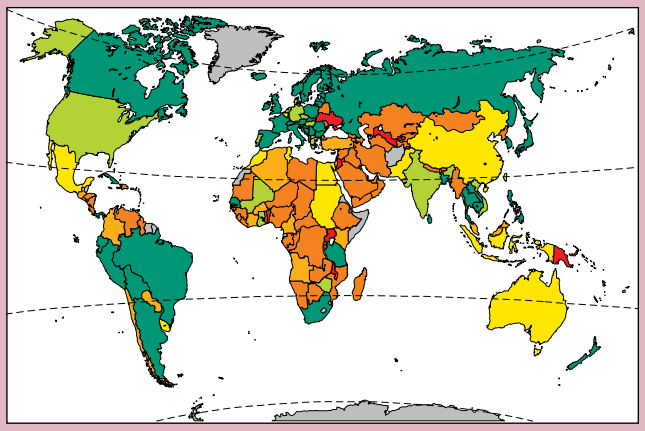


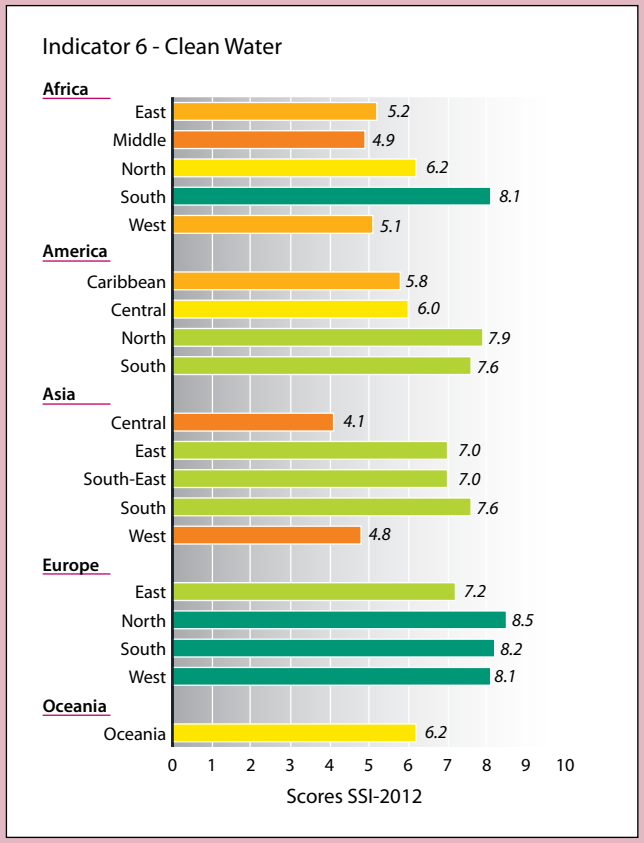
Indicator: Surface water quality

Source: Environmental Performance Index, EPI 2010

Year of data: 2008 or MRYA

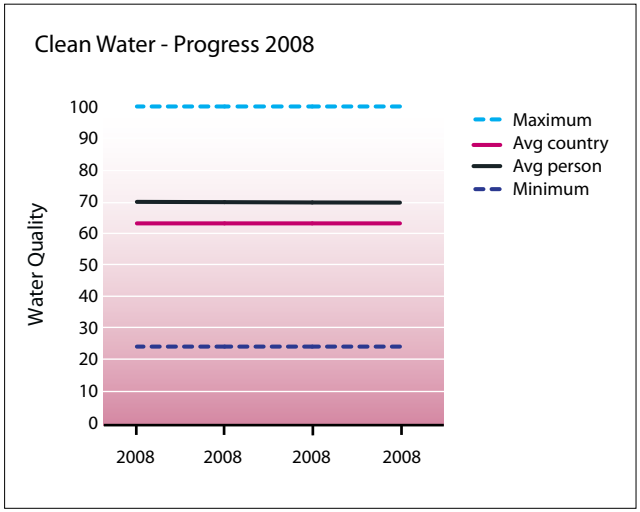
Target: 100

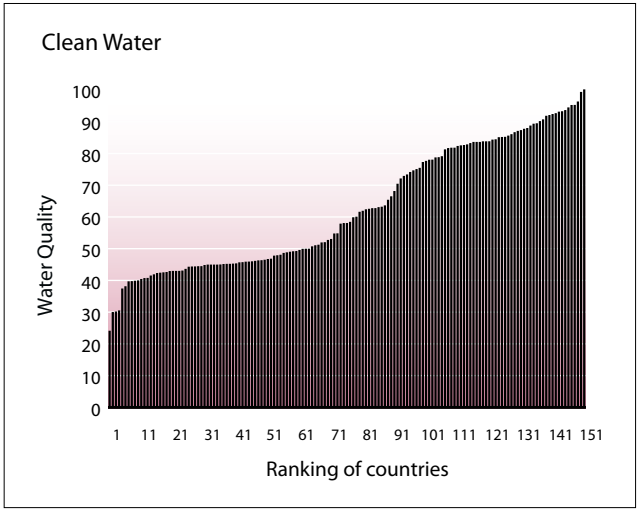


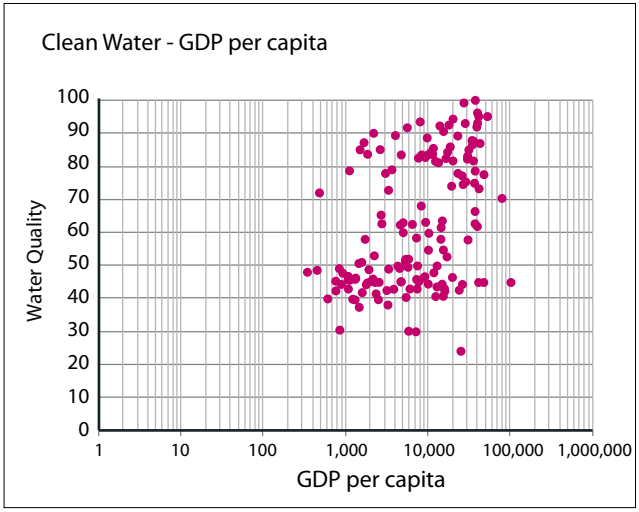


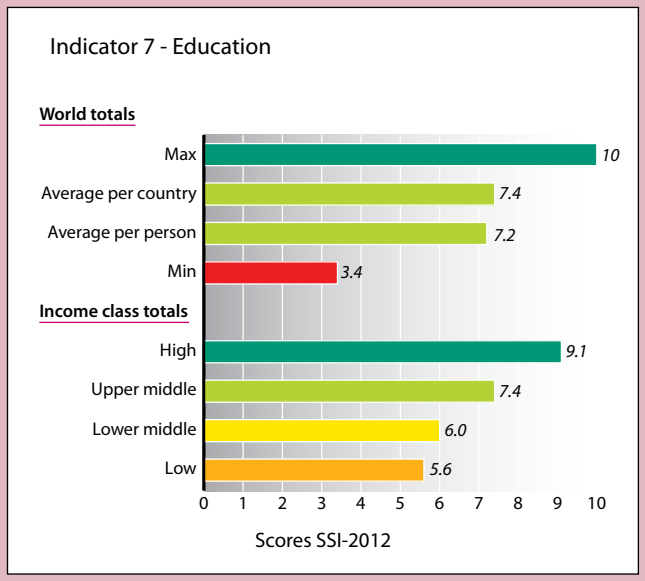
Clean Water is measured by dissolved oxygen concentration, pH, electrical conductivity, total nitrogen and total phosphorus. Due to lack of an update of these data, we have used the same data as in the SSI-2010.

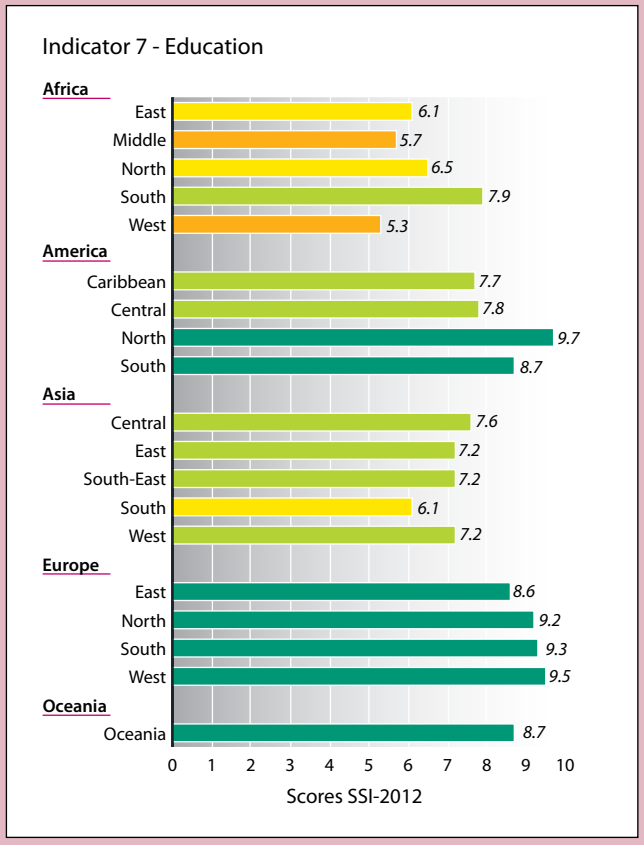
Top 5 and bottom 5 countries Clean Water (EPI scores)					
		SSI-2006	SSI-2008	SSI-2010	SSI-2012
Rank	Year of data	2008	2008	2008	2008
1	Iceland	100.0	100.0	100.0	100.0
2	New Zealand	99.2	99.2	99.2	99.2
3	Sweden	96.2	96.2	96.2	96.2
4	Austria	95.1	95.1	95.1	95.1
5	Norway	95.1	95.1	95.1	95.1
147	Benin	37.2	37.2	37.2	37.2
148	Malawi	30.3	30.3	30.3	30.3
149	Jordan	30.0	30.0	30.0	30.0
150	Ukraine	29.8	29.8	29.8	29.8
151	Malta	23.9	23.9	23.9	23.9









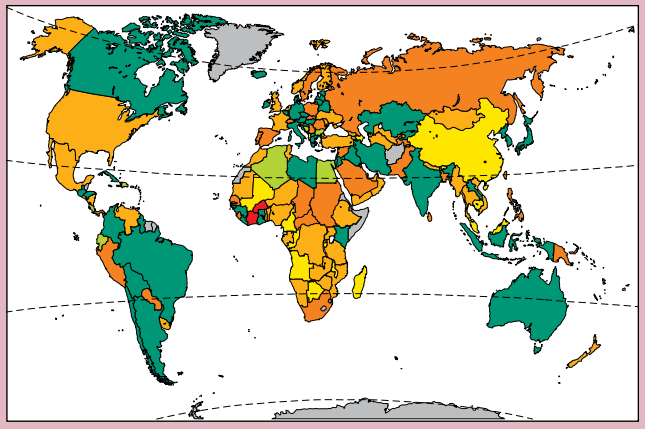


Indicator: combined gross enrolment ratio for primary, secondary and tertiary schools

Source: Unesco

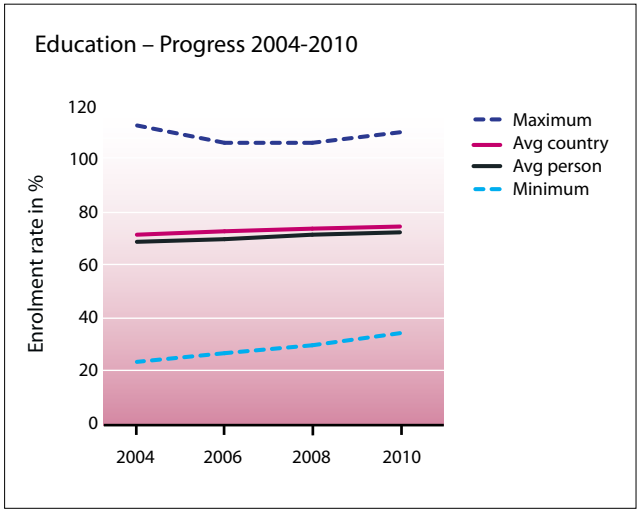
Year of data: 2010 or MRYA

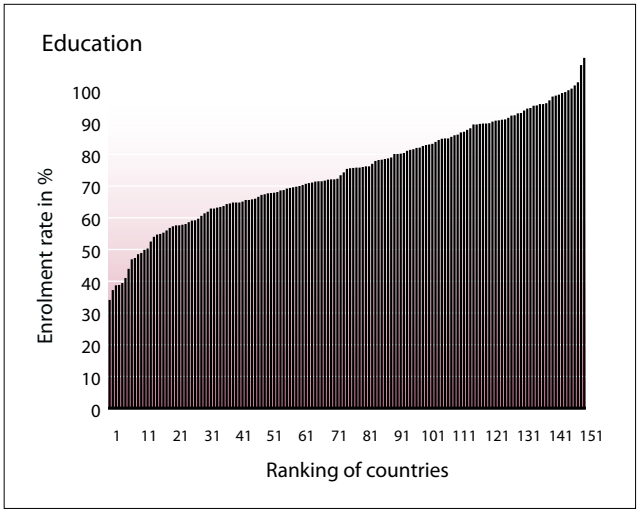
Target: 100%

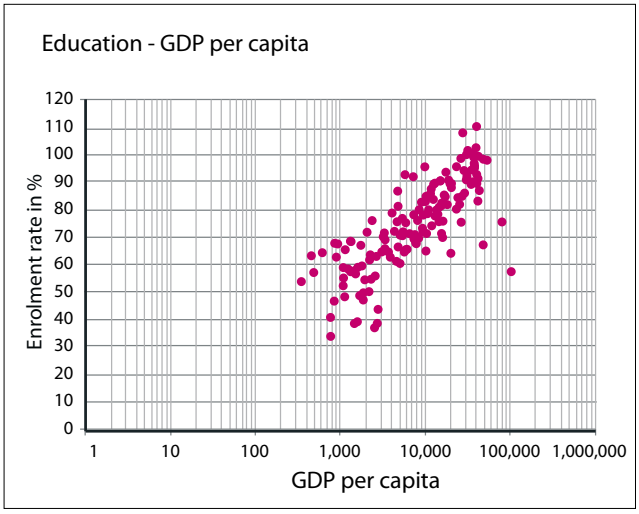


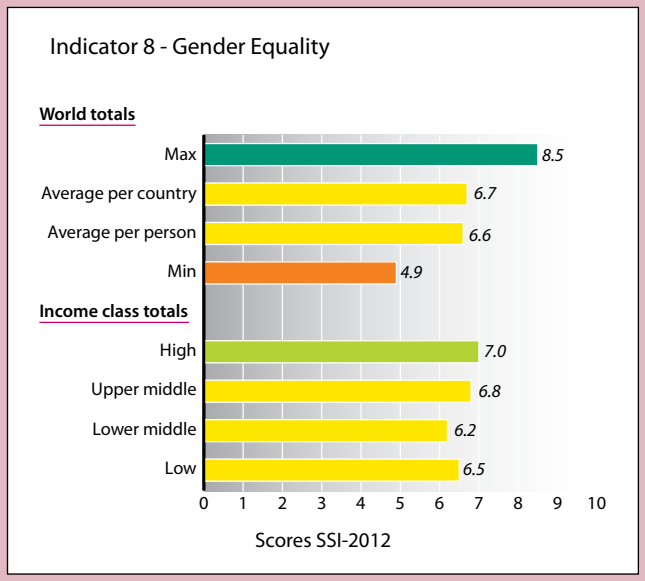
The combined Gross enrolment ratio expresses the number of students enrolled in primary, secondary and tertiary levels of education, regardless of age, as a percentage of the population of official school age for the three levels. Since all students are included, regardless of age, the ratio can be more than 100%. This happens when students younger or older than the official school age are enrolled.

Top 5 and bottom 5 countries Education (Gross enrolment rate primary, secondary, tertiary schools)					
		SSI-2006	SSI-2008	SSI-2010	SSI-2012
Rank	Year of data or MRYA	2004	2006	2008	2010
1	Australia	112.8	104.9	105.5	110.2
2	New Zealand	105.1	106.2	106.2	107.9
3	Ireland	95.9	96.9	100.0	102.5
4	Korea, South	96.6	98.9	100.9	101.5
5	Finland	100.3	101.5	101.3	100.5
147	Côte d'Ivoire	39.2	39.2	39.2	39.2
148	Sudan	35.2	38.8	38.6	38.6
149	Burkina Faso	23.0	29.5	35.2	38.5
150	Papua New Guinea	37.0	37.0	37.0	37.0
151	Niger	24.0	26.3	29.3	33.9







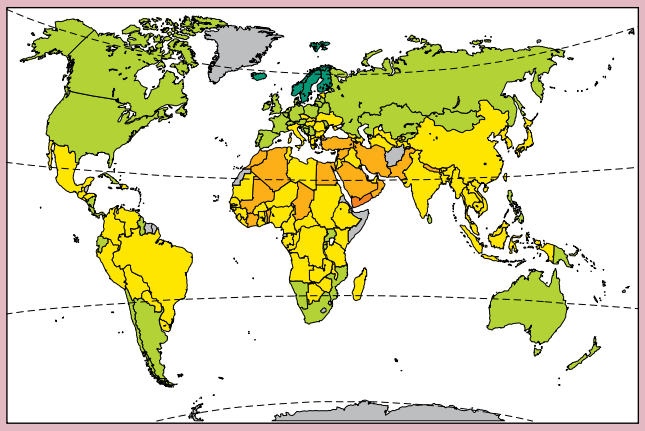


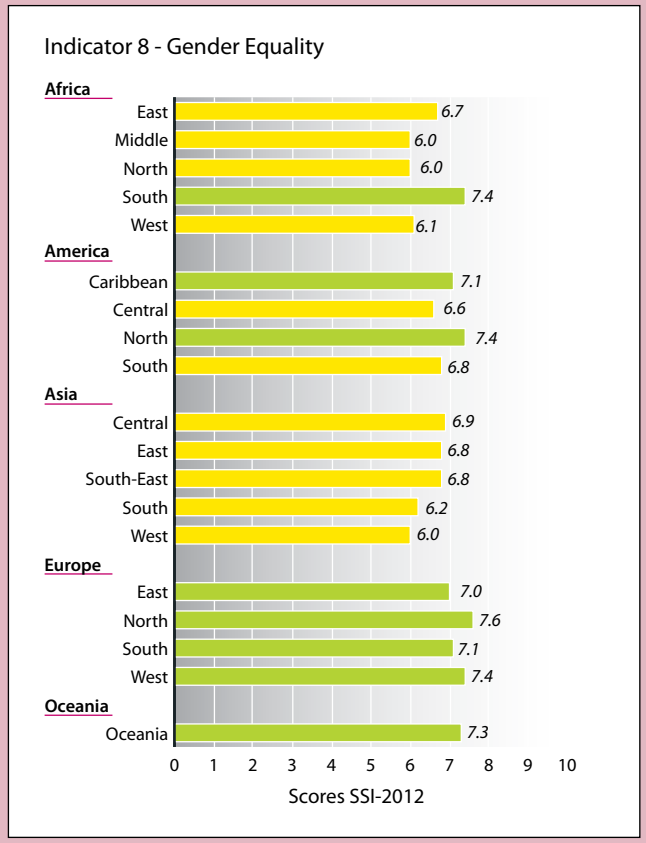
Indicator: Gender Gap Index

Source: World Economic Forum

Year of data: 2011

Target: 1 on the scale of 0 to 1

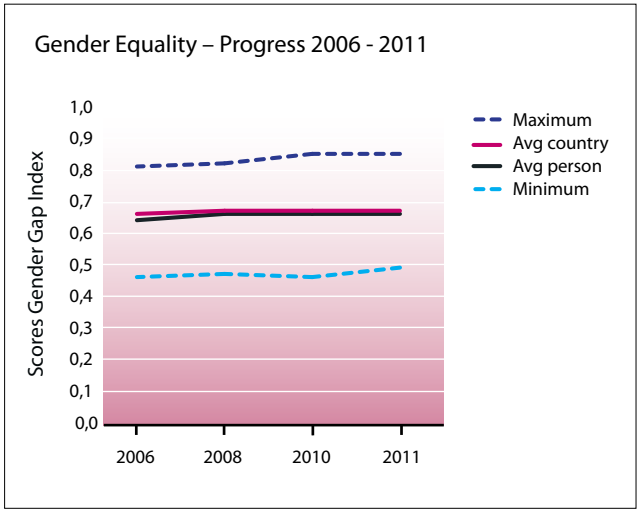


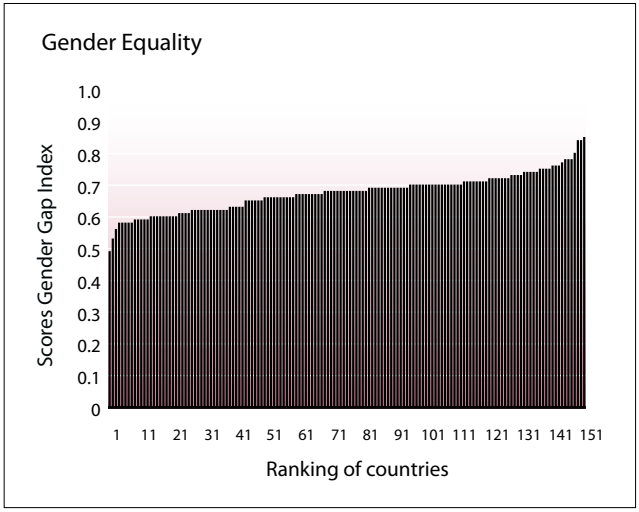


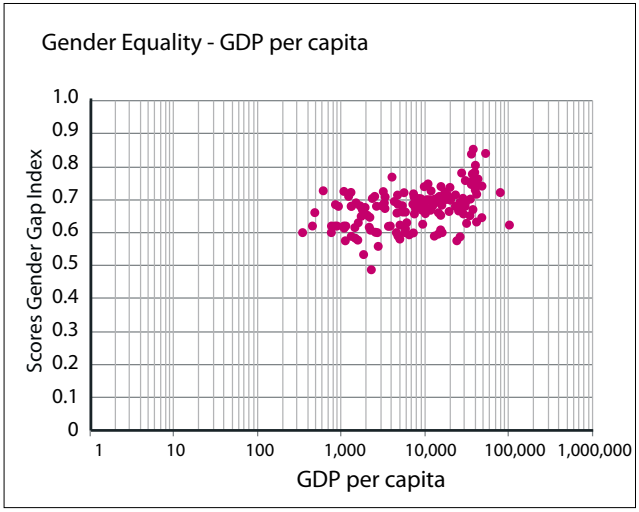
The Gender Gap Index, yearly published by World Economic Forum, is a comprehensive index, based on 14 indicators aggregated into 4 categories:

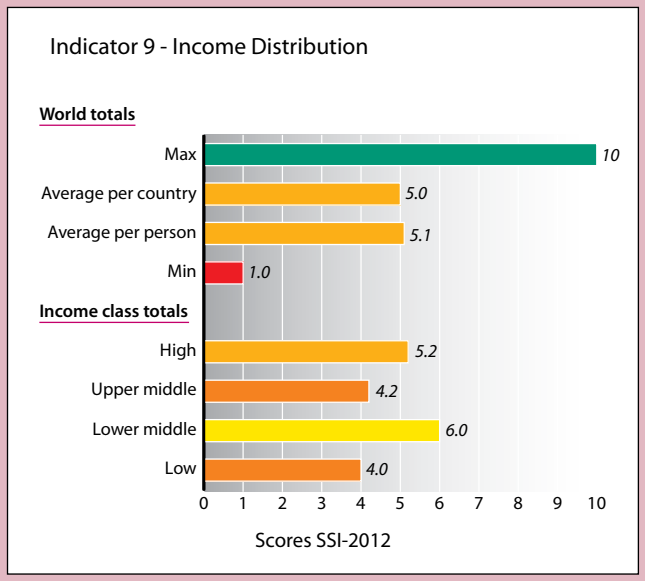
1. Economic participation and opportunity (salaries, participation levels and access to high-skilled employment).
2. Educational attainment (access to basic and higher level education).
3. Political empowerment (representation in decision-making structures).
4. Health and survival (life expectancy and sex ratio).

Top 5 and bottom 5 countries Gender Equality (Scores Gender Gap Index)					
		SSI-2006	SSI-2008	SSI-2010	SSI-2012
Rank	Year of data	2006	2008	2010	2011
1	Iceland	0.78	0.80	0.85	0.85
2	Norway	0.80	0.82	0.84	0.84
3	Finland	0.80	0.82	0.83	0.83
4	Sweden	0.81	0.81	0.80	0.80
5	New Zealand	0.75	0.79	0.78	0.78
147	Côte d'Ivoire	0.57	0.57	0.57	0.58
148	Mali	0.60	0.61	0.57	0.58
149	Pakistan	0.54	0.55	0.55	0.56
150	Chad	0.52	0.53	0.53	0.53
151	Yemen	0.46	0.47	0.46	0.49







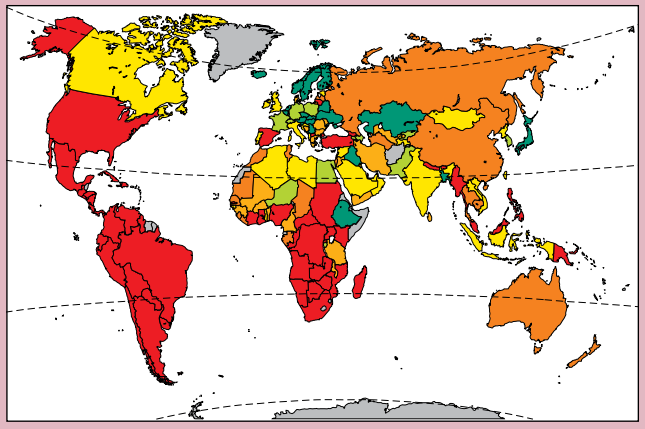


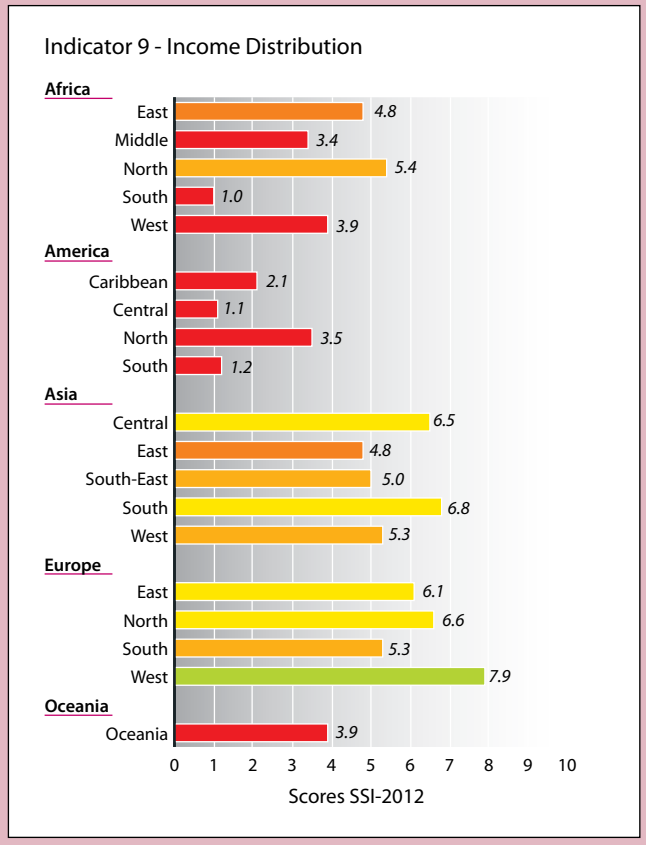
Indicator: ratio of income of the richest 10% to the poorest 10% of the people in a country

Source: World Bank

Year of data: 2010 or MRYA

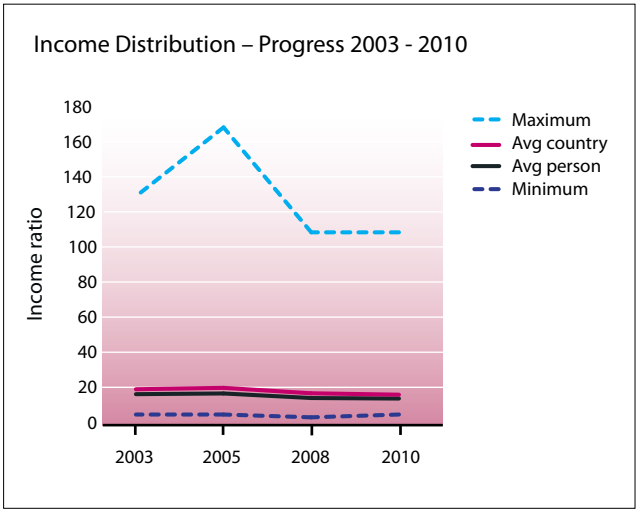
Target: the actual maximum score, i.e. the lowest ratio.



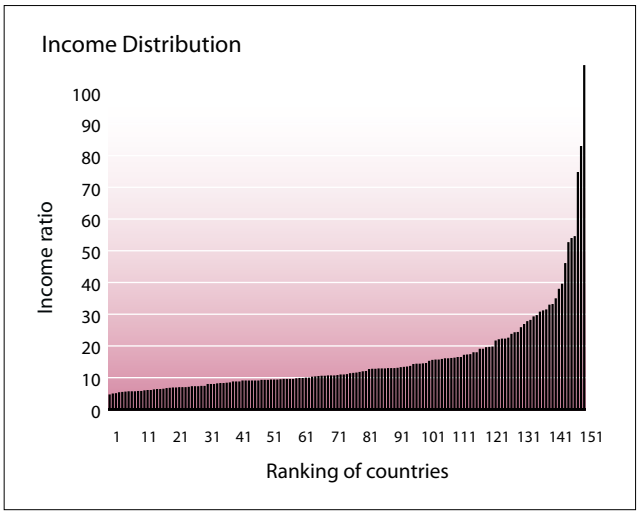


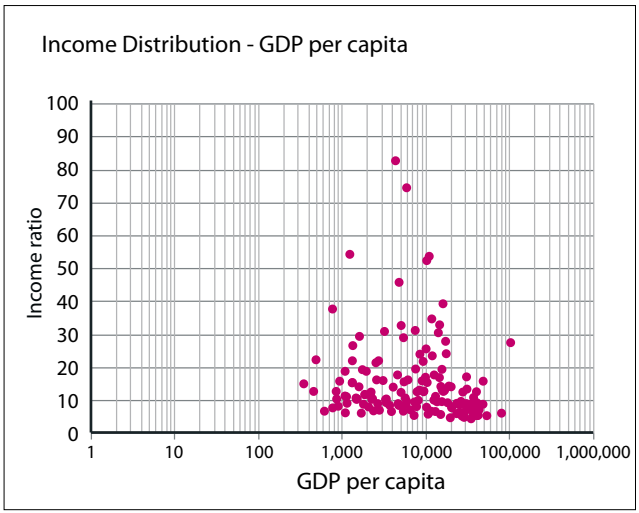
This indicator assesses the level of equality of the distribution of income of the richest 10% to the poorest 10% of the people in a country. A low level of inequality is supposed to contribute to a stable society, whereas a high level of inequality provokes unrest or worse in a society.

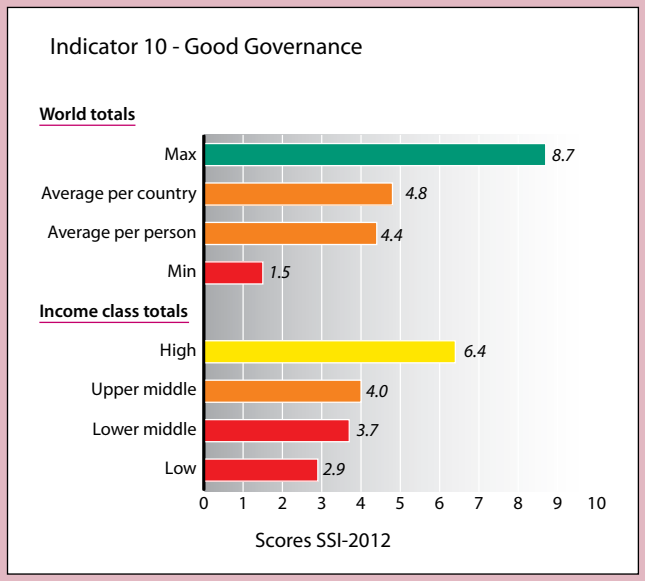
Top 5 and bottom 5 countries Income Distribution (Income richest 10% to poorest 10%)					
		SSI-2006	SSI-2008	SSI-2010	SSI-2012
Rank	Year of data	2003	2005	2008	2010
1	Japan	4.5	4.5	4.5	4.5
2	Hungary	5.5	5.5	6.9	4.8
3	Slovenia	5.9	5.9	7.2	4.9
4	Finland	5.6	5.6	5.7	5.2
5	Czech Republic	5.2	5.2	5.3	5.3
147	South Africa	33.1	33.1	34.5	53.8
148	Haiti	21.2	71.7	53.1	54.4
149	Angola	21.2	22.1	74.5	74.6
150	Honduras	49.1	34.2	60.3	82.8
151	Namibia	128.8	128.8	108.3	108.3



The maximum values are for Namibia, except in 2005, when Bolivia had the highest ratio; all data according to the World Bank. The maximum values are not included in the graphs on this page.





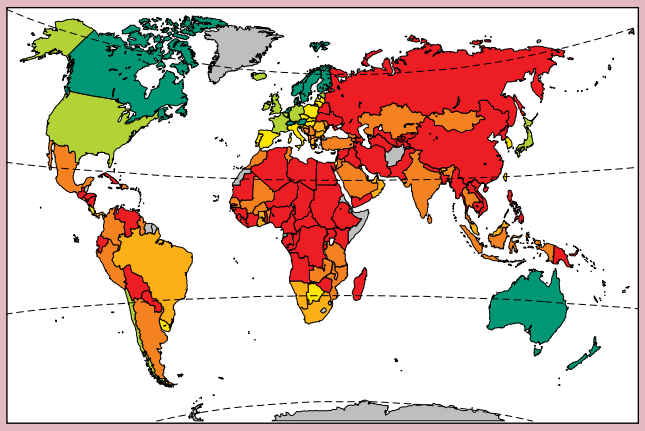


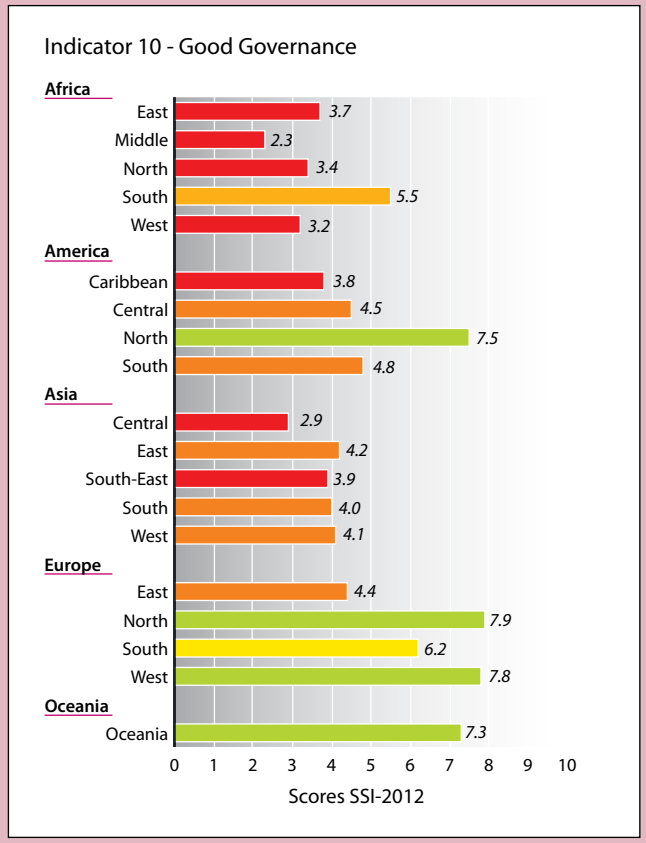
Indicator: the average of values of the six Governance Indicators of the World Bank

Source: World Bank

Year of data: 2010

Target: the maximum score corresponds with 15, on the World Bank scale of -15 to +15



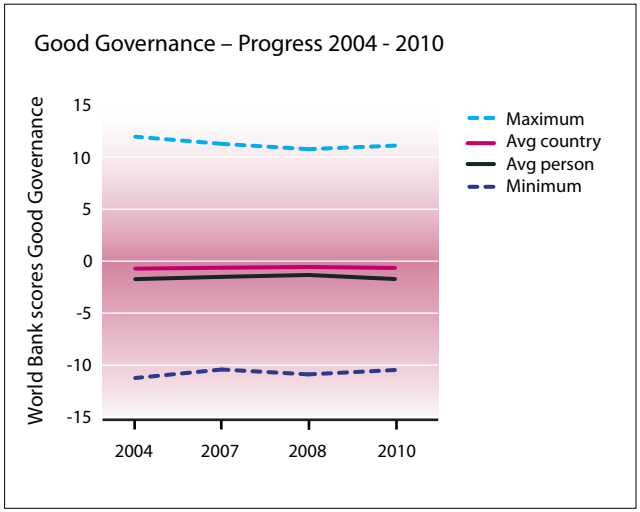


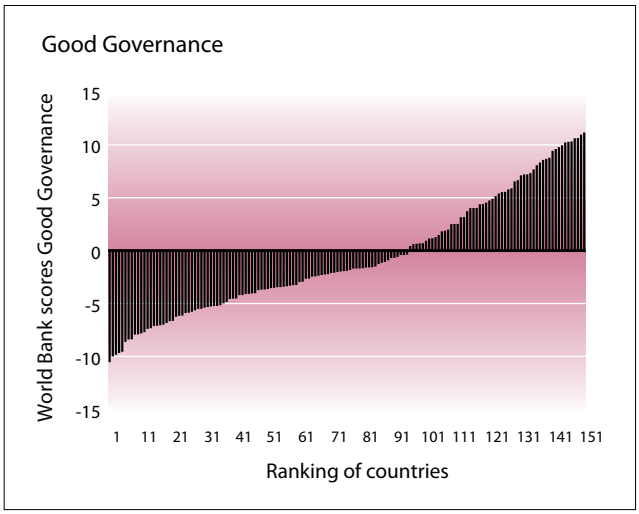
Yearly the World Bank publishes the level of Good Governance, based on the assessment of six major issues:

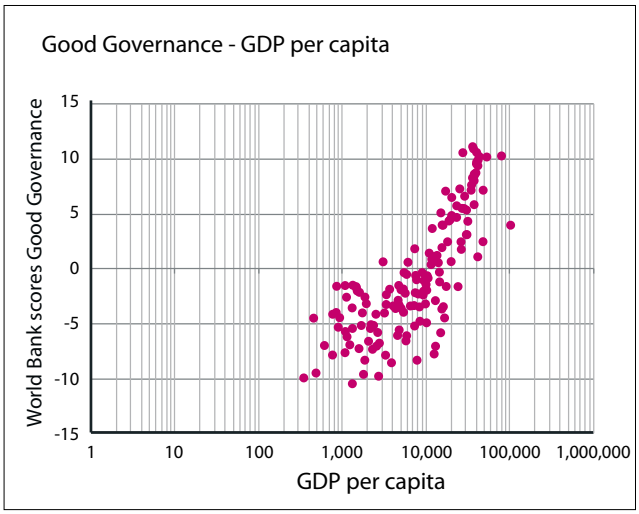
1. Voice and Accountability,
2. Political Stability,
3. Government Effectiveness,
4. Regulatory Quality,
5. Rule of Law and
6. Control of Corruption.

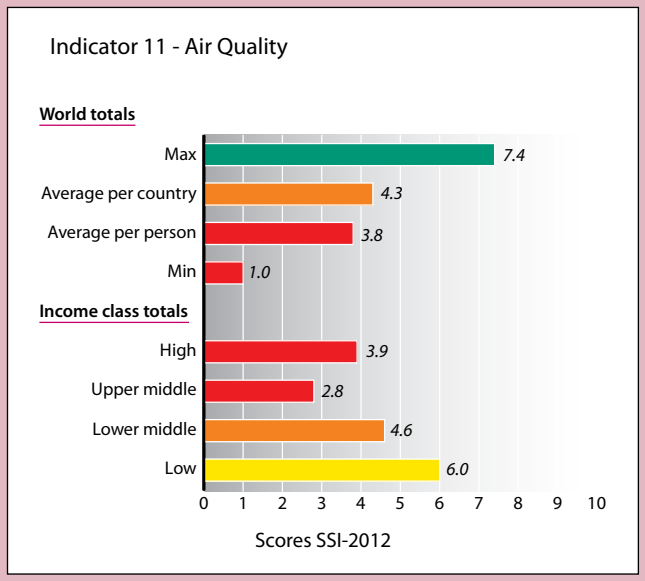
The World Bank uses a scale of +2.5 to -2.5 for each item, so by adding up one gets a scale of +15 to -15. For the SSI these six issues have been integrated into one indicator, expressing the level of Good Governance.

Top 5 and bottom 5 countries Good Governance (World Bank scores, scale +15 to -15)					
		SSI-2006	SSI-2008	SSI-2010	SSI-2012
Rank	Year of data	2004	2007	2008	2010
1	Finland	12.0	11.0	10.6	11.1
2	Denmark	11.2	11.0	10.8	10.9
3	Sweden	10.7	10.7	10.5	10.6
4	New Zealand	11.5	10.6	10.3	10.6
5	Luxembourg	11.4	10.9	10.2	10.3
147	Zimbabwe	-9.0	-9.5	-10.0	-9.5
148	Korea, North	-8.8	-9.0	-9.1	-9.6
149	Sudan	-9.1	-9.2	-10.0	-9.8
150	Congo Dem. Rep.	-10.1	-9.7	-10.1	-9.9
151	Myanmar	-10.3	-10.2	-10.9	-10.5







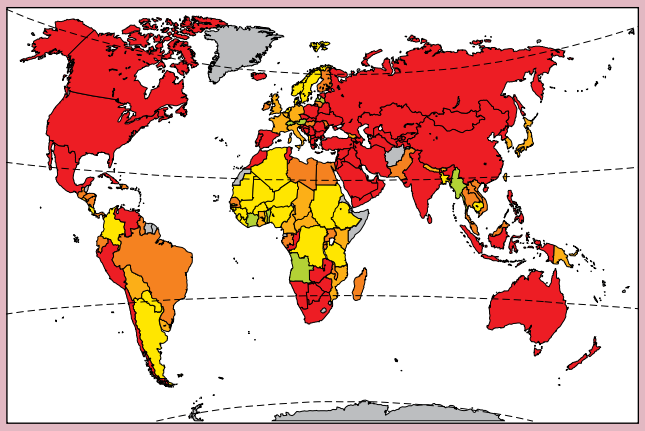


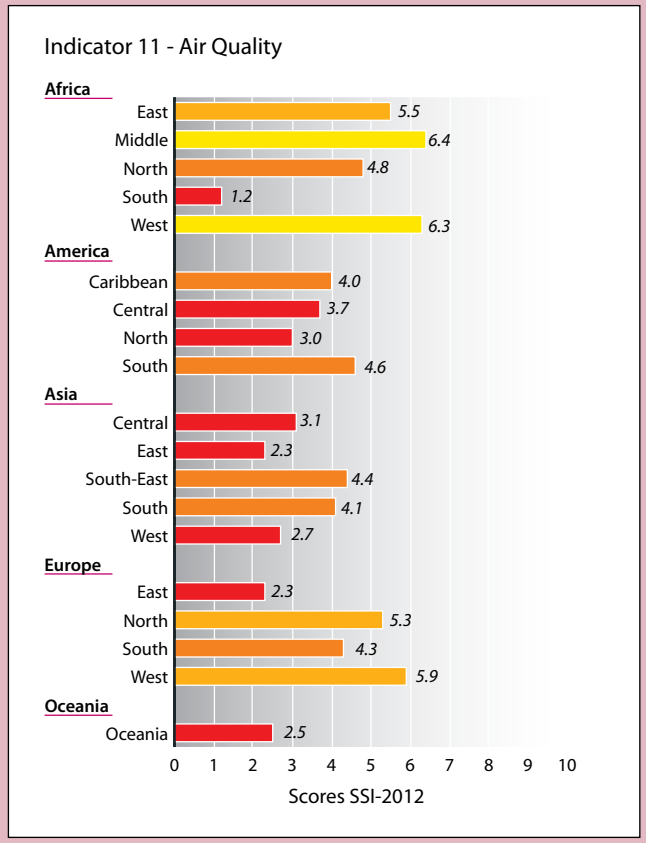
Indicator: Air Pollution in its effects on nature

Source: Environmental Performance Index, EPI 2012

Year of data: 2005

Target: 100 on the used scale of 0 to 100

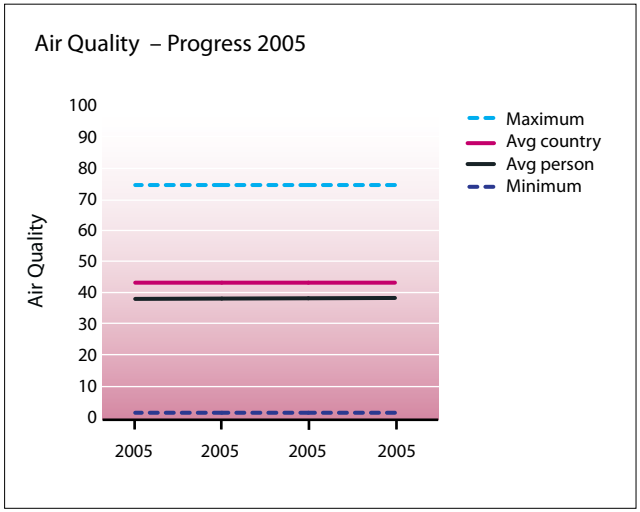


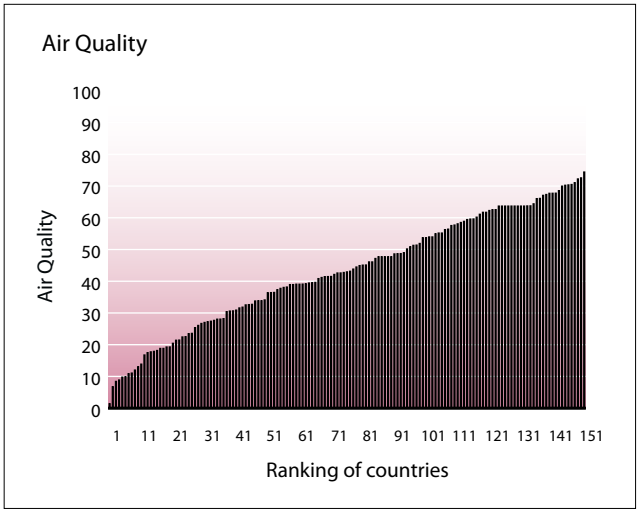


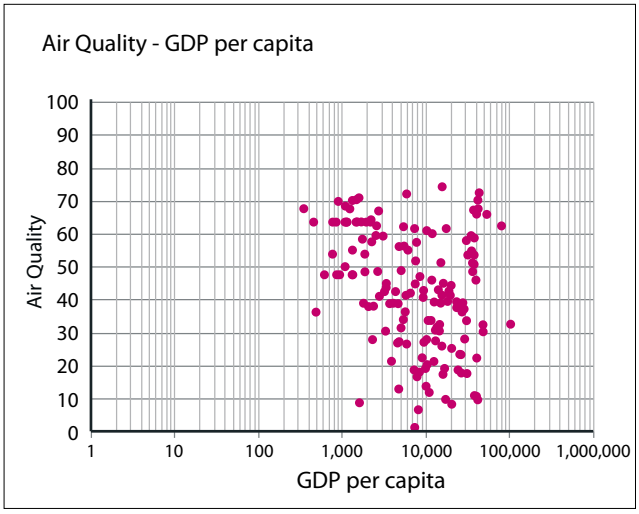
Air Pollution in its effects on nature is expressed by emissions of SO_2: SO_2 emissions per capita and SO_2 emissions per GDP.

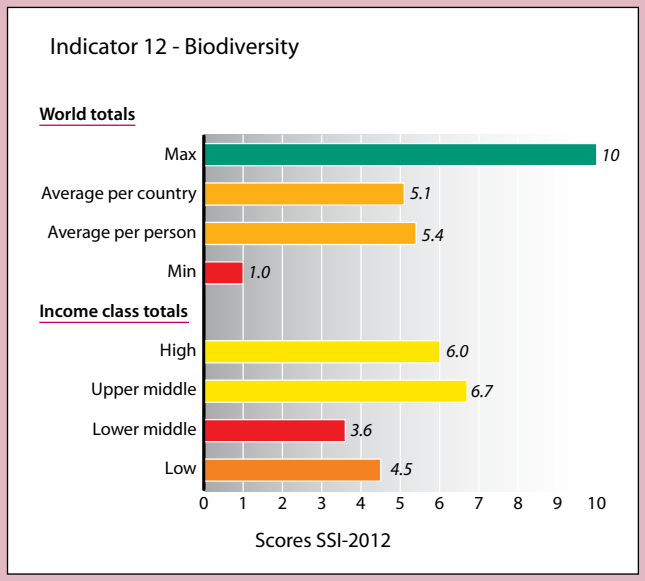
Due to lack of an update of these data, we have used the same data as in the SSI-2010.

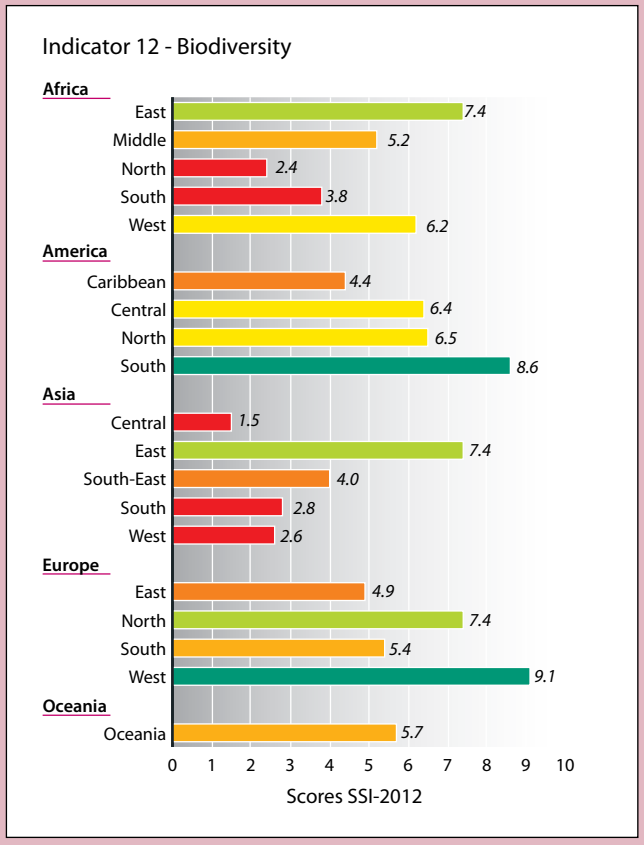
Top 5 and bottom 5 countries Air Quality (EPI scores SO_2)					
		SSI-2006	SSI-2008	SSI-2010	SSI-2012
Rank	Year of data	2005	2005	2005	2005
1	Latvia	74.4	74.4	74.4	74.4
2	Switzerland	72.6	72.6	72.6	72.6
3	Angola	72.2	72.2	72.2	72.2
4	Côte d'Ivoire	71.1	71.1	71.1	71.1
5	Benin	70.5	70.5	70.5	70.5
147	Kuwait	9.8	9.8	9.8	9.8
148	Zambia	8.9	8.9	8.9	8.9
149	Estonia	8.4	8.4	8.4	8.4
150	Bosnia Herzegovina	6.7	6.7	6.7	6.7
151	Namibia	1.4	1.4	1.4	1.4









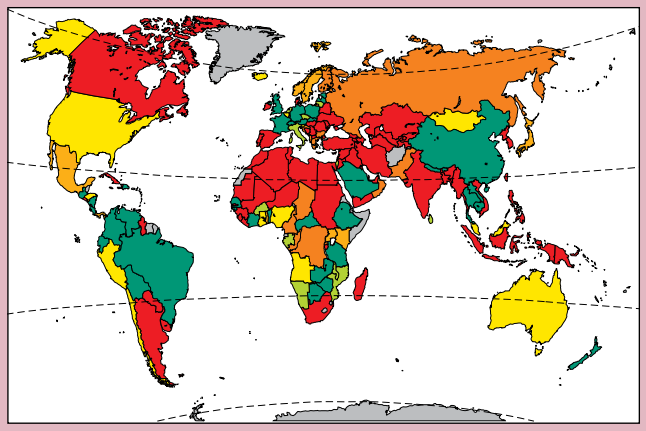


Indicator: size of protected areas (in % of land area)

Source: UNEP-WCMC

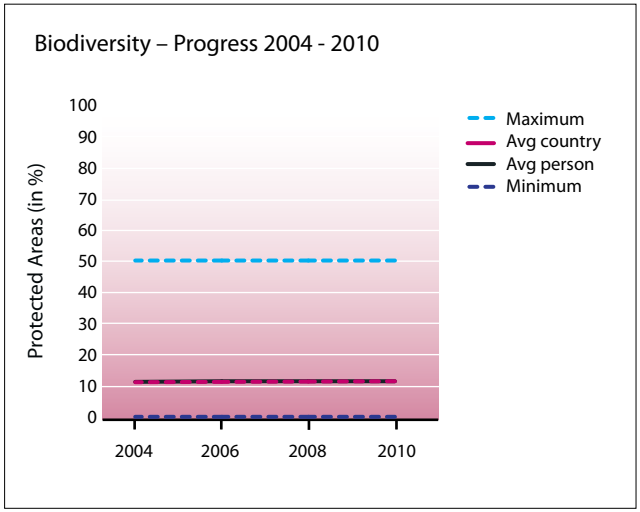
Year of data: 2010

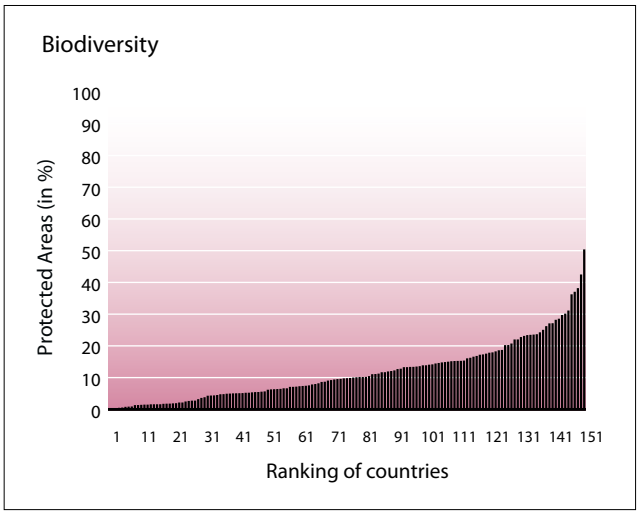
Target: 20%

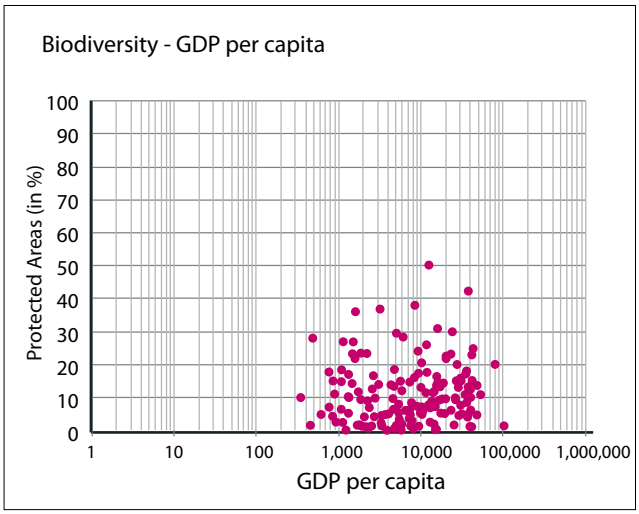


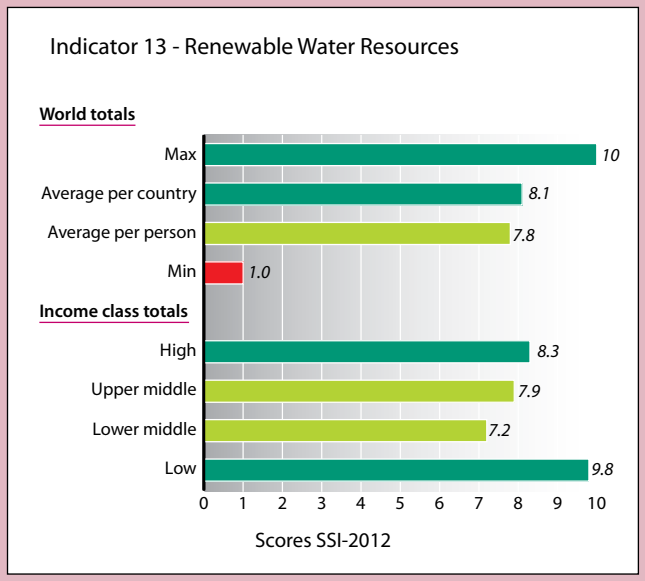
Since it is practically impossible to use data for threatened species, Biodiversity is only expressed by the size of protected areas in % of the total land area of a country.

Top 5 and bottom 5 countries Biodiversity (Protected Areas in % country size)					
		SSI-2006	SSI-2008	SSI-2010	SSI-2012
Rank	Year of data	2004	2006	2008	2010
1	Venezuela	50.2	50.2	50.2	50.2
2	Germany	41.0	41.8	42.3	42.3
3	Ecuador	37.8	37.8	38.0	38.0
4	Nicaragua	31.7	36.8	36.8	36.8
5	Zambia	36.0	36.0	36.0	36.0
147	Lebanon	0.4	0.4	0.4	0.4
148	Uruguay	0.2	0.3	0.3	0.3
149	Libyan Arab Jam.	0.1	0.1	0.1	0.1
150	Haiti	0.1	0.1	0.1	0.1
151	Iraq	0.1	0.1	0.1	0.1







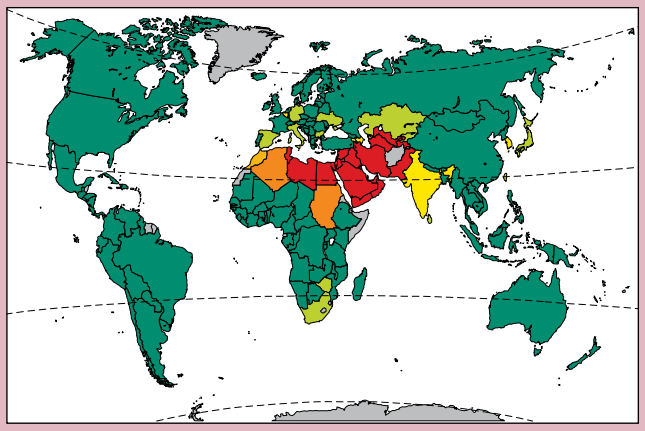


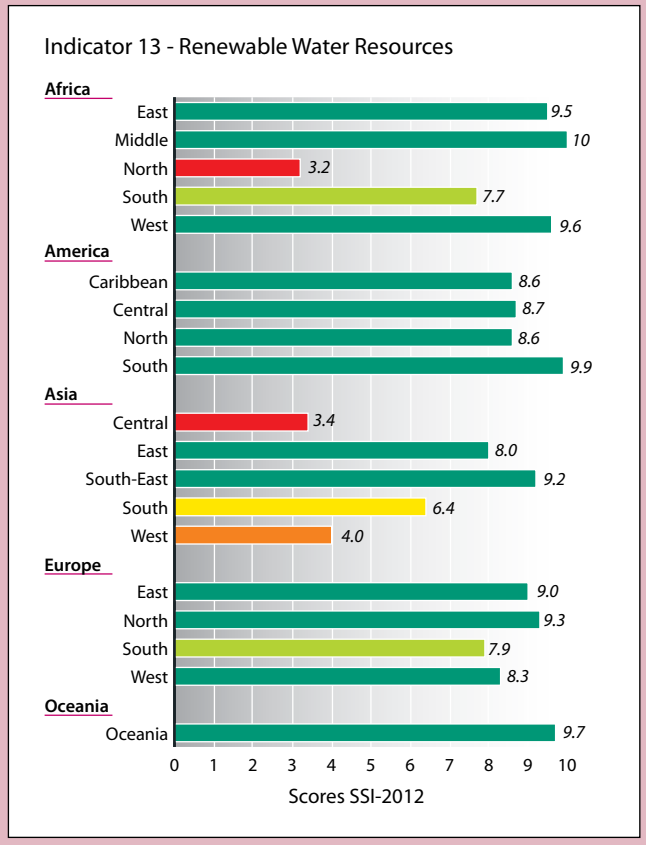
Indicator: annual water withdrawals (m^3 per capita) as % of renewable water resources

Source: Aquastat

Year of data: 2009 or MRYA

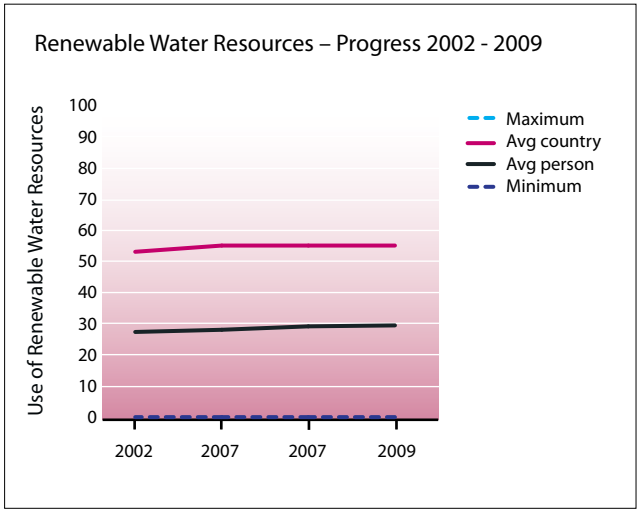
Target: the actual maximum score, i.e. the lowest ratio



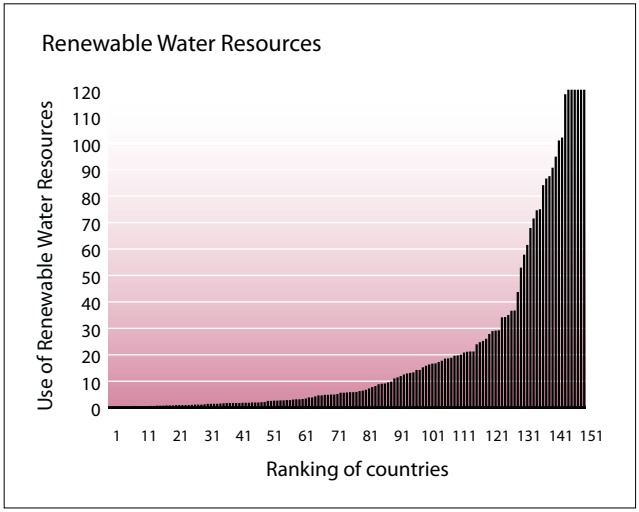


To monitor the sufficiency and the depletion of fresh water resources, the indicator Renewable Water Resources expresses the water consumption per year as a percentage of total available renewable water resources. This total includes internal and external (flowing in from neighbouring countries) water resources.

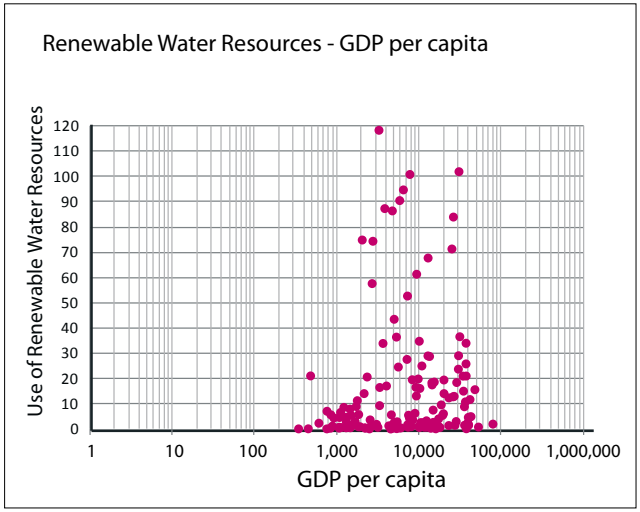
Top 5 and bottom 5 countries Renewable Water Resources (in %)					
		SSI-2006	SSI-2008	SSI-2010	SSI-2012
Rank	Year of data	2002	2007	2007	2009
1	Congo	0.0	0.0	0.0	0.0
2	Central Afr. Rep.	0.0	0.0	0.0	0.0
3	Congo Dem. Rep.	0.0	0.0	0.0	0.0
4	Papua New Guinea	0.0	0.0	0.0	0.0
5	Liberia	0.1	0.1	0.1	0.1
147	Qatar	336	381	381	381
148	Libyan Arab Jam.	610	610	610	610
149	Saudi Arabia	936	936	936	936
150	United Arab Emir.	1556	1867	1867	1867
151	Kuwait	2075	2075	2075	2075



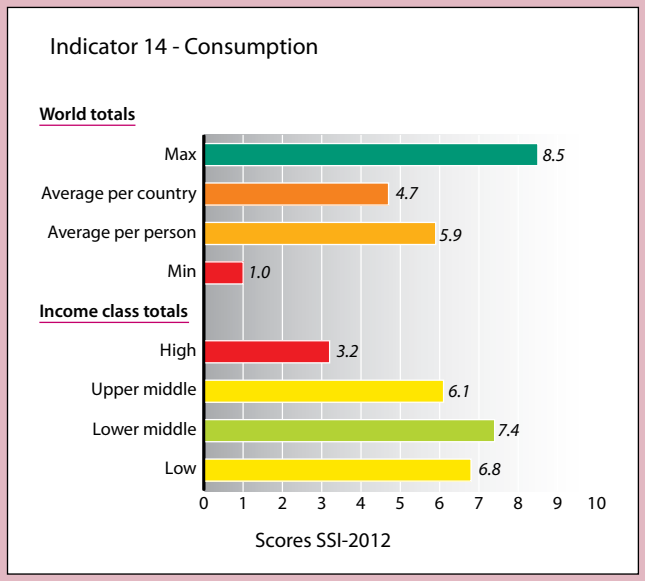
NB The maximum value is not included in the graph.



NB 6 countries with a value > 120% are not included in this graph.



NB 6 countries with a value > 120% are not included in this graph.

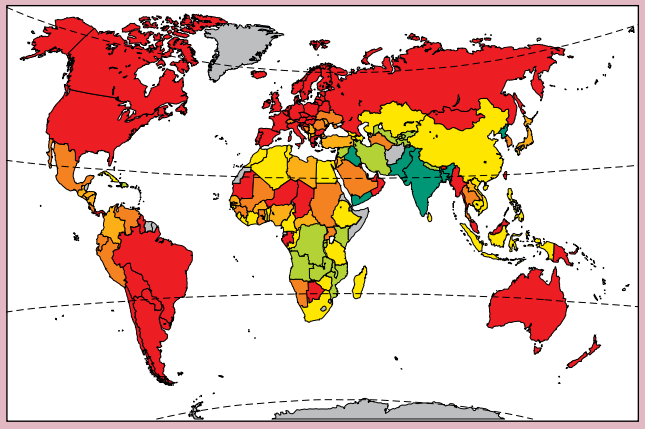


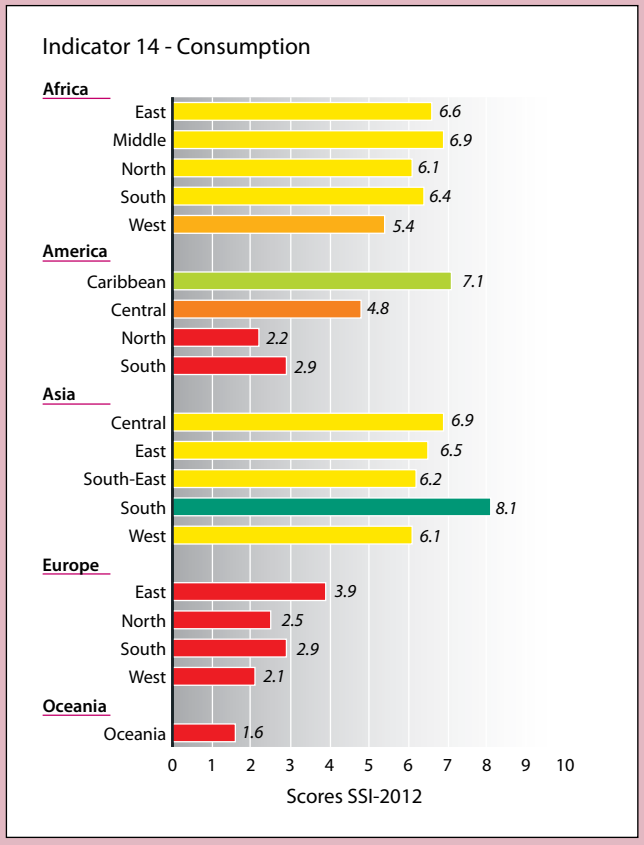
Indicator: Ecological Footprint minus Carbon Footprint

Source: Global Footprint Network

Year of data: 2008

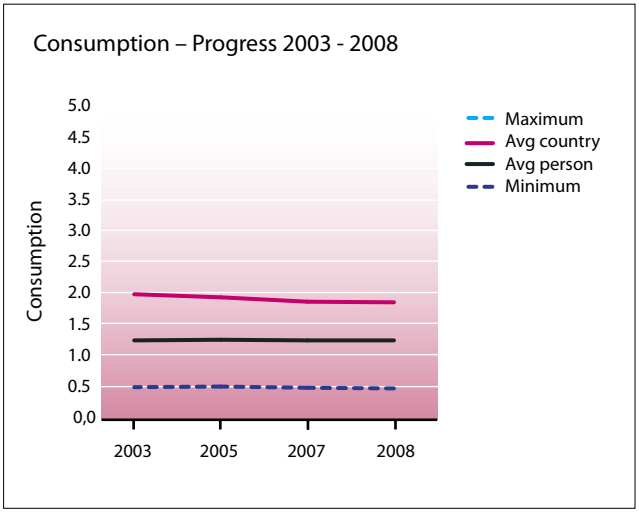
Target: 0.9 gha (global hectares)



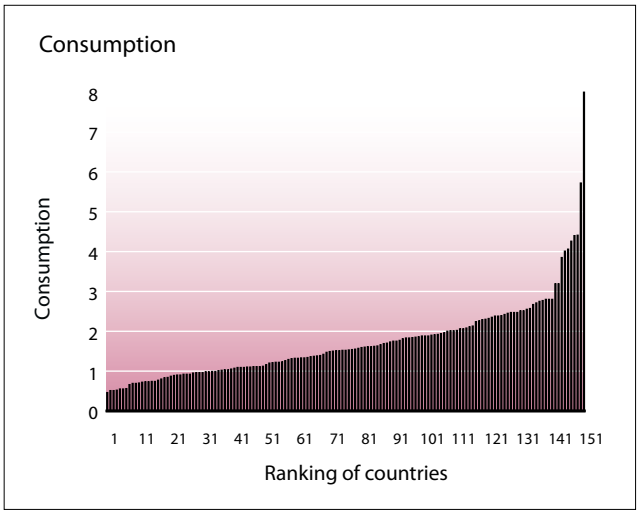


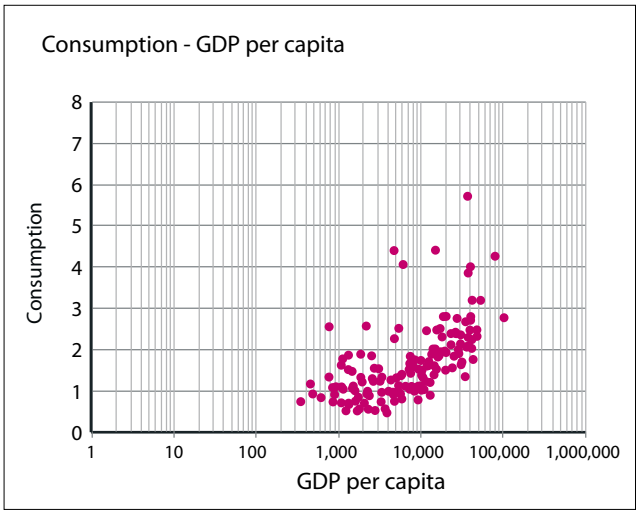
As a proxy for consumption the Ecological Footprint has been used minus the Carbon Footprint. The latter is already included in the SSI, by the indicator Emission of Greenhouse Gases.

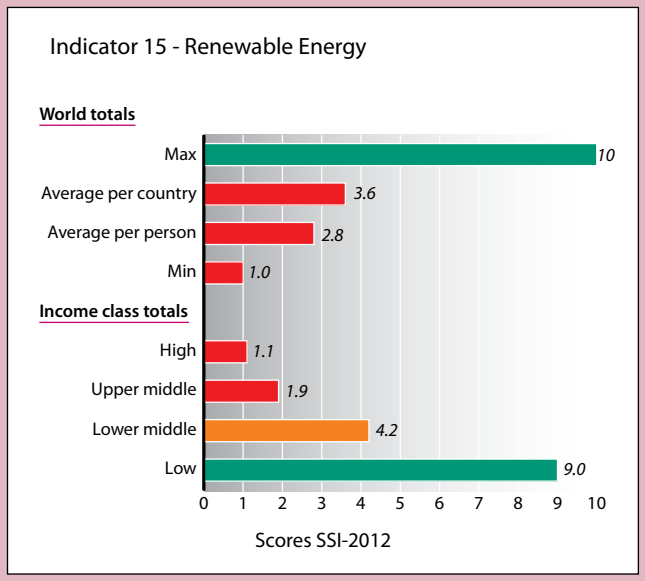
Top 5 and bottom 5 countries Consumption (global hectares per person)					
		SSI-2006	SSI-2008	SSI-2010	SSI-2012
Rank	Year of data	2003	2005	2007	2008
1	Iraq	0.54	0.54	0.47	0.46
2	Bangladesh	0.51	0.49	0.52	0.51
3	Haiti	0.50	0.51	0.54	0.51
4	Pakistan	0.48	0.51	0.52	0.52
5	Yemen	0.65	0.61	0.63	0.55
147	Luxembourg	5.58	2.99	3.69	4.26
148	Mongolia	3.36	3.51	4.22	4.40
149	Uruguay	4.52	4.38	4.67	4.41
150	Denmark	5.63	6.07	5.80	5.72
151	Iceland	47.16	36.30	31.21	26.19

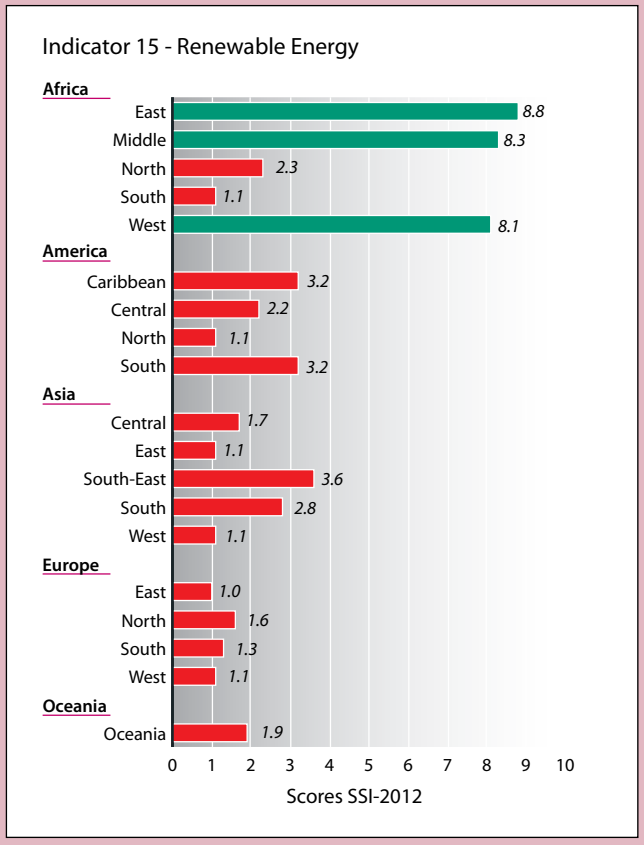


NB Iceland, maximum value, is not presented in the graphs on this page.







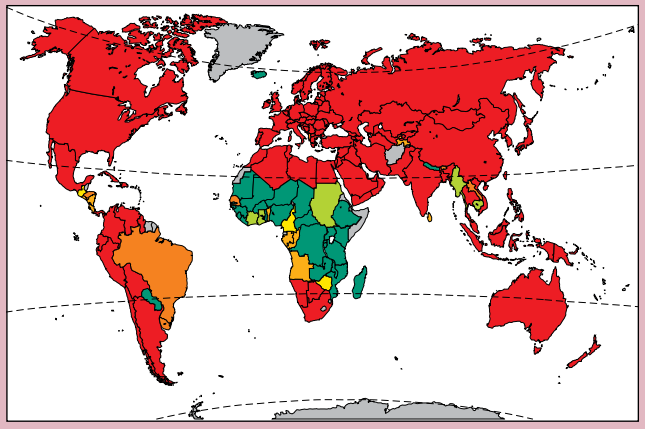


Indicator: renewable energy as % of total energy consumption

Source: IEA

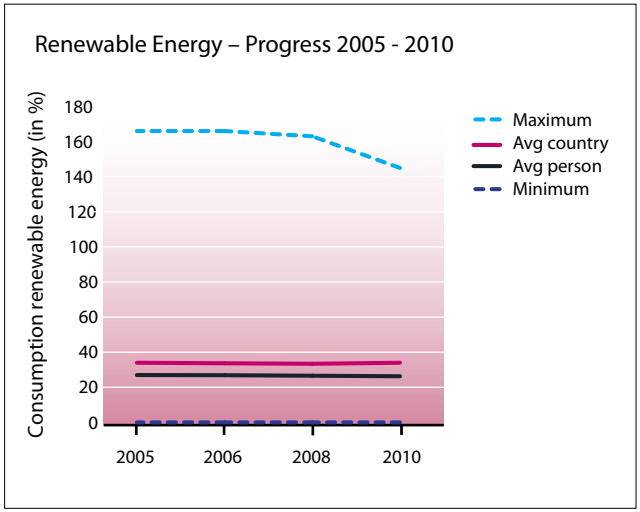
Year of data: 2010

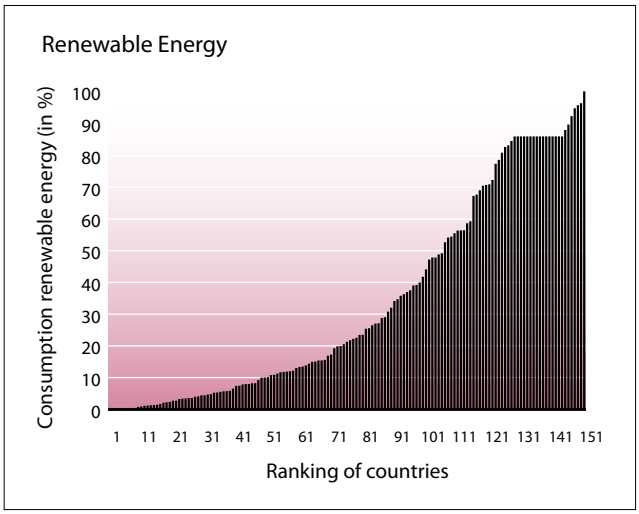
Target: 100%

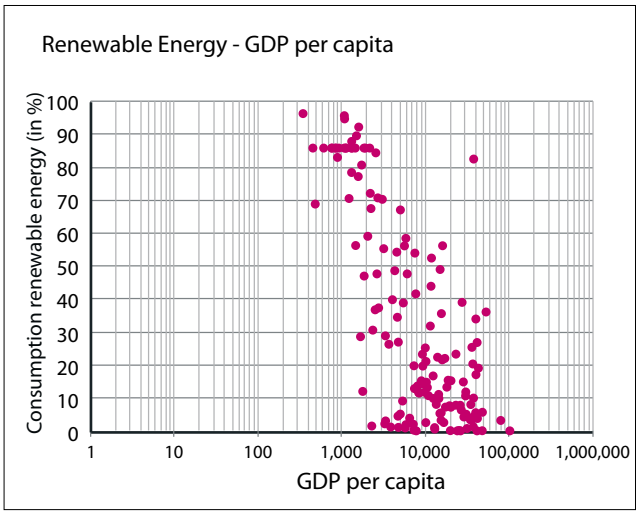


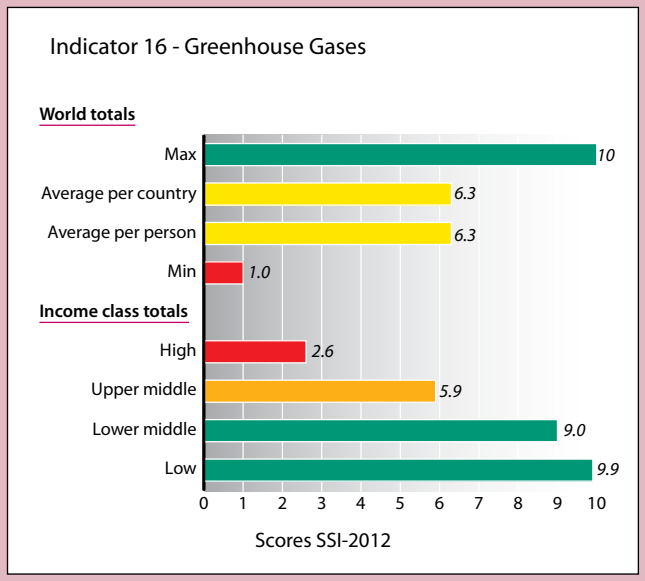
Renewable energy expresses the share of energy produced by renewable sources in % of total used energy (TPES, Total Primary Energy Supply). According to the definition used by IEA, renewable energy includes hydro, geothermal, solar photovoltaic, solar thermal, tide, wave, ocean, wind, solid biomass, gases from biomass, liquid biomass and renewable municipal waste.

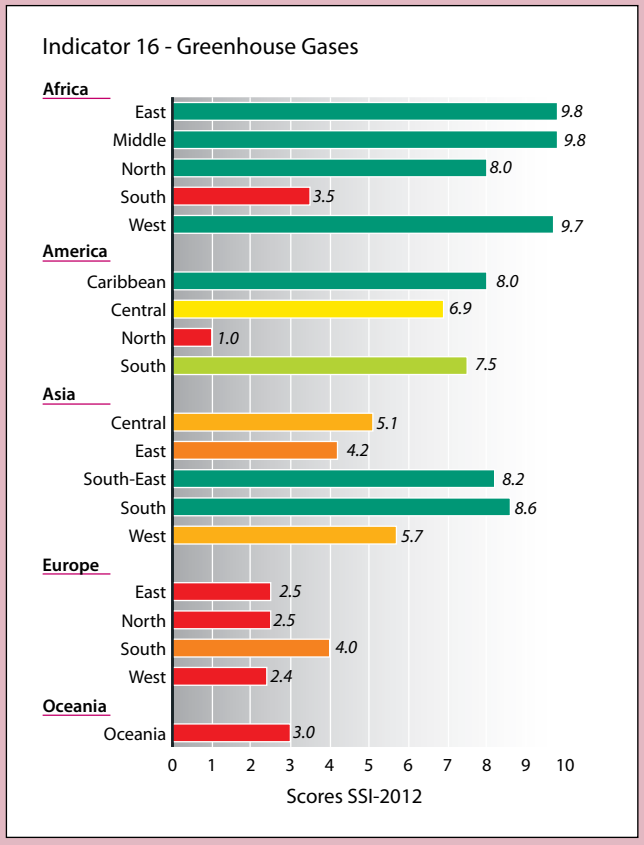
Top 5 and bottom 5 countries Renewable Energy (% renewable energy)					
		SSI-2006	SSI-2008	SSI-2010	SSI-2012
Rank	Year of data	2005	2006	2008	2010
1	Paraguay	166.2	166.3	162.7	145.2
2	Congo Dem. Rep.	97.2	96.9	96.3	96.3
3	Mozambique	96.4	96.7	95.9	95.6
4	Ethiopia	93.1	92.8	94.0	94.7
5	Zambia	90.7	91.5	92.5	92.2
147	Oman	0.0	0.0	0.0	0.0
148	Qatar	0.0	0.0	0.0	0.0
149	Saudi Arabia	0.0	0.0	0.0	0.0
150	Turkmenistan	0.0	0.0	0.0	0.0
151	Unit. Arab Emir.	0.0	0.0	0.0	0.0









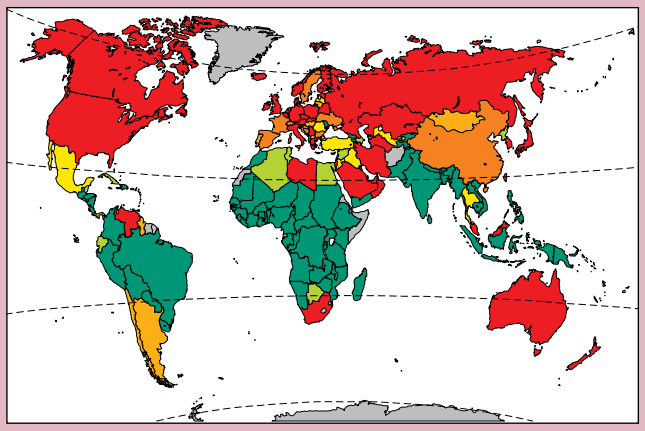


Indicator: CO_2 emissions per capita per year

Source: IEA

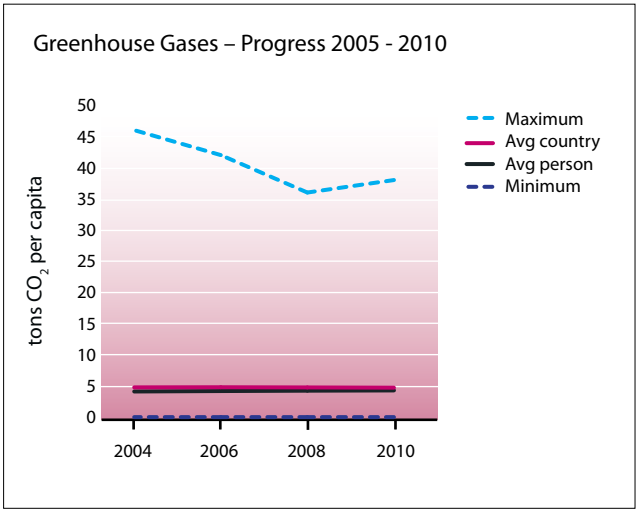
Year of data: 2010

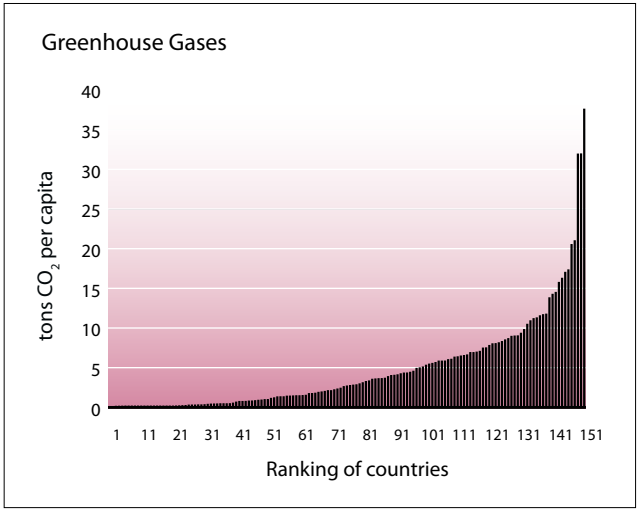
Target: ≤ 2 ton CO_2 per capita per year

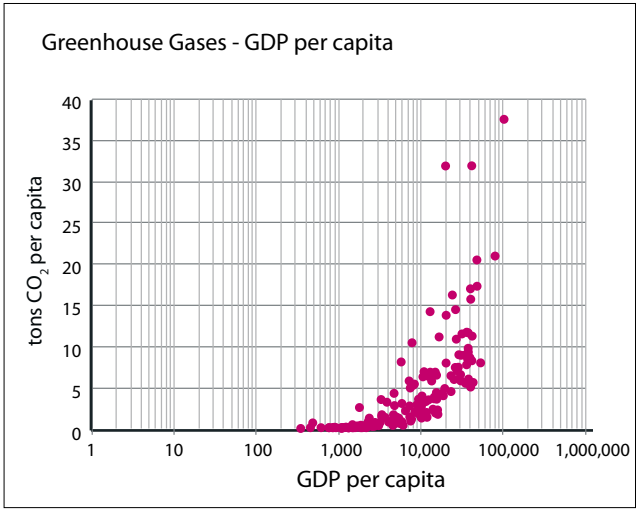


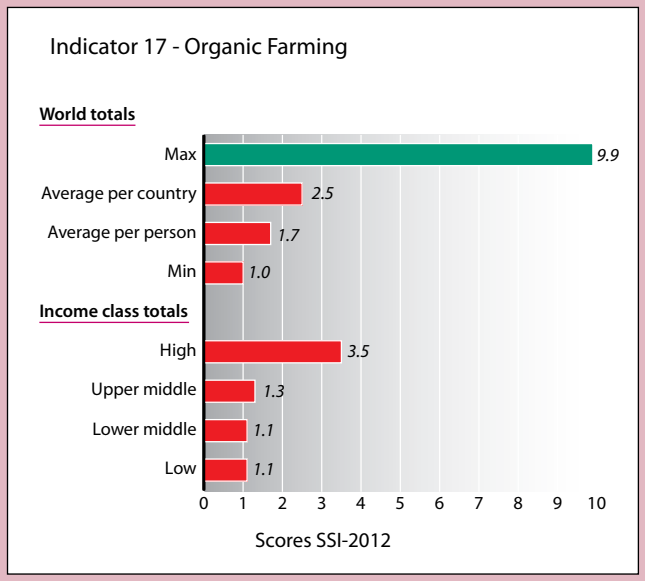
This indicator uses the common measure for Emission of Greenhouse Gases (GHG): the amount of emitted CO_2. Thus other GHG emissions, like CH_4, N_2O, HFCs, PFCs and SF_6, are not included.

Top 5 and bottom 5 countries Greenhouse Gases (CO_2 emissions per capita)					
		SSI-2006	SSI-2008	SSI-2010	SSI-2012
	Year of data	2005	2006	2008	2010
1	Congo Dem. Rep.	0.04	0.04	0.05	0.05
2	Ethiopia	0.06	0.06	0.07	0.06
3	Mozambique	0.07	0.08	0.09	0.11
4	Nepal	0.11	0.09	0.10	0.12
5	Tanzania	0.13	0.14	0.14	0.13
147	Unit. Arab Emir.	26.6	24.6	23.5	20.5
148	Luxembourg	24.5	23.8	21.6	21.0
149	Trinidad & Tobago	25.8	29.2	29.5	31.9
150	Kuwait	31.0	29.6	29.0	31.9
151	Qatar	45.7	42.2	35.7	37.6







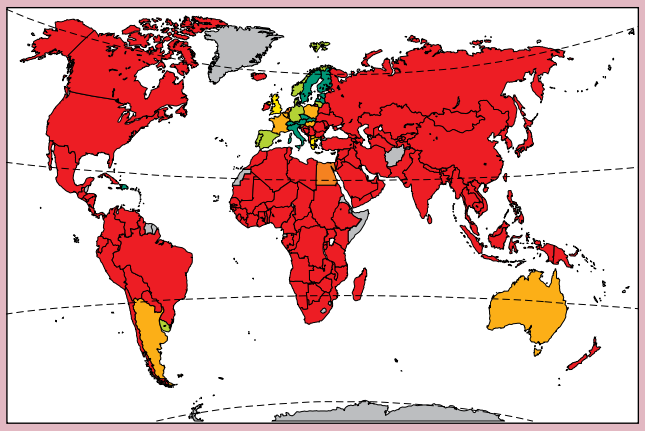


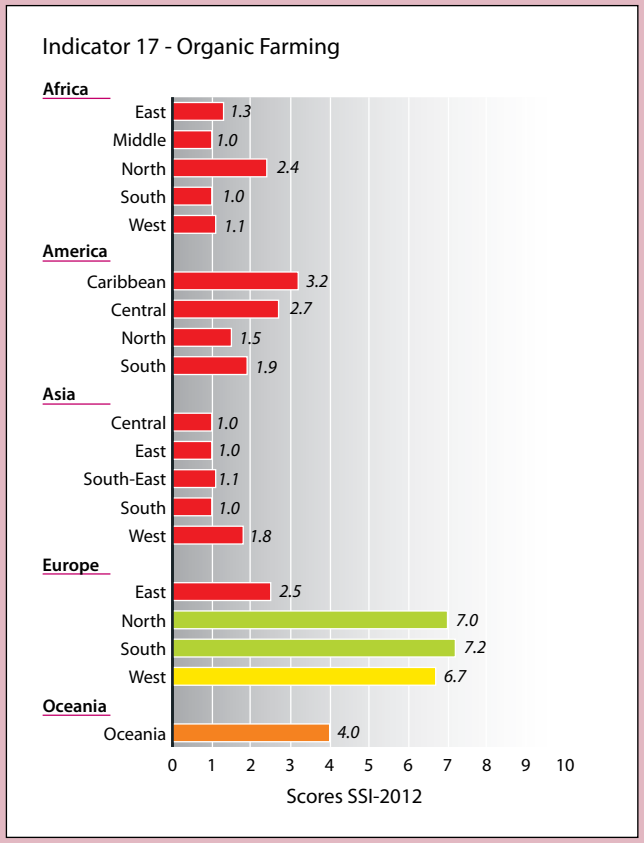
Indicator: area for organic farming in % of total agricultural area of a country

Source: FiBL

Year of data: 2010

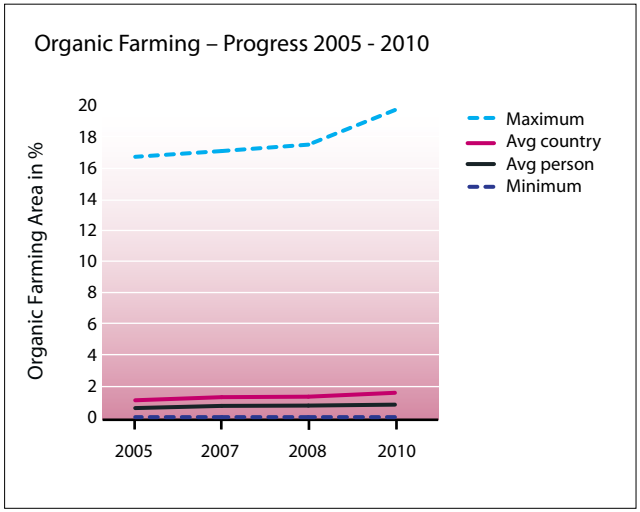
Target: 20%

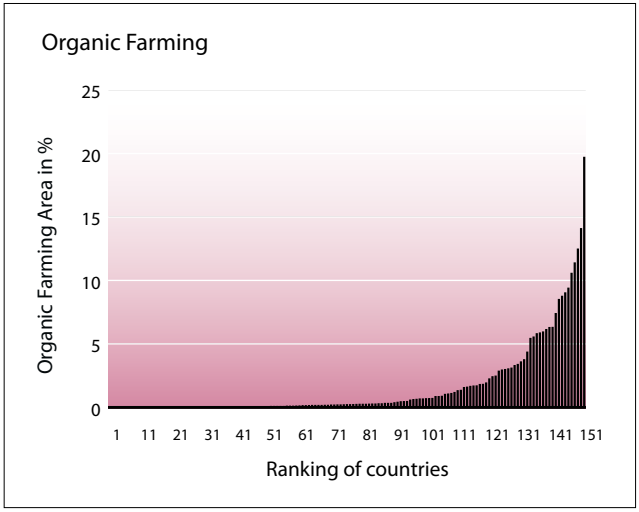


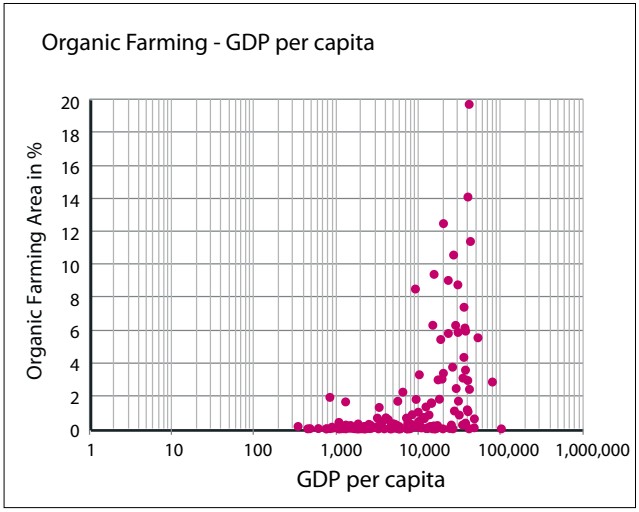


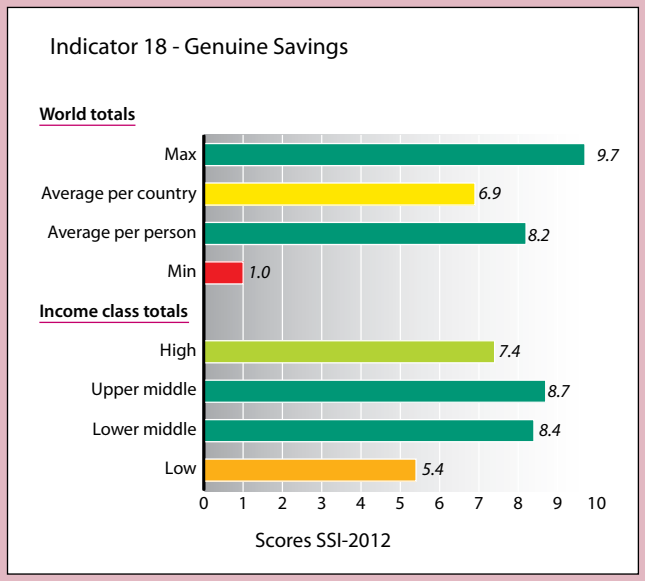
Organic Farming is expressed by the area of fully converted and in-conversion organically cultivated land as the percentage of total agricultural area.

Top 5 and bottom 5 countries Organic farming (area in % total agricultural area)					
		SSI-2006	SSI-2008	SSI-2010	SSI-2012
Rank	Year of data	2005	2007	2008	2010
1	Austria	16.69	17.06	17.47	19.69
2	Sweden	6.98	9.89	10.79	14.07
3	Estonia	7.21	8.77	9.63	12.46
4	Switzerland	11.00	11.00	10.99	11.37
5	Czech Republic	5.99	7.36	8.04	10.55
147	Myanmar	0.0	0.0	0.0	0.0
148	Qatar	0.0	0.0	0.0	0.0
149	Trinidad & Tobago	0.1	0.0	0.0	0.0
150	Turkmenistan	0.0	0.0	0.0	0.0
151	Yemen	0.0	0.0	0.0	0.0







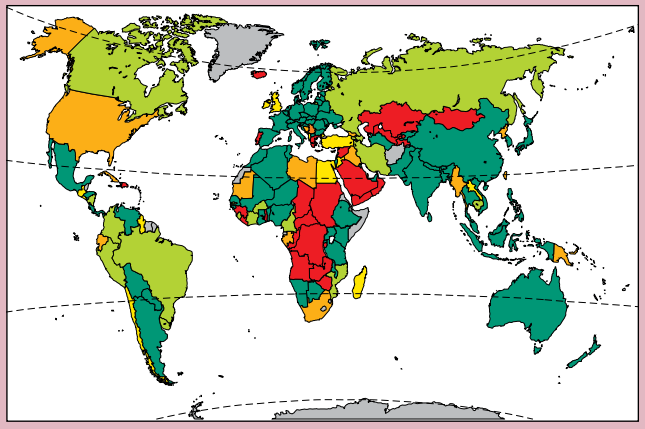


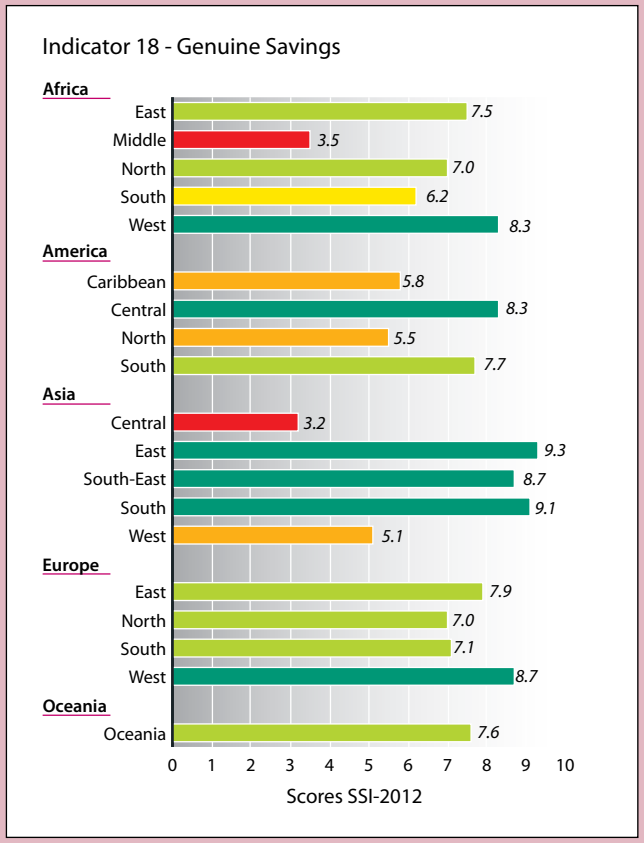
Indicator: Genuine Savings (Adjusted Net Savings) as % of Gross National Income (GNI)

Source: World Bank

Year of data: 2010

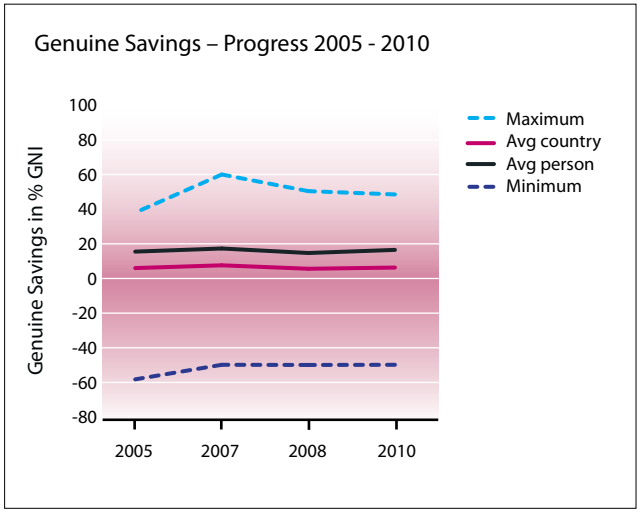
Target:

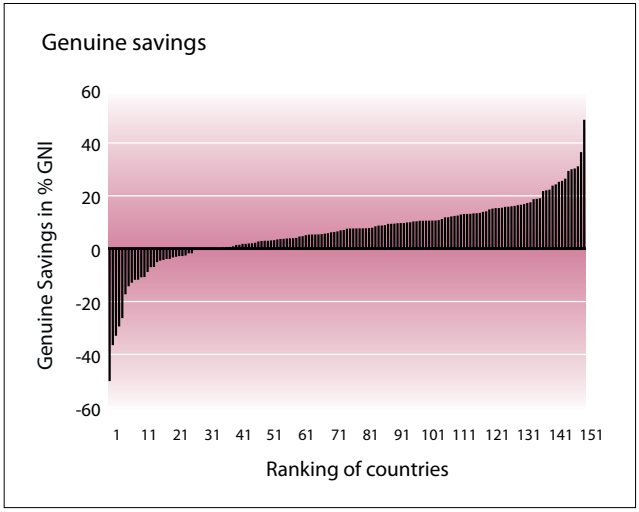


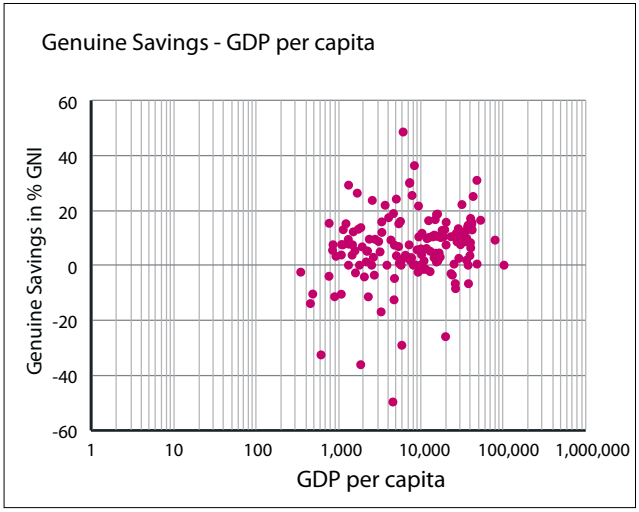


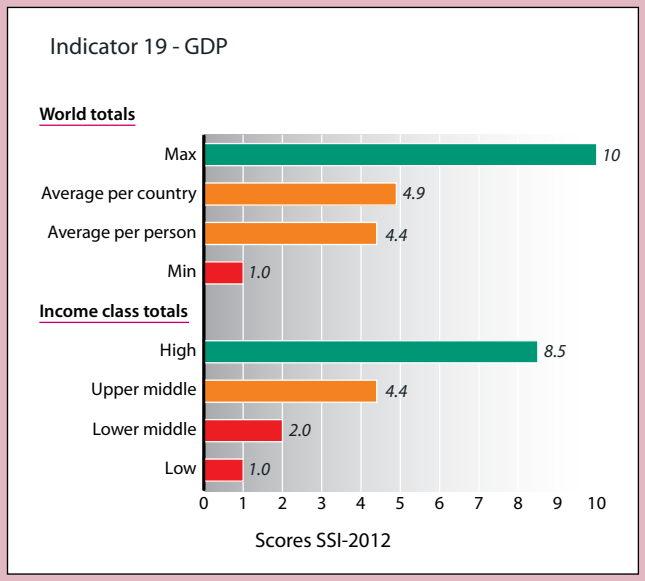
Genuine Savings (= Adjusted Net Savings) measures the true rate of savings in an economy after taking into account investments in human capital, depletion of natural resources and damage caused by pollution. The used data are including particulate emission damage.

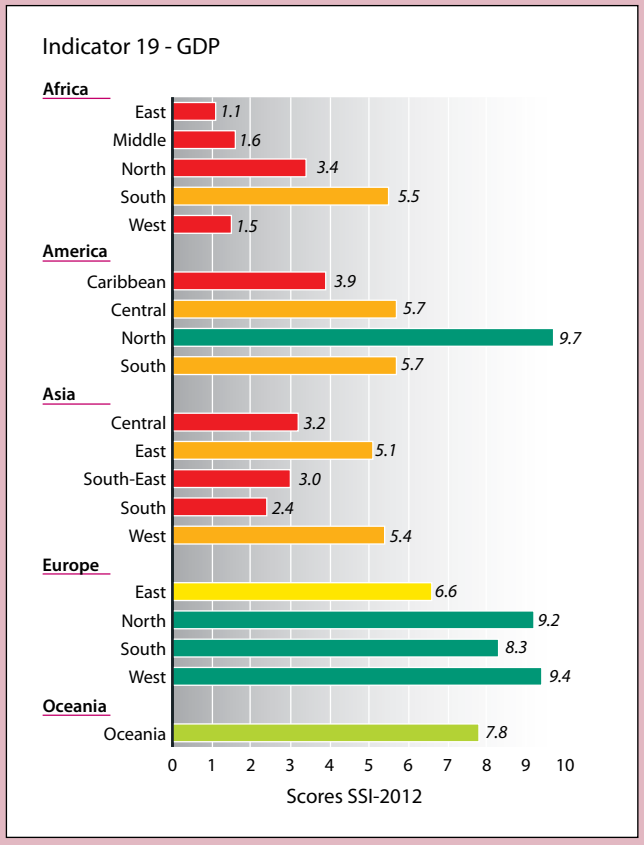
Top 5 and bottom 5 countries Genuine Savings (Adjusted Net Savings in % GNI)					
		SSI-2006	SSI-2008	SSI-2010	SSI-2012
Rank	Year of data	2005	2007	2008	2010
1	Bhutan	35	60	50	49
2	China	33	36	34	36
3	Unit. Arab Emir.	31	31	31	31
4	Namibia	22	26	26	30
5	Algeria	17	26	23	30
147	Trinidad & Tobago	-4	-15	-26	-26
148	Angola	-35	-24	-38	-29
149	Burundi	-33	-33	-33	-33
150	Chad	-35	-24	-50	-36
151	Congo	-58	-50	-50	-50









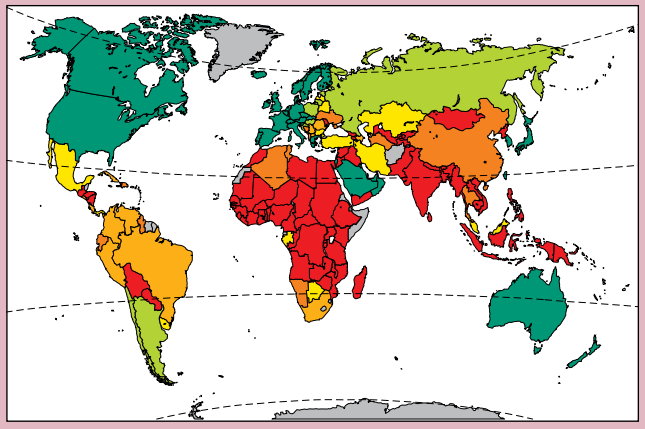


Indicator: GDP per capita, PPP, current international dollars

Source: IMF

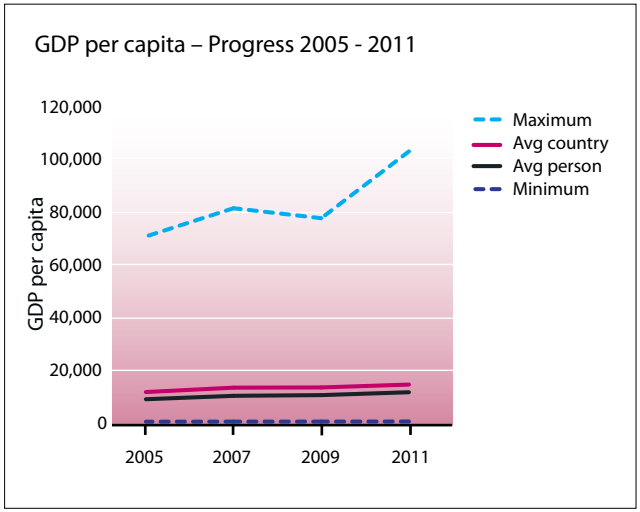
Year of data: 2011

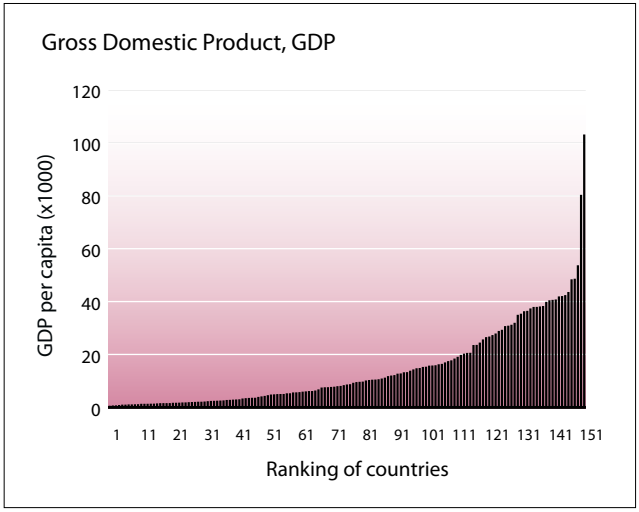
Target: $ 75,000

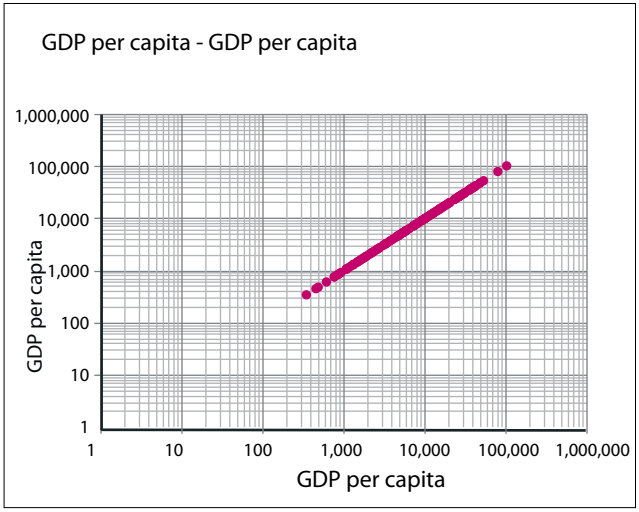


Gross domestic product (GDP) is the market value of all goods and services produced within a country in a given period. It is a measure of a country's economy as far as money is involved. To enable a fair comparison across countries GDP is calculated in Purchasing Power Parity, PPP, i.e. the exchange rate is adjusted so that an identical good in two different countries has the same price when expressed in the same currency (current international dollar).

Top 5 and bottom 5 countries GDP per capita (purchasing power parity, PPP, current $)					
		SSI-2006	SSI-2008	SSI-2010	SSI-2012
Rank	Year of data	2005	2007	2009	2011
1	Qatar	66,494	76,186	77,568	102,943
2	Luxembourg	70,628	81,357	77,364	80,119
3	Norway	47,842	52,427	51,929	53,471
4	USA	42,629	46,467	45,348	48,387
5	Unit. Arab Emir.	44,477	50,130	46,734	48,158
147	Central Afr. Rep.	658	723	733	768
148	Burundi	470	530	572	615
149	Zimbabwe	452	446	399	487
150	Liberia	363	417	423	456
151	Congo Dem. Rep.	262	294	312	348





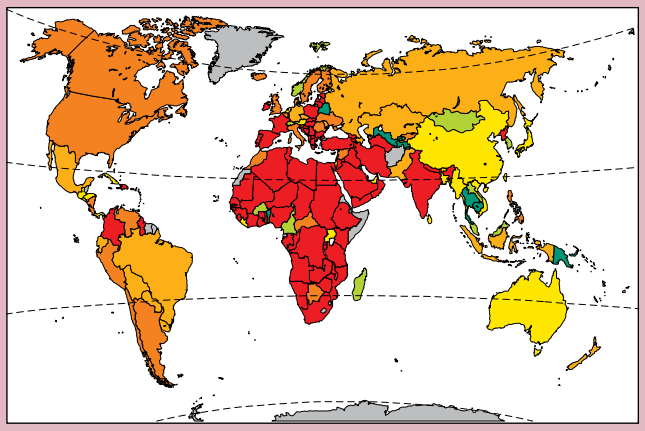


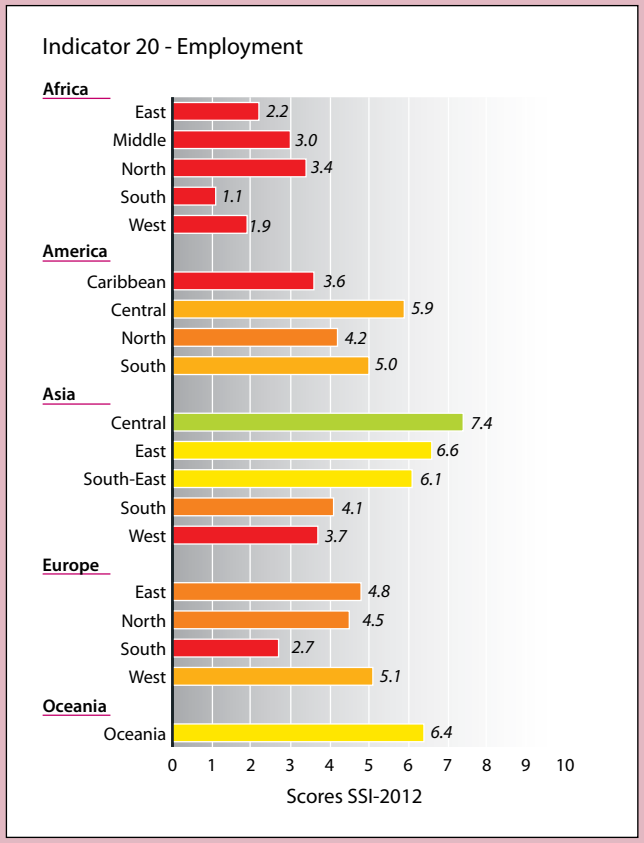
Indicator: unemployment as % of total labour force

Source: ILO, World Bank and CIA World Factbook

Year of data: 2011 or MRYA

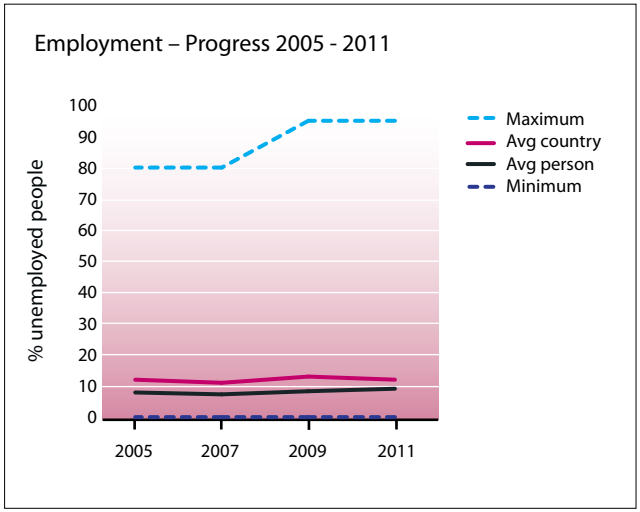
Target: 0



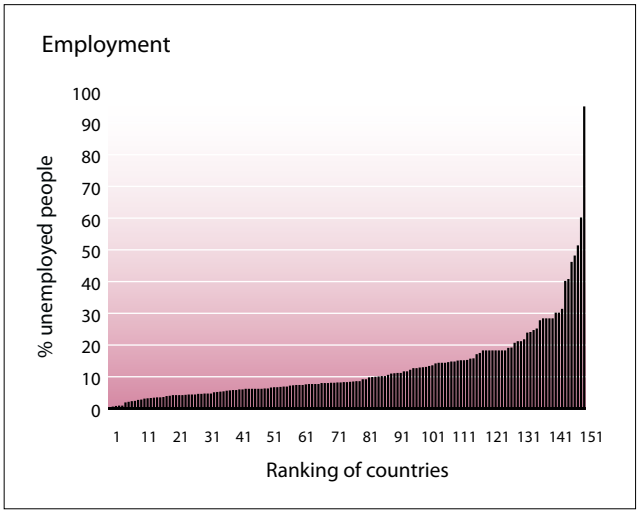


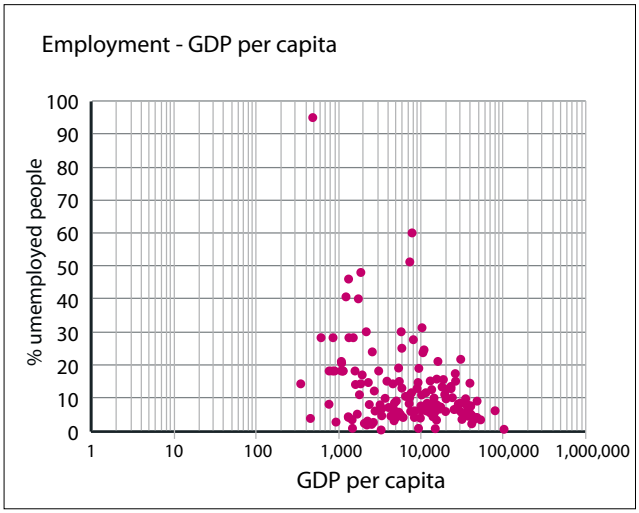
Employment is a common indicator to measure the status of a country's economy. Moreover, for most people employment is an important condition for the possibilities of developing her- or himself.

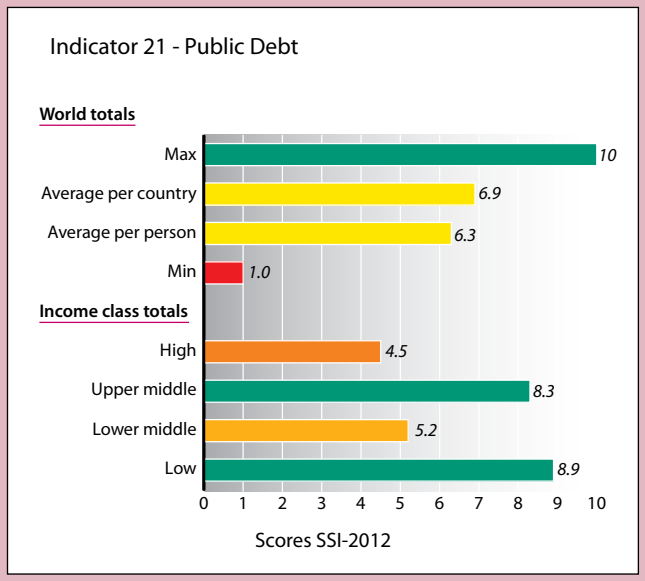
Top 5 and bottom 5 countries Employment (unemployed people as % of total labour force)					
		SSI-2006	SSI-2008	SSI-2010	SSI-2012
Rank	Year of data	2005	2007	2009	2011
1	Uzbekistan	0.3	0.2	0.2	0.2
2	Qatar	1.5	0.5	0.5	0.4
3	Belarus	1.5	1.0	0.9	0.6
4	Thailand	1.9	1.4	1.5	0.7
5	Benin	0.7	0.7	0.7	0.7
147	Nepal	42.0	42.0	46.0	46.0
148	Senegal	10.0	48.0	48.0	48.0
149	Namibia	21.9	21.9	51.2	51.2
150	Turkmenistan	60.0	60.0	60.0	60.0
151	Zimbabwe	80.0	80.0	95.0	95.0



70 countries report less than 5% undernourished people. Due to lack of a more precise figure, the raw data of all these countries have been given the value 0.





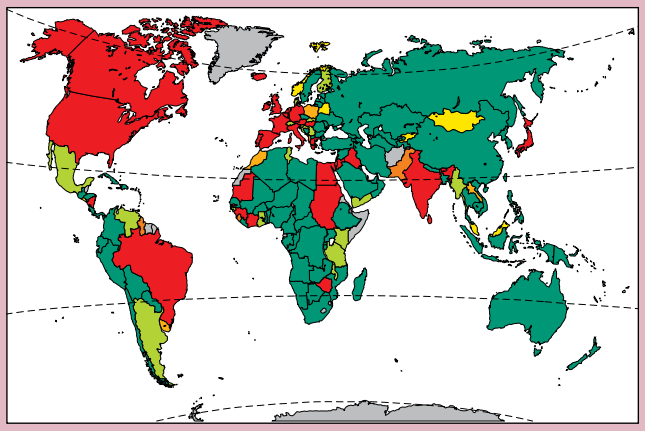


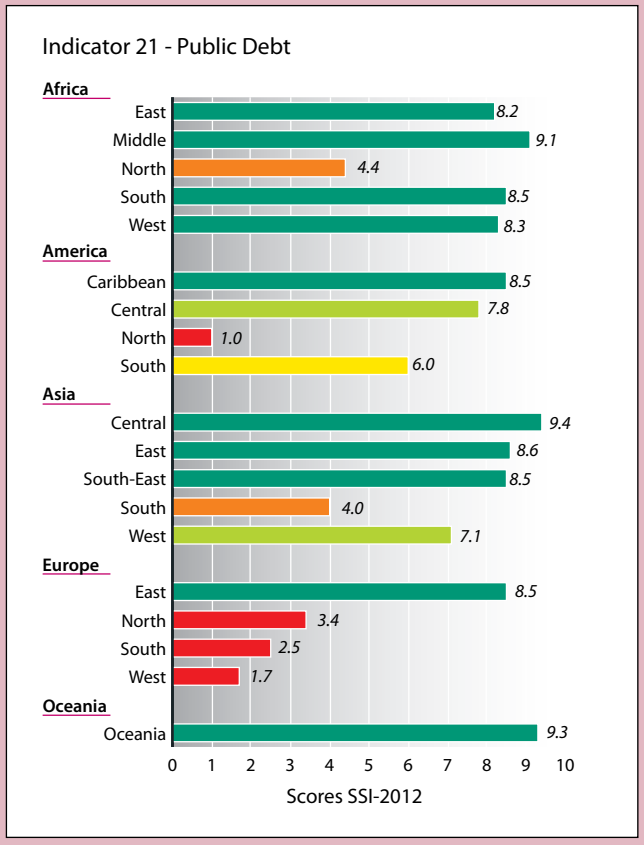
Indicator: the level of public debt of a country as % of GDP

Source: IMF and CIA World Factbook

Year of data: 2011

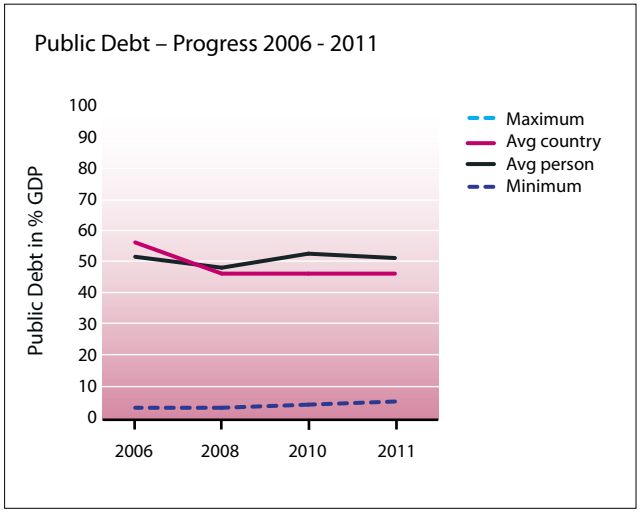
Target: 2.5 % of GDP



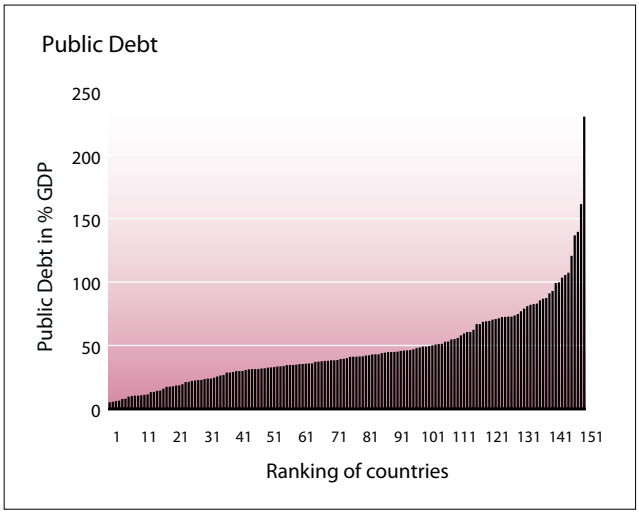


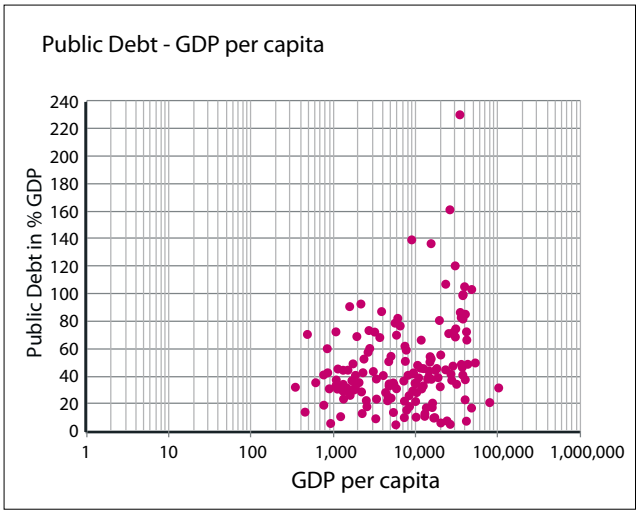
The amount of public debt of a country determines the yearly payments on interest and amortization. This limits a government in the free allocation of its budget. Thus it is an important indicator for the economy, as well as for the society at large.

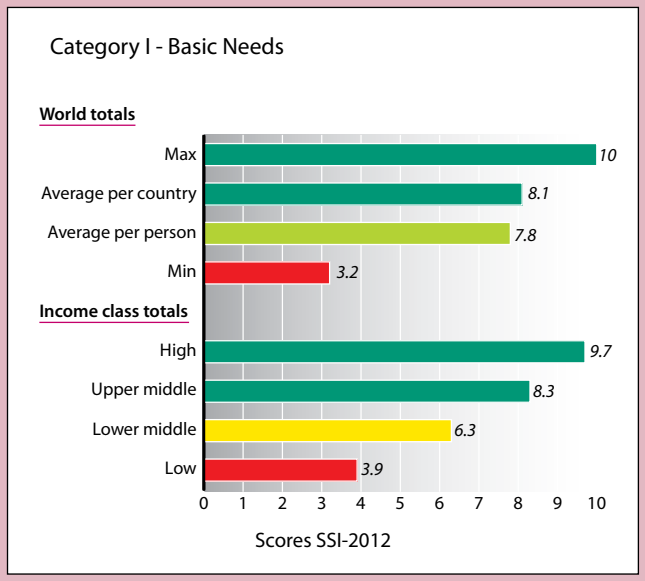
Top 5 and bottom 5 countries Public Debt (Public Debt as % of GDP)					
		SSI-2006	SSI-2008	SSI-2010	SSI-2012
Rank	Year of data	2006	2008	2010	2011
1	Libyan Arab Jam.	8.0	4.7	3.9	4.7
2	Oman	8.7	4.7	5.4	5.1
3	Madagascar	9.9	6.4	6.2	5.7
4	Estonia	4.4	4.5	6.7	6.0
5	Kuwait	10.6	9.8	10.5	7.3
147	Italy	106.1	105.8	118.7	120.1
148	Lebanon	179.9	156.3	141.7	136.2
149	Jamaica	117.1	126.4	141.4	139.0
150	Greece	106.1	110.7	142.8	160.8
151	Japan	186.0	191.8	215.3	229.8

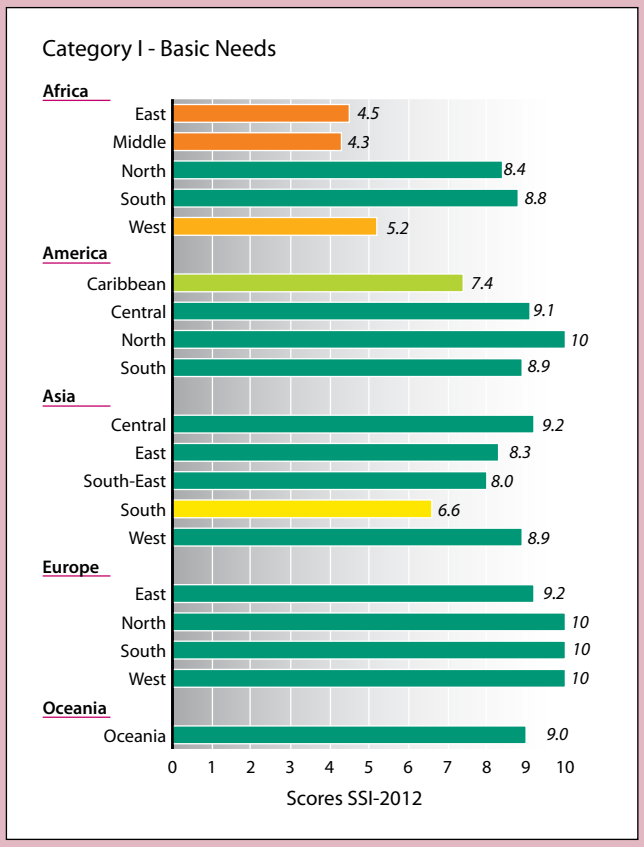


NB Maximum is not included in this graph.



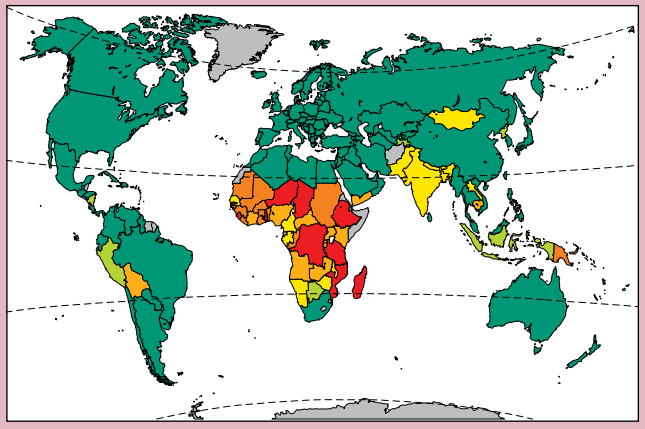




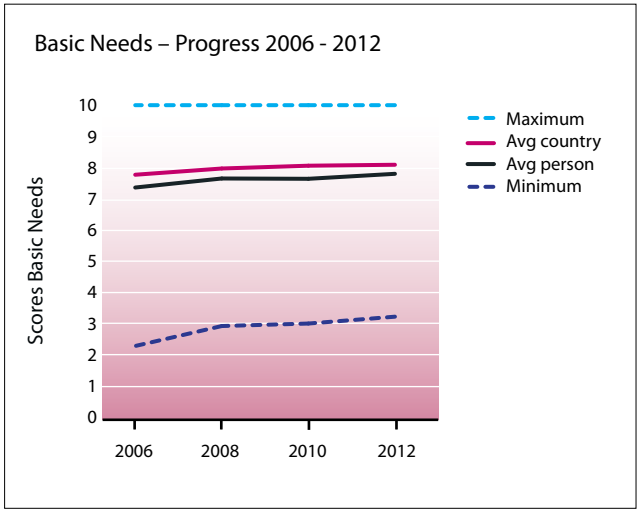


Category I – Basic Needs comprises 3 indicators

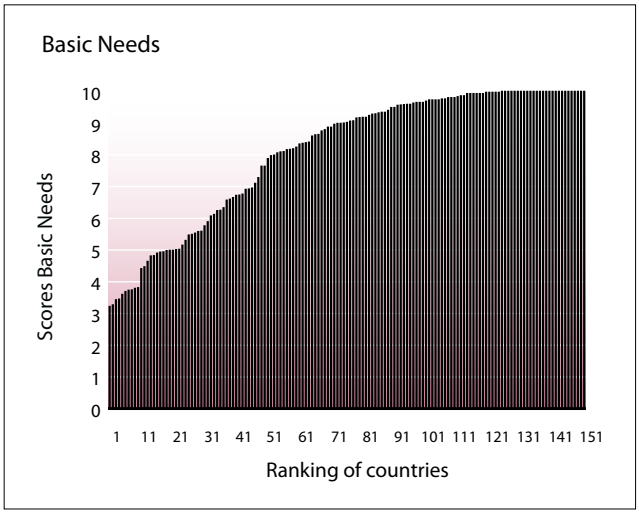
1. Sufficient Food
2. Sufficient to Drink
3. Safe Sanitation

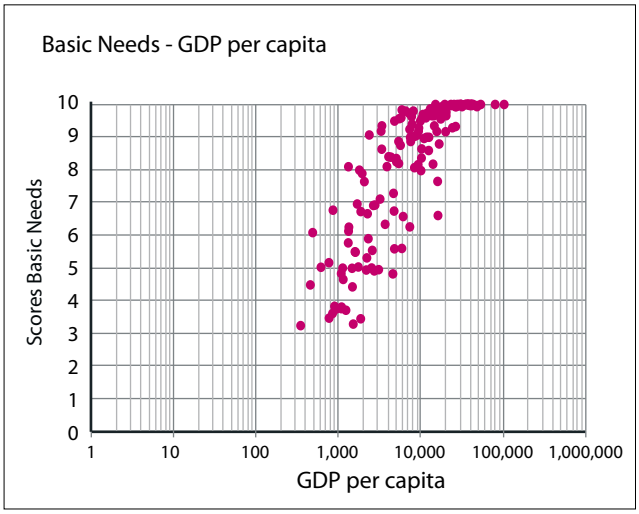


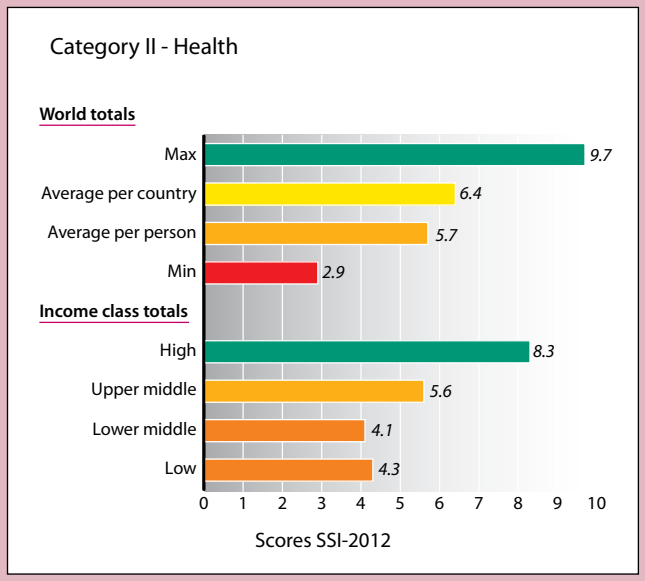
Top 5 and bottom 5 Basic Needs					
Rank		SSI-2006	SSI-2008	SSI-2010	SSI-2012
1	Australia	10	10	10	10
2	Austria	10	10	10	10
3	Belgium	10	10	10	10
4	Canada	10	10	10	10
5	Cyprus	9.80	10	10	10
147	Sierra Leone	4.81	3.06	3.46	3.60
148	Niger	3.32	3.06	3.37	3.45
149	Chad	2.82	3.15	3.16	3.43
150	Tanzania	5.73	4.67	4.41	3.27
151	Congo Dem. Rep.	3.38	3.33	3.20	3.22

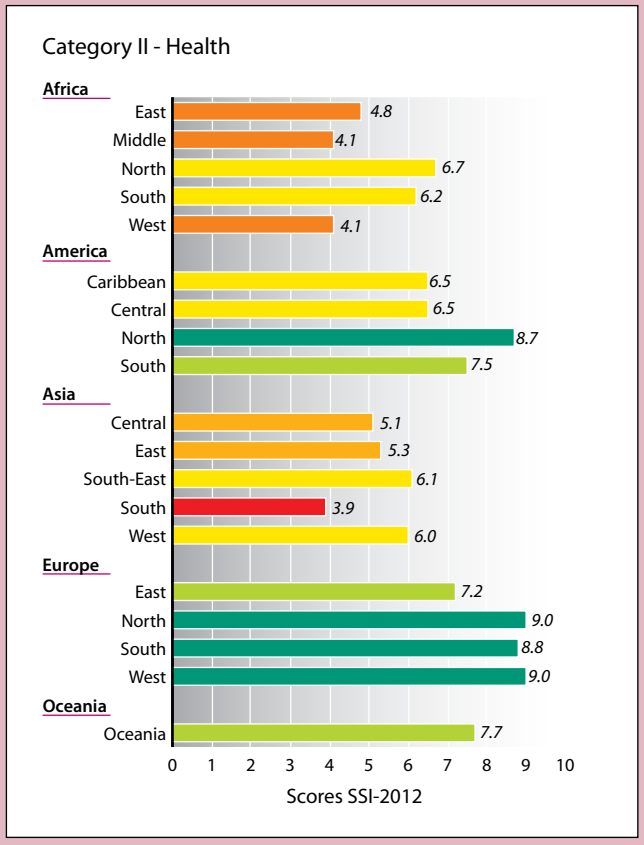


27 countries, listed in alphabetical order, have the maximum score 10.



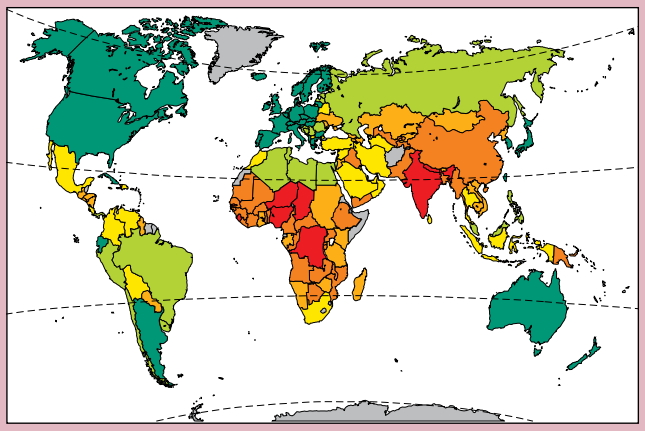




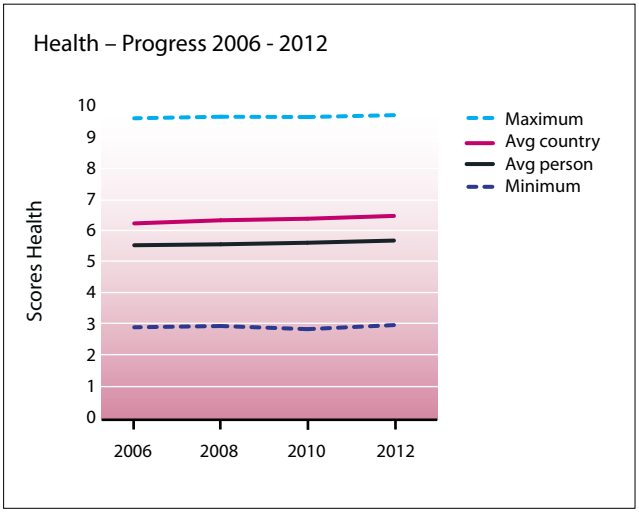


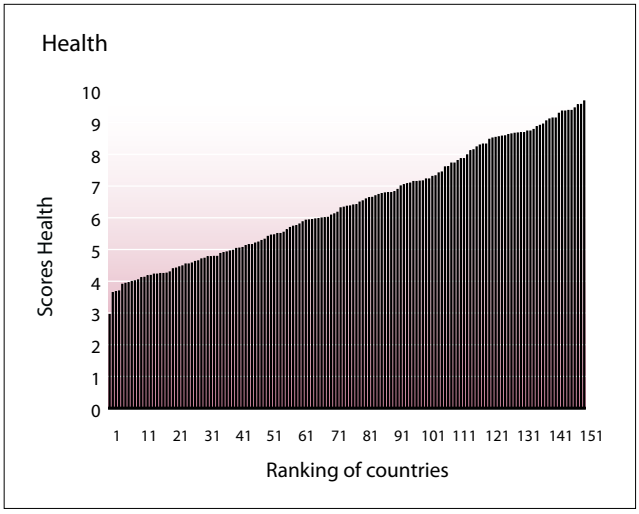
Category II – Health comprises 3 indicators

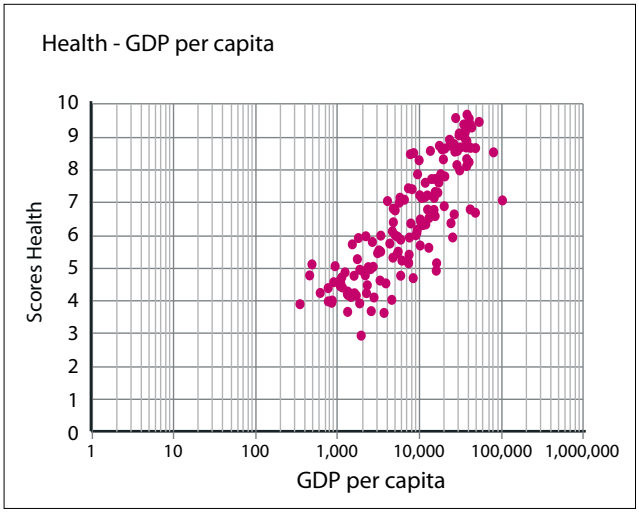
4. Healthy Life
5. Clean Air
6. Clean Water

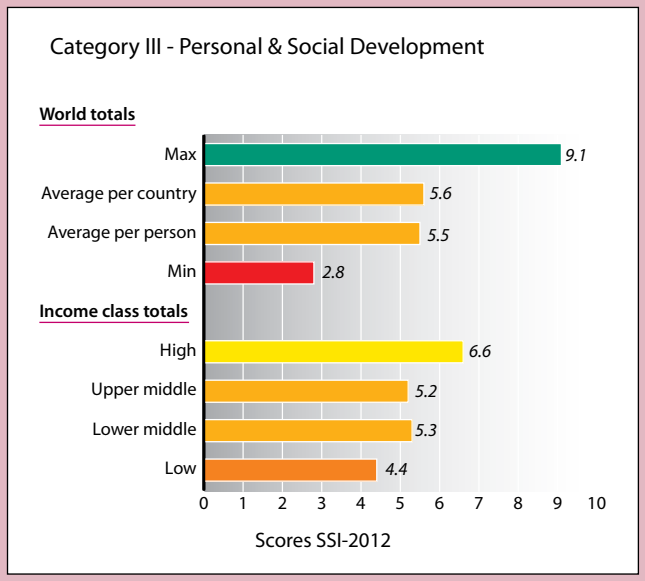


Top 5 and bottom 5 Health					
Rank		SSI-2006	SSI-2008	SSI-2010	SSI-2012
1	Iceland	9.58	9.63	9.62	9.68
2	New Zealand	9.44	9.49	9.49	9.57
3	Sweden	9.49	9.53	9.55	9.56
4	Norway	9.38	9.42	9.45	9.46
5	Austria	9.34	9.39	9.42	9.38
147	Congo Dem. Rep.	3.29	3.47	3.55	3.90
148	Nigeria	3.48	3.55	3.69	3.69
149	Nepal	3.70	3.60	3.69	3.67
150	India	3.53	3.59	3.56	3.64
151	Gambia	2.88	2.92	2.82	2.95



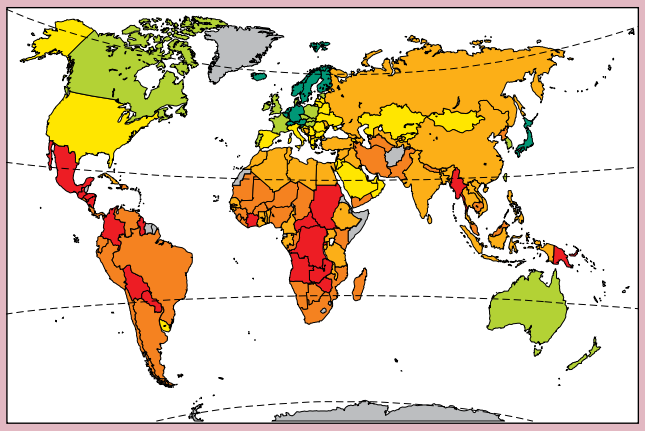


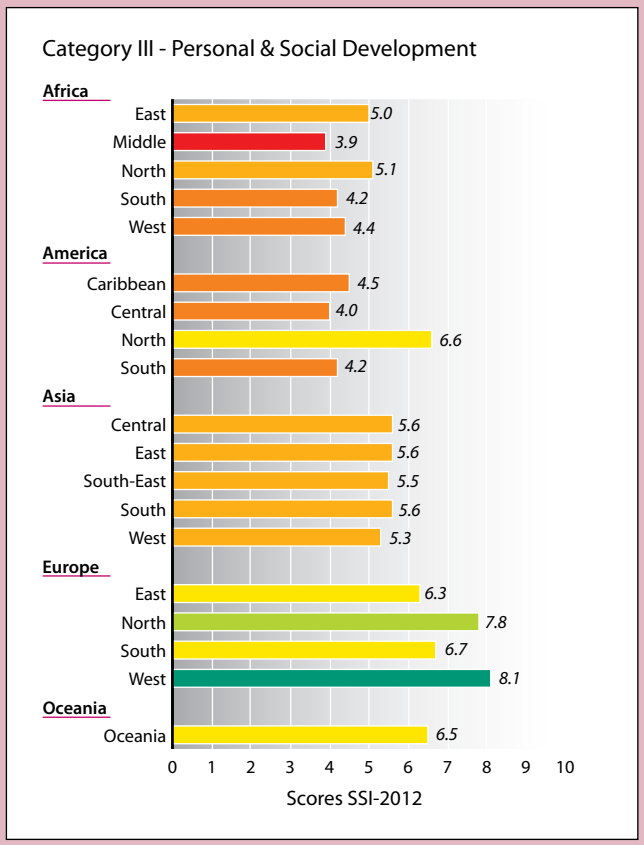




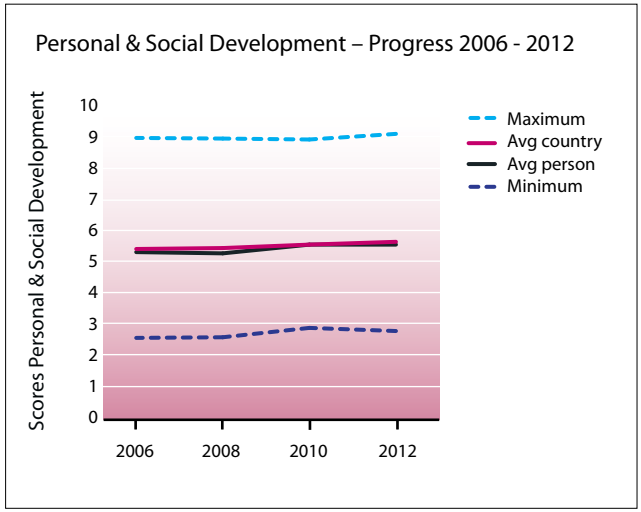
Category III – Personal & Social Development comprises 4 indicators

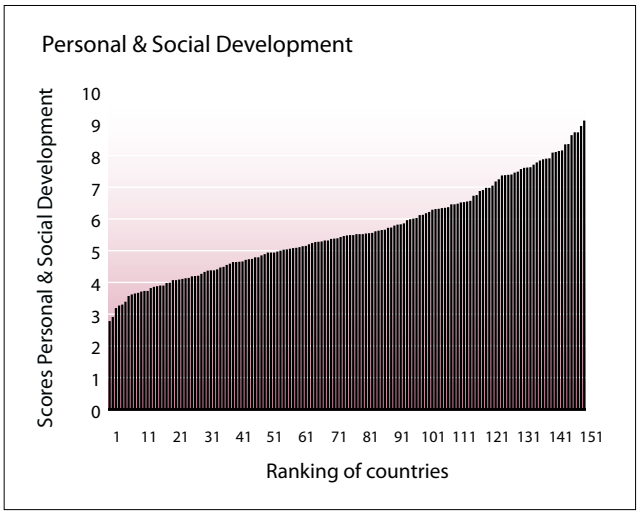
7. Education
8. Gender Equality
9. Income Distribution
10. Good Governance

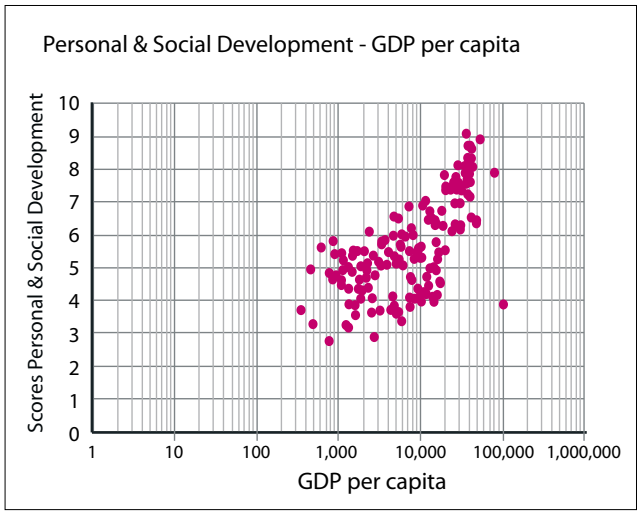


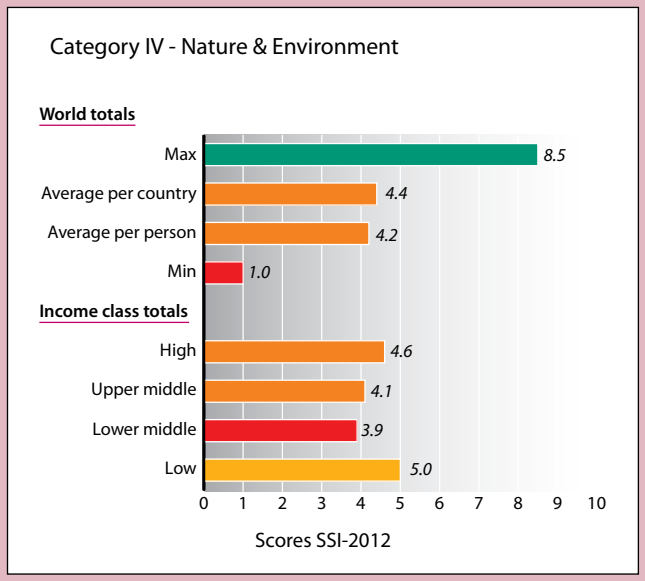


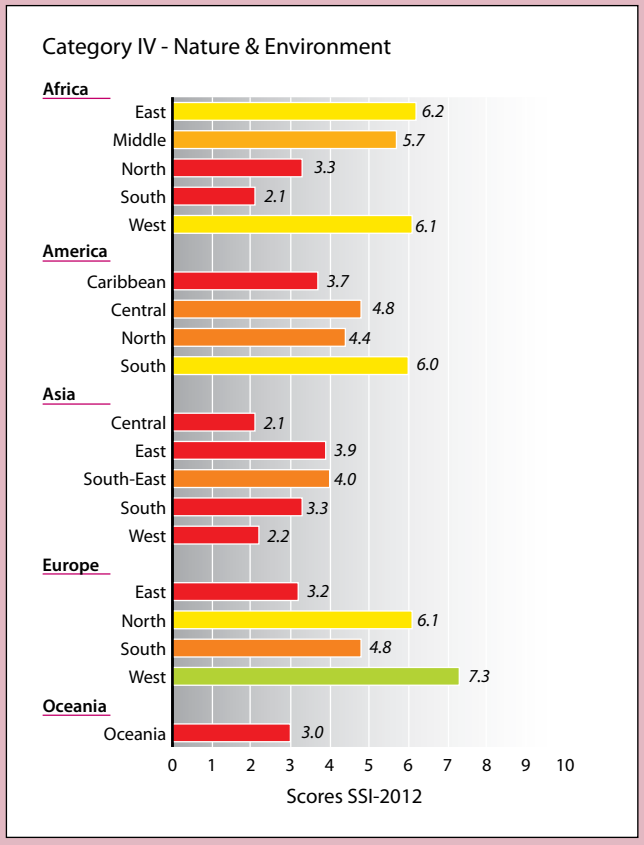
Top 5 and bottom 5 Personal & Social Development					
Rank		SSI-2006	SSI-2008	SSI-2010	SSI-2012
1	Finland	8.95	8.93	8.90	9.08
2	Norway	8.73	8.77	8.75	8.91
3	Sweden	8.69	8.64	8.55	8.71
4	Iceland	7.76	7.95	7.94	8.71
5	Netherlands	7.80	7.83	7.89	8.62
147	Zimbabwe	3.36	3.30	3.20	3.28
148	Haiti	3.47	3.22	3.24	3.25
149	Myanmar	3.18	3.21	3.10	3.17
150	Sudan	2.97	2.97	2.86	2.89
151	Centr. Afr. Rep.	2.54	2.56	3.69	2.76





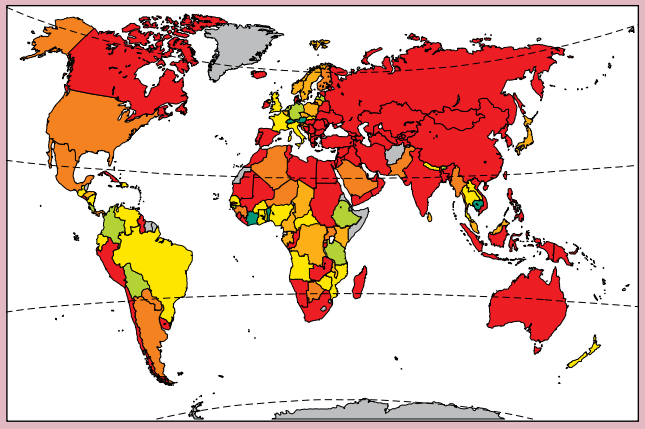




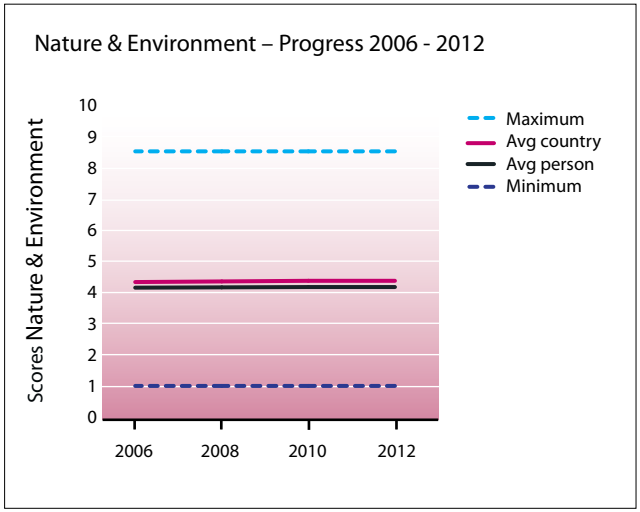


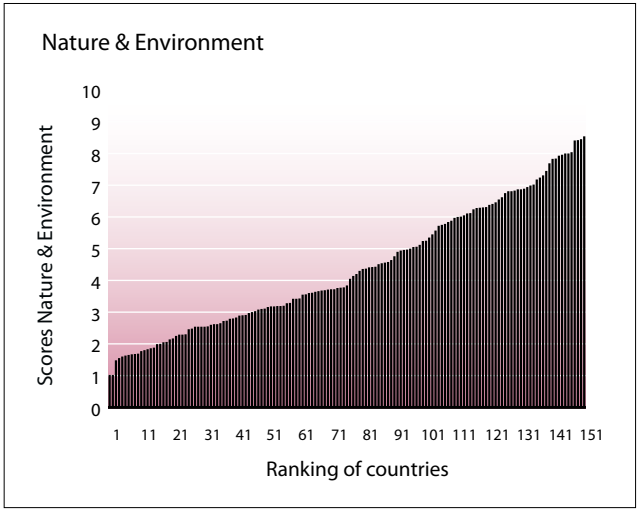
Category IV – Nature & Environment comprises 2 indicators

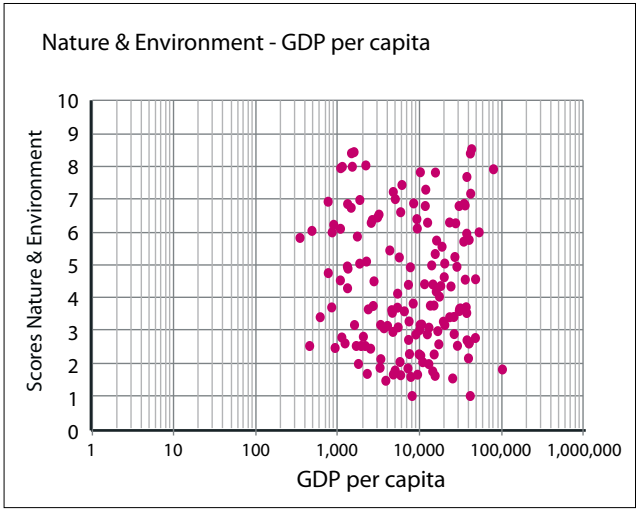
11. Air Quality
12. Biodiversity

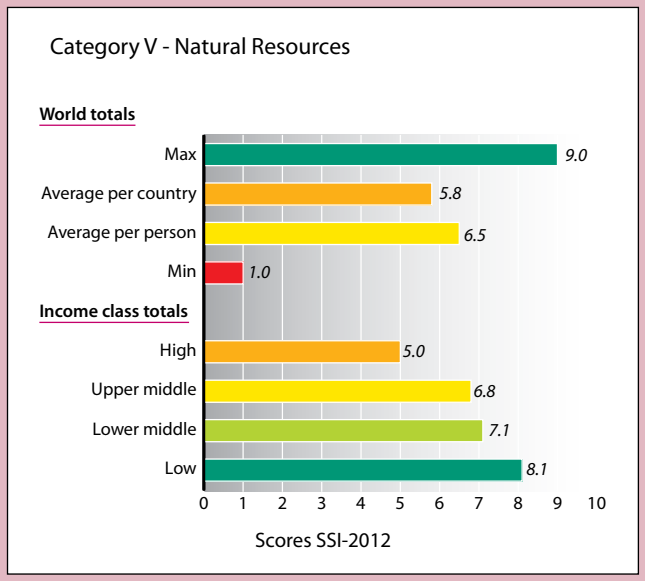


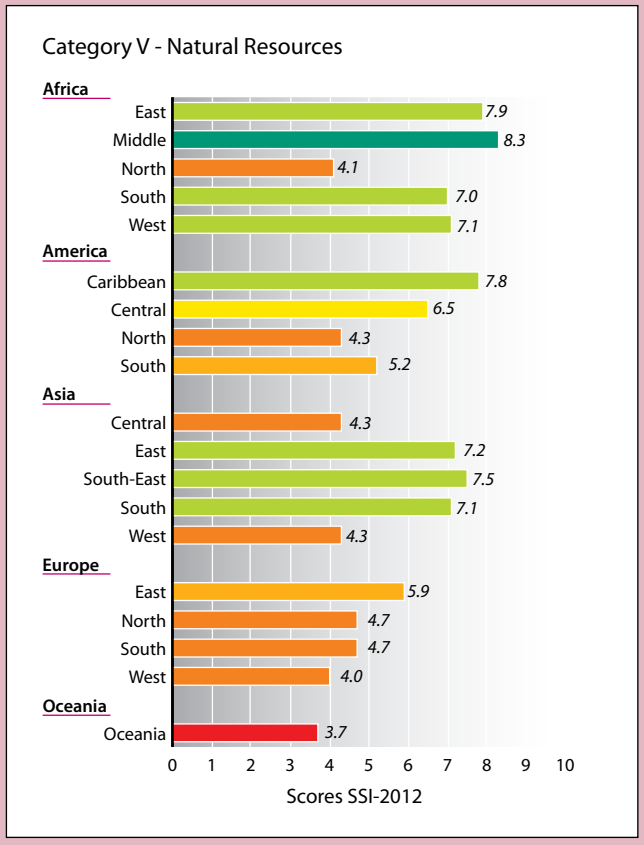
Top 5 and bottom 5 Nature & Environment					
Rank		SSI-2006	SSI-2008	SSI-2010	SSI-2012
1	Switzerland	8.52	8.52	8.52	8.52
2	Côte d'Ivoire	8.43	8.43	8.43	8.43
3	Benin	8.40	8.40	8.40	8.40
4	Austria	8.39	8.39	8.39	8.39
5	Cambodia	8.02	8.02	8.02	8.02
147	Turkmenistan	1.58	1.58	1.58	1.58
148	Malta	1.53	1.53	1.53	1.53
149	Iraq	1.46	1.46	1.46	1.46
150	Bosnia Herzegovina	1.00	1.00	1.00	1.00
151	Kuwait	1.00	1.00	1.00	1.00





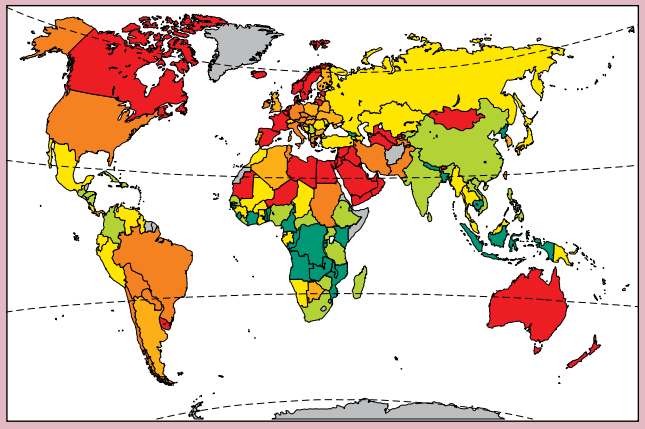




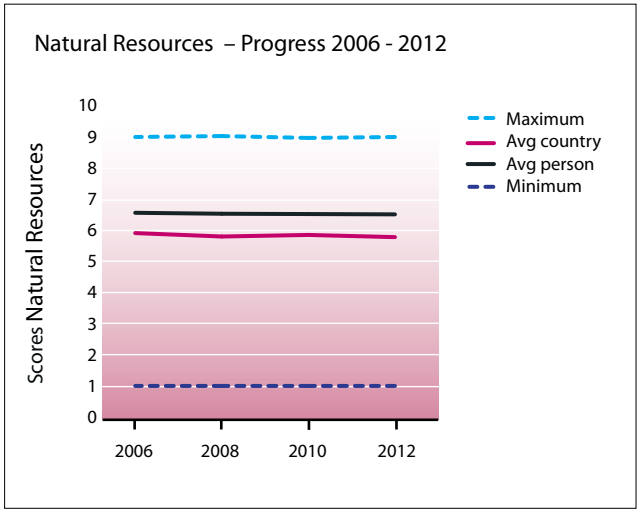


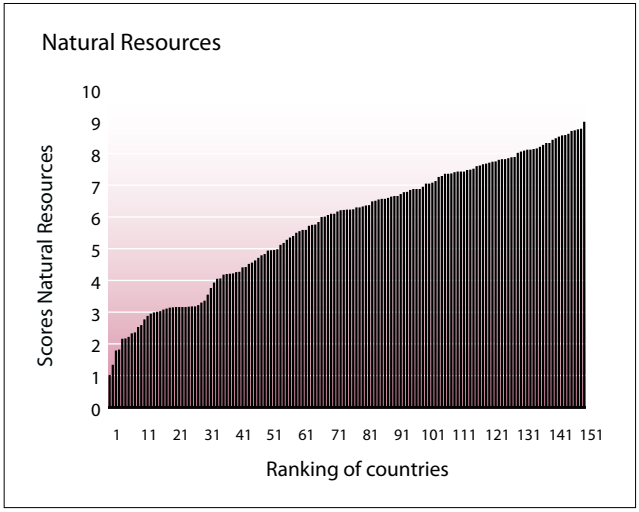
Category V – Natural Resources comprises 2 indicators

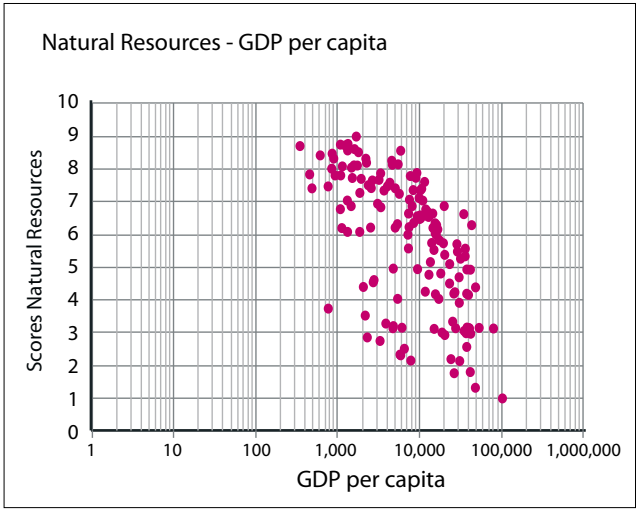
13. Renewable Water Resources
14. Consumption

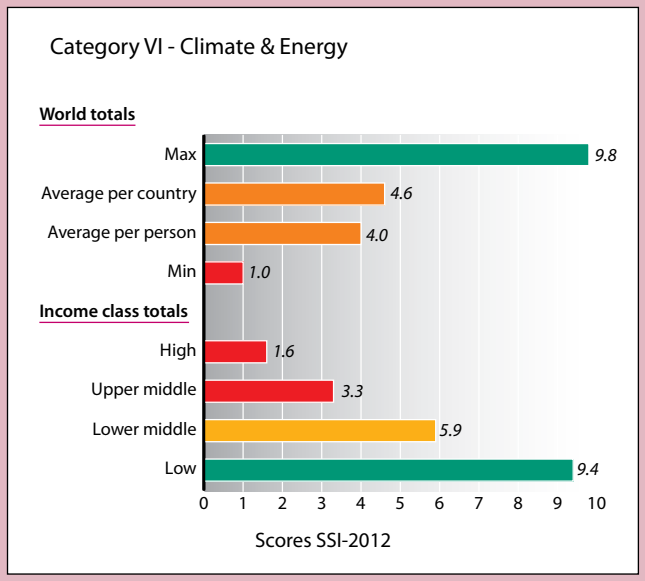


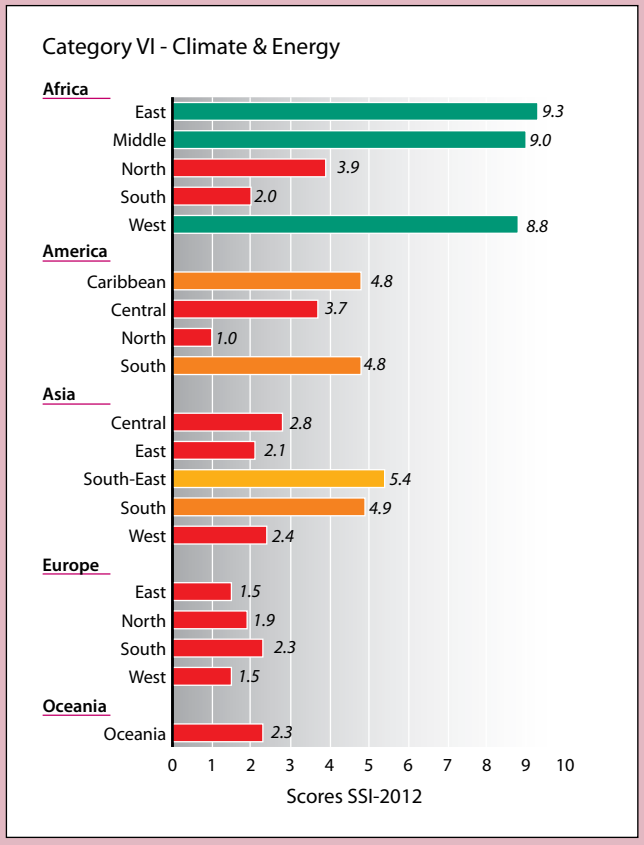
Top 5 and bottom 5 Natural Resources					
Rank		SSI-2006	SSI-2008	SSI-2010	SSI-2012
1	Bangladesh	8.98	9.01	8.95	8.98
2	Rwanda	8.56	8.58	8.23	8.76
3	Mozambique	8.61	8.66	8.73	8.74
4	Haiti	8.73	8.72	8.65	8.71
5	Congo Dem. Rep.	8.57	8.63	8.68	8.69
147	Israel	2.29	2.03	2.08	2.14
148	Kuwait	2.34	2.01	1.79	1.80
149	Oman	1.95	2.13	1.96	1.77
150	Unit. Arab Emirates	1.00	1.39	1.00	1.32
151	Qatar	1.27	1.00	1.22	1.00





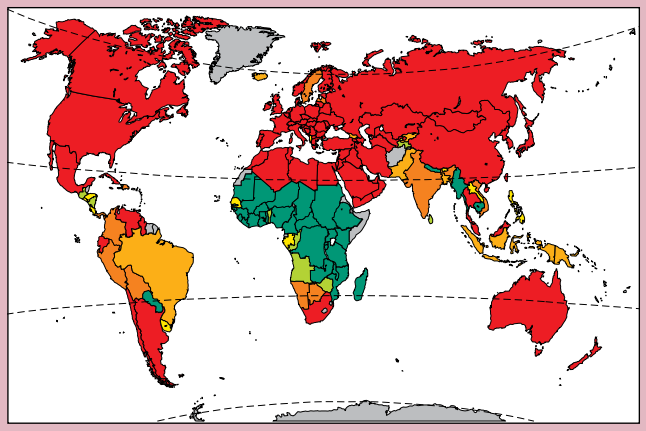




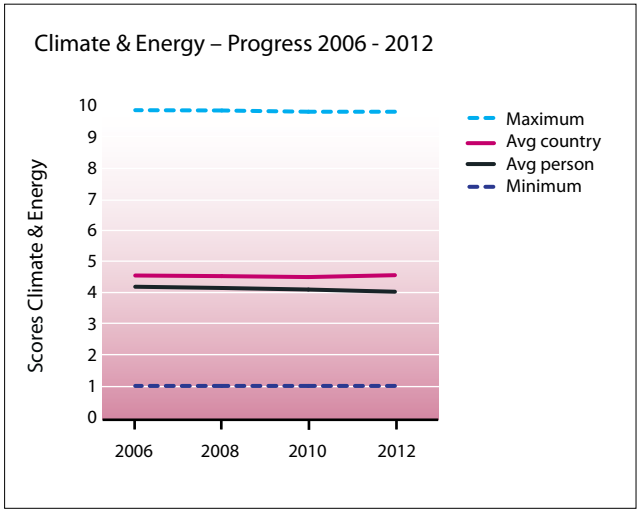


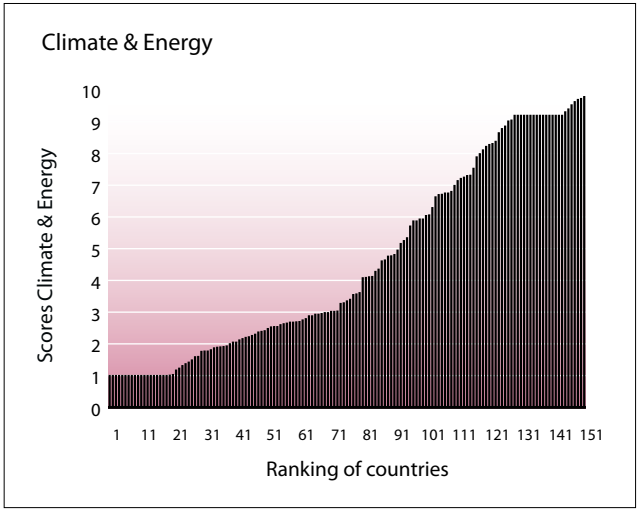
Category VI – Climate & Energy comprises 2 indicators

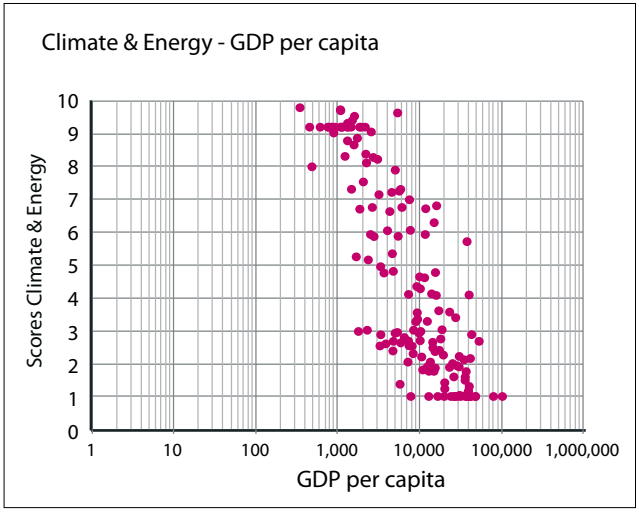
15. Renewable Energy
16. Greenhouse Gases

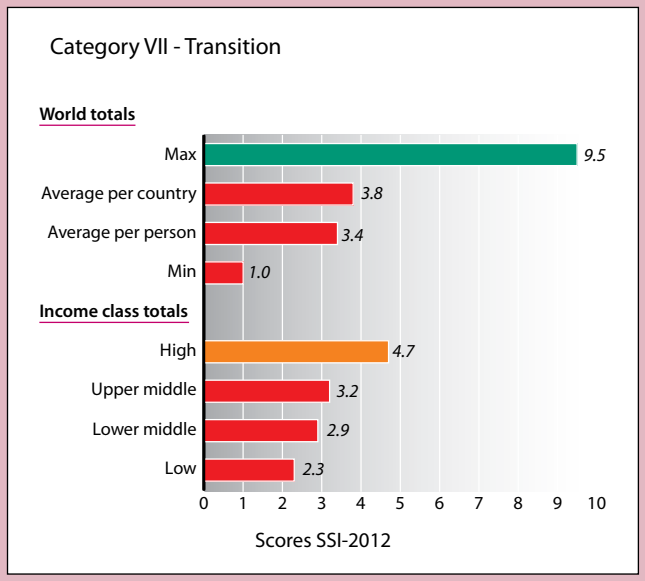


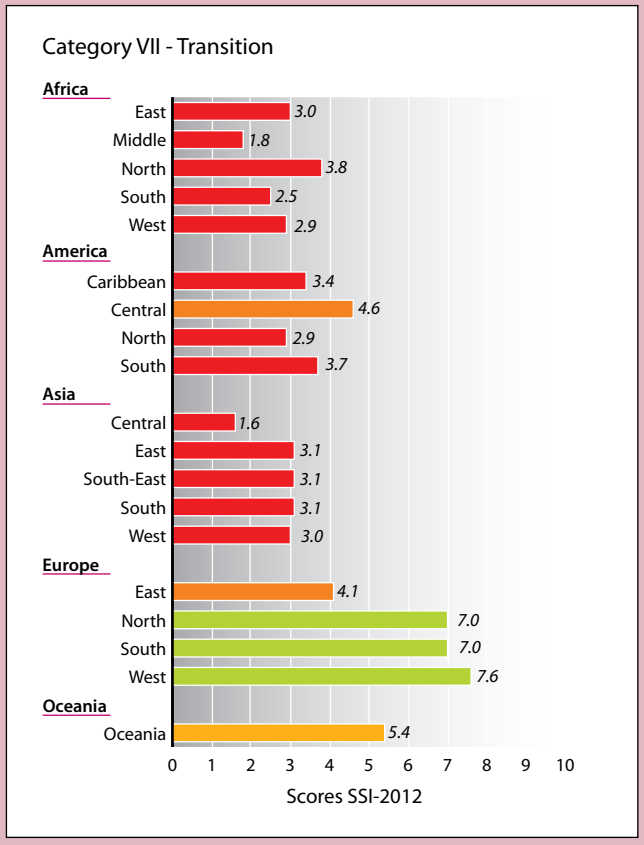
Top 5 and bottom 5 Climate & Energy					
Rank		SSI-2006	SSI-2008	SSI-2010	SSI-2012
1	Congo Dem. Rep.	9.84	9.83	9.79	9.79
2	Mozambique	9.78	9.79	9.75	9.73
3	Ethiopia	9.62	9.61	9.66	9.70
4	Paraguay	9.70	9.69	9.69	9.63
5	Zambia	9.43	9.48	9.56	9.53
147	Taiwan	1.00	1.00	1.00	1.00
148	Trinidad & Tobago	1.00	1.00	1.00	1.00
149	Turkmenistan	1.00	1.00	1.00	1.00
150	Unit. Arab Emirates	1.00	1.00	1.00	1.00
151	USA	1.00	1.00	1.00	1.00





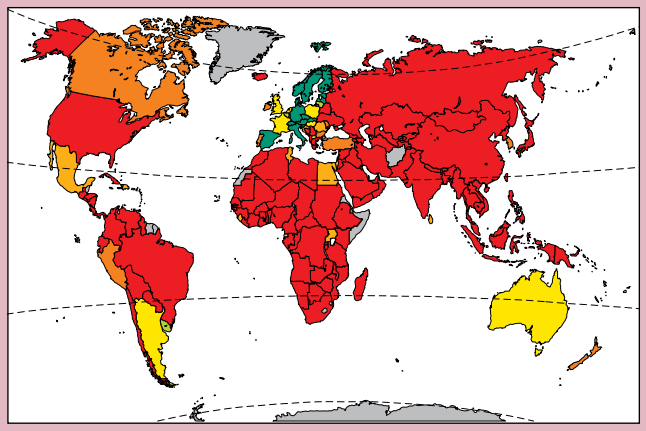




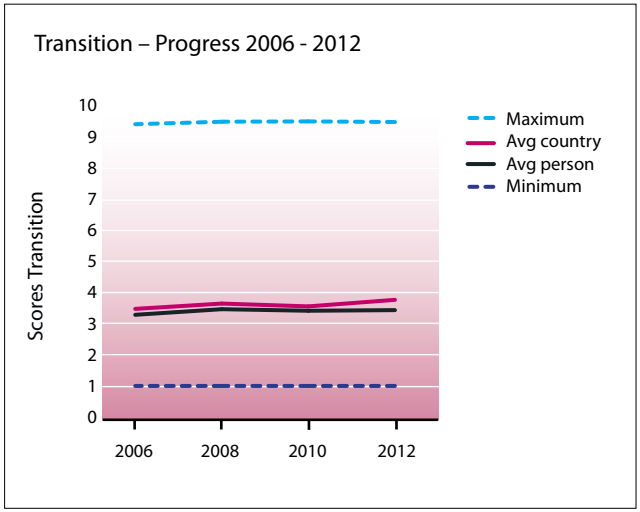


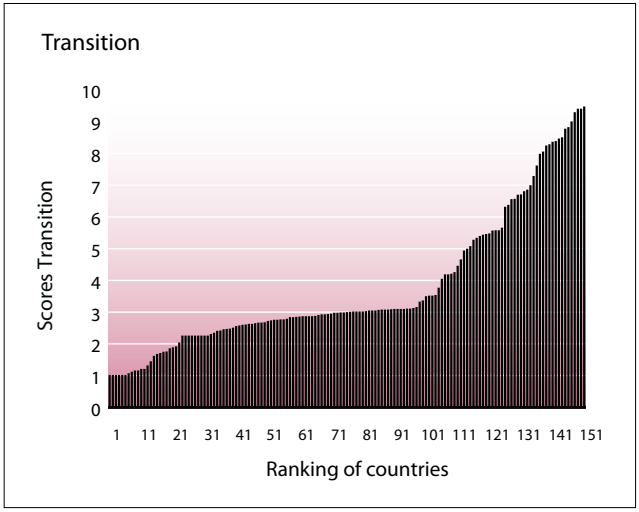
Category VII –Transition comprises 2 indicators

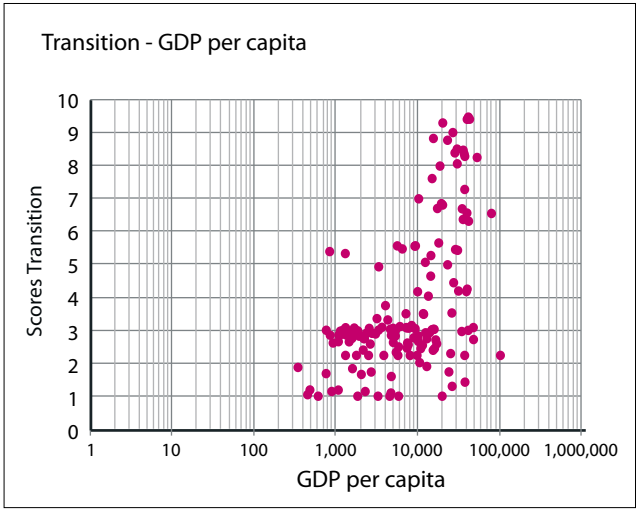
17. Organic Farming
18. Genuine Savings

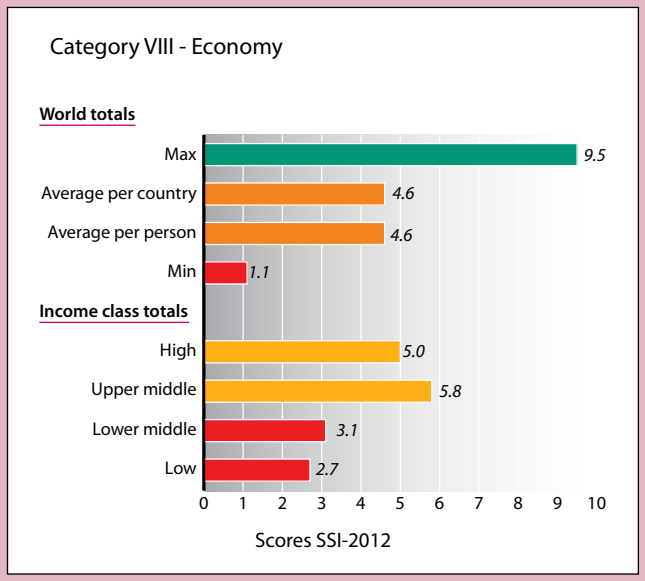


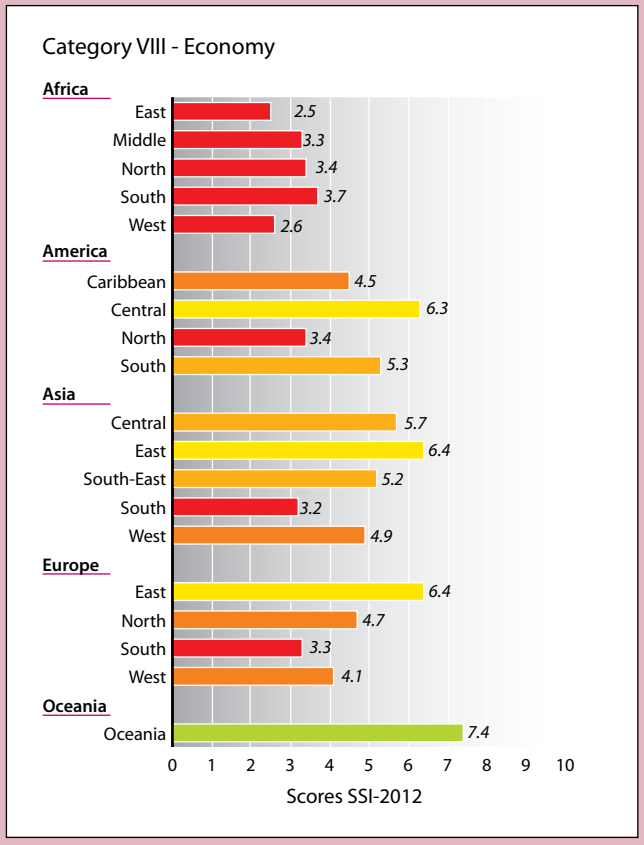
Top 5 and bottom 5 Transition					
Rank		SSI-2006	SSI-2008	SSI-2010	SSI-2012
1	Austria	9.39	9.47	9.48	9.46
2	Switzerland	9.29	9.25	9.02	9.39
3	Sweden	8.71	9.22	9.30	9.39
4	Estonia	8.66	8.91	8.93	9.28
5	Czech Republic	8.10	8.53	8.65	8.99
147	Burundi	1.00	1.00	1.00	1.00
148	Chad	1.00	1.00	1.00	1.00
149	Congo	1.00	1.00	1.00	1.00
150	Trinidad & Tobago	1.64	1.01	1.00	1.00
151	Uzbekistan	1.00	1.47	1.04	1.00





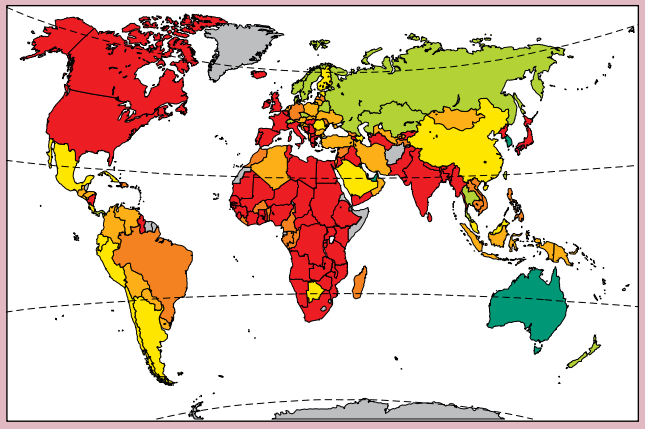




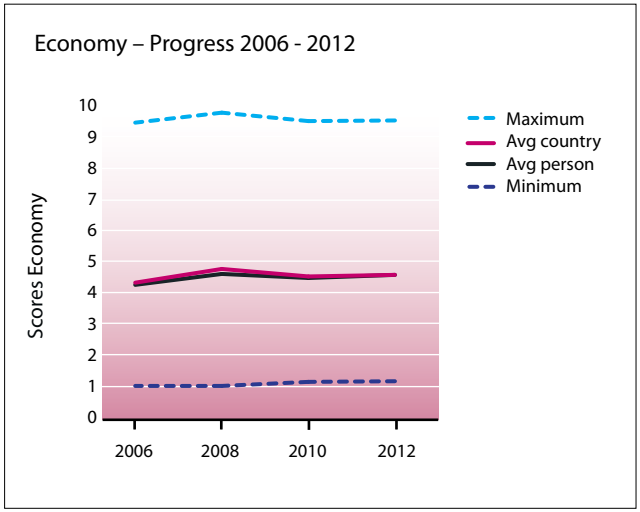


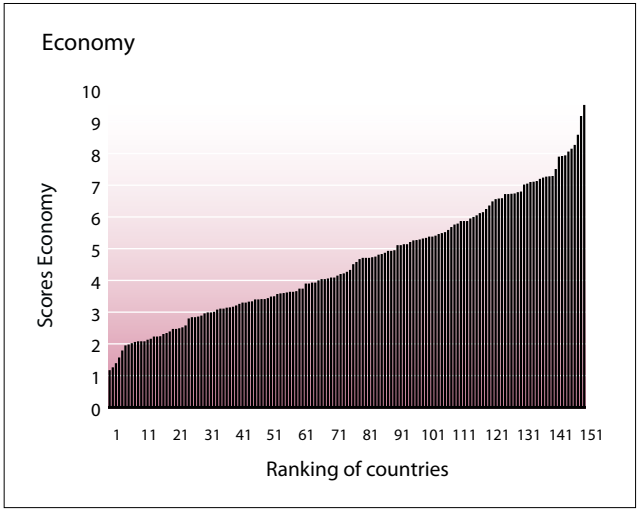
Category VIII –Economy comprises 3 indicators

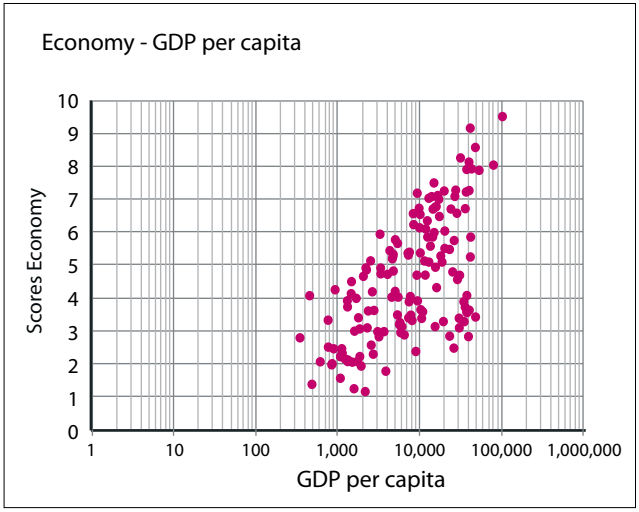
19. Gross Domestic Product, GDP
20. Employment
21. Public Debt

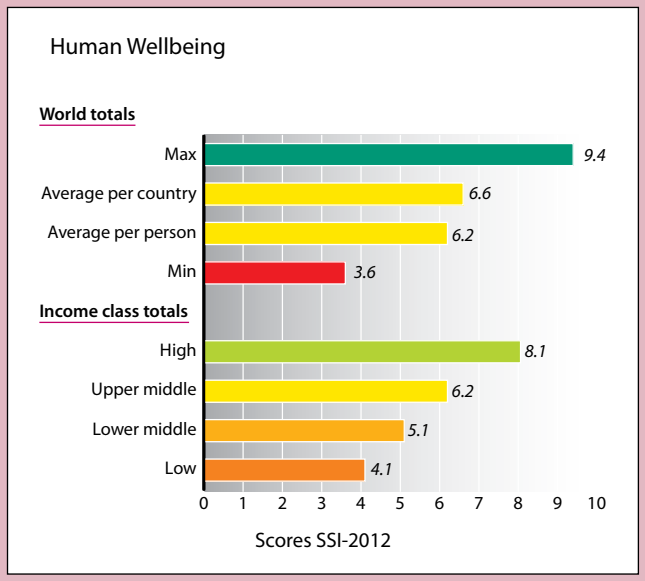


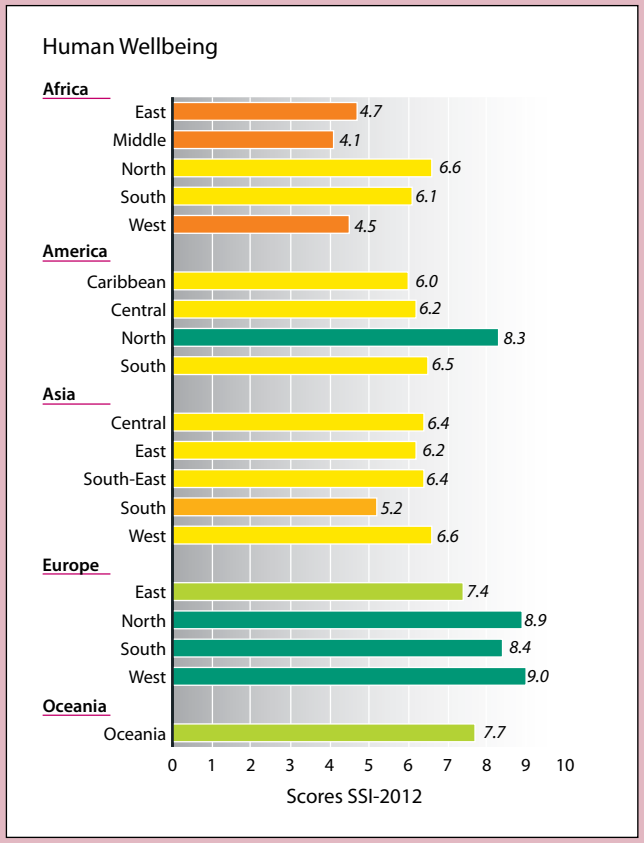
Top 5 and bottom 5 Economy					
Rank		SSI-2006	SSI-2008	SSI-2010	SSI-2012
1	Qatar	9.44	9.76	9.49	9.51
2	Kuwait	9.29	9.21	9.22	9.16
3	Unit. Arab Emirates	8.89	8.89	8.52	8.57
4	Korea, South	7.93	8.23	8.11	8.25
5	Australia	8.16	8.39	8.00	8.13
147	Iraq	1.48	1.54	1.62	1.77
148	Guinea	1.53	1.36	1.35	1.55
149	Zimbabwe	1.71	1.00	1.76	1.37
150	Côte d'Ivoire	1.66	1.77	1.91	1.24
151	Mauritania	1.08	1.12	1.13	1.15





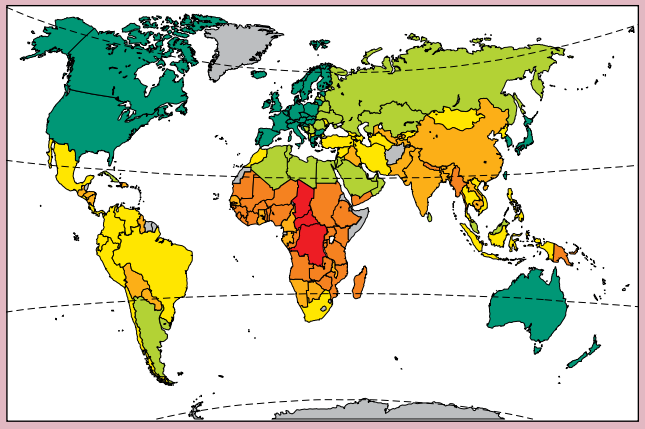




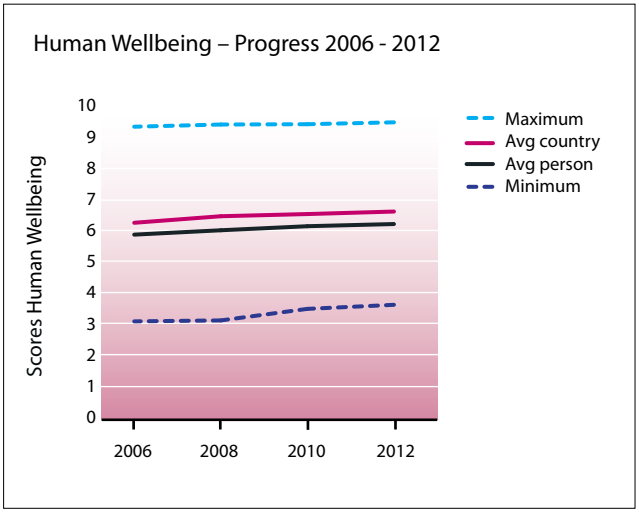


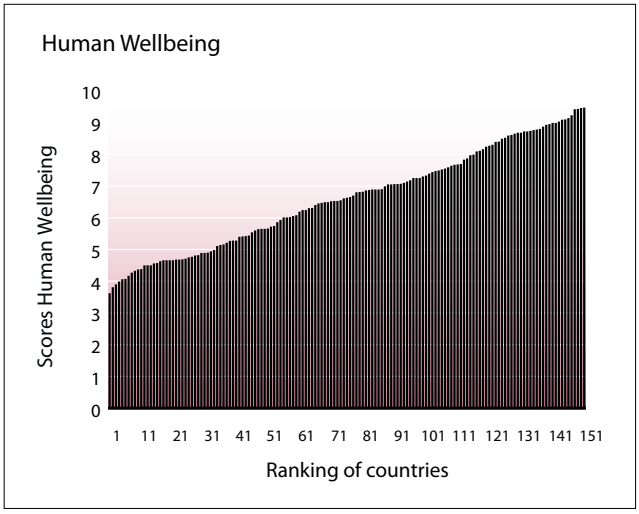
Human Wellbeing comprises 3 categories

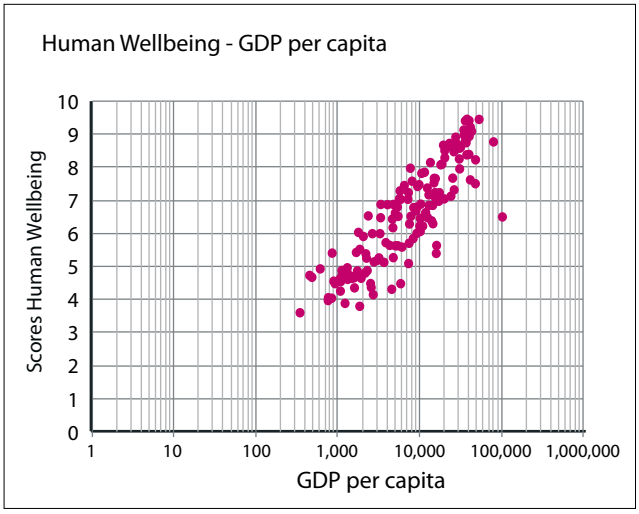
I. Basic Needs
II. Health
III. Personal & Social Development

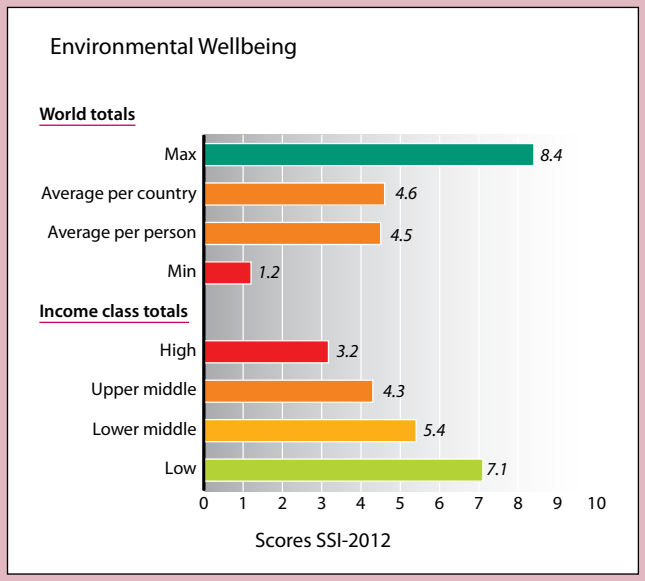


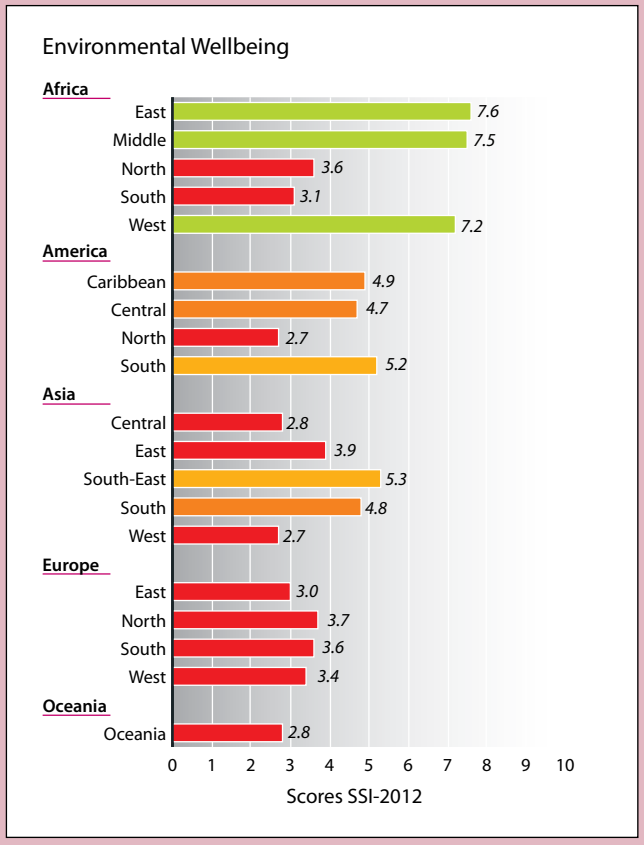
Top 5 and bottom 5 Human Wellbeing					
Rank		SSI-2006	SSI-2008	SSI-2010	SSI-2012
1	Iceland	8.92	9.15	9.14	9.45
2	Norway	9.29	9.38	9.39	9.44
3	Sweden	9.31	9.37	9.35	9.41
4	Finland	9.29	9.34	9.34	9.40
5	Austria	8.87	9.10	9.11	9.21
147	Sierra Leone	3.57	3.17	3.88	4.04
148	Central Afr. Rep.	3.51	3.69	4.31	3.97
149	Haiti	4.14	3.82	3.72	3.88
150	Chad	3.28	3.31	3.60	3.79
151	Congo Dem. Rep.	3.11	3.26	3.47	3.60





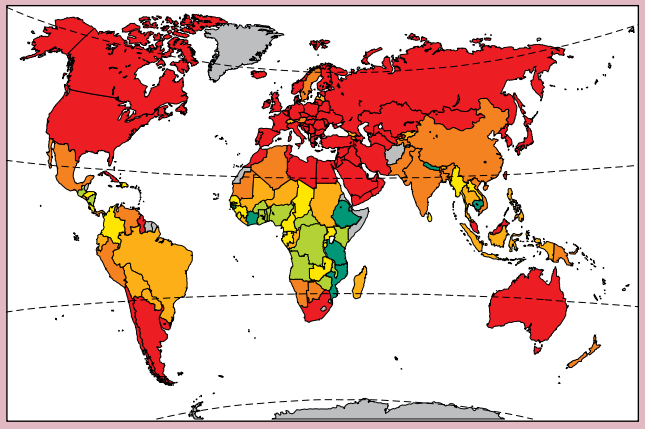




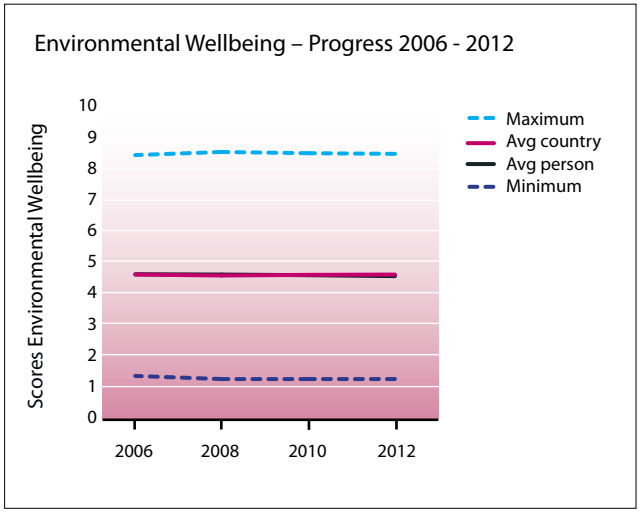


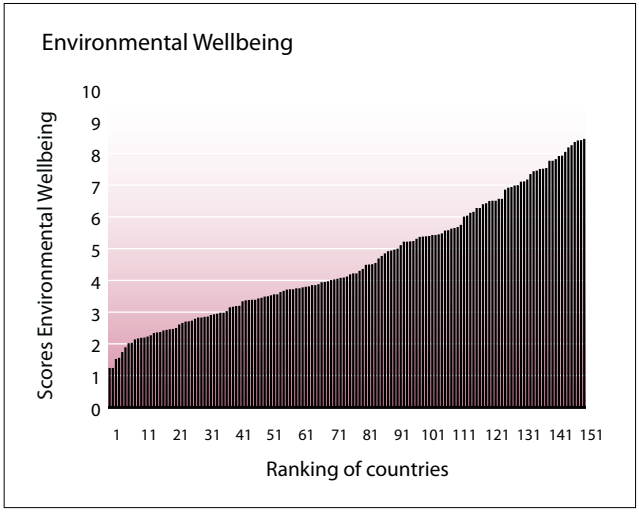
Environmental Wellbeing comprises 3 categories

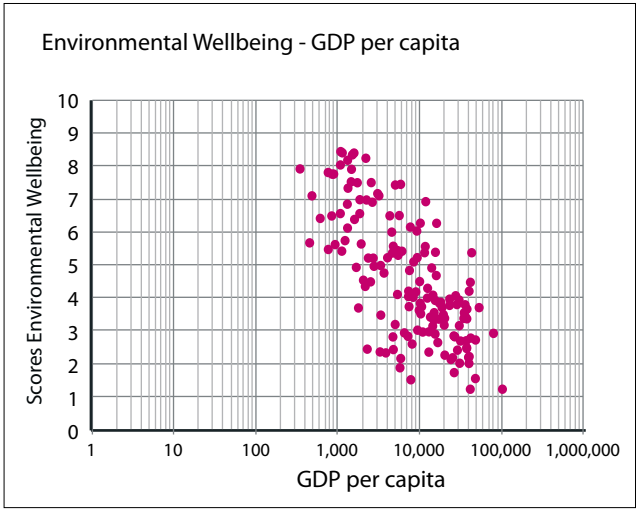
IV. Nature & Environment
V. Natural Resources
VI. Climate & Energy

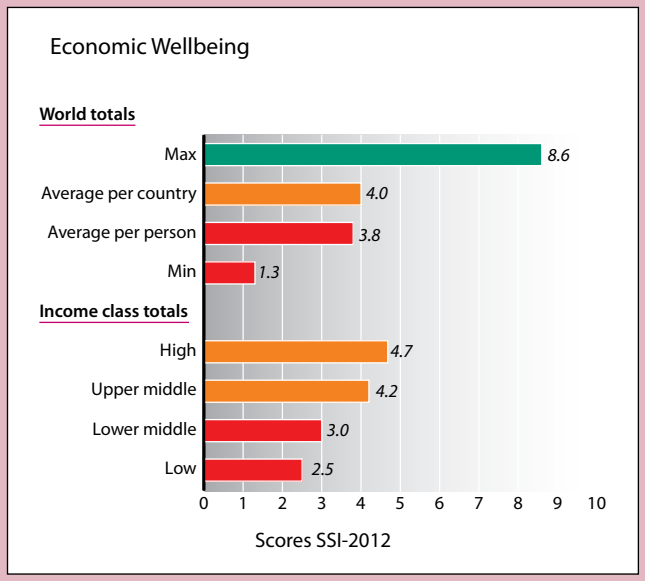


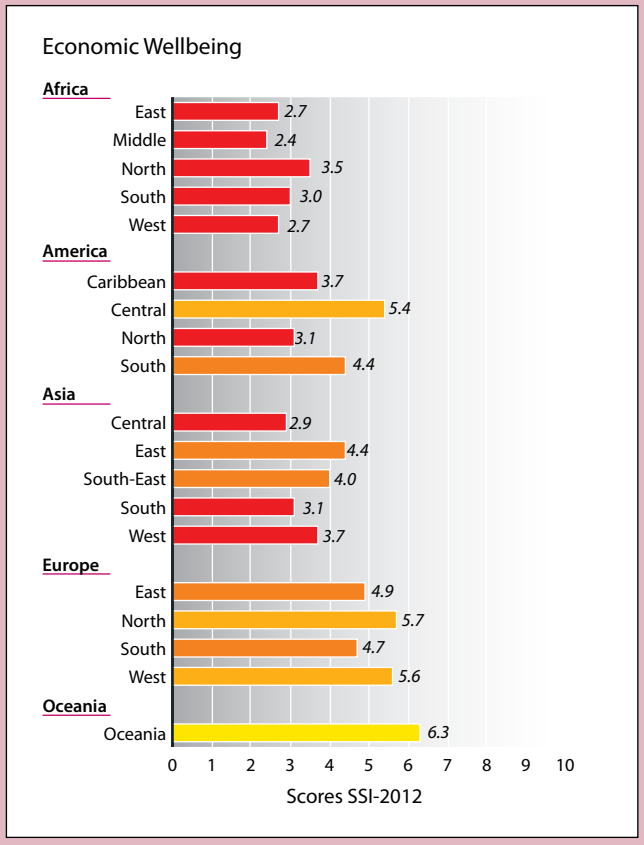
Top 5 and bottom 5 Environmental Wellbeing					
Rank		SSI-2006	SSI-2008	SSI-2010	SSI-2012
1	Ethiopia	8.36	8.36	8.46	8.44
2	Guinea-Bissau	8.40	8.38	8.42	8.40
3	Côte d'Ivoire	8.40	8.50	8.38	8.39
4	Tanzania	8.31	8.26	8.29	8.34
5	Cambodia	8.31	8.22	8.09	8.24
147	Oman	1.78	1.83	1.78	1.72
148	Unit. Arab Emirates	1.40	1.57	1.40	1.54
149	Turkmenistan	1.53	1.50	1.51	1.50
150	Qatar	1.32	1.22	1.30	1.22
151	Kuwait	1.33	1.26	1.22	1.22







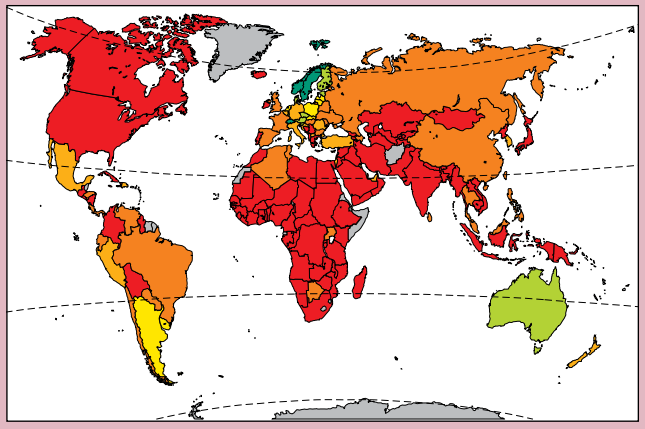




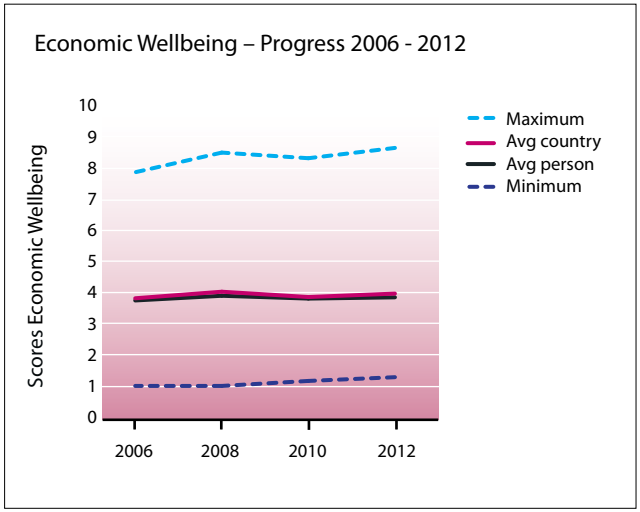
Economic Wellbeing comprises 2 categories

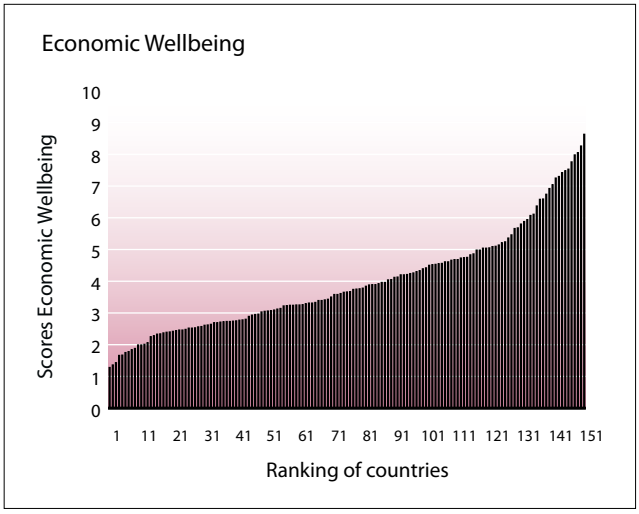
VII. Transition

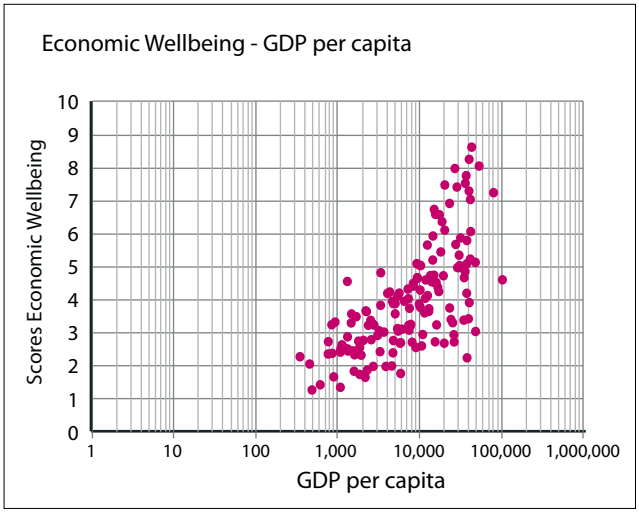
VIII. Economy



Top 5 and bottom 5 Economic Wellbeing					
Rank		SSI-2006	SSI-2008	SSI-2010	SSI-2012
1	Switzerland	7.29	8.48	8.30	8.63
2	Sweden	7.55	8.33	8.04	8.26
3	Norway	7.05	7.82	7.98	8.05
4	Czech Republic	7.34	8.09	7.86	7.98
5	Denmark	7.85	8.06	7.75	7.76
147	Togo	1.37	1.28	1.69	1.67
148	Mauritania	1.05	1.64	1.64	1.66
149	Burundi	1.00	1.00	1.43	1.43
150	Guinea	1.47	1.16	1.16	1.36
151	Zimbabwe	1.48	1.09	1.45	1.28

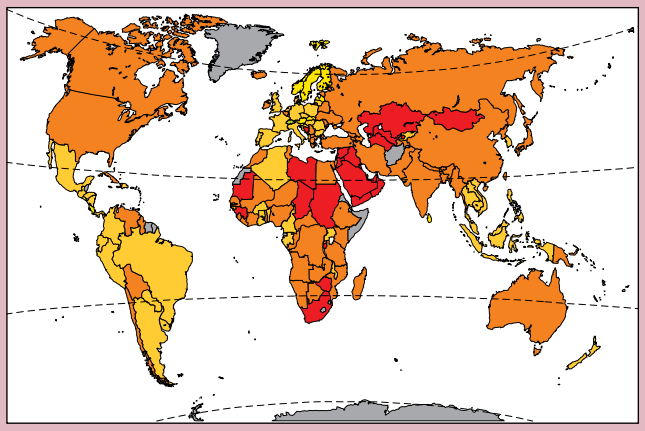


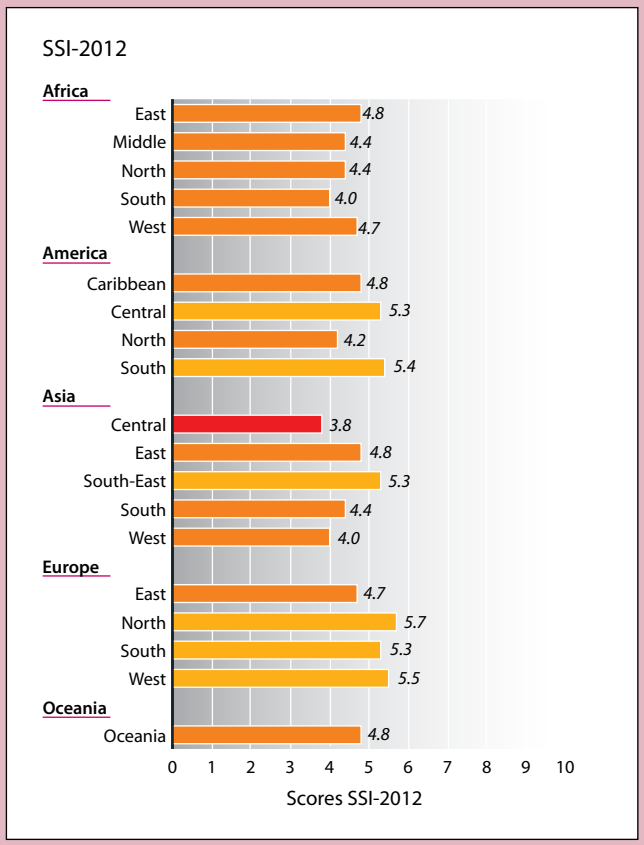




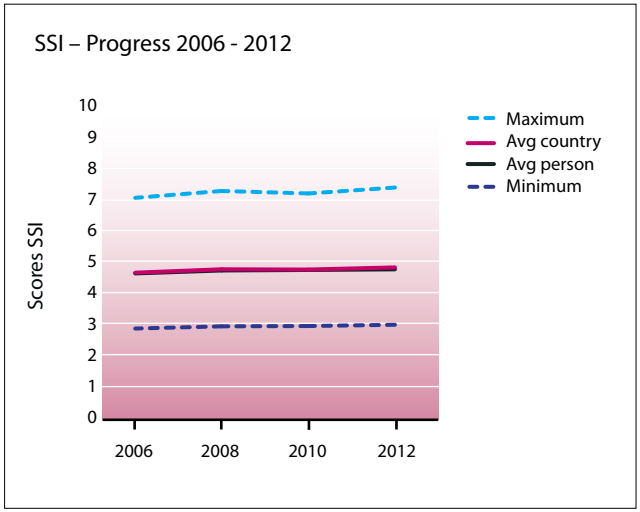
SSI comprises 3 dimensions

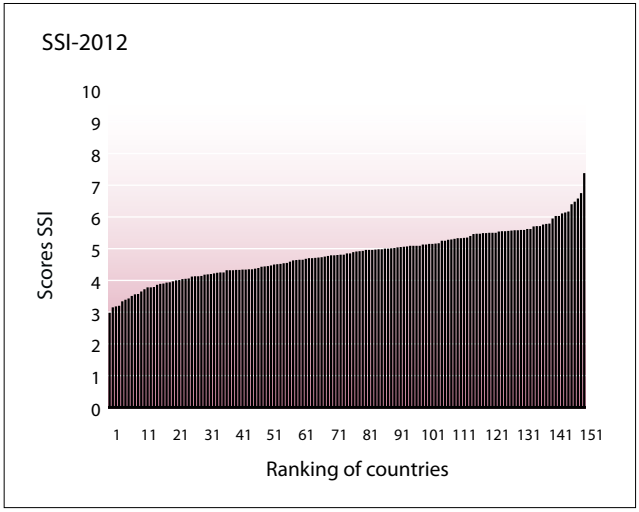
- HW – Human Wellbeing
- EW – Environmental Wellbeing
- EcW – Economic Wellbeing

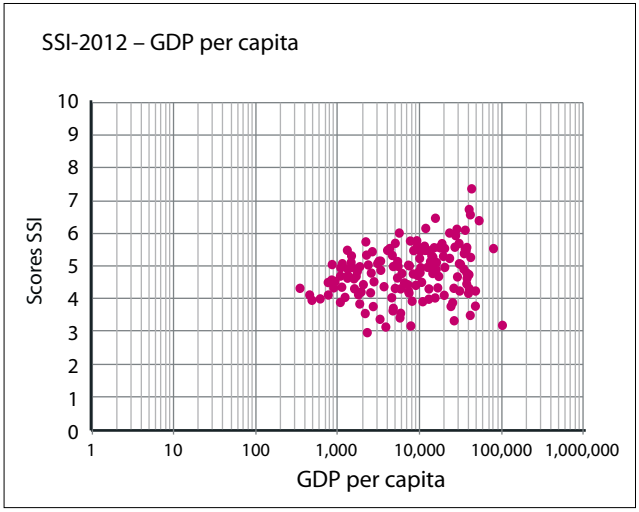




Top 5 and bottom 5 countries SSI					
Rank		SSI-2006	SSI-2008	SSI-2010	SSI-2012
1	Switzerland	7.03	7.25	7.17	7.36
2	Sweden	6.49	6.64	6.66	6.73
3	Austria	6.48	6.59	6.51	6.56
4	Latvia	6.44	6.51	6.15	6.46
5	Norway	6.25	6.38	6.47	6.38
147	Oman	3.27	3.40	3.35	3.32
148	Qatar	3.46	3.40	3.26	3.18
149	Turkmenistan	3.00	3.12	3.16	3.16
150	Iraq	3.00	3.05	3.10	3.13
151	Yemen	2.84	2.91	2.92	2.96







Annex A - Ranking list of the 151 assessed countries

Countries	HW				EW				EcW				SSI			
	2006	2008	2010	2012	2006	2008	2010	2012	2006	2008	2010	2012	2006	2008	2010	2012
Albania	37	36	36	36	41	40	42	36	91	92	89	96	20	14	13	13
Algeria	59	52	52	53	77	77	78	79	70	73	58	63	63	63	56	60
Angola	142	134	141	140	10	13	14	16	139	141	143	145	113	110	111	113
Argentina	48	59	62	55	87	80	83	86	61	25	17	15	53	40	29	21
Armenia	74	71	66	72	71	73	77	76	103	107	92	97	89	88	84	90
Australia	23	26	26	28	145	146	145	145	11	13	10	9	72	80	80	83
Austria	6	5	5	5	75	70	70	70	10	10	11	11	3	3	3	3
Azerbaijan	81	78	87	84	86	85	86	87	104	62	48	54	112	82	77	77
Bangladesh	105	112	106	107	61	60	61	62	82	85	80	81	74	90	82	87
Belarus	55	48	43	45	89	96	102	109	31	37	32	38	49	53	52	70
Belgium	14	16	17	14	129	128	130	130	52	38	33	30	86	83	83	78
Benin	129	120	129	134	4	7	8	9	68	88	79	80	30	32	38	41
Bhutan	112	107	101	105	46	47	46	49	105	83	82	98	79	73	60	81
Bolivia	97	101	114	111	55	57	50	44	114	86	93	68	98	76	87	63
Bosnia-Herzegovina	40	39	44	44	123	126	128	129	107	123	111	115	119	123	132	132
Botswana	119	119	113	109	66	66	63	66	74	43	40	48	97	75	65	73
Brazil	76	77	77	77	50	42	41	45	83	68	60	62	46	30	25	32
Bulgaria	34	31	31	33	94	94	99	104	59	103	49	39	56	78	48	50
Burkina Faso	149	141	143	131	14	15	13	13	77	94	90	88	87	69	61	51
Burundi	143	142	126	119	31	33	34	32	151	151	150	149	144	148	131	129
Cambodia	125	109	110	110	5	5	6	5	72	75	67	75	28	17	12	14
Cameroon	124	125	120	113	19	18	24	23	75	77	74	77	44	46	40	38
Canada	11	10	10	12	142	138	135	139	39	46	62	66	100	103	100	111
Central African Republic	147	147	139	148	12	12	10	10	142	137	133	134	122	116	89	98
Chad	148	148	149	150	28	29	27	28	140	142	145	146	135	138	135	136
Chile	65	62	61	64	105	108	106	108	42	54	63	55	76	92	91	88
China	109	105	99	98	72	72	75	80	47	49	47	50	80	86	76	82
Colombia	90	90	92	92	34	31	31	34	64	74	81	71	25	29	33	35
Congo	145	140	133	143	36	37	37	39	149	146	140	140	143	132	120	127
Congo. Dem. Rep.	150	149	151	151	9	9	9	8	147	143	135	137	132	128	109	109
Costa Rica	72	80	74	75	24	24	26	24	41	45	50	45	8	9	8	6
Cote d'Ivoire	126	132	137	130	2	1	3	3	138	139	137	144	75	95	86	93
Croatia	36	35	34	35	85	83	80	85	50	39	31	24	42	36	24	24
Cuba	53	50	48	47	81	87	92	97	99	64	55	69	83	67	67	76
Cyprus	29	29	28	21	131	131	134	134	30	20	26	35	77	72	81	89

Countries	HW				EW				EcW				SSI			
	2006	2008	2010	2012	2006	2008	2010	2012	2006	2008	2010	2012	2006	2008	2010	2012
Czech Republic	24	17	16	19	112	116	120	122	8	5	4	4	16	16	21	20
Denmark	8	11	11	17	133	134	129	126	1	6	6	5	32	42	35	34
Dominican Republic	86	96	94	94	39	39	39	38	37	27	30	29	12	11	10	12
Ecuador	85	74	75	73	59	54	48	59	73	69	43	51	51	43	18	33
Egypt	54	56	50	48	115	117	116	117	120	99	76	65	123	113	104	99
El Salvador	98	95	96	88	64	64	64	64	56	67	84	73	59	61	75	61
Estonia	39	34	35	30	140	141	139	138	5	2	9	7	66	62	72	66
Ethiopia	144	143	146	137	3	3	1	1	115	91	120	126	85	55	73	69
Finland	3	3	3	4	96	119	96	103	6	7	7	6	6	10	6	8
France	17	13	13	11	88	89	93	99	28	28	36	41	14	19	32	37
Gabon	115	111	97	102	38	36	32	35	87	100	94	92	60	65	42	52
Gambia	130	130	132	132	45	44	43	42	130	124	131	136	117	109	115	118
Georgia	79	75	79	80	56	62	58	54	79	93	134	101	52	58	90	62
Germany	7	7	8	10	102	101	108	107	23	19	22	21	15	13	28	22
Ghana	95	123	118	114	17	20	17	19	86	84	122	106	22	49	68	53
Greece	30	23	24	27	130	127	126	120	53	53	65	105	94	93	97	108
Guatemala	107	98	102	104	20	19	18	17	49	55	57	67	19	15	11	15
Guinea	137	145	135	133	27	27	28	27	145	149	151	150	128	143	137	134
Guinea-Bissau	127	128	125	125	1	2	2	2	135	135	117	120	73	85	51	55
Guyana	78	70	98	100	91	88	87	91	129	117	124	99	124	105	128	120
Haiti	138	146	148	149	40	41	40	40	123	128	118	124	109	122	130	126
Honduras	104	104	105	101	35	32	35	30	51	59	56	56	27	31	30	26
Hungary	19	18	22	22	95	103	88	101	25	33	37	40	17	35	34	42
Iceland	5	4	4	1	113	110	100	96	24	56	136	138	35	56	96	92
India	113	117	117	116	63	63	65	65	109	101	83	103	106	100	93	104
Indonesia	73	79	85	85	48	49	49	53	81	80	70	64	45	48	41	39
Iran	75	85	71	70	114	112	114	115	63	61	59	74	108	107	107	114
Iraq	103	103	103	99	135	132	136	137	141	138	141	142	149	150	150	150
Ireland	9	8	7	9	139	142	141	140	17	21	66	82	67	81	116	121
Israel	35	37	37	37	138	144	143	144	71	47	41	33	114	118	117	115
Italy	26	25	25	25	98	97	90	83	32	24	24	25	21	27	22	16
Jamaica	63	73	69	74	82	86	84	75	112	122	119	123	102	108	110	103
Japan	4	6	6	6	107	105	105	106	80	87	87	84	62	68	69	72
Jordan	56	63	60	63	141	139	140	142	121	108	106	116	139	139	141	142
Kazakhstan	66	58	54	56	134	137	138	136	102	112	101	76	138	135	136	130

Countries	HW				EW				EcW				SSI			
	2006	2008	2010	2012	2006	2008	2010	2012	2006	2008	2010	2012	2006	2008	2010	2012
Kenya	106	110	124	122	15	14	15	15	126	131	130	127	54	60	74	75
Korea, North	83	92	95	93	101	95	95	95	110	119	109	111	121	121	122	122
Korea, South	25	22	19	24	125	125	125	127	26	30	21	20	69	64	59	57
Kuwait	43	42	40	43	150	150	151	151	19	31	28	26	137	142	144	144
Kyrgyz Republic	80	72	76	78	42	43	51	57	124	96	104	94	71	44	62	59
Laos	117	97	100	96	21	22	23	25	116	106	107	89	68	37	45	36
Latvia	33	38	38	42	65	65	66	50	14	8	14	14	4	4	7	4
Lebanon	47	55	53	54	119	113	115	119	128	114	116	113	129	117	129	128
Liberia	141	135	130	126	43	45	44	41	146	147	138	139	140	140	125	123
Libya	51	47	46	52	144	145	146	146	96	110	100	117	136	137	142	145
Lithuania	20	27	29	34	83	84	101	93	18	11	16	16	10	8	19	17
Luxembourg	18	21	20	16	118	118	117	118	2	12	8	10	18	23	23	27
Macedonia	49	60	67	65	106	104	109	100	97	125	112	32	104	115	121	68
Madagascar	123	137	140	139	44	46	45	43	76	89	85	86	78	101	95	95
Malawi	132	113	111	108	11	10	12	12	133	134	132	133	99	57	58	58
Malaysia	68	64	41	58	78	79	85	84	33	41	45	49	48	52	49	54
Mali	134	116	122	120	47	48	47	48	98	116	114	119	103	94	101	105
Malta	87	87	81	40	146	143	144	141	66	79	86	87	142	141	143	135
Mauritania	114	124	131	123	76	74	72	71	150	145	148	148	148	145	145	143
Mexico	84	84	86	87	80	78	79	77	16	16	18	19	34	28	39	43
Moldova	69	66	70	66	92	92	91	102	69	66	64	37	88	84	85	74
Mongolia	96	89	91	91	121	120	119	123	111	71	68	132	134	119	126	141
Montenegro	46	41	42	38	49	61	59	51	55	48	115	78	13	18	55	19
Morocco	71	86	73	76	110	106	110	110	90	81	75	79	110	112	106	110
Mozambique	131	138	145	144	8	8	7	7	132	136	144	131	90	99	108	86
Myanmar	122	115	123	124	32	35	36	37	119	113	103	107	84	77	88	91
Namibia	121	118	116	117	73	81	73	74	93	97	96	95	111	120	112	117
Nepal	118	127	127	135	7	6	5	6	127	130	123	125	55	71	63	71
Netherlands	12	14	14	8	122	123	121	124	13	18	13	18	26	39	37	44
New Zealand	10	12	12	13	97	90	89	78	27	34	27	22	24	24	14	11
Nicaragua	88	99	109	112	23	23	22	20	106	78	95	100	29	25	43	48
Niger	151	151	150	146	37	38	38	46	94	111	108	112	115	125	124	124
Nigeria	140	139	136	141	16	16	16	14	88	98	102	108	64	70	70	79
Norway	2	1	1	2	84	82	82	94	12	9	3	3	5	5	4	5
Oman	50	51	51	51	147	147	147	147	101	120	110	114	145	147	147	147
Pakistan	111	108	115	115	60	58	62	61	92	95	99	93	82	89	94	96
Panama	77	81	82	86	53	59	55	63	62	50	42	47	37	38	27	40

Countries	HW				EW				EcW				SSI			
	2006	2008	2010	2012	2006	2008	2010	2012	2006	2008	2010	2012	2006	2008	2010	2012
Papua New Guinea	135	131	134	138	70	71	71	69	84	102	88	85	116	124	119	119
Paraguay	101	102	104	103	62	53	60	47	54	63	61	61	57	59	66	49
Peru	94	88	90	89	67	67	68	68	58	58	44	31	58	54	54	46
Philippines	70	67	65	68	54	50	53	56	85	76	73	59	41	41	36	31
Poland	28	28	27	26	93	99	103	105	48	23	19	17	39	26	26	25
Portugal	32	33	33	23	111	100	94	82	21	26	52	72	33	34	50	45
Qatar	42	40	78	81	151	151	150	150	29	40	35	44	141	146	148	148
Romania	60	44	45	50	100	91	81	81	34	29	25	23	65	45	31	29
Russia	41	53	57	59	124	124	123	128	44	51	46	52	96	104	102	106
Rwanda	110	133	119	129	18	17	19	18	125	132	126	129	61	91	71	85
Saudi Arabia	62	57	56	57	143	140	142	143	46	65	72	83	126	127	134	138
Senegal	102	114	108	106	25	25	20	22	89	126	121	122	38	74	64	64
Serbia	45	43	39	39	90	98	98	92	108	115	105	121	101	102	92	97
Sierra Leone	146	150	147	147	29	30	29	31	136	127	139	91	125	126	127	94
Slovak Republic	21	20	18	18	74	76	76	90	22	15	12	12	7	6	5	9
Slovenia	16	19	21	20	99	93	104	88	3	4	5	8	9	7	9	7
South Africa	92	94	88	90	116	114	122	116	95	109	125	104	127	130	140	133
Spain	15	15	15	31	127	122	124	112	15	17	23	34	47	33	57	56
Sri Lanka	52	65	63	61	30	28	30	29	118	104	91	57	31	22	16	10
Sudan	136	129	142	145	58	55	57	58	143	144	147	141	131	136	138	139
Sweden	1	2	2	3	79	75	74	73	4	3	2	2	2	2	2	2
Switzerland	13	9	9	7	51	51	54	52	9	1	1	1	1	1	1	1
Syria	82	82	84	67	137	135	133	133	122	90	77	110	146	134	133	140
Taiwan	27	30	30	29	128	129	131	131	35	52	53	58	92	96	99	100
Tajikistan	108	100	93	97	69	69	69	67	134	82	78	109	130	87	78	101
Tanzania	99	106	112	127	6	4	4	4	131	133	128	128	43	50	47	67
Thailand	67	68	68	71	57	56	52	55	36	42	39	42	23	21	17	18
Togo	133	144	144	136	13	11	11	11	148	148	146	147	120	129	113	107
Trinidad and Tobago	61	54	58	60	108	107	111	111	65	121	113	118	105	114	118	125
Tunisia	57	49	49	49	117	115	113	114	40	36	34	43	81	79	79	84
Turkey	64	69	64	69	109	111	112	113	57	60	69	27	91	98	105	80
Turkmenistan	89	76	72	79	148	149	148	149	100	105	98	90	150	149	149	149
Uganda	116	122	107	118	26	26	25	26	78	35	38	46	36	20	15	30
Ukraine	58	61	59	62	120	121	118	121	43	44	51	53	95	97	98	102
United Arab Emirates	44	45	47	46	149	148	149	148	20	32	29	28	133	131	139	137
United Kingdom	22	24	23	15	103	102	97	89	7	14	20	36	11	12	20	28
United States	31	32	32	32	126	133	127	125	45	70	97	102	93	111	114	116

Countries	HW				EW				EcW				SSI			
	2006	2008	2010	2012	2006	2008	2010	2012	2006	2008	2010	2012	2006	2008	2010	2012
Uruguay	38	46	55	41	104	109	107	98	38	22	15	13	40	51	44	23
Uzbekistan	91	91	89	95	136	136	137	135	113	118	129	130	147	144	146	146
Venezuela	100	93	83	82	68	68	67	72	60	57	54	60	70	66	53	65
Vietnam	93	83	80	83	52	52	56	60	67	72	71	70	50	47	46	47
Yemen	120	121	121	121	132	130	132	132	137	140	142	143	151	151	151	151
Zambia	139	136	138	142	33	34	33	33	117	129	127	135	107	106	103	112
Zimbabwe	128	126	128	128	22	21	21	21	144	150	149	151	118	133	123	131

Annex B - Top 10 – Bottom 10 of the 151 assessed countries

	Human Wellbeing			
	2012	2010	2008	2006
Iceland	1	4	4	5
Norway	2	1	1	2
Sweden	3	2	2	1
Finland	4	3	3	3
Austria	5	5	5	6
Japan	6	6	6	4
Switzerland	7	9	9	13
Netherlands	8	14	14	12
Ireland	9	7	8	9
Germany	10	8	7	7
Zambia	142	138	136	139
Congo	143	133	140	145
Mozambique	144	145	138	131
Sudan	145	142	129	136
Niger	146	150	151	151
Sierra Leone	147	147	150	146
Central African Republic	148	139	147	147
Haiti	149	148	146	138
Chad	150	149	148	148
Congo. Dem. Rep.	151	151	149	150

	Economic Wellbeing			
	2012	2010	2008	2006
Switzerland	1	1	1	9
Sweden	2	2	3	4
Norway	3	3	9	12
Czech Republic	4	4	5	8
Denmark	5	6	6	1
Finland	6	7	7	6
Estonia	7	9	2	5
Slovenia	8	5	4	3
Australia	9	10	13	11
Luxembourg	10	8	12	2
Iraq	142	141	138	141
Yemen	143	142	140	137
Cote d'Ivoire	144	137	139	138
Angola	145	143	141	139
Chad	146	145	142	140
Togo	147	146	148	148
Mauritania	148	148	145	150
Burundi	149	150	151	151
Guinea	150	151	149	145
Zimbabwe	151	149	150	144

	Environmental Wellbeing			
	2012	2010	2008	2006
Ethiopia	1	1	3	3
Guinea-Bissau	2	2	2	1
Cote d'Ivoire	3	3	1	2
Tanzania	4	4	4	6
Cambodia	5	6	5	5
Nepal	6	5	6	7
Mozambique	7	7	8	8
Congo. Dem. Rep.	8	9	9	9
Benin	9	8	7	4
Central African Republic	10	10	12	12
Jordan	142	140	139	141
Saudi Arabia	143	142	140	143
Israel	144	143	144	138
Australia	145	145	146	145
Libya	146	146	145	144
Oman	147	147	147	147
United Arab Emirates	148	149	148	149
Turkmenistan	149	148	149	148
Qatar	150	150	151	151
Kuwait	151	151	150	150

	SSI			
	2012	2010	2008	2006
Switzerland	1	1	1	1
Sweden	2	2	2	2
Austria	3	3	3	3
Latvia	4	7	4	4
Norway	5	4	5	5
Costa Rica	6	8	9	8
Slovenia	7	9	7	9
Finland	8	6	10	6
Slovak Republic	9	5	6	7
Sri Lanka	10	16	22	31
Jordan	142	141	139	139
Mauritania	143	145	145	148
Kuwait	144	144	142	137
Libya	145	142	137	136
Uzbekistan	146	146	144	147
Oman	147	147	147	145
Qatar	148	148	146	141
Turkmenistan	149	149	149	150
Iraq	150	150	150	149
Yemen	151	151	151	151

Africa East
Burundi
Ethiopia
Kenya
Madagascar
Malawi
Mozambique
Rwanda
Tanzania
Uganda
Zambia
Zimbabwe

Africa Middle
Angola
Cameroon
Central African Republic
Chad
Congo
Congo. Dem. Rep.
Gabon

Africa North
Algeria
Egypt
Libya
Morocco
Sudan
Tunisia

Africa South
Botswana
Namibia
South Africa

Africa West
Benin
Burkina Faso
Cote d'Ivoire
Gambia
Ghana
Guinea
Guinea-Bissau
Liberia
Mali
Mauritania
Niger
Nigeria
Senegal
Sierra Leone
Togo

America Caribbean
Cuba
Dominican Republic
Haiti
Jamaica
Trinidad and Tobago

America Central
Costa Rica
El Salvador
Guatemala
Honduras
Mexico
Nicaragua
Panama

America North
Canada
United States

America South
Argentina
Bolivia
Brazil
Chile
Colombia
Ecuador
Guyana
Paraguay
Peru
Uruguay
Venezuela

Asia Central
Kazakhstan
Kyrgyz Republic
Tajikistan
Turkmenistan
Uzbekistan

Asia East
China
Japan
Korea. North
Korea. South
Mongolia
Taiwan

Asia South
Bangladesh
Bhutan
India
Iran
Nepal
Pakistan
Sri Lanka

Asia South East
Cambodia
Indonesia
Laos
Malaysia
Myanmar
Philippines
Thailand
Vietnam

Asia West

Armenia
Azerbaijan
Cyprus
Georgia
Iraq
Israel
Jordan
Kuwait
Lebanon
Oman
Qatar
Saudi Arabia
Syria
Turkey
United Arab Emirates
Yemen

Europe East

Belarus
Bulgaria
Czech Republic
Hungary
Moldova
Poland
Romania
Russia
Slovak Republic
Ukraine

Europe North

Denmark
Estonia
Finland
Iceland
Ireland
Latvia
Lithuania
Norway
Sweden
United Kingdom

Europe South

Albania
Bosnia-Herzegovina
Croatia
Greece
Italy
Macedonia
Malta
Montenegro
Portugal
Serbia
Slovenia
Spain

Europe West

Austria
Belgium
France
Germany
Luxembourg
Netherlands
Switzerland

Oceania

Australia
New Zealand
Papua New Guinea

	Indicator	Rationale
1	Sufficient Food	Condition for the development of an individual
2	Sufficient to Drink	Condition for the development of an individual
3	Safe Sanitation	Condition for the prevention and spreading of diseases that would severely hamper a person's development
4	Healthy Life	Condition for development of each individual in a healthy way
5	Clean Air	Condition for human health
6	Clean Water	Condition for human health
7	Education	Condition for a full and balanced development of children
8	Gender Equality	Condition for a full and balanced development of all individuals and society at large
9	Income Distribution	Fair distribution of prosperity is a condition for sustainability
10	Good Governance	Condition for development of all people in freedom and harmony, within the framework of (international) rules and laws
11	Air Quality	Condition for ecological health
12	Biodiversity	Condition for perpetuating the function of nature, in all its aspects
13	Renewable Water Resources	Measure of sustainable use of renewable water resources in order to prevent depletion of resources
14	Consumption	Measure of the use and depletion of material resources
15	Renewable Energy	Measure of sustainable use of renewable energy resources in order to prevent depletion of fossil resources and to reduce GHG emissions
16	Greenhouse Gases	Measure of main contribution to climate change, causing irreversible effects
17	Organic Farming	Measure for progress of transition to sustainability
18	Genuine Savings	Measure for the true rate of savings, essential for sustainability
19	Gross Domestic Product	(Inadequate) measure for (the growth of) the economy
20	Employment	Access to the labour market is a condition for wellbeing for all people
21	Public Debt	Measure of a country's ability to make independent decisions with respect to budget allocation

Annex E - Data details and data sources

Note:
F(X) is the mathematical function to calculate the indicator score.
X is the value of the raw data, like '% of undernourished people' or 'consumption of renewable energy as % of total energy consumption' etc.

Indicator 1 – Sufficient food
Indicator: number of undernourished people in % of total population
Source: FAO
Year of data: 2006 – 2008
Target: 0% undernourished people
Formula:
F(X)=(100-X)/10 if 5≤X≤100
F(X)=10 if X<5, since FAO doesn't specify values < 5.

Indicator 2 – Sufficient to Drink
Indicator: number of people as % of the total population, with sustainable access to an improved water source.
Source: WHO - Unicef Joint Monitoring Programme
Year of data: 2010
Target: 100%
Formula: F(X)=X/10
Range of validity: 0≤X≤100

Indicator 3 – Safe Sanitation
Indicator: number of people in % of total population, with sustainable access to improved sanitation
Source: WHO – Unicef Joint Monitoring Programme
Year of data: 2010
Target: 100%
Formula: F(X)=X/10
Range of validity: 0≤X≤100

Indicator 4 – Healthy Life
Indicator: Life expectancy at birth in number of healthy life years (HALE – Health Adjusted Life Expectancy)
Source: WHO and UN Population Division
Year of data: 2009
Target: the actual maximum
Formula: F(X)=((X-20)/60)*10
Range of validity: 20≤X≤80

Indicator 5 – Clean Air
Indicator: Air pollution in its effects on humans
Source: Environmental Performance Index, EPI 2012
Year of data: 2007 or MRYA
Target: 100
Formula: F(X)=X/10
Range of validity: 0≤X≤100

Indicator 6 – Clean Water
Indicator: Surface water quality
Source: Environmental Performance Index, EPI 2010
Year of data: 2008 or MRYA
Target: 100
Formula: F(X)=X/10
Range of validity: 0≤X≤100

Indicator 7 – Education
Indicator: combined gross enrolment ratio for primary, secondary and tertiary schools
Source: Unesco
Year of data: 2010 or MRYA
Target: 100%
Formula: F(X)=X/10 if 0≤X≤100
F(X)=10 if X>100

Indicator 8 – Gender Equality
Indicator: Gender Gap Index
Source: World Economic Forum
Year of data: 2011
Target: 1 on the scale of 0 to 1
Formula: F(X)=X*10
Range of validity: 0≤X≤1

Indicator 9 – Income Distribution
Indicator: ratio of income of the richest 10% to the poorest 10% of the people in a country
Source: World Bank
Year of data: 2010 or MRYA
Target: the actual maximum score, i.e. the lowest ratio
Formula: F(X)=EXP(-0.1*(X-4.5))*10 if 4.5≤X≤168
F(X)=0 if X>168

Indicator 10 – Good Governance
Indicator: the average of values of the six Governance Indicators of the World Bank
Source: World Bank
Year of data: 2010
Target: the maximum score corresponds with 15, on the World Bank scale of -15 to +15
Formula: F(X)=((X+15)/30)*10
Range of validity: -15≤X≤+15

Indicator 11 – Air Quality
Indicator: Air Pollution in its effects on nature
Source: Environmental Performance Index, EPI 2012
Year of data: 2005
Target: 100
Formula: F(X)=X/10
Range of validity: 0≤X≤100

Indicator 12 – Biodiversity
Indicator: size of protected areas (in % of land area)
Source: UNEP-WCMC
Year of data: 2010
Target: 20%
Formula: F(X)=0.5*X for 0≤X<20
F(X)=10 for X≥20

Indicator 13 – Renewable Water Resources
Indicator: annual water withdrawals (m^3 per capita) as % of renewable water resources
Source: Aquastat
Year of data: 2009 or MRYA
Target: the actual maximum score, i.e. the lowest ratio
Formula: F(X)=(100-X)/10 if 0≤X≤100
F(X)=0 if X>100

Indicator 14 – Consumption
Indicator: Ecological Footprint minus Carbon Footprint
Source: Global Footprint Network
Year of data: 2008
Target: 0.9 gha (global hectares)
Formula: F(X)=10-3*X*2/1.8 if 0≤X≤3
F(X)=0 if X>3

Indicator 15 –Renewable Energy
Indicator: renewable energy as % of total energy consumption
Source: IEA
Year of data: 2010
Target: 100%
Formula: F(X)=X/10 if 0≤X≤100
F(X)=10 if X>100

Indicator 16 – Greenhouse Gases
Indicator: CO_2 emissions per capita per year
Source: IEA
Year of data: 2010
Target: ≤ 2 ton CO_2 per capita per year
Formula: F(X)=10-X if 0≤X≤10
F(X)=0 if X>10

Indicator 17 – Organic Farming
Indicator: area for organic farming in % of total agricultural area of a country
Source: FiBL
Year of data: 2010
Target: 20%
Formula: F(X)=10*(1-EXP(-0.25*X))
Range of validity: 0≤X≤20

Indicator 18 – Genuine Savings
Indicator: Genuine Savings (Adjusted Net Savings) as % of Gross National Income (GNI)
Source: World Bank
Year of data: 2010
Target:
Formula: F(X)=10*ARCTAN(0.2*X)/π +5
Range of validity: -∞<X<+∞

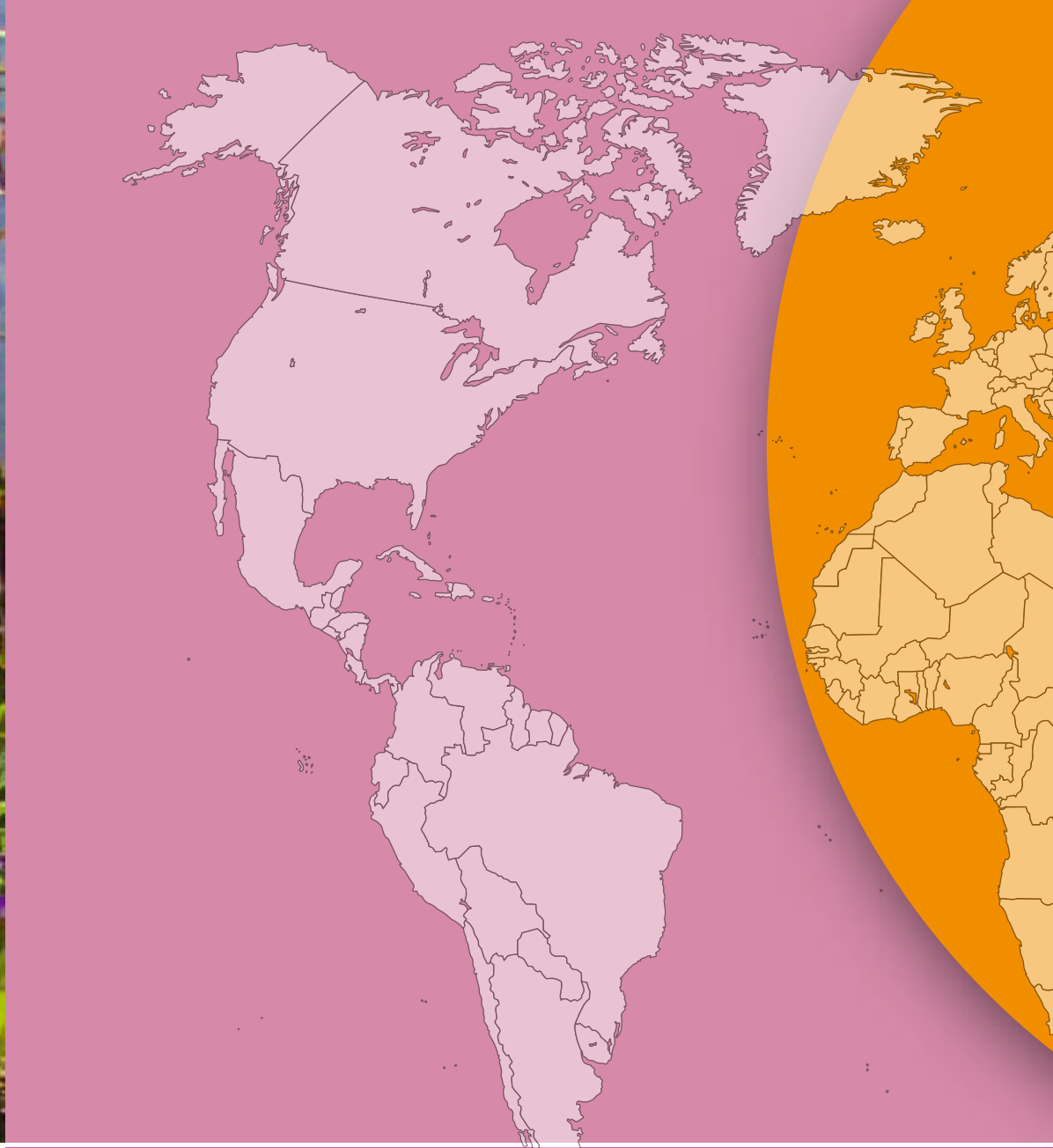
Indicator 19 – Gross Domestic Product
Indicator: GDP per capita, PPP, current international dollars
Source: IMF
Year of data: 2011
Target: $ 75,000
Formula: F(X)=10*(1.01-EXP(-0.00007*X)) if 0≤X≤75000
F(X)=10 if X>75,000

Indicator 20 – Employment
Indicator: unemployment as % of total labour force
Source: ILO, World Bank and CIA World Factbook
Year of data: 2011 or MRYA
Target: 0
Formula: F(X)=EXP(-0.1*X)*10 if 0≤X≤60
F(X)=0 if X>60

Indicator 21 – Public Debt
Indicator: the level of public debt of a country as % of GDP
Source: IMF and CIA World Factbook
Year of data: 2011
Target: 2.5% of GDP
Formula: F(X)=-3.9*ARCTAN(0.06*X-3.5)+5 if 2.5≤X<112
F(X)=0 if X≥112
F(X)=10 if X<2.5

Annex F - Abbreviations

CIA	Central Intelligence Agency
EF	Ecological Footprint
EPI	Environmental Performance Index
EU	European Union
FAO	Food and Agriculture Organisation
FiBL	Forschungsinstitut für biologischen Landbau
GDI	Gender related Development Index
GDP	Gross Domestic Product
Gha	Global hectares
GHG	Greenhouse Gases
GNI	Gross National Income
GS	Genuine Savings
HALE	Health Adjusted Life Expectancy
HDR	Human Development Report
IEA	International Energy Agency
ILO	International Labour Organisation
IMF	International Monetary Fund
JRC	Joint Research Centre of the European Commission
MDG	Millennium Development Goals
MRYA	Most recent year available
NGO	Non-Governmental Organisation
OECD	Organisation for Economic Cooperation and Development
SSF	Sustainable Society Foundation
SSI	Sustainable Society Index
UN	United Nations
UNEP	United Nations Environmental Program
Unesco	United Nations Educational, Scientific and Cultural Organisation
UNICEF	United Nations International Children's Emergency Fund
WCED	World Commission on Environment and Development
WCMC	World Conservation Monitoring Centre
WDPA	World Database on Protected Areas
WHO	World Health Organisation
WWF	World Wildlife Fund / World Wild Fund for Nature



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