# SOCIAL AND ECONOMIC RIGHTS FULFILLMENT INDEX (SERF) A new Human Rights approach

Countries have a duty to progressively realize economic and social rights to the maximum of available resources. This means that assessing the extent of each State's obligation requires specifying what is reasonably feasible to achieve using best policy and technological practices. Measuring economic and social rights fulfillment requires considering the perspectives of both the rightsholding individual and the duty-bearing government. The composite SERF Index does this and is comprised of separate scores for each economic and social right considered, and estimates obligations for progressive realization by using an innovative approach that maps an 'achievement possibilities frontier'.

Although other human rights indices exist, almost all focus on civil and political rights, while the new Social and Economic Rights Fulfillment Index (SERF Index) provides a means of determining the extent to which countries are meeting their obligations to fulfil five of the substantive human rights enumerated in The International Covenant of Economic, Social, and Cultural Rights (ICESCR): the right to food, the right to adequate shelter, the right to healthcare, the right to education, and the right to decent work<sup>1</sup>. What makes the SERF Index methodology unique is the construction of Achievement Possibilities Frontiers (APFs) which specify each country's level of obligation for progressive realization with regard to the various aspects of each economic and social right considered.

Moreover, many human rights and governance measures rely on subjective information, using expert opinion to rate conditions in countries. This raises issues about who is making these judgements, what criteria are used, who is publishing the indices for what purpose, and local advocacy groups replicating the measures. Aware of these pitfalls, the SERF Index uses survey based quantitative data series, published by international agencies that assure comparability across countries and that is readily accessible through the internet.

### The SERF Methodology<sup>2</sup>

States bear the primary responsibility for the realization of the rights of citizens and individuals residing within their borders. States have a three-fold responsibility – to protect, respect, and fulfill rights – and with respect to each, obligations for conduct

2 A full discussion of the SERF Index and the methodology underlying its construction can be found in the following papers all available from the Economic and Social Rights Empowerment Initiative's website, <www.serfindex.org> Fukuda-Parr, Lawson-Remer, and Randolph, "An Index of Economic and Social Rights fulfillment: Concept and Methodology", *Journal of Human Rights*, 8: 195-221, (2009): Randolph, Fukuda-Parr, and Lawson-Remer, "Economic and Social Rights Fulfillment Index: Country Scores and Rankings," *Journal of Human Rights*, 9: 230-61, (2010): and Fukuda-Parr, Lawson-Remer, and Randolph, *SERF index Methodology Version 2011.1: Technical Note.* 

TABLE 1										
Indicators of Core Rights										
Social/Economic Right	Core SERF Index	High-Income OECD SERF Index								
Right to Food	% Children under 5 not stunted	% infants without low birth weight								
Right to Education	Primary School Completion Rates Combined Gross School Enrollment Rates	Combined Gross School Enrollment Rates Average Math and Science PISA scores								
Right to Health	Under 5 Survival rate (%) Age 65 Survival rate Contraception Use rate	Under 5 Survival rate Age 65 Survival rate								
Right to Adequate Housing	% Rural Population with Access to Improved Water Source % Population with Access to Improved Sanitation	Data Not Available								
Right to Decent Work	% with income >\$2 (2005 PPP\$) per day	% with Income > 50% median income % Unemployed not Long Term Unemployed								
Right to Social Security	Data Not Available	Data Not Available								

as well as obligations of result. Composite SERF Index scores are comprised of separate scores on each economic and social right considered. The SERF methodology draws on international law - in addition to the ICESR, the Universal Declaration of Human Rights (UDHR), the General Comments of the Committee on Economic, Social and Cultural Rights (CESCR), reports of Special Rapporteurs, and reports of relevant task forces, seminars, and working groups, to define relevant aspects of substantive economic and social rights guaranteed under the ICESCR as well as the obligations of State Parties to the Covenant. When considering any given aspect of an economic or social right, two pieces of information are compared: 1) the level of achievement on a socio-economic indicator reflecting fulfillment of the aspect of the socio-economic right concerned, and 2) the level of achievement feasible on the socioeconomic indicator concerned given the country's resource capacity.

### Standard Socio-Economic Indicators Measure the Extent of Rights Enjoyment

The General Comments of the CESCR single out six substantive rights – food, adequate shelter, healthcare, education, decent work and social security – and expand on the relevant aspects of each right. The selection of indicators of rights enjoyment for the SERF Index involved translating the narrative of the legal documents into specific aspects of rights, the enjoyment of which can be quantitatively measured using socio-economic indicators. A number of criteria governed the selection of indicators used to construct the SERF Index, beyond making sure the indicators adequately reflected the right aspect of concern. First, selected indicators had to be based on reliable data, measured with objective methods, legitimately comparable over time and across countries, and publicly accessible. Second, indicators were selected to reflect the current challenges to fulfillment of a given right for the context at hand and not to encompass all aspects of each right. Bellwether indicators sensitive to a variety of relevant challenges were prioritized over multiple distinct indicators of each relevant aspect of a right. Further, emphasis was placed on selecting indicators that discriminate well between degrees of enjoyment in the context at hand. Some of the indicators relevant to high income OECD countries differ from those relevant to developing countries. For example, an indicator of the quality of education is much more relevant to high income OECD countries than an indicator of the proportion of children attending or completing primary school. Further, the latter does not discriminate between levels of enjoyment of the right to education in high income OECD countries. As a result, the SERF Index is actually a pair of indices, the Core SERF Index covering most countries, and a supplementary index, the SERF Index for High Income OECD Countries.

United Nations (1966) International Covenant on Economic, Social and Cultural Rights (ICESCR). Adopted 16 Dec. 1966, General Assembly Res. 2200 (XXI), U.N. GAOR, 21<sup>st</sup> Sess., Supp. No. 16, U.N. Doc. A/6316 (1966), 993 U.N.T.S. 3 (*entered into force* 3 Jan. 1976).

#### Achievement Possibility Frontiers (APFs) : Identifying the Level of State Obligations

The ICESCR commits governments to achieve realization of economic, social and cultural rights *progressively*. As stated in Article 2.1:

Each State Party to the present Covenant undertakes to take steps, individually and through international assistance and co-operation, especially economic and technical, to the maximum of its available resources, with a view to achieving progressively the full realization of the rights recognized in the present Covenant, by all appropriate means including particularly the adoption of legislative measures.

The "progressive realization" provision recognizes that States have very different starting points in their ability to achieve full enjoyment of economic and social rights. Inherent in the idea of progressive realization is that a government's ability to achieve realization of rights depends on the level of resources (financial and other) available in the country. The enjoyment of the right to highest attainable standard of health, for example, cannot be achieved overnight, as facilities need to be built, personnel trained, and policy incentives for business and households put in place and so on, so that people have access to healthcare. These arrangements require financial resources which may be beyond what governments and households can mobilize.

Consequently, the human rights performance of States cannot be judged on the basis of outcomes – enjoyment of rights by people – alone. For example, the performance of the United States and Malawi cannot be compared on the basis of their respective levels of maternal mortality considering the hugely different levels of capacity in these two countries. A country's performance in fulfilling obligations for economic and social rights depends on both: (a) the actual ESR outcomes people enjoy, as indicated by socio-economic statistics that proxy for particular rights; and (b) a society's capacity for fulfillment, as determined by the amount of economic resources available overall to the duty-bearing State.

A State's level of obligation depends on its resource capacity and this implies that assessing the extent of each State's obligation requires specifying what is reasonably feasible to achieve using best policy and technological practices in the face of its resource constraints. This is not a straightforward task. Specifically, how does one determine whether a country has committed "the maximum of [a country's] available resources" to fulfilling economic and social rights? As Audrey Chapman notes, it: "necessitates the development of a multiplicity of performance standards for each right in relationship to the varied ... contexts of countries"<sup>3</sup>.

Achievement Possibility Frontiers benchmark each country's level of obligation at a given time for each right aspect considered. Achievement Possibilities Frontiers (APFs) were specified by first constructing a scatter plot of achievement on a given indicator against per capita GDP (measured in constant purchasing power parity dollars. PPP\$), our indicator of available resources, using data from all countries over the 1990 to 2008 period. Frontier observations were then identified from the scatter and statistical techniques were used to fit a curve to the boundary observations. The resultant APF shows the level of achievement on an indicator that is feasible using best practices at each per capita GDP level, our indicator of resource capacity. It could be argued that states with larger budgets, more revenue, or better institutions have a greater capacity to fulfill economic and social rights than those with the same per capita income, but smaller budgets or poorer institutions. However, a State's capacity depends on the choices it makes with regard to its taxing policies and institutional structure. The obligation to progressively realize economic and social rights requires states to collect and expend resources at the level necessary to meet their economic and social rights obligations. It is therefore appropriate to measure resource capacity as reflected by the total resources available to the state, not the portion of those resources the state chooses to tap. The use of data from a recent, but relatively long period allows us to trace out a frontier that is stable over the medium term facilitating comparisons over time.4

For example, Box 1 shows the APF for the child survival rate, one element of our right to health index. Each black dot is the child survival rate (100% the % under 5 mortality rate) in a particular country at a particular year. The APF for the child survival rate rises with per capita income until the per capita income level reaches \$6,350 (2005 PPP\$) and then remains constant (plateaus) indicating that using best practices, it is possible to fully ensure this aspect of the right to health once a country's per capita income level reaches \$6.350. The shape of the frontier for per capita income levels below \$6.350 shows the rate at which it is feasible to transform resources into further improvement in the child survival rate. The APFs for different aspects of rights have different shapes and plateau at different per capita income levels indicating that it is easier to transform resources into some aspects of rights enjoyment than others and feasible to fulfill some aspects of some rights at a lower per capita income level than others. A country's level of obligation at a given time with regard to any given aspect of a right is then specified as the frontier value of the APF at that country's per capita GDP level.

## Assessing the Extent to which Countries Meet their Obligations of Result

A striking feature of each of the frontier plots is the large difference in rights enjoyment levels among countries with similar per capita GDP levels. For ex-

ample, as the frontier plot for the child survival rate shows, child survival rates range from around 75% to 98% for countries with per capita income levels of \$2000 (2005 PPP\$). The range is surprisingly high, even in countries with per capita income levels of \$10,000 – from about 80% to nearly 100% – even though this is well beyond the per capita income level necessary to fully realize this aspect of the right to health. These differences are indicative of differences in the extent to which countries meet their commitments to fulfill a particular right aspect.

A performance indicator score for a given right aspect is calculated as the percentage of the frontier value of the indicator achieved. So, for example, if the country achieves a child survival rate of 72%, but the frontier value of the indicator at the country's per capita GDP level is 90%, then the country's performance indicator score with regard to the child survival rate is 80%, indicating the country is only achieving 80% of the level feasible given its resources.5 In the case that a country has more than enough income to ensure full enjoyment of the right aspect but fails to do so, their performance indicator score incorporates a penalty - the penalty is greater, and hence their performance indicator score reduced more, the lower is their achievement and the greater is the ratio of their per capita income to the per capita income level needed to ensure full enjoyment of the right aspect.6

A Right Index is constructed for each of the substantive economic and social rights and the SERF Index aggregates the component Right Indices. The Component Right Indices are constructed as the simple average of the performance indicator scores relevant to each right. The Core Right to Education Index, for example, is the average of the adjusted performance indicator scores for the primary school completion rate and the combined school enrollment rate. In those cases where a single indicator is used to measure performance on a substantive right, the substantive right index is simply the performance indicator score on the corresponding indicator. The Core right to Food Index, for example, is the adjusted performance indicator score for the percentage of children that are not stunted (low height for age). The SERF Index itself is constructed as the average of the Component Right Indices.7

<sup>3</sup> Chapman, Audrey. "The Status of Efforts to Monitor Economic, Social and Cultural Rights," Chapter 7, in Economic Rights: Conceptual, Measurement and Policy Issues Shareen Hertel and Lanse Minkler (eds.), (Cambridge: Cambridge University Press, 2007). pp. 143-164

<sup>4</sup> A potential concern was that knowledge of the kinds of policies and technologies that promote aspects of rights enjoyment change rapidly so that the frontier would be defined by the most current observations. However, this turned out not to be the case; the frontier observations are reasonably balanced over time implying that the assumption that the APFs are stable over the medium term is reasonable.

<sup>5</sup> The practical range of indicators differs. For example, the lowest child survival rate observed in any country since 1990 is 68%, while the lowest Age 65 survival rate observed is 20%. As a result, indicators are rescaled to reflect their practical range before computing the performance indicator scores. See SERF Index Methodology Version 2011.1 Technical Note at <vww.serfindex.org/data> for more details.

<sup>6</sup> The penalty formula was specified on the basis of a set of axioms defining the characteristics one would like to have in such a penalty (see Fukuda-Parr, Lawson-Remer, and Randolph, "An Index of Economic and Social Rights fulfillment: Concept and Methodology", *Journal of Human Rights*, 8: 195-221, 2009) and subjected to review in multiple seminars and workshops. The final penalty formula adopted is elaborated in "SERF Index Methodology Version 2011.1 Technical Note available at <vww.serfindex.org/data>.

<sup>7</sup> Alternative weighting schemes can be employed that place more weight on those rights where a country's performance falls shortest.

#### Country Performance on the SERF Index<sup>8</sup>

The Core SERF Index can be calculated for 99 countries and the Supplementary SERF Index for High Income OECD Countries can be calculated for an additional 24 countries. The Component Right Indices can be calculated for a significantly larger number of countries. In the case of the Core SERF Index, the Right to Food, Education, Health, Housing, and Work Indices can be calculated for 123, 145, 131, 144, and 118 countries, respectively. With regard to the Supplementary Index it can be calculated for and 28, 27, 28, and 25 countries in the case of the Right to Food, Education, Health, and Work Indices, respectively.

The extent to which countries honor their commitments to fulfill economic and social rights obligations varies widely. None of the countries for which either the Core or Supplementary SERF Index can be calculated succeeds in fully meeting its commitments with regard to all economic and social rights simultaneously. The best performing core country, Uruguay, achieves a score of just over 94% on the SERF Index while the best performing OECD country, Finland, achieves a score just shy of 95%. Although a number of countries fully meet their commitments with regard to specific economic and social rights, other countries fall far short of meeting any of their commitment with regard to each of the five economic and social rights. Equatorial Guinea scores 20% on the SERF Index and its scores on the component right indices range from just above 3% to just under 29%. The mean score on the Core SERF Index is just shy of 72%; it is substantially higher, just under 90%, on the Supplementary Index for high income OECD countries. There is variation in the mean score across the different component right indices. For core countries, the range is 71% to 79% for the right to food and the right to education, respectively. For high income OECD countries, the range is larger-62% to nearly 98% for the right to work and education, respectively. What is clear is that there is considerable room for improvement for most countries. The Economic and Social Rights Empowerment Initiative's website, www.serfindex.org/data, provides downloadable spread sheets showing each country's performance on the SERF and component right indices.

## Shedding light on important policy questions: virtuous and vicious cycles

The ICESCR commits countries to devote "the maximum of available resources" to enhancing the enjoyment of economic and social rights. A key question is whether countries that honor this commitment do so at the expense of generating additional resources that could enable even greater enjoyment of economic and social rights in the future. A recent application of the SERF methodology,

### THE ACHIEVEMENT POSSIBILITY FRONTIER: CHILD SURVIVAL EXAMPLE

The level of State obligation is determined by constructing an Achievement Possibilities Frontier that identifies the highest level of enjoyment observed by any country at each per capita income level. The Achievement Possibilities Frontier is identified by first constructing a scatter plotting the value of the indicator concerned observed in each country against its per capita GDP income at the time (adjusted for inflation and differences in purchasing power by using 2005 PPP\$) and then using statistical techniques to fit a curve to the boundary observations. The Achievement Possibilities Frontier for the Child (Under 5) Survival Rate is shown below. Each black dot is an observation from a particular country for a particular year between 1990 and 2008. The green curve is the resultant Achievement Possibilities Frontier for the Under 5 Survival Rate. A country's level of obligation is specified as the under 5 survival rate corresponding to the country's per capita GDP level.

Frontier: Under 5 Survival = 100.895 – 7334.1/GDP Per Capita Maximum Constrained to 99.74%



the *Historical International SERF Index* sheds light on this question (forthcoming at www.serfindex. org/data). In addition, it also identifies those countries where rights enjoyment in relation to resource capacity is growing over time signifying improved compliance with their obligations under the ICESCR as well as those countries in violation of the principle of non-retrogression.

In general, country compliance with their obligations of results is improving; the cross-country average value of the Core Historical International SERF Index increased from 60% to 75% between 1975 and 2005. Progress was most robust with regard to the right to education with the mean score on the historical education index increasing from 35% to 72% over the 40 years. Progress was less pronounced, but not negligible for high income OECD concern. First, progress for the Core countries was most robust between 1975 and 1985; the pace of improvement slowed between 1985 and 1995, and was further dampened between 1995 and 2005. Further, there was wide variation in performance and the principle of non-retrogression is frequently violated over the period of a decade or more. Retrogression occurred in half the countries on some right over one or more periods.

countries. Despite these gains, there is reason for

One way to examine the question of whether there is a trade-off between fulfilling economic and social rights obligations today and building resources to enhance economic and social rights enjoyment in the future is to look at country outcomes from one decade to the next. To address this question, we first split the countries for which the Core Historical

<sup>8</sup> The results presented here are for the most recent version of the dataset (International SERF Index Dataset Version 2011.1 available at <vwww.serfindex.org/data>). This version reflects several refinements over the version reported on in Randolph, Fukuda-Parr, and Lawson-Remer, "Economic and Social Rights Fulfillment Index: Country Scores and Rankings," *Journal of Human Rights*, 9: 230-61, (2010).



### **PROMOTING ECONOMIC AND SOCIAL RIGHTS IS GOOD FOR GROWTH**

The diagram above tracks where countries that start out in 1995 end up in 2005. Four possible initial and final positions are considered: 1) countries with per capita GDP growth rates and SERF Index scores both below the median of the sample—vicious cell, 2) countries with per capita GDP growth rates and SERF Index scores above the median of the sample—virtuous cell, 3) countries with per capita GDP growth rates above the median of the sample—virtuous cell, 3) countries with per capita GDP growth rates above the median but SERF Index scores below the median—growth lopsided, and 4) countries with SERF Index scores above the median, but per capita income

growth rates below the median—SERF lopsided. The bubbles show the percentage of countries that end up in each of the four positions depending on their starting point. As can be seen, countries that prioritize meeting their economic and social rights obligations over growth are the most likely to end up in the virtuous position, whereas countries that prioritize growth in per capita income over meeting the economic and social rights commitments are very unlikely to end up in the virtuous cell and quite likely to fall back to the vicious cell.

International SERF Index could be computed for both the decade of the 1990s and the decade of the 2000s into four groups:

- Countries whose SERF Index score and per capita income growth rate over the decade were below the median values—countries trapped in a vicious cycle.
- Countries whose SERF Index score and per capita income growth rate over the decade were above the median values—countries in a virtuous cycle.
- Countries whose SERF Index score was above the median value but whose per capita income growth rate was below the median value—call them SERF lopsided—.
- Countries whose per capita income growth rate was above the median value but whose SERF Index score was below the median—call them growth lopsided.

Given a country's starting point—vicious cycle, virtuous cycle, SERF lopsided or growth-lopsided one can then look at where the countries end up in the next decade. Box 2 details the outcome. The findings from this analysis clearly reveal that growth-lopsided countries seldom converged to the virtuous cycle and in fact were as likely to converge to the vicious cycle as remain in the growth-lopsided category. On the other hand, SERF-lopsided countries were far more likely to converge to the virtuous cycle, and if not, with few exceptions, remain in the SERF-lopsided category. In summary, countries that emphasized meeting their economic and social rights commitments were unlikely to face reduced per capita income growth as a result. Quite the contrary, the results suggest that promoting economic and social rights is good for growth.

Core Country SERF Index													
Country	Core Country SERF Index Value	Core Country Right to Food Index Value	Core Country Right to Health Index Value	Core Country Right to Education Index Value	Core Country Right to Housing Index Value	Core Country Right to Work Index Value	Country	Core Country SERF Index Value	Core Country Right to Food Index Value	Core Country Right to Health Index Value	Core Country Right to Education Index Value	Core Country Right to Housing Index Value	Core Country Right to Work Index Value
Countries with Complete	Data												
Uruguay	94.05	79.45	95.63	98.98	100.00	96.17	Togo	76.73	99.75	70.26	78.15	35.50	100.00
Jordan	93.65	96.27	84.57	93.76	95.27	98.37	Azerbaijan	76.38	63.03	76.95	91.85	50.05	100.00
Belarus	93.41	95.79	85.23	92.45	93.56	100.00	Peru	75.89	57.34	88.72	96.88	58.04	78.46
Moldova	92.15	100.00	88.69	85.42	89.83	96.82	Congo, Dem. Rep.	75.49	73.29	66.70	92.28	45.21	100.00
Kyrgyz Republic	92.13	100.00	80.59	92.52	97.48	90.06	Malawi	74.39	31.40	69.14	77.11	94.31	100.00
Cuba	92.07	98.16	97.15	87.72	87.98	89.32	Burundi	73.85	19.41	59.95	93.50	96.37	100.00
Ukraine	90.69	76.61	83.00	98.62	95.24	100.00	Timor-Leste	73.24	24.23	70.03	91.31	80.64	100.00
Chile	90.59	100.00	87.60	86.64	79.43	99.30	Bolivia	72.17	59.40	78.45	95.78	47.51	79.74
Serbia	90.35	89.48	78.83	90.96	92.48	100.00	Ghana	71.95	86.59	60.01	78.67	52.25	82.22
Jamaica	89.84	98.57	86.03	86.70	83.19	94.73	Kenya	71.57	67.65	56.31	84.98	51.09	97.81
Guyana	89.25	91.02	68.95	98.24	94.68	93.33	Rwanda	68.83	33.71	59.07	72.49	78.90	100.00
Bulgaria	88.52	88.49	78.02	76.62	100.00	99.48	Nepal	67.91	37.96	86.58	79.01	72.99	63.02
Argentina	88.34	88.33	87.31	97.78	77.58	90.69	Comoros	66.88	35.41	68.66	81.02	76.25	73.05
Brazil	87.42	91.11	90.08	96.47	75.81	83.61	Guatemala	65.83	17.78	76.11	72.31	86.60	76.38
Georgia	86.62	92.35	80.15	92.41	96.86	71.31	Indonesia	65.71	45.01	85.16	93.43	63.88	41.09
Kazakhstan	86.60	72.77	70.51	98.42	91.31	100.00	Bangladesh	64.18	50.90	87.27	58.28	83.42	41.05
Tunisia	86.11	91.11	86.84	84.04	81.58	86.97	Senegal	63.31	98.91	47.96	52.41	62.60	54.68
Malaysia	85.15	75.93	84.08	80.04	95.71	90.00	Sierra Leone	61.46	49.90	30.20	100.00	27.20	100.00
Thailand	85.14	79.38	88.09	74.52	96.20	87.51	Mozambique	61.33	50.98	46.94	76.79	31.94	100.00
Armenia	84.98	83.58	83.14	89.34	91.17	//.65	Mauritania	60.94	/6.86	46.81	59.63	42.84	/8.5/
Russia	84.82	76.18	82.24	85.49	80.18	100.00	Lesotno	60.58	45.20	49.44	/3.0/	66.53	68.65
Albania	84.76	62.33	89.58	01.00	97.60	92.48	Botswana	60.36	52.64	59.63	80.07	63.08	39.79
Iran	84.74	72.35	89.82	91.03	79.94	90.56	Guinea-Bissau	60.15	52.51	44.91	49.81	53.53	100.00
Turkov	04.37	75.20	90.02	92.00	22.06	00.43	Calliboula	59.67	22.70	00.00 65.16	73.14	49.90	50.09
Pomania	92.09	70.29 92.57	00.00	70.90 99.54	62.95	09.20	Namihia	59.70	52.70	70.52	71.10	57.26	37.09
Dominican Benublic	83.85	88 15	86.50	78.50	80.13	85.87	Ethionia	58 10	30.02	58.08	67.36	25.85	100.00
Sri Lanka	83.81	85.61	91 1 <i>4</i>	88.29	91.05	62.97	Cameroon	56.92	59.19	47 31	67.97	57 13	53.02
Paraquay	83.78	83.82	92.97	86.56	68.59	86.99	Pakistan	56.73	48 55	65.94	49.06	74.09	46.02
Macedonia	83 54	82.92	68.08	80.10	91 45	95.18	Zambia	56 71	44 18	46.98	91 94	61.46	39.00
Ecuador	83 51	58 51	90.56	95 13	88 10	85.24	India	56.06	32 70	74 74	82.64	62 55	27.67
Liberia	83 13	90.10	73 17	99.08	53 29	100.00	Cote d'Ivoire	55 76	54 52	51 14	46.03	54 45	72 65
Algeria	82.67	79.77	83.78	90.41	85.48	73.91	Diibouti	55.59	54.52	52.37	31.72	63.01	76.33
Gambia	81.65	88.99	53.44	75.22	96.71	93.88	Lao PDR	55.07	36.16	72.44	70.40	61.14	35.22
Belize	81.60	70.05	77.22	90.74	93.82	76.18	Mali	53.70	65.09	32.75	62.11	53.01	55.57
Nicaragua	81.55	93.29	94.09	76.23	67.04	77.09	Guinea	53.52	64.18	52.26	63.10	51.53	36.53
Egypt	81.41	58.37	84.92	84.88	96.64	82.25	Benin	52.50	45.81	58.51	68.76	48.59	40.81
Venezuela	80.55	74.91	90.96	89.61	60.95	86.32	Yemen	51.84	13.29	63.89	57.91	62.31	61.81
El Salvador	80.04	67.94	87.64	78.86	80.05	85.71	Niger	51.14	27.56	48.10	47.06	32.99	100.00
Tajikistan	79.91	71.17	73.86	93.60	84.65	76.25	Swaziland	50.54	61.76	50.69	63.89	57.81	18.56
China	79.73	90.43	94.82	83.58	65.83	63.98	Gabon	50.03	52.30	54.07	54.06	20.29	69.44
Colombia	79.54	78.23	91.74	95.19	67.64	64.92	Congo, Rep.	48.35	61.86	53.70	66.61	33.27	26.31
Vietnam	78.79	58.39	98.59	85.80	92.52	58.66	Madagascar	47.87	29.91	66.44	81.89	25.98	35.14
Uzbekistan	78.60	93.59	85.79	89.14	94.36	30.12	Tanzania	47.70	49.33	57.12	76.75	43.73	11.60
Trinidad and Tobago	78.56	92.96	68.18	66.58	84.06	81.05	Burkina Faso	46.77	49.13	45.12	41.36	51.44	46.80
Mongolia	77.79	73.34	81.47	92.20	52.46	89.46	Nigeria	42.51	47.70	33.35	66.71	43.29	21.50
Philippines	77.53	69.17	83.36	90.79	86.60	57.70	Chad	39.79	46.94	30.12	38.53	32.39	50.95
Suriname	77.42	86.89	74.24	74.87	80.03	71.07	Angola	34.75	26.61	23.51	45.78	45.30	32.57
Morocco	77.33	77.42	87.12	68.34	65.93	87.85	Equatorial Guinea	20.22	26.99	23.12	28.89	18.66	3.41
Honduras	76.98	64.62	88.04	82.90	76.96	72.39							

name <t< th=""><th colspan="10">Core Country SERF Index</th></t<>	Core Country SERF Index													
Constraint of a constraint o	Country	Core Country SERF Index Value	Core Country Right to Food Index Value	Core Country Right to Health Index Value	Core Country Right to Education Index Value	Core Country Right to Housing Index Value	Core Country Right to Work Index Value	Country	Core Country SERF Index Value	Core Country Right to Food Index Value	Core Country Right to Health Index Value	Core Country Right to Education Index Value	Core Country Right to Housing Index Value	Core Country Right to Work Index Value
AndonaNo. </th <th>Countries with Incomplete</th> <th>e Data</th> <th></th>	Countries with Incomplete	e Data												
AndonaNo.No	Aruba							Lithuania			77.30	83.25		100.00
AlphaiseMath </td <td>Andorra</td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td>Latvia</td> <td></td> <td></td> <td>78.46</td> <td>86.60</td> <td>77.48</td> <td>100.00</td>	Andorra							Latvia			78.46	86.60	77.48	100.00
Any decisionAny decisi	Afghanistan		13.13	24.32	59.10	51.13		Macao SAR, China				86.93		
Nether United Ande United Ande United Ande Intermark Same Andemark Same Andemar	Anguilla							Monaco						
Unick AdministryUnick Administry <th< td=""><td>Netherlands Antilles</td><td></td><td></td><td></td><td></td><td></td><td></td><td>Maldives</td><td></td><td>61.48</td><td>76.29</td><td>89.26</td><td>92.68</td><td></td></th<>	Netherlands Antilles							Maldives		61.48	76.29	89.26	92.68	
AmericandomAmerican JongImage <td>United Arab Emirates</td> <td></td> <td>41.18</td> <td>74.10</td> <td>78.40</td> <td>94.68</td> <td></td> <td>Marshall Islands</td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td>	United Arab Emirates		41.18	74.10	78.40	94.68		Marshall Islands						
Andipand BahanaNo <td>American Samoa</td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td>Malta</td> <td></td> <td></td> <td></td> <td>85.92</td> <td>100.00</td> <td></td>	American Samoa							Malta				85.92	100.00	
Bahama         Final         Reds         Bada         Final         Reds         Final         Reds         Final         Reds         Final         Reds         Final         Fin	Antigua and Barbuda					86.64		Myanmar						
BahanadBahanadBanad	Bahrain		71.16	86.45	86.38			Montenegro		89.81	77.79		91.06	100.00
Benamia         Image         Benamia         Image	Bahamas				82.33			Northern Mariana Islands						
Bernade         Image	Bosnia and Herzegovina		86.58			95.50	100.00	Montserrat						
Barbado         Image	Bermuda							Mauritius		82.33	88.49	75.94	91.93	
Brain Standing         Image	Barbados					100.00		Mayotte						
British Qinchi         Inter         Inter         Inter         Nove Gendand Same	Brunei Darussalam				85.58			Nauru						
Cantal Alcan A publicSindSindSindNind<	British Virgin Islands							New Caledonia						
Channel IslandsImage: Section of the sect	Central African Republic		59.75		50.38	61.01	100.00	Niue						
CookislandsImage </td <td>Channel Islands</td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td>Oman</td> <td></td> <td>75.00</td> <td>75.08</td> <td>51.64</td> <td>68.53</td> <td></td>	Channel Islands							Oman		75.00	75.08	51.64	68.53	
Cape Verde     Image of the set of the s	Cook Islands							Panama		68.98		92.55	65.26	75.40
Costa Rica     Image: Marcial Marcia	Cape Verde			87.70	85.28	72.20	67.70	Palau						
Caymanislands         Image         Field         Field         Pietro Rico         Pietro Ri	Costa Rica			97.77	79.06	90.39	96.27	Papua New Guinea		43.73	62.19		45.78	47.88
Cyprus         Sind         <	Cayman Islands							Puerto Rico						
Dominacian ErritreaFranch PolynesianFrench PolynesianStataSt	Cyprus				90.47	100.00		Korea, Dem. Rep.						
FirtneaImage: space spa	Dominica				70.01	84.45		French Polynesia						
EstoniaFench MainFence MainSeader Main	Eritrea		57.65	60.70	56.31	49.50		Qatar				77.19	100.00	
French GuianaIncIncIncSudanSudanStr.847.8343.4350.03Common set of the	Estonia			88.27	95.56	92.19	100.00	Saudi Arabia		81.34	71.14	80.47	70.75	
FijiFijiFinal of the state75.8381.9961.3461.3461.34Singapore91.7991.7491.74100.00FacroelslandsImage <td>French Guiana</td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td>Sudan</td> <td></td> <td>57.68</td> <td>47.83</td> <td>43.43</td> <td>50.03</td> <td></td>	French Guiana							Sudan		57.68	47.83	43.43	50.03	
Facroe IslandsFaceFaceFaceSolomon IslandsFace <td>Fiji</td> <td></td> <td></td> <td>75.83</td> <td>81.99</td> <td>61.34</td> <td></td> <td>Singapore</td> <td></td> <td>91.79</td> <td>91.34</td> <td></td> <td>100.00</td> <td></td>	Fiji			75.83	81.99	61.34		Singapore		91.79	91.34		100.00	
MicronesiaIncomesia <td>Faeroe Islands</td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td>Solomon Islands</td> <td></td> <td></td> <td>69.74</td> <td>57.65</td> <td>55.25</td> <td></td>	Faeroe Islands							Solomon Islands			69.74	57.65	55.25	
GuadeloupeIncIncIncIncSomalaSomalaIncIncIncIncIncIncGibraltarInc <t< td=""><td>Micronesia</td><td></td><td></td><td></td><td></td><td>63.62</td><td></td><td>San Marino</td><td></td><td></td><td></td><td></td><td></td><td></td></t<>	Micronesia					63.62		San Marino						
GibraltarGibraltarFieldFieldSaceSace Torme and Principe83.73Field79.0266.8785.85GrenadaFieldSec85.4292.0194.18SloveniaFieldField94.6088.1198.98100.00GreenlandFieldFieldFieldFieldSeychellesFieldField95.8296.93100.00GuamFieldFieldFieldFieldFieldSyriaGet.7464.7488.8088.3191.53100.00GuamFieldFieldFieldSizeFieldSyriaGet.7464.7488.8088.3191.5370.4370.8091.5370.4370.8091.5370.4391.5370.4370.6070.4370.0070.70 <td>Guadeloupe</td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td>Somalia</td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td>	Guadeloupe							Somalia						
GrenadaGren ASStace	Gibraltar							Sao Tome and Principe		83.73		79.02	66.87	85.85
GreenlandGreenlandFileFileFileSeychellesSeychellesFileFileSeychellesFileSeychellesFileSeychellesFileSeychellesFileSeychellesFileSeychellesFileSeychellesFileSeychelles <td>Grenada</td> <td></td> <td></td> <td>85.42</td> <td>92.01</td> <td>94.18</td> <td></td> <td>Slovenia</td> <td></td> <td></td> <td>94.60</td> <td>88.11</td> <td>98.98</td> <td>100.00</td>	Grenada			85.42	92.01	94.18		Slovenia			94.60	88.11	98.98	100.00
HadamIncomeIncomeIncomeIncomeSyrathIncome	Greenland							Seychelles		04.74	00.00	95.82	04 50	100.00
Hong Kong SAH, ChinaIceBisc	Guam				05.04			Syria		64.74	88.80	88.31	91.53	
CroatiaInterference<	Hong Kong SAR, Unina			01.07	85.21	00.54	100.00	Turks and Galcos Islands		00.05	70.40			00.07
HathHath1687.3172.4172.4174.5195.02100elau100elau100 <td>Groatia</td> <td></td> <td>07.04</td> <td>91.27</td> <td>90.84</td> <td>96.54</td> <td>100.00</td> <td>Turkmenistan</td> <td></td> <td>80.65</td> <td>70.43</td> <td></td> <td></td> <td>66.27</td>	Groatia		07.04	91.27	90.84	96.54	100.00	Turkmenistan		80.65	70.43			66.27
Isle of MainIncome <t< td=""><td>Haiti</td><td></td><td>87.31</td><td>72.41</td><td></td><td>45.91</td><td>58.02</td><td>Tokelau</td><td></td><td></td><td>70.00</td><td>07.54</td><td>07.07</td><td></td></t<>	Haiti		87.31	72.41		45.91	58.02	Tokelau			70.00	07.54	07.07	
Indq71.1360.3160.30100.00IUValu $no$			71.10		60.04	60.00		Tunglu			70.88	97.54	97.97	
Israel         Israe         Israe         Israe <td>loraol</td> <td></td> <td>/1.13</td> <td></td> <td>00.31</td> <td>100.00</td> <td></td> <td>llaanda</td> <td></td> <td>65.45</td> <td>50.00</td> <td></td> <td>72 77</td> <td>77 60</td>	loraol		/1.13		00.31	100.00		llaanda		65.45	50.00		72 77	77 60
Kitts and Nevis         Gene         50.35         40.71         Gene         St. Vilteritation the defit.         Gene         53.06         Feed         Feed<	Kiribati				92.99	100.00		St Vincent and the Cron		00.40	JU.UZ	02 60	13.11	11.00
Kosovo         Main Movis         Main Movis<	St. Kitte and Novie				88.25	40./1		Virgin Jelande (U.S.)				93.00		
Kusava       Total all       Total all <thtotal all<="" th=""> <thtotal all<="" th=""></thtotal></thtotal>	Kosovo				00.20	50.01		Vaguatu			75.60	68.95	67.02	
Induction     10.23     10.40     10.40     West balk allo data     Induction data     Induction data       Lebanon     74.47     83.87     73.89     98.46     Walliset Futuna     Image: Comparison of the co	Kuwait		30.00		76 /6			West Bank and Caza			10.00	00.00	01.20	
Libya     60.51     79.72     86.75     91.00     49.06     South Africa     77.58     92.77     95.45       Lichtenstein     79.72     86.75     91.00     49.06     South Africa     57.58     71.39     70.22     46.60	Lebanon		74 47	83.87	73.80	98.46		Wallis et Futuna						
St. Lucia         79.72         86.75         91.00         49.06         South Africa         57.58         71.39         70.22         46.60           Liechtenstein         88.39         7imhahwe         7imhahwe         07.62         46.00	Libva		60.51	00.07	10.09	76.45		Samoa			77 58	92 77	95 /5	
Liechtenstein 88.39 7imbahwe 07.60 77.00 70.00 40.00	St Lucia		00.01	79 72	86 75	91.00	49.06	South Africa			57 58	71 30	70.22	46.60
	Liechtenstein			13.12	88.30	01.00	10.00	Zimbabwe			01.00	97.62	10.22	10.00

SERF Index for High Income OECD Countries									
Country	OECD High Income Country Right to Food Index Value	OECD High Income Country Right to Health Index Value	CD High Income OECD High Income ry Right to Health Country Right to Index Value Education Index Value		OECD High Income Country SERF Index Value				
Countries with Complete Data									
Finland	99.75	98.43	100.00	80.38	94.64				
Sweden	100.00	99.85	82.66	88.49	92.75				
Korea, Rep.	99.56	97.76	95.65	76.22	92.30				
Norway	97.84	99.61	79.28	89.28	91.50				
Denmark	97.13	96.30	87.53	84.86	91.46				
Canada	95.26	98.04	90.59	73.53	89.36				
Netherlands	96.78	98.76	92.07	67.71	88.83				
Australia	94.41	99.05	92.23	68.31	88.50				
Poland	96.06	92.79	90.94	67.21	86.75				
Austria	92.48	98.55	82.52	72.29	86.46				
France	93.73	98.90	83.09	62.05	84.44				
Czech Republic	93.98	95.77	84.51	62.52	84.19				
Switzerland	93.19	99.23	82.46	60.18	83.77				
Spain	92.95	99.30	83.61	57.88	83.43				
Hungary	92.30	89.89	87.67	61.20	82.76				
United Kingdom	91.81	97.45	81.44	59.65	82.59				
Ireland	98.03	98.72	86.71	43.99	81.86				
Japan	86.80	99.72	86.46	53.94	81.73				
Belgium	91.04	98.12	86.93	48.36	81.11				
United States	88.58	94.44	75.81	57.55	79.09				
Slovakia	94.19	91.83	81.30	48.44	78.94				
Italy	93.87	99.50	76.04	43.44	78.21				
Greece	89.24	99.35	80.77	42.61	77.99				
Luxembourg	97.51	98.27	58.85	44.55	74.79				
Countries with Incomplete Data									
Germany	93.44	98.37		46.52					
Iceland	100.00	99.85	83.70						
New Zealand	96.42	98.15	93.77						
Portugal	93.31	98.01	79.58						