

Methodology

Sources and handling of information

Social Watch has always geared its efforts to measuring (with objective indicators) governments' compliance with the targets set by the governments themselves at different international forums. This means the Social Watch Reports are a tool that people the world over can use to make their governments, the UN system and international organizations accountable.

Although there has been an increase in the amount of information available on different social development indicators produced regularly by each country and compiled by international organizations, this data is not readily available to the public. Most international statistics databases are accessible only by subscription and at very high cost. The World Bank, the main source of international statistics on development, has a policy of claiming copyright and charging for the use of the information, and this is doubly contradictory since not only is it an inter-governmental institution but also the information it handles is provided by different governments and is therefore public property.

Once the obstacles to obtaining primary data are surmounted there are further difficulties involved in compiling the comparative tables, such as the fact that data are not always available for the same time periods, there may be differences in methodological criteria for the construction of the indicators for each country, and there are considerable discrepancies between the statistics provided for the same year by different sources.

In the light of these problems, in this report Social Watch has maintained the same criteria adopted in earlier editions. The data used are the most recent available from recognized international organizations. For recent statistics from "secondary sources", we opted for the data that regularly showed the highest correlation with those published by recognized sources on the subject in question. When there was a choice between similar sources, we chose the one that covered the most countries.

Measurement of the present situation of countries and the rate of change

In each of the thematic areas the information is displayed using a set of chosen indicators. The data in each indicator are presented in three columns: the first shows the country's initial situation, the second shows the latest available data¹ and the third (progress or regression) shows the rate of change.

In order to assess the evolution of each indicator, two aspects were taken into account: initial and final levels, and the rate of change of progress or regression.

The **situation** a country is in, according to each indicator, is given by the latest available value for that indicator.

Each country is assigned a value from 1 to 4 (1 indicates the worst situation and 4 indicates the best situation) according to the distribution of values on each indicator,² and an average of these values is then given for all the indicators in that area.³ In this way a self-referential ranking is obtained, independent of distance from goals or from specific conceptually-defined levels.

This ranking was only applied to those countries with information available for at least half the indicators that make up each overall thematic area.

To avoid giving a false impression that the data are exact values, the average values were rescaled⁴ to create four country categories:

- *Countries in better situation*
- ◐ *Countries above average*
- ◑ *Countries below average*
- *Countries in worse situation*

Countries for which sufficient data to be included in the ranking are lacking (*Countries with insufficient data to summarize the area*) are also shown.

The **rate of change** for each country is obtained by considering the variation in the values of the indicator over the time period within which the measurements were made. The ratio between the variation in the indicator and the time period reflects the rate of change for the item in question.

In the case of information from a specific period (e.g. 1990-1994) rather than a specific year, the criterion adopted was to use the data for the middle of the interval (e.g. 1992) as a means of calculating the rate of change.

The values for this rate of change have also been rescaled in sections (using a reference scale of 1 to 5), and in the tables these appear in the column "Progress or regression". A series of symbols are used to illustrate changes in order to make the information easier to read (numerical values are not used because they would tend to give the impression that the information is exact, which in this case it is not).

The categories defined in this rescaling are as follows:

- Significant progress
- ➡ Slight progress
- || Stagnant
- ← Slight regression
- ← Significant regression

"Significant progress" applies to those countries which are progressing at rates above the average for all countries making progress.

"Slight progress" applies to those countries which are progressing at rates below the average for all countries making progress.

"Stagnant" refers to those countries where no changes (or quantitatively insignificant changes) have been recorded over the period in question.

"Slight regression" applies to those countries which are regressing at rates below the average for all countries regressing (i.e. they are regressing more slowly).

"Significant regression" applies to those countries which are regressing at rates above the average for all countries regressing (i.e. they are regressing more rapidly).

1 In some tables there are two extra columns showing the date of the information selected.

2 For this, the variable was normalized (by subtracting the mean and dividing by the standard deviation) and then the mean positive values and the mean negative values for the normalized indicator were calculated. The four categories were established according to the values above and below the mean positive values for the normalized indicator, and the values above and below the mean negative values for the normalized indicator.

3 In the case of the table showing morbidity and mortality rates, the child immunization ranking was included as another indicator in the calculations of the average value for the area. The immunization table is presented separately and countries are ranked according to the average value of their indicators.

4 The possible range for the average of the area was divided into four groups as follows: group 1 (between 4 and 3.26); group 2 (between 3.25 and 2.6); group 3 (between 2.5 and 1.76); group 4 (between 1.75 and 1).

GENDER EQUITY INDEX (GEI) - Methodological Notes

Gender equity is a very complex concept that involves numerous quantitative and qualitative dimensions, for many of which there is no information available.

In 2004 Social Watch produced a Gender Equity Index (GEI), and this has since been revised and improved. The aim is to develop a tool to capture the degree of gender equity prevailing in a country, and the index was built up from information available internationally about dimensions that have a bearing on gender equity.

The first challenge was to assemble the different dimensions in which inequity is measured so as to obtain an overall ranking that was wider than that of the dimensions taken separately or of the indexes traditionally used.

In this way the first version of the GEI was constructed, and this appeared in the 2004 and 2005 Social Watch reports.

We have now produced a new 2006 version of the GEI to meet a further challenge, which is to create a tool to follow up countries' performance over time, and to evaluate this in relation to an "optimum" for each country, regardless of how other countries perform. This dimension was lacking in the 2004 and 2005 version of the GEI.

The most suitable model for this purpose is one that will give a reading for the gaps between women and men in each of the indicators in the index, and thus make it possible to evaluate how far each country currently is from an optimum situation in which there are no gender gaps at all.

The main obstacle to constructing a comprehensive tool based on a selection of indicators and conceptually suitable for measuring gender inequities, is that in many countries basic information is scarce. Different dimensions were selected, bearing in mind the information available that could be used to make comparisons internationally. These dimensions were education, economic activity, and women's representation at decision-making levels in political and economic life ("empowerment").

The information available for these areas was used to construct the GEI indicators. This task involved transforming the data so as to obtain values for the gaps.

The 2006 version of the GEI gives an average of the gaps in the three selected dimensions, and these all have equal weight in the index. The values used in the GEI range from 0 to 1. The lower a value on the index the greater degree of gender inequality

there is in the country in question, and the countries with values nearer to 1 are those that have managed to reduce gender inequity the most. It is important to bear in mind that the values in the index reflect only the dimensions and indicators employed; no index could yield a complete picture of a phenomenon as complex as gender equity, but it is possible to be sensitive to the different situations involved and detect the ways in which these are changing.

This tool is an early prototype of an index to give an overall picture of the different dimensions of gender equity, and we will continue to make adjustments to produce a more refined instrument in the future.

However valuable it may be to build up an index that reflects the different areas in which gender equity is currently measured, what really matters is that the gender perspective should be incorporated into all the analyses of all the dimensions of social development, that it should become an integral part of the concept of development. It is not that a society is "developed" or that it "has gender equity", it is rather that gender equity is a necessary condition for development.

Technical notes: the construction of the GEI

1. Dimensions and indicators

- Empowerment (% of women in technical positions, % of women in management and government positions, % of women in parliaments, % of women in ministerial posts).
- Economic activity (income gaps, % of economically active women (excluding the agriculture sector)).
- Education (literacy rate gap, primary school enrolment rate gap, secondary school enrolment rate gap, tertiary education enrolment rate gap).

2. Gaps

To construct the gaps in the indicators that did not register them originally two transformations were carried out. First the percentages for men were calculated, then the differences for women:

- % of men in technical positions,
- % of men in management and government positions,
- % of men in parliaments,
- % of men in ministerial posts,
- % of economically active men (excluding the agriculture sector).

Secondly, for each country the weight of the female population in relation to the male was calculated for the relevant age ranges (over 19 years old, except for the economically active population indicator, for which over 14 years old was used).

Weight of female population = % female population / % male population

The gap was calculated for each indicator for each country, with the rate for women as the numerator and the rate for men as the denominator, weighted by the inverse of the weight of the female population.¹

% female rate * (weight of female population)⁻¹ / % male rate

3. The construction of the components of the index in each dimension

For each dimension the average of the indicators of the gaps was calculated, but no values were given for countries for which information was available for less than half the indicators of the dimension in question.

4. Construction of the index

The index was calculated as an average of the values obtained in the three dimensions (the average of the gaps in each dimension).

5. Comparison with the 2004 and 2005 version of the GEI

This comparison showed a high degree of correlation (Spearman: 0.937).

¹ The value 0 was re-codified as 0.01 to allow algebraic calculations. At the other end of the scale, values greater than 1 were re-codified as 1, since this is the normative limit employed for the purposes of the index.

BASIC CAPABILITIES INDEX (BCI) - Methodological Notes

For its 2004 Annual Report, Social Watch designed the Basic Capabilities Index (BCI), a summary index which covered the multi-dimensional aspects of development and made it possible to classify countries more easily. This index was based on the methodological approach adopted by Social Watch Philippines in their 2001 Report,⁵ and Social Watch has been using this country evaluation tool since 2004.⁶

The BCI complements the thematic tables included since 1996 in the Social Watch Annual Report, which present the situation of each country in a series of dimensions considered relevant for evaluating social development.

The BCI reflects basic well-being gauged by capabilities⁷ in different aspects of the human condition, and the indicators that make it up yield separate results for each dimension. The index gives an efficient rating for the basic levels of people's well-being on the basis of their state of health (child health and reproductive health) and their performance in primary education. Both these dimensions are of crucial importance in development goals.

The indicators that make up the BCI are as follows:

- Percentage of children in the first grade of primary education who reach the fifth grade.
- Mortality among children under 5 years old.⁸
- Percentage of births attended by skilled health personnel.

Low values on the BCI indicate that the country in question is far from satisfying people's basic needs, so the first positions are occupied by countries where improvement is urgently necessary, and indeed essential if a minimum level of well-being is to be reached.

5 Raya, R. (2001). *An alternative measure of poverty and human capability: Introducing the Quality of Life Index*. Social Watch Philippines. Report 2001. The Quality of Life Index, originally developed by the Philippine non-governmental organization Action for Economic Reforms, is derived from the Capability Poverty Index (CPI) developed by Professor Amartya Sen and popularized as the United Nations Development Programme's Human Development Index (HDI).

6 In the 2004 report it featured as the "Quality of Life Index". This title was changed in 2005.

7 One difference between the BCI and the HDI is that the latter combines capability indicators with measures of income.

8 The original indicator used in the Philippines experience was "Malnutrition among children under 5". Social Watch Philippines developed this methodology, and in their own report they note that the infant mortality rate could be used instead because there is more data available on this in different countries' statistical registers, and because there is a high correlation between it and the child malnutrition indicator.

TABLE 1. Categorization of countries by BCI levels

BCI level	Points grouping	Number of countries
Critical	Up to 69 points	26
Very low	70 to 79 points	26
Low	80 to 89 points	18
Medium	90 to 97 points	47
High	98 to 100 points	45

The BCI has comparative advantages in that it is relatively simple to calculate and inexpensive because it does not depend on household surveys to estimate levels of income. It is compatible with the various national and international statistical systems, and it can be calculated easily from indicator data that are regularly issued by governments and agencies. In addition to being an instrument for classifying the relative situation of countries or of particular sectors within a country (population groups or geographical areas, for example), it can also be used to generate time series for monitoring situations connected to poverty. The BCI is closely correlated with the indexes used to summarize the situation of countries in the dimensions studied by Social Watch in the thematic tables (education, morbidity-mortality, reproductive health, science and technology, public expenditure, food security, water and sanitation).⁹ There is also a high degree of correlation with other indicators and indexes that are generally used to measure development or to classify countries according to their levels of well-being: the Human Development Index, the Human Poverty Index, the International Poverty Line, and per capita Gross Domestic Product (GDP).

The BCI makes it possible to distinguish between countries in more unfavourable situations, but it is less sensitive when detecting differences between countries that have reached a relatively high level of development. This is because the indicators used relate to basic capabilities that are characteristic of unfavourable development situations. Therefore, as a tool, it is more suitable for identifying critical situations than for detecting slight differences between more developed countries.

While the indicators used in the BCI are basic, are widely used internationally and have comparative advantages over other more expensive or more complex indicators, problems can arise when it comes to obtaining up-to-date information from many countries. It has therefore been necessary to make assumptions about performance and to em-

ploy statistical tools, so as to be able to include more countries in the classification.

BCI values, positions and categories

In this year's report the BCI operates in three different modalities:

First, the BCI values for each country are given in the section entitled "Achievement of basic capabilities is an indispensable task for development".

Second, the countries have been ranked in line with their BCI rating,¹⁰ which means they can be evaluated and compared to each other. This ranking is used in all the tables for the different thematic areas.

Lastly, the BCI makes it possible to place each country in a group of countries that are all in a similar situation as regards their basic capabilities.

The BCI rates countries with theoretical values between 0 and 100. Empirically however the lowest values are around 50 and the distribution of countries is heavily concentrated at the upper end of the scale (values close to 100). Working with this range, countries were categorized in five groups, in accordance with their ranking on the BCI.

As the BCI is an index that only expresses results it is a good tool to use in combination with other tools that include indicators of means (like income). This cross-checking also makes it possible to see how some countries have managed to achieve good BCI performance in spite of having low levels of income.

It should be borne in mind that the BCI is more sensitive to differences between countries that have lower levels of basic capabilities than between those that have risen well above the minimum levels of well-being. ■

9 The BCI explicitly excludes the gender dimension. There is a separate ranking for countries in that dimension, given by the Gender Equity Index (see the section entitled "The long road towards gender equity" in this report).

10 The countries were ranked with a correlating number in accordance with their BCI values. When two or more countries have the same BCI value they share the ranking position and that number of positions are left out.

Technical notes: BCI design in countries

Indicators that make up the BCI:

- Percentage of children in the first grade who reach the fifth grade
- Mortality among children under 5
- Percentage of births assisted by skilled health personnel

In this year's report, the information available (infant mortality for 193 countries, school retention for 124, and assisted childbirth for 175) meant that the BCI could be constructed from data for 103 countries. To increase the number of countries, values were assigned¹ for the indicators where information was lacking. This was done by assigning the average value of that indicator for the group the country was in as defined by its current situation in the thematic area in question. This made it

possible to design an index covering a total of 162 countries.

The BCI was calculated using the non-weighted average of the original values of the three indicators in question (in the case of infant mortality a lineal transformation was previously applied to the indicator). To simplify the calculations all three indicators were given the same weight.

Child health is represented as I1 = $(100 - M)$, where M is the under-5 mortality rate (expressed as a percentage) or the probability of death in the first five years of life expressed as per 1,000 live births.

Education is represented as I2, where I2 is the rate of school retention or the percentage of children enrolled in the first grade who reach the fifth grade in the required number of years.

Reproductive health is shown as I3, where I3 is the percentage of births assisted by skilled health personnel (doctors, nurses or midwives).

The Basic Capabilities Index value for a particular country is obtained by taking a simple average of the three components: $BCI = (I1 + I2 + I3) / 3$

¹ No values were assigned in the mortality dimension. Values had to be assigned for 22 countries in the percentage of assisted births, and values were assigned for 48 countries in the percentage of children reaching the fifth grade. The procedures used to assign values were geared to ensuring that the position of countries in the situation ranking would be reflected with as little distortion as possible, on the hypothesis that the indicator would be consistent with the four big ranges defined by area. However, special care should be taken with countries that were assigned values when it comes to analyzing index values over time.