



Defining Robust Development Indicators

a note to the World Bank

(attention Jean-Eric Aubert, World Bank Institute)

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International institutions, concerned with health, resources and development, need global indicators, which allow comparison between countries and analysis of evolution (past versus present). Indicators presently used have several major drawbacks :

- They give a numerical value, with no uncertainty at all : nothing reflects the fact that, quite often, data are missing ;
- They are usually based upon "secondary activities" of the human race, such as energy consumption, education, and so on. But how these activities are linked with the development of a country is unclear. For instance, electricity production or consumption is certainly not a good indicator of the level of civilization of a country : many countries were civilized before electricity was discovered.

These indicators often reflect the distance of a given country to our present state of development, which we present as "sustainable", which is of course naïve and absurd. Certainly, they are not politically neutral.

Defining robust indicators

By definition, such indicators should be established from "primary" human activities, that is activities which make sense in any country at any time. This corresponds to facts, such as duration of life, number of children, and so on. These indicators should be presented as simple probability laws, instead of being just numbers. And finally, they should be based upon data which are easy to measure.

For instance, we have at present an indicator, called "life expectancy" ; it indicates how long a child, born in 2006, is supposed to live. The result is a number : for instance, 75.5 years for men and 82.8 for women, in France. But nobody realizes that this is the result of an extrapolation, from previous years ; in fact, this is just a guess, that may be wrong (wars, epidemics, may for instance modify the figures). So we claim that this should not be an "indicator".

A robust indicator would be based upon the number of deaths : in 2005, in a given country, how many people died :

- Under the age of 10 ;
- Between 10 and 50 ;
- Above 50.

We see here that this indicator is simple to establish, because in any country people die and their deaths is recorded. We do not need exact data, just approximate. And this indicator will reflect child mortality, which is a very important element for comparisons between countries.

Other indicators might be :

- Number of births each year ;
- Percentage of population having access to water of good quality (which is a primary need of human race) ;

We could add education, which exists everywhere, but not under the same form :

- Percentage of population aged <10 which receives full time education in a given year ;
- Percentage of population aged <20 which receives full time education in a given year.

And the same thing for employment :

- Percentage of population aged <20 which is full time employed ;
- Percentage of population aged <60 which is full time employed.

When you want to define robust indicators, you should not try to be precise : usually two or three possibilities are enough in each case. More values give nothing, due to the impossibility to gather data.