SOCIAL DEVELOPMENT INFORMATION AND KNOWLEDGE

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Contents

1. Introduction
2. Social Development Information
   2.1 Social Indicators
      2.1.1 Single Social Indicators
      2.1.2 Synthetic Social Indicators
      2.1.3 Indicators of Poverty
      2.1.4 The “Missing” Indicators
   2.2 Statistical Basis
      2.2.1 The Information Sources
      2.2.2 Inequity, Deprivation, Envy and Justice
3. Knowledge about Social Sustainability, Possibilities and Limits
   3.1 The Types of Allocations and Limits of a Poverty Policy
      3.1.1 Targeted Allocation and Universal Allocation
      3.1.2 Some Inefficiencies of the Economic Policy
      3.1.3 Community Societies
      3.1.4 Individual Societies: Politics of Displacement and Ethnocide
      3.1.5 The Social Situation may be Analyzed by Poverty but the Analyses have not yet been Accomplished
   3.2 Social Sustainability
      3.2.1 Potential Social Capital and Social Configuration
      3.2.2 Social Capital as an Effective Advanced Capital
      3.2.3 Measuring Advanced Social Capital
4. Conclusion
Glossary
Bibliography
Biographical Sketches

Summary

Social development is firstly a problem of information that will allow the construction of social indicators, either single indicators or synthetic indicators, relating to the quality of life, or finally, indicators relating to poverty. These indicators are incomplete, especially as far as sustainable livelihoods or vulnerability are concerned. It remains very difficult to evaluate such problems as inequity, deprivation, envy, and justice. For
this reason, social development is a problem of knowledge, especially concerning social sustainability. How can redistributive, targeted or universal, allocations best be conceptualized? This problem has become more complex when taking into account social capital, implying as it does, the introduction of a compensation principle in social development.

1. Introduction

This introductory section starts with a quotation from the World Summit for Social Development held in Copenhagen in 1995:

Social development is inseparable from the cultural, ecological, economic, political and spiritual environment in which it takes place. It cannot be pursued as a sectoral initiative. Social development is also clearly linked to the development of peace, freedom, stability and security, both nationally and internationally. To promote social development requires an orientation of values, objectives and priorities towards the well-being of all and the strengthening and promotion of conducive institutions and policies (United Nations 1995).

Also, quoting from the World Bank (1999): “by promoting socially sustainable development, the World Bank strives to ensure that people, their cultures and societies, and their organizations and institutions are taken into account in the process of economic development. It also helps ensure that development improves the lives of people, especially the poor.”

These quotations show that social development may be interpreted in several ways: from the strict point of view of social indicators, of well-being, or from a much larger point of view, concerning social life and the state of the society—for instance the level of social capital. But social development is highly concerned with the validity of social indicators and especially with the existence of poverty lines. These indicators often depend on hypotheses coming from social knowledge.

How can sustainable social development be conceived and precautionary principles be laid down in this field? Social environment is not a priori benevolent and efficient, and the tools of ecological economics cannot be transposed directly into the social environment.

2. Social Development Information

Which indicators and which pieces of information are basic to constructing the social dashboard of an economy? This is a problem of priority between social indicators and availability of statistical sources.

2.1 Social Indicators

Several kinds of indicator are used: single social indicators relating to one variable, or synthetic social indicators, which refer to several economic and social variables considered together, and indicators of poverty.
2.1.1 Single Social Indicators

2.1.1.1 Gross National Product per capita

The World Bank’s main criterion for classifying economies is gross national product (GNP) per capita. According to the (1997) figures for GNP per capita, economies are divided among four (annual) income groups: low-income ($785 or less), lower middle income ($786–3125), upper-middle-income ($3126–9655) or high-income ($9656 or more). This indicator is the reference for the mainstream, “pro growth school”: the larger the pie, the better everyone’s share will be. But the inequality approach and the well-known Kuznets’ law (growth, for a time, may accentuate poverty, Kuznets 1995) contest this.

This economic indicator becomes “social” as soon as considerations about income distribution and consequently on economic and social inequality are taken into account. The most widely used single measure of income inequality is the Gini index; this measures the extent to which the distribution of income (or, in some cases, consumption expenditure) among individuals or households within an economy deviates from a perfectly equal distribution. Another measure of the dispersion of income is the percentage share of income or consumption that accrues to quintiles or deciles of the population ranked by income or consumption.

GNP per capita still must be corrected to take into account the marginal utility of the money unit: the dollar utility is very different between the rich and poor. Some methods are used to include this in the equation, which subsequently modifies a lot the comparisons for social development.

2.1.1.2 Quality of Life

The World Bank considers quality of life through various indicators: growth of private consumption per capita, prevalence of child malnutrition, under-5 mortality rate, life expectancy at birth, adult illiteracy rate, urban population, access to sanitation in urban areas.

2.1.1.3 Education and Health

Two other “social” indicators are considered: education, and health. Education is first measured by public expenditure, and then considered in terms of levels of enrolment of children in primary and secondary school or of attainments in the overall educational process.

In the same way, health is first a question of public expenditure and then a problem of accessibility to safe water, sanitation, and contraception. Traditional demographic indicators are fertility rate and maternal mortality ratio.

Housing and other measures of quality of life such as suicide or criminality, environment management, gender discrimination, appear in the United Nations
Development Program (UNDP) annual report and adjust the World Bank indicators toward a human conception of development.

2.1.2 Synthetic Social Indicators

2.1.2.1 Human Development Index

The main indicator is the Human Development Index (HDI), first published by the UNDP in 1990 and since constructed every year, even though there have been a number of changes made to the way it is constructed. The purpose of the HDI is to capture achievements in basic human capabilities (i.e., the basic capacities which enable people to function), which are measured by the average level reached by a country according to three main criteria for human development: longevity, educational attainment and standard of living. Longevity is measured through life expectancy at birth, education as a composite of two thirds of adult illiteracy and one third of enrolment of the children, and standard of living through the gross domestic product (GDP) per capita measured at purchasing power parity rate (PPP). The value of each one of these components is normalized, so that the HDI value ranges from zero to one. The difference between the value achieved by a country and one—the maximum possible—shows how far the country has to go. One of the main interests of HDI is to rank the countries and to compare them with their ranking according to GDP; the link between economic prosperity and human development is neither automatic, nor obvious. Table 1 indicates the most significant distances between HDI and GDP.

<table>
<thead>
<tr>
<th>Countries</th>
<th>Ranking according to HDI</th>
<th>HDI</th>
<th>Distance HDI/GDP</th>
</tr>
</thead>
<tbody>
<tr>
<td>High HDI</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Canada</td>
<td>1</td>
<td>0.932</td>
<td>+ 12</td>
</tr>
<tr>
<td>United States</td>
<td>3</td>
<td>0.927</td>
<td>0</td>
</tr>
<tr>
<td>Sweden</td>
<td>6</td>
<td>0.923</td>
<td>+ 18</td>
</tr>
<tr>
<td>Australia</td>
<td>7</td>
<td>0.922</td>
<td>+ 15</td>
</tr>
<tr>
<td>Switzerland</td>
<td>12</td>
<td>0.914</td>
<td>– 6</td>
</tr>
<tr>
<td>Denmark</td>
<td>15</td>
<td>0.905</td>
<td>– 5</td>
</tr>
<tr>
<td>Luxembourg</td>
<td>17</td>
<td>0.902</td>
<td>–16</td>
</tr>
<tr>
<td>The most significant negative distances</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Kuwait</td>
<td>35</td>
<td>0.833</td>
<td>– 30</td>
</tr>
<tr>
<td>Saudi Arabia</td>
<td>78</td>
<td>0.740</td>
<td>– 37</td>
</tr>
<tr>
<td>Oman</td>
<td>89</td>
<td>0.725</td>
<td>– 47</td>
</tr>
<tr>
<td>South Africa</td>
<td>101</td>
<td>0.695</td>
<td>– 47</td>
</tr>
<tr>
<td>Namibia</td>
<td>115</td>
<td>0.638</td>
<td>– 44</td>
</tr>
<tr>
<td>Botswana</td>
<td>122</td>
<td>0.609</td>
<td>– 70</td>
</tr>
<tr>
<td>Gabon</td>
<td>124</td>
<td>0.607</td>
<td>– 71</td>
</tr>
</tbody>
</table>
Table 1. The most significant distances between HDI and GDP


The Gender-related Development Index (GDI) measures achievement in the same basic capabilities as the HDI does, but takes note of inequality in achievement between women and men. The methodology used imposes a penalty for inequality, such that the GDI falls when the achievement levels of both women and men in a country go down or when the disparity between their achievements increases. The greater the gender disparity in basic capabilities, the lower a country’s GDI compared with its HDI. The GDI is simply the HDI discounted, or adjusted downwards, for gender inequality. Thus the GDI reflects gender imbalances in basic health, education and income.

The Gender Empowerment Measure (GEM) evaluates progress in advancing women at the political and economic level. It examines whether women and men are able to participate actively in economic and political life and take part in decision-making. While the GDI focuses on expansion of capabilities, the GEM is concerned with the use of those capabilities to take advantage of the opportunities of life.

2.1.2.2 Human Poverty Index

The Human Poverty Index (HPI) was introduced in 1997 for developing countries and focuses on those groups whose choices are heavily constrained in the three areas of the HDI: longevity, knowledge, and standard of living. Rather than measuring poverty by income, the HPI uses indicators of the most basic dimensions of deprivation: a short life, lack of basic education, and lack of access to public and private resources.

The first deprivation relates to survival, the vulnerability to death at a relatively early age, and is represented in the HPI by the percentage of people expected to die before the age of forty.

The second dimension relates to knowledge, being excluded from the world of reading and communication, and is measured by the percentage of adults who are illiterate. The third aspect relates to standard of living, in particular, overall economic provisioning.
This is represented by a composite of three variables: the percentage of people with access to health services and to safe water, and the percentage of malnourished children under five.

UNDP includes unemployment only in the industrialized country poverty index (HPI-2), calculated since 1998. This shows that human poverty does not strike only developing countries, and particularly, that a high HDI does not constitute a guarantee against poverty (for example, in the United States, human poverty strikes 16.5% of the population).

2.1.3 Indicators of Poverty

2.1.3.1 Poverty Line

Social situation is often summarized by the poverty line drawn between those who fall below this line, “the poor” and the others, the “non-poor,” with a norm of real income.

For instance, the World Bank underlines the need for a universal poverty line which permits cross-country comparisons. In this objective, the World Bank has estimated a standard threshold of one dollar per person a day, measured in 1985 international prices and adjusted to local currency using PPP conversion factors, according to the method of the basic needs.

Basic needs are said to include both minimum requirements of a family for private consumption (food, shelter, clothing), and essential services provided by and for the community (safe water, sanitation facilities, health, education).

With an estimation of $370 PPP per person and per year, it has provided a plausible and useful indicator which is simple to understand and apply—a dollar a person a day—which is not assumed to be applicable to countries other than the poorest.

The poverty line only indicates who is poor and who is not. But it is also necessary to know how much poverty there is, both in the country as a whole and among particular groups. This is given by various poverty measures.

2.1.3.2 Poverty Head Count

The poverty head count is the simplest measure of poverty: it tells how many are poor. According to the World Bank, nearly 1200 million of the world population are poor.

2.1.3.3 Poverty Head-Count Ratio

The poverty head-count ratio refers to the proportion of the population that falls under the poverty line (25% of the world’s population); it provides information on the incidence of poverty among the population. If \( q \) is the number of people identified as poor and \( n \) the total population, then the head-count ratio is: \( H = q/n \)
2.1.3.4 Poverty Gap

The poverty gap is calculated as the average income shortfall \( I \) of the poor from the poverty line, expressed as a percentage of the poverty line. The measure reflects the depth of poverty.

\[
I = \frac{1}{q} \sum_{i} \left( \frac{z - y_i}{z} \right)
\]

where \( z \) is the poverty line, and \( y_i \) is the income of the \( i \)th poor \((i = 1, \ldots, q)\) where \( q \) is the number of poor.

2.1.3.5 Poverty Gap Index

The poverty gap index \((PGI)\) is defined as the proportionate poverty gap normalized to the total population size.

\[
PGI = \frac{1}{n} \sum_{i} \left( \frac{z - y_i}{z} \right) = H \times I
\]

Calculated in this way, the various poverty indicators inform on the different aspects of poverty, but not all at once. A class of comprehensive poverty measures has been developed, which takes into account these components simultaneously, and also, importantly, adds one more: the inequality among the poor.

2.1.3.6 Foster, Greer and Thorbecke (FGT) Index

The FGT index \((P_\alpha)\) is defined as:

\[
P_\alpha = \left( \frac{1}{n} \right) \cdot \sum_{i} \left[ \left( \frac{z - y_i}{z} \right) \right] ^\alpha
\]

with \( y_i, q, n \) and \( z \) defined as above, and \( \alpha \) the aversion degree against poverty.

This index allows estimation of the distribution between the poorest of the poor and the richest of the poor, taking in account the altruistic behavior (sympathy or aversion) aroused by this distribution.

The aversion against poverty or propensity to altruism, noted as \( \alpha \), has a normative value that can be set at different levels; a higher \( \alpha \) gives more weight to the poorest. The value of \( \alpha \) (for instance being materialized by transfers or pluri-activity on segmented markets) determines the position of the index. If there are many FGT indexes, the volatility of the poverty they imply is very high according to the types of allocations. This FGT index enlightens the Smithian “linen shirt paradox.”

In its modern version, this paradox shows that the marginal dollar for assistance will play around the poverty line without any effect on the poorest of the poor.
Bibliography


Biographical Sketches

Marie-France Jarret is assistant professor in economics at the University of Maine, France. She teaches development economics, international trade and European integration thought in graduate and postgraduate programs. She obtained a Master of Economics degree at Grenoble-II University and a Ph.D. at the same university, after two years spent at Jawaharlal Nehru University, India. She also taught at the University of Abidjan, Côte d’Ivoire, from 1979 to 1991. She has written books on economics and public economics, and papers on economic development in academic reviews. She is carrying out research as an associate member of the Centre d’économie et d’éthique pour l’environnement et le développement (C3ED), France.

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