

The Arab Human Development Report:

Encouraging Underdevelopment?

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The aim of a human development report is to instigate improvements in people's quality of life. While each person may define "quality of life" differently, the idea is to concentrate on mainstream criteria that most "people often value."¹ In order to enable uncomplicated international comparisons, and to facilitate the study of changes over time, the measurements are quantifiable. Unavoidably, any program aiming to improve "human development" tries to boost the score of these quantified measurements. Hence, the criteria for what "people often value" and their measurements are crucial and needed to be selected cautiously.

Issued in cooperation with the Arab Fund for Economic and Social Development, the United Nations Development Programme's (UNDP) *Arab Human Development Report: Creating Opportunities for Future Generations* suggests unusual, "alternative," criteria and measurements for human development. Consequently it also calls for unusual paths for development.

While discussing the criteria and measurements of the report's Alternative Human Development Index (AHDI), and comparing them to those of the UNDP's common Human Development Index (HDI), it will be argued here that both the criteria and measurements of the Arab report are in need for re-examination. They do

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not necessarily lead to improvement in matters that most people in Arab countries often value; also, an over-reliance on the AHDI for programs in the Arab world is not less likely to cause underdevelopment in terms of the commonly agreed criteria and measurements of the HDI.

The Report: Pros and Cons

The Arab report attracted much attention in the media for several reasons. It was the first specific report on human development in the Arab world; only Arabs worked on its preparation, based on the assumption that Arabs' analyses of the Arab countries and their needs are less biased than those of non-Arabs;² it includes direct criticism of the Arab world, defining three significant "deficits" existing there in freedom, women's empowerment, and human capabilities (driven from lack of knowledge); it suggests, for the most part, corresponding reforms in education, governance, human rights and women's empowerment. Still, it also discusses other issues such as environmental protection, Arab cooperation and the need for improvement in health services. The report was presented as a kind of "agenda for action" for the 22 Arab countries, whose implementation would lead the Arab world to significant human development;³ or in the words of the report's director, "it finds solutions."⁴

Right after its publication, the report was principally praised in the media, where material from the "press kit," referring to the state of "human development" in the Arab world and the suggested plan for its improvement,⁵ was quoted again and again.⁶ Subsequently, more complex views emerged. The report was praised for being a big step towards the finding of creative solutions for Arab development; especially since, although it described Israel as a serious obstacle to development, it mainly dealt with the question "what the Arabs did wrong" and not "who did it to the Arabs" (i.e., who

underdeveloped the Arabs);⁷ it was also praised for being a report with almost perfect measurements for human development.⁸

The report did also come under criticism, partly on the grounds that its agenda does not take into account the funds needed for its different suggested projects,⁹ but mainly – inside the Arab world – on the cultural basis of taking for granted Westerner's beliefs and perceptions of development and ignoring those of Arabs and Moslems. In this context it was argued that Western-style democracy and empowerment to women (i.e., remedies to two of the mentioned "deficits") would only cause underdevelopment to Arab states.¹⁰ This led Galal Amin to entitle his essay, "Westernization and Expatriation in the Arab 'Human' Development Report!" while he criticized both the report and the team that prepared it.¹¹

This essay addresses another aspect of the report, indeed, its very foundation – the criteria and measurements. The next section looks at human development reports and indexes in general. It is followed by a discussion of the AHDI of the Arab report.

Human Development Reports and Indexes

Every year since 1990, the United Nations has published a Human Development Report, discussing the state of "human development" in the world by comparing the situation in different countries and in different cross-sections of countries; recent reports have also analyzed subsequent changes that have occurred in these places.¹²

One of the factors that impelled the writing of the report in 1990 was the notion that to characterize the quality of life of a country, additional data are needed beyond the long-used national product per capita (usually measured by GDP). The first report attempted to clarify what criteria are important. The criteria it speaks of in

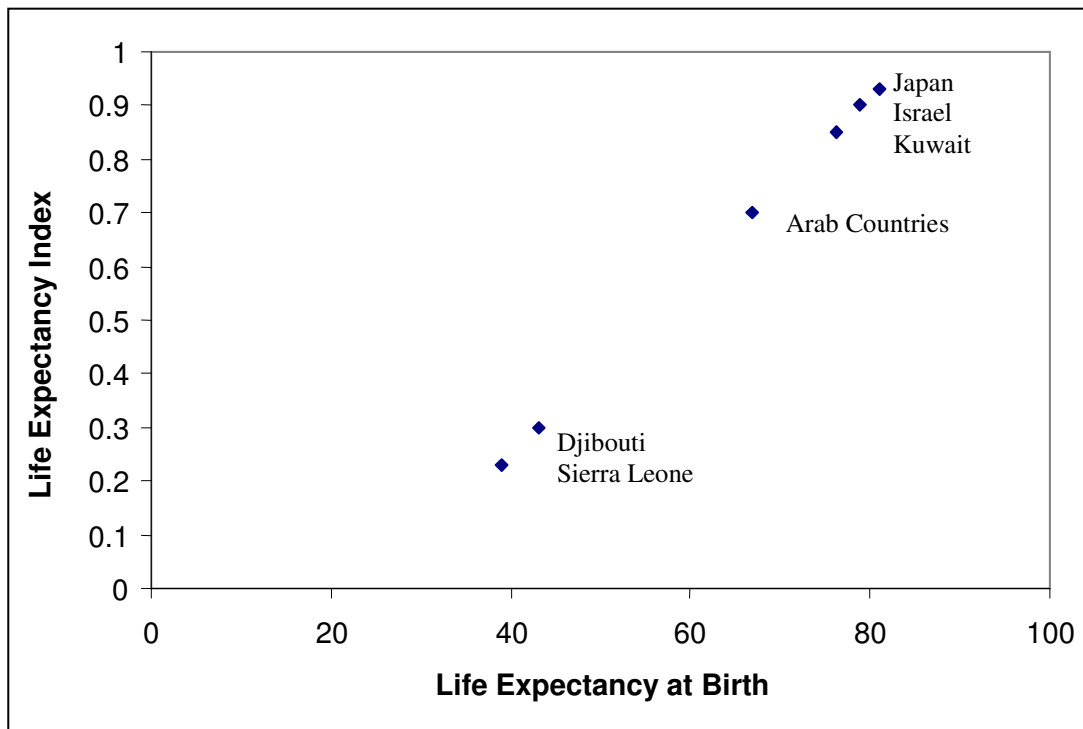
fact embrace the aspirations of people in both developed and developing countries; this includes many aspects:

People often value . . . better nutrition and health services, greater access to knowledge, more secure livelihoods, better working conditions, security against crime and physical violence, satisfying leisure hours, and a sense of participating in the economic, cultural and political activities of their communities. Of course, people also want higher incomes as one of their options. But income is not the sum total of human life.¹³

When the authors of the report sought to compare data between different countries, they encountered a number of problems. First, whereas it is easy to compare quantitative data between countries – such as child mortality rates – it is almost impossible to compare qualitative data – for example, to what extent leisure time is spent satisfactorily. Second, data were lacking for many of the countries. These two problems prompted the report's authors to focus on limited criteria of quantitative data. Third, when quantitative data did exist, the authors needed to determine to what extent any data reflected a good or bad situation and, moreover, to give it a score that could be translated into the index. Thus, they needed to determine the minimum that would receive a zero score and the maximum, which would receive a score of one.¹⁴ For example, to what extent is the forecast of an average life expectancy of about 67 years – the average life expectancy in the Arab countries in 2002 – satisfactory?

Their estimation can be seen in Figure 1. On a scale of 0 to 1—the scale of the index—the average score that the Arab countries received in the year 2000 was 0.7 and life expectancy stood at 66.8. Kuwait won the highest score in Arab countries (0.85 - 76.2 years) and Djibouti the lowest (0.3 - 43.1 years). For comparison's sake, in the country that was rated the highest in terms of life expectancy (Japan) the score was 0.93 (81 years), while in the country rated the lowest (Sierra Leone) the score was 0.23 (38.9 years).

Figure 1: Index of Life Expectancy: lowest and highest scores

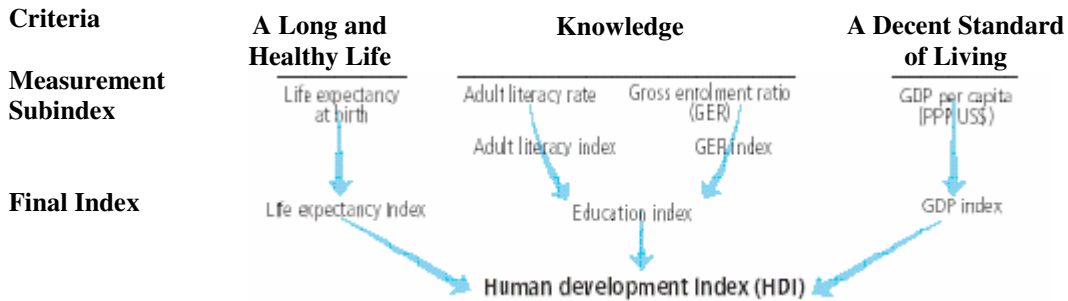


Source: UNDP, *Human Development Report 2002* (Oxford: Oxford University Press, 2002)

In addition, the authors of the international report had to decide how to rank any given element relative to other elements (for example, to what should more importance be attached —life expectancy or knowledge?). Finally, they compromised by choosing

three criteria, each one of identical weight in the final composition of the index of human development:

Figure 2: The Construction of the Human Development Index

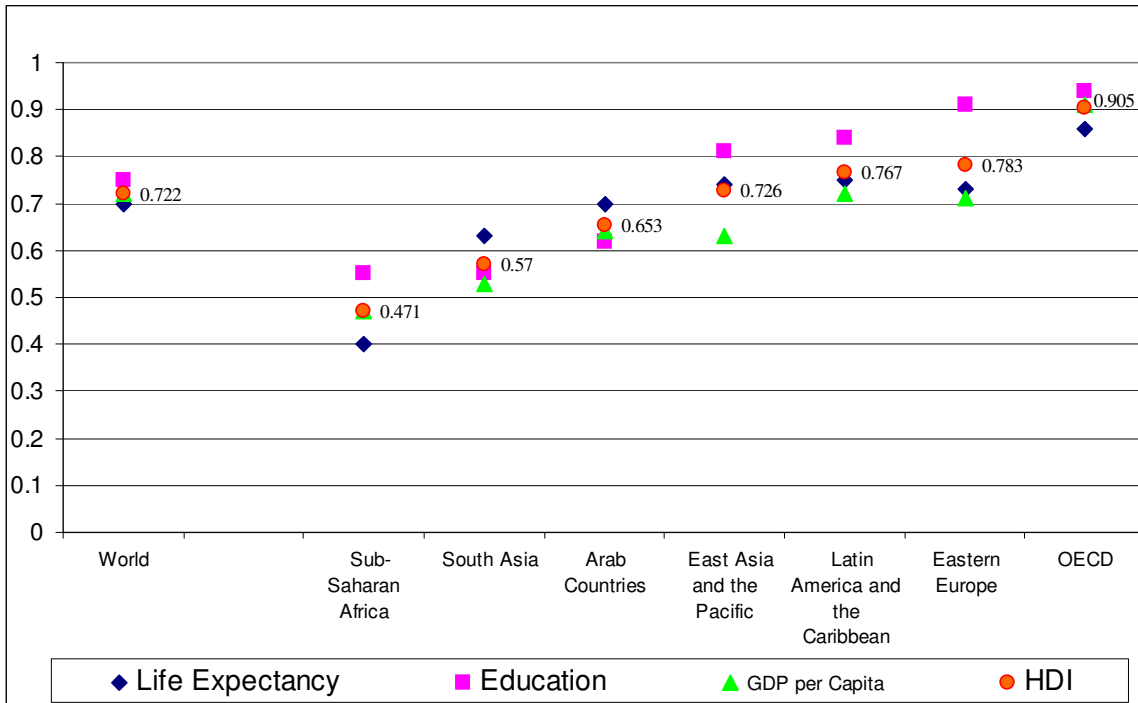


Source: UNDP, *Human Development Report 2002* (Oxford: Oxford University Press, 2002), p. 252

In the upper section of Figure 2, the three criteria are mentioned: long and healthy life, knowledge, and economic standard of living. Beneath each criterion, the measurement(s) is marked. The arrows from the measurements point to the subindexes for each category; then the final index (HDI) is composed by combining the returns of the three subindexes.

The next Figure (3) shows returns for the (world) Human Development Report for 2002. As can be seen, the placement of the Arab countries is slightly below the world average; also, for the Arab countries, the influence of each subindex on the final result is quite similar.

Figure 3: Human Development Index, 2002



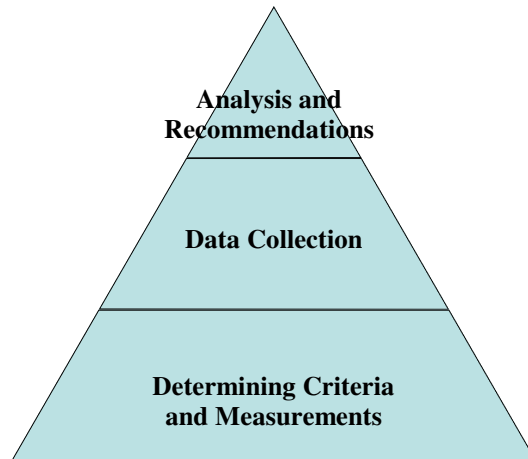
Source: UNDP, *Human Development Report 2002* (Oxford: Oxford University Press, 2002)

In fact, up until today the indexes of the Human Development Report have remained as they were in 1990. Each report includes a kind of disclaimer—a statement that it is actually impossible to measure human development perfectly and some sort of compromise is inevitable.

Criteria and measurements for the index, as noted, are the foundation of any human development report. A human development report is constructed as a pyramid with three levels. The first step in building is to lay the foundations, that is, the criteria and the ways of measuring them (see Figure 2). This is the most critical stage since it affects the others, and particularly the conclusions. Next comes is the collection of quantitative data, fitted to the measurements determined in the first stage. The third stage is the analysis of the returns, including proposals for improving future returns

(this, unavoidably, also means programs aiming at increasing the score in each of the measurements).

Figure 4: The Construction of a Human Development Report



Recognizing that human development has many faces, recent reports have seen the addition of some supportive indexes to the HDI. Still, as can be seen in Figure 5, those indexes are used primarily when dealing with developing countries (among which the Arab countries are included) centered on the same criteria mentioned in Figure 2, namely longevity, knowledge, and economic standard of living. The difference is that the other indexes focus more on specific issues: the issue of poverty in the HPI-1 (Human Poverty Index) and that of gender in the GDI (Gender-Related Development Index).

Figure 5: Criteria of Alternative Indexes

| Index | Longevity | Knowledge | Economic Standard of Living |
|-------|---|---|---|
| HDI | Life expectancy at birth | 1. Adult literacy rate 2. Combined enrolment rate | GDP per capita (PPP US\$) |
| HPI-1 | Probability of not surviving to age 40 | Adult literacy rate | Deprivation in economic provisioning, measured by: 1. percentage of people not using improved water sources 2. percentage of children under 5 who are underweight |
| GDI | Female to male life expectancy at birth | 1. Female to male adult literacy rate 2. Female to male combined primary, secondary, and tertiary enrolment ratios | Estimated female to male earned income, reflecting women's to men's command of resources |

Source: UNDP, *Human Development Reports* (Oxford: Oxford University Press, various years)

The AHDI of the 2002 Arab Report

As mentioned, the authors of the 2002 Arab Human Development Report presented their Alternative Human Development Index (AHDI). This index was constructed from six measurements and subindexes (five criteria). It poses a challenge to the original index, the HDI, as shown in Figure 6 by juxtaposing the criteria, the measurements and their relative weight in each of the indexes. The shaded areas in the figure highlight the common features of the measurements and subindexes, namely the creation of a subindex of learning-age children who are actually learning (i.e., "enrolment ratio" weighted as $\frac{1}{6}$ in both indexes), and the subindex of life expectancy at birth (weighted double in the HDI compared to the AHDI – $\frac{1}{3}:\frac{1}{6}$). In the second criterion of "knowledge" the HDI measurement of "adult literacy rate" was replaced by "Internet hosts per capita." The AHDI also lacks any subindex in the "economic standard of living" criterion which exists in the HDI ($\frac{1}{3}$); in other words, income is not dealt with in the AHDI. The AHDI has other criteria not used at all in the HDI, such as "gender" (measured by Gender Empowerment Measure: quantification of women's

participation in decision making; and, to a lesser degree, of female to male relative income;¹⁵ GEM is weighted $\frac{1}{6}$ in the AHDI), "environmental protection" (measured by carbon dioxide per capita and weighted as $\frac{1}{6}$); and "freedom" (measured by freedom rating – a conversion of the Freedom House's data, and "other key variables"¹⁶ in which their use remained unclear to an extent; together weighted as $\frac{1}{6}$).

Figure 6: Criteria and Measurements of the AHDI versus the HDI

| Alternative HDI (AHDI) | | | Human Development Index (HDI) | | |
|------------------------|---|---------------|-------------------------------|---------------------------|---------------|
| Criterion | measurement | Weight | Criterion | Measurement | Weight |
| | | | Knowledge | Adult Literacy | $\frac{1}{6}$ |
| Knowledge | Enrolment Ratio | $\frac{1}{6}$ | Knowledge | Enrolment Ratio | $\frac{1}{6}$ |
| Knowledge | Internet Hosts per Capita | $\frac{1}{6}$ | | | |
| Gender | Gender Empowerment Measure | $\frac{1}{6}$ | | | |
| Longevity | Life Expectancy at Birth | $\frac{1}{6}$ | Longevity | Life Expectancy at Birth | $\frac{1}{3}$ |
| Environment Protection | Carbon Dioxide per Capita | $\frac{1}{6}$ | | | |
| Freedom | 1. Civil Liberties 2. Freedom Rating | $\frac{1}{6}$ | | | |
| | | | Standard of Living | GDP per Capita (PPP US\$) | $\frac{1}{3}$ |
| Final Index | | 1 | Final Index | | 1 |

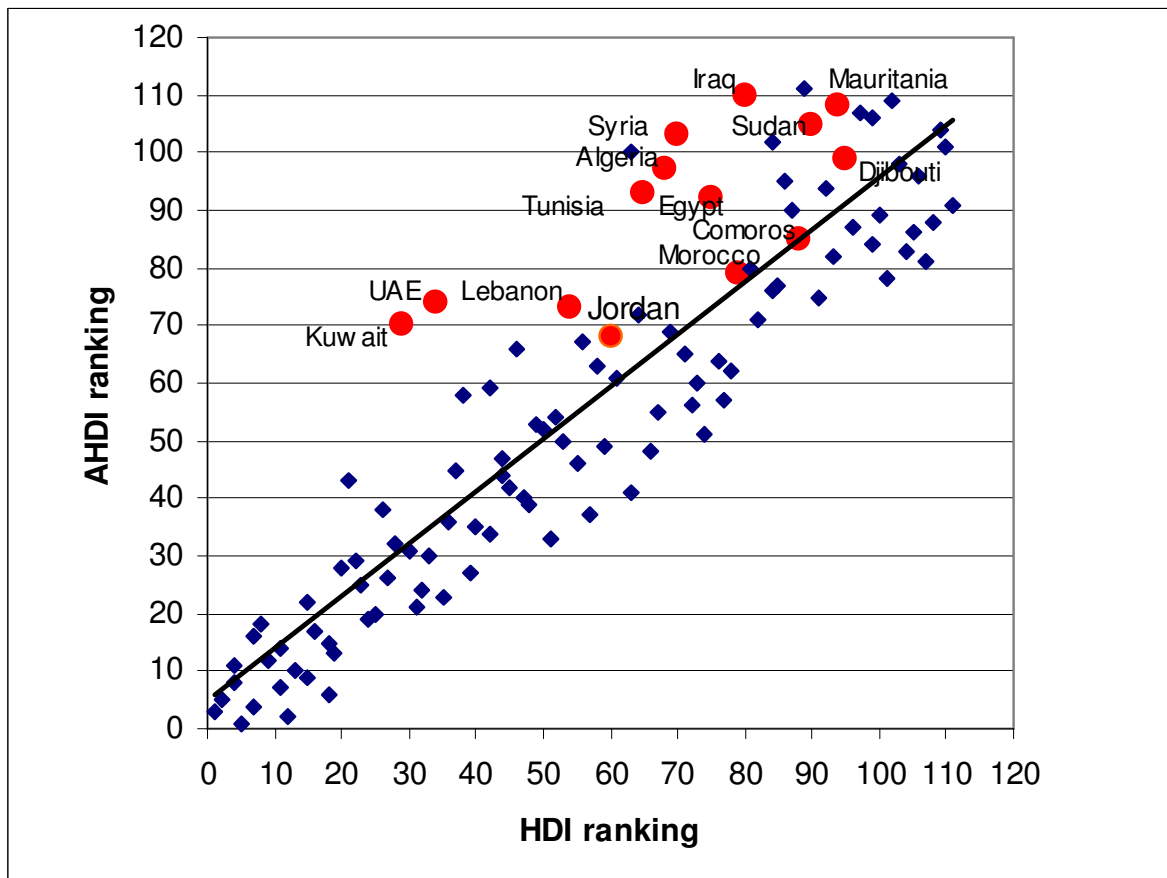
Sources: UNDP in cooperation with AFESD, *The Arab Human Development Report 2002: Creating Opportunities for Future Generations* (SYNTAX: Amman, 2002). UNDP, *Human Development Report 2002* (Oxford: Oxford University Press, 2002)

Surprisingly, the authors of the report do not make available the final score for their alternative index, or the scores for the subindexes. The report only enables a ranking of countries—from the highest level of "development" to the lowest. The lack of various data produced an index that includes only 111 countries (for comparison's sake, the world report includes 173), of which only 14 are Arab countries (compared

to a total of 20 that they could have reached if using the world report; lacking are data on Somalia and the Palestinian Authority).

Figure 7 displays 111 points, each of which represents a country. Each country is located according to the rank it received in the alternative index and its relative place in the original index. A country whose rank is identical in the two indexes is on the diagonal line. If a country is rated lower in the AHDI than in the HDI (say, for example, it was placed 80th in the AHDI and 60th on the HDI), then it is located above the diagonal line. The circle points represent the Arab countries. As can be seen, the new index puts the Arab countries in a significantly less favorable light (and place). The report's authors say that the low ranking only shows how bad the situation is in Arab countries and how urgent the need for accelerated improvement is.

Figure 7: HDI vs. AHDI of 111 Countries



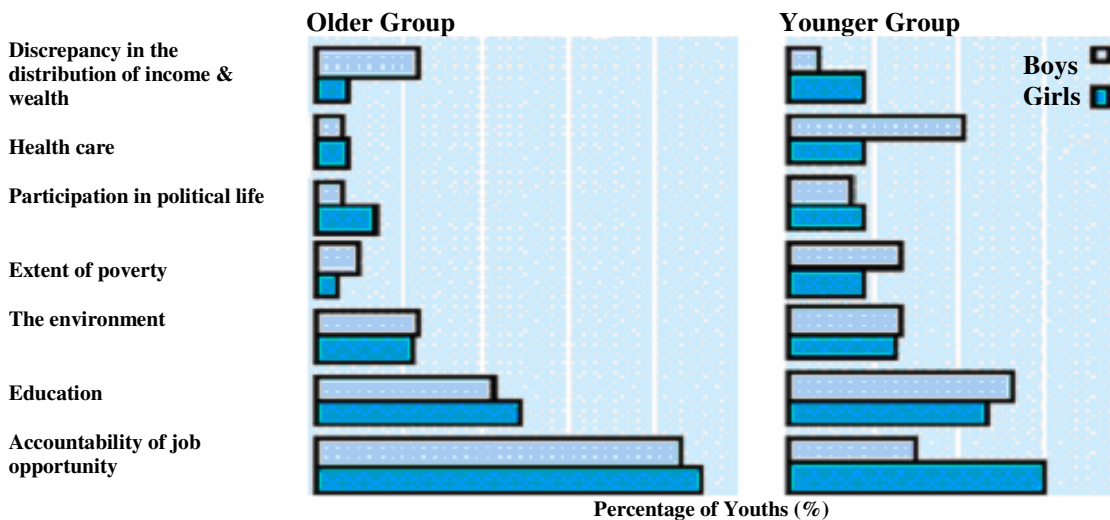
Source: UNDP in cooperation with AFESD, *The Arab Human Development Report 2002: Creating Opportunities for Future Generations* (SYNTAX: Amman, 2002).

If the aim of a human development report is, as noted, to lead to an improved quality of life – within the boundaries that the people concerned use to define quality of life – then it must draw on mainstream criteria (what most "people often value") and their corresponding measurements. In the context of writing an Arab Human Development Report, this necessitates an examination of what most Arabs often value. This is most important, especially if a decision is taken to modify the criteria and measurements – as was the case in the 2002 Arab report. Yet this did not occur; rather, those who prepared the report were the ones to determine what Arabs "often value." This team

was rather homogeneous, and mainly included academics (a considerable number of whom studied and even live outside the Arab countries) and some policymakers,¹⁷ chosen by the director of the UNDP's Office for Arab State Affairs.¹⁸

The report is based on existing statistics on the Arab world without supplemental studies having been conducted. Essentially, the statistical data—which constitutes the factual core of the report—was taken from the United Nations, the World Bank, and an American NGO known as Freedom House. An exception to this is a small-scale study that was conducted by the report's preparatory team, in which questionnaires were distributed to 136 adolescents aged 13-17, most of whom took part in a conference in Amman.¹⁹ It is not clear to what extent the sample is representative of the opinions of youths in the Arab world. The authors of the report, however, regard this study as important. In it, each young person was given the opportunity to mark one area of which s/he regarded most important. Figure 8 shows the results:

Figure 8: Analysis of Questionnaires



The distribution of answers is interesting, especially when one looks at the answers of the older teenagers. The extent of poverty and the distribution of wealth in their countries was not their main concern; nor was individual freedom or health. They were slightly more concerned about the environment, and even more about education, but what concerned them (both boys and girls) most was the possibility of a person not being able to find a job. Yet this very concern—for the individual's economic security—is not included at all in the measurements of the AHDI: whether in terms of level of unemployment, income level and distribution, or—a datum that may be less accurate by nature but gives some sort of indication—GDP per capita.

If we turn back to the disparities between AHDI and HDI, we see that the young people's answers are more closely correlated with the criteria of the HDI than those of the AHDI. Here, there are actually two groups with different views—a group of Arab researchers adhering to the AHDI and a group of Arab youths who ascribe different importance to areas needing improvement. In addition, one also has to remember the aforementioned criticism from within the Arab world arguing that there is no need for democracy; this criticism is, in fact, aligned with the teenagers' answers.

Recalling the pyramid discussed earlier (Figure 4), and the idea that researchers of human development should try to clarify—first and foremost—what people "often value," could it be that the Alternative Human Development Index, and consequently the Arab report, do not represent the sought-after human development for Arab countries? Until a more inclusive answer is available, the claim that

"generally speaking... progress in the development of Arab nations is significantly hindered by the lack of freedom, repression of women and inadequate education"²⁰ remains merely theoretical. There is, therefore, a need to examine the extent to which the alternative criteria and measurements represent views in the Arab world. Until then, it might be preferable to stick to a more general and conventional concept of what "people often value" - within the lines of the common human development reports.²¹

As for the remaining criteria, "environment" and "knowledge" these received much less criticism by Arabs (albeit there was some about the over-emphasis on high-tech)²² and considerably greater recognition in the teenagers' answers. It is possible, though of course in need of further examination, that these criteria are simply more conventional. Still, even if further examination will prove that they are important, are the measurements for these criteria profound? What makes carbon dioxide per capita a proxy for environment protection – as was determined in the AHDI? If the environment is of major concern, especially with regard to sustainable development, why neglect other important measurements? Agenda 21 for sustainable development highlights direct economic measurements relating to the environment (investment in the environment as a percentage of GDP, and environmental-protection taxes and subsidies), measurements for air and climate protection (where carbon dioxide per capita is only one of the measurements), measurements for waste management; and measurements for the protection of land, soil, water, and minerals (see the UN's long "list of environmental and related socioeconomic indicators").²³ Hence, if environmental protection remains one of the criteria, its measurements must be redefined.

As for the knowledge criterion, while the HDI selects measurements whose combination addresses both current and future generations (adult literacy and the enrolment ratio of learning-age children who are actually learning), the AHDI measurements only refer to future generations (enrolment ratio and Internet hosts per capita; illiterates, for example, cannot use the Internet effectively).²⁴ This is not a matter of chance: the report's education program is predominantly concerned with the coming generations (according to the report, these will be generations of the Internet and high-tech).²⁵ It is also worth mentioning that the report does not make the case for Internet hosts per capita as a measure of either high-tech development (such hosts do not necessarily supply high-tech workers) or of freedom of information (the Internet can provide limited access to knowledge if controlled or traceable by the authorities).

The education measurements are an example of a more general attitude found in the report. While the subtitle of the report is "Creating opportunities for future generations," and this is its primary concern, there are no specific measurements aiming to assist the current generation. Some concern can be found in the criteria and measurements of freedom and gender, but this is mainly a by-product of the concern for future generations.

Discriminative measurements cause discriminative programs, and these have the potential to hurt both current and future generations. Improvement in the future also depends on improvement in the present; many of the report's capital-intensive programs for future generations seem unattainable if the present situation – especially the economic situation – is not improved. Inevitably, an over-emphasis on high-tech deters possibilities for "low-tech," but low-tech employment is most needed since the Arab countries have a surplus of labor, which to a large extent consists of unemployed and under-employed low-skilled workers.²⁶ Arab countries have a comparatively low

economic product (the combined GDP of all the Arab countries is smaller than that of Spain),²⁷ yet they do not attract substantial investment. Not all the Arab countries, needless to say Arab citizens, are able to feed themselves properly; moreover undernourishment increases as Arab countries become more and more dependent on agricultural imports, and still irrigation projects are hardly developed.²⁸ Better use of the ample low-skilled labor, investment-attraction to both high-tech and low-tech, and a greater emphasis on agriculture seem to have the potential for some remedy. No measurement for these - only inadequate discussion - is available in the Arab Human Development Report.

Conclusion

A human development report aims at improving mainstream criteria for people's quality of life. It therefore has to find out what most "people often value," and as far as index-creation is concerned, to find quantified measurements that correspond to those criteria. Any program aiming to improve "human development" directs at improving the score of the chosen quantified measurements. The selected criteria and measurements are clearly the foundation for any human development report.

The report in question does not make available the final scores of either the subindexes or the final index. The available relative ranking of countries shows the Arab countries in a significantly less favorable light than others. Still, there is no indication that either the uncommon criteria of the AHDI or its rare measurements represent the mainstream views in Arab countries. Rather, it represents the views of the team that prepared the report – which itself was a quite homogenous group. The only supportive resource used by the report's preparatory team is a study of young persons who were asked to mark one area of life they regarded as most important. The

youngsters' perception is more oriented to HDI criteria than to the AHDI. The criticism of the report from within the Arab world also highlights uncertainty concerning the criteria and measurements used. There is, therefore, a need to examine the extent to which these different criteria and measurements represent the views in the Arab world. Until then, it might be a good idea to stick with more general and conventional views - within the lines of the HDI.

Both the preparatory team and the teenagers were concerned with the criteria of education and environment. Criticism in the Arab world did not concentrate on these criteria (other than limited criticism of the over-emphasis on high-tech). It is possible, though of course in need for further examination, that these criteria are more conventional. Still, the measurements for both criteria are problematic. Regarding that for environmental protection, it would be far better to follow the group of measurements found in Agenda 21; and the measurements for education mainly concern the creation of "opportunities for future generations," but neglect current ones. This neglect reflects a more general problem of the report. It is dubious that less development for the current generation would result in greater development for future generations. Measurements – and consequently programs – aiming, simultaneously, at improving opportunities for future and current generations seem to hold more promise.

Notes

- ¹ UNDP, *Human Development Report 1990* (Oxford: Oxford University Press, 1990), p. 9.
- ² Jamīl Maṭar's view in 'ru'ā naqadīyah litakrīr al-tanmiyah al-'arabiyah lil'ām 2002,' *al mustaqbal al arabi*, no. 287, January 2003, pp. 62-63.
- ³ UNDP in cooperation with AFESD, *The Arab Human Development Report 2002: Creating Opportunities for Future Generations* (SYNTAX: Amman, 2002)
- ⁴ 'The Arab Human Development Report 2002: Creating Opportunities for Future Generation,' *GulfWire Perspectives*, 4.6.2002.
- ⁵ The 'press kit' is available online at: <http://www.undp.org/rbas/ahdr/presskit.html>
- ⁶ 'How the Arabs Compare: Arab Human Development Report 2002,' *The Middle East Quarterly*, vol. ix, no. 4, Fall 2002. 'takrīr al-tanmiyah al-'arabiyah lil'ām 2002,' *al-zajīrah net*, 16.8.2002. 'Bahrain and the Arab Human Development Report,' *Bahrain Brief*, vol. 3, no. 8, August 2002. 'jalālah al-maliq 'abdallh sayastaqbal mas'ūlah barnāmiy al-'umam al-mutaḥidah al-'inmā'ī lilduwal al-'arabīyah,' *markaj al-'akhbār - 'amān*, 9.7.2002 (http://www.amanjordan.org/arabic_news). Neil Barnett 'The Arab Human Development Report,' *The Middle East*, November 2002, pp. 16-17. 'Arab Human Development Report Takes an Honest Look at the Region,' *The Washington Report on Middle East Affairs*, September/October 2002, pp. 44-45. 'The Arab Human Development Report 2002: Creating Opportunities for Future Generation,' *The Atlantic Monthly*, October 2002, p. 42. 'Arab Himan Development Report 2002,' *Here&Now* (online), 02.06.2003. About this experience see also: Glal Amin's view in 'ru'ā naqadīyah litakrīr al-tanmiyah al-'arabiyah lil'ām 2002,' p. 85. Mark LeVine, 'The UN Arab Human Development Report: A Critique,' *Middle East Report* (Online), July 26, 2002.
- ⁷ Shimon Shamir, 'ha'o'lam ha-'aravī 'ashir yoter meshho mefotaḥ' *akademia*, 12, February 2003, pp. 56-61.
- ⁸ Ibrāhim Sa'ad al-Dīn's view in 'ru'ā naqadīyah litakrīr al-tanmiyah al-'arabiyah lil'ām 2002,' pp. 80-1. He praises the new indicators yet argues that measurements for income needed to be used as well.
- ⁹ Mark LeVine, 'The UN Arab Human Development Report: A Critique.' Chronologically, LeVine's piece is ahead of time criticism.
- ¹⁰ See broadly: 'ru'ā naqadīyah litakrīr al-tanmiyah al-'arabiyah lil'ām 2002,' pp. 61-160.
- ¹¹ Glal Amin, 'al-taghrīb waal-'ightirāb fi takrīr al-tanmiyah 'al-'insāniyah' al-'arabiyah!,' *Weghat Nazar*, vol. 4, no. 46, November 2002, pp. 66-69.
- ¹² UNDP, *Human Development Report 1990*.
- ¹³ UNDP, *Human Development Report 1990*, p. 9.
- ¹⁴ For more about this debate see: Partha Dasgupta and Martin Weale, 'On Measuring the Quality of Life,' *World Development*, vol. 20, no. 1, 1992, pp. 119-131. N. F. R. Crafts, 'Economic Growth in East Asia and Western Europe since 1950: Implications for Living Standards,' *National Institute Economic Review*, no. 162, 1997, pp. 75-84. 'HDI' in <http://www.undp.org>
- ¹⁵ UNDP, *Human Development Report 2002* (Oxford: Oxford University Press, 2002), p. 252.
- ¹⁶ UNDP, *The Arab Human Development Report 2002*, pp. 20-1.
- ¹⁷ UNDP, *The Arab Human Development Report 2002*, p. IX.
- ¹⁸ Fahed al-Fanek, 'The Arab Press on the Human Development: Rima Khalaf Drops a Bomb,' *World Press Review*, 23.1.2003.
- ¹⁹ UNDP, *The Arab Human Development Report 2002*.
- ²⁰ 'UNDP: Arab Human Development Report': minutes by Rima Khalaf Hunaidi, the Director of the Office for Arab State Affairs in the UNDP, for the Carnegie Council of Ethics and International Affairs, 4.12.2002.
- ²¹ For a similar view see Ibrāhim al-'aysuwī's view in 'ru'ā naqadīyah litakrīr al-tanmiyah al-'arabiyah lil'ām 2002,' pp. 81-85.
- ²² Especially Glal Amin's in 'ru'ā naqadīyah litakrīr al-tanmiyah al-'arabiyah lil'ām 2002,' pp. 85-91.
- ²³ The UN's 'Environmental Indicators': <http://unstats.un.org/unsd/environment/indicators.htm>
- ²⁴ See Figure Six.
- ²⁵ UNDP, *The Arab Human Development Report 2002*, pp. 65-83.
- ²⁶ Alan Richards and John Waterbury, *A Political Economy of the Middle East* (Oxford: Westview Press, 2nd, 1998), pp. 89-94. Overview of a forthcoming books by the World Bank: *Unlocking the Employment Potential in the Middle East and North Africa: Toward A New Social Contract* (14 pages) <http://www.worldbank.org/>
- ²⁷ UNDP, *The Arab Human Development Report 2002*, p. 85.
- ²⁸ M. Riad El-Ghonemy, *Affluence and Poverty in the Middle East* (London: Routledge, 1998), pp. 21-25, 54-73. Richards and Waterbury, *A Political Economy of the Middle East*, pp. 145-172.