

ARAB WOMEN'S DEVELOPMENT: HOW RELEVANT ARE UNDP MEASUREMENTS?

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The Beijing International Women's Conference was held in 1995. In the same year, the United Nations Development Program (UNDP) introduced two main gender indicators in its annual *Human Development Report*: the Gender-Related Development Index (GDI) and the Gender Empowerment Measurement (GEM).

The gender indicators as they are constructed underestimate to a great degree Arab women's economic participation rates and do not differentiate between the situation of women in rich oil rentier Arab economies and the more diversified economic structures of the relatively oil poor Arab countries. In addition, contrary to the UNDP Human Development Report and the Arab Human Development Report's claims of not relying on the level of income to determine either the level of women's development or the degree of their empowerment, the gender indicators demonstrate a high reliance on the income variable. It is included in both gender indicators. This has led to an anomalous conclusion: women in certain Arab countries, where they cannot drive a car or

participate in the political process, are accorded higher development and empowerment indicators by the UNDP than women in poorer countries of the region, where they enjoy significant public rights but lower income levels.

The GDI is a constructed measurement of overall achievement of both women and men in the three dimensions of the human development index (HDI): life expectancy, educational attainment and real income adjusted for gender inequalities.¹

The GEM focuses on three variables, which reflect women's participation in political decision making, access to professional opportunities, and earnings power, respectively.² After the 1995 report was issued, different countries (especially those with low rankings) objected to the idea of classifying all nations according to these indexes. Since then, classifications of countries according to both GDI and GEM were conducted by blocs of countries according to the three familiar UNDP classifications of high, medium and low human development. That resulted in very different values for different regions and

countries, especially the Arab countries.

This paper examines the relevance of the GDI and GEM to measuring gender inequality, especially in relation to the Arab region, and explores the need to construct different gender indexes due to the specificity of this region and the great disparities between income levels and socioeconomic and cultural attitudes towards gender.

UNDP GENDER INDEXES

In constructing the gender indexes GDI and GEM, the UNDP had to deal with problems of relating female-male disparity to overall achievement measures. In its construction of these indexes, UNDP calculates the overall indicators and then subtracts for gender inequality.

The GDI adjusts HDI for gender inequality in life expectancy, educational attainment and income levels. Allowance is made for women's biological edge in the calculation of life-expectancy rates. GDI uses two measurements for educational attainment: a literacy rate and a combined primary, secondary and tertiary enrollment rate. However, it assigns two-thirds of the weight to literacy alone. The income measure is based on the calculation of male and female wages as a ratio to the average national wage and then multiplying this ratio by male and female shares of the labor force. Male and female shares of earned income are then divided by population share. If there is gender disparity (and usually there is) between the proportional shares of earned income, average real gross domestic product (GDP) is adjusted downward. In both GDI and GEM, the income variable reflects a family member's earning power. Income in this context is defined solely as non-agricultural income.

If the GDI has a value of 1, it reflects

a maximum achievement in basic capabilities with perfect gender equality. Below 0.5, GDI reflects the fact that women suffer the double deprivation of gender disparity and low achievement.

A major criticism of the 1995 UNDP gender indicators is that neither GDI nor GEM measure gender inequality as such, but a combination of absolute levels of attainment and relative female attainments.⁴ Therefore, UNDP, on the basis of its 1995 indicators, could not draw comparative conclusions concerning gender equality on the basis of the countries' GDI or GEM scores.

The choice of indicators in both GDI and GEM has raised a number of issues. As mentioned above, the GDI has the same components as the HDI (income, life expectancy and education). The income variable in GDI is adjusted as in the HDI and is based on the female share in the economically active population and on the relative female/male urban wage rate. However, the definition of the economically active population varies from one country to the other. Some countries include work in family enterprises even if it is not paid; others exclude it. More significantly, economic activity rates in the rural areas and the informal sector are not included in the UNDP gender indicators. Third World countries with substantial agricultural and informal sectors are thereby heavily penalized, especially as a large number of women work in these sectors.

The bias towards the urban sector is a bias towards the pattern of development relying on the familiar modernization model. Agriculture in advanced industrial countries is a capitalist enterprise and is highly mechanized; it employs a very small proportion of the population. The omission

of economic activity rates and rural/informal wages is not going to affect total activity rates in advanced industrial countries as it does in Third World countries.

Finally, the female share of income is calculated as 75 percent of male income. This share was obtained by relating female to male income for the countries where data was available (55 of the countries in UNDP classification). While the measure is relatively plausible, it is nevertheless a measure that is imposed on all countries without discrimination. That might obliterate relative differences and therefore distort gender aversion to inequality.

The education indicator has raised a number of criticisms because of its bias towards adult literacy. Only one-third of the weight is assigned to formal education, that includes all stages, i.e. primary, secondary and tertiary. Most developing countries focus their attention and resources on basic education, increasing enrollment rates to erase illiteracy of the young cohorts of the population. Adult literacy in this case may not be the best indicator of development. In addition, developed countries may have zero illiteracy, but functional illiteracy might be on the increase, a problem not reflected in the illiteracy rates.

The gender-empowerment indicator is also formed of three parts: the percentage of women in parliamentary seats; the female share in professional and technical posts and administrative and managerial positions; and women's share in earned income.

But the female share in parliamentary seats is not a valid indicator of women's political power in many countries. First, the parliaments in many Third World countries are not really representative, especially

under authoritarian bureaucratic regimes. Second, the presence of women in the parliament does not mean that they are gender sensitive or that they differ from men in their attitudes and voting patterns towards gender issues. Third, many of these women are not elected, but rather are appointed by the regime to improve its image internationally. Moreover, some countries assign parliamentary seats for women (a quota) to improve their representation, whereas others have eliminated these seats. The Egyptian Supreme Court abolished the women's quota in the parliament, ironically stating that giving women a preassigned percentage of parliamentary seats is an indication of gender discrimination, this time against men.⁵

The female share in professional, technical, administrative and managerial positions is also not a good predictor of female participation in decision making. It indicates, instead, a bias towards the modernization model, where these posts signify a move towards industrial urbanism. Tomson Ogwang and Abdella Abdou challenge the validity of HDI, GDI and GEM as calculated by the UNDP. They investigated the choice of variables used to compute these measures and concluded that there is statistical justification for the selection of only one variable for each indicator. The life-expectancy index is said to be an effective measure of HDI, the equally distributed educational attainment index for the GDI and parliamentary representation index for GEM.⁶

While the choice of one variable might be statistically justified, it might not be the best indicator for all countries. For example, while the parliamentary index might be a good predictor of women's share in decision making in established democracies, it might

not be a valid indicator in authoritarian or semi-democratic countries. Even in full-fledged democracies in the Third World, elections might be overshadowed by patron-client relationships and ethnic or tribal identities, which weaken to a large degree the effectiveness of such a measure in assessing women's power and their participation in political decision making.

UNDP GENDER INDEXES IN THE ARAB WORLD

The first UNDP *Arab Human Development Report* (AHDR 2002) indicates that women's development and empower-

ment in the Arab world ranks next to last. Only Sub-Saharan Africa has a lower score. This conclusion derives from the data used by AHDR: the 1995 UNDP GDI and GEM indicators for the Arab region. As pointed out above, there are a number of problems surrounding the calculation of UNDP gender indicators. However, other problems make problematic the use of these indicators in the Arab world.

Gender-related Development Indicators (GDI)

The 1995 GDI (used in the first UNDP Arab Human Development Report) is

Gender-related Development Index Arab States 1995 (Source: HDR, 1995)

GDI Rank	GDI Index	Share of Earned Income		Life Expectancy 1992		Literacy Rate (%) 1990		Combined Enrollment 1992		HDI-GDI
		F	M	F	M	F	M	F	M	
51 - Kuwait	0.716	18.4	81.6	77.2	73.3	72.9	80.0	47.6	47.0	0
56 - Bahrain	0.686	10.1	89.9	74.1	69.8	76.8	87.8	85.8	81.3	-20
57 - UAE	0.674	6.8	93.2	75.3	72.9	77.4	77.8	83.9	76.3	-20
59 - Tunisia	0.641	19.5	80.5	68.7	66.9	50.2	75.3	60.2	68.4	1
61 - Qatar	0.639	5.3	94.7	74.2	68.8	77.4	78.3	77.9	71.5	-15
65 - Lebanon	0.622	21.8	78.2	70.5	66.6	89.0	94.1	71.2	73.9	6
72 - Syria	0.571	11.3	88.7	69.2	65.2	51.6	83.6	61.4	71.4	-9
75 - Libya	0.534	7.5	92.5	65.0	61.6	57.4	85.5	66.4	66.0	-17
78 - Iraq	0.523	17.7	82.3	67.5	64.5	40.9	67.9	47.9	61.8	-4
81 - Saudi Arabia	0.514	5.3	94.7	71.4	68.4	46.3	69.9	49.3	55.0	-20
84 - Algeria	0.508	7.5	92.5	68.3	66.0	44.1	70.5	59.9	71.2	-19
92 - Egypt	0.453	8.2	91.8	64.8	62.4	36.1	61.8	60.5	73.9	-16
93 - Morocco	0.450	16.4	83.6	65.0	61.6	27.7	53.8	35.4	49.8	-9
98 - Comoros	0.402	31.9	68.1	56.5	55.5	48.4	62.7	34.4	39.5	3
109 - Sudan	0.332	18.5	81.5	54.4	51.6	30.6	54.8	27.0	34.8	-4
112 - Djibouti	0.315	33.4	66.6	50.0	46.7	29.5	57.4	15.6	20.4	2
116 - Mauritania	0.309	18.5	81.5	53.1	49.9	24.9	48.1	26.5	36.7	-5
117 - Yemen	0.307	9.2	90.8	50.4	49.9	26.0	50.0	22.5	64.6	-18

replete with problems. The data is outdated, going back to the beginning of the nineties. The GDI is an unweighted index assigning equal value to each development indicator (income, education and health).

The female share in earned income is grossly underestimated in countries such as Libya, Egypt, Qatar, the UAE, Yemen, Morocco and Algeria. Egypt, Sudan, Yemen, Morocco and, to some degree, Algeria have a substantial agricultural sector. For example, 55 percent of the Egyptian population and over 80 percent of the Yemeni population is rural. Women have a leading role in agricultural economic activity in both countries, notwithstanding that the economic activity rates for rural women are grossly underestimated by national statistics. For example, the 1986 Egyptian Population Census estimates the overall economic activity rate for females at 9 percent and for rural females at 4 percent. A 1988 Labor Force Sample Survey redefined women's work and established that the overall economic activity rate for women is 38 percent and that rural women form 51 percent of the total rural labor force. UNDP chose the 1986 census data, which unfairly underestimated women's share in the labor force.

In addition, many of the above-mentioned countries have a substantial informal sector. Women tend to work in the informal sector because many have limited if any education, want to have flexible work hours and prefer to be self-employed. The average wage of workers in the so-called informal sector is much higher than the average national wage that the UNDP has adopted to calculate shares of earned income.

As mentioned above, educational attainment is biased towards literacy. The

UNDP weighs literacy by two-thirds of the education index, while primary, secondary and tertiary enrollment is given only one-third of the total weight. Accordingly, poor countries with a sizable population working in traditional agriculture are heavily penalized due to the high rate of illiteracy, especially among females. However, these same countries have higher achievements in school and higher school-enrollment rates than some of the so-called rich countries, because such education is a must in today's information-dominated world. High female illiteracy is mostly that of older women and girls living in very poor or remote areas. More has to be done to eliminate illiteracy, especially for adult females. However, these women are very busy; efforts at literacy should take account of that fact so that women can attend classes conveniently.

Regardless of population size, economic structures or levels of income, all countries are ranked using the same criteria. This can lead to the misreading of data for those who are not aware of the conditions of income generation and production structures in the Arab region.

Arab Socioeconomic Structures

The problems raised above in relation to the UNDP Human Development reports are due to the specificity of Arab socioeconomic structures. The Arab region can be divided roughly into two categories: rich but underpopulated oil countries and poor, heavily populated countries with semi-modernized economic structures.

The majority of oil-producing countries in the region moved from a Bedouin society to export-oriented economies based on one commodity: oil. The sudden financial wealth was used to transform these

societies into consumer societies importing everything from water to supersonic jets. The basic job of the ruling elites is the distribution of the oil wealth. The main criterion for the distribution of wealth, especially in the Gulf States, is nationality. The government employs over 95 percent of the working population. Job creation is the main mechanism for wealth distribution. Therefore, the relatively high percentage of economically active women is a result of oil wealth and not of expanding opportunities for women in these societies. Women in the Gulf region are not saddled with housework in addition to their work in the public sphere. For example, the wealthy Gulf state of Kuwait has a national Kuwaiti population of 800,000 and employs 250,000 migrant domestic laborers, most of whom come from Asia. Each Kuwaiti household has an average of two to three domestic workers. Kuwaiti women do not suffer from the familiar double work burden borne by Arab women in the poorer countries. Work for women in these societies is not only a means to earn their share of oil wealth but also a justification for leaving home and meeting people in the workplace.⁷

Education and health services are offered freely, and even housing is extended by the state through land grants or the sale of land at minimal prices and the extension of mortgages at minimal interest rates. As a matter of fact, the state in the Gulf and other oil-rich Arab countries is responsible for the welfare of its citizens from the cradle to the grave.

With a financial surplus, it is relatively easy for the rentier Gulf states to eliminate illiteracy and increase life expectancy. These are, in essence, small-city states

with populations ranging from 400,000 to two or three million. For complex productive structures with large agricultural sectors and populations ranging from 30 to 75 million, achieving improvements is much harder.

Poor countries in the Arab region were forced to move from state-capitalist economies in the fifties and sixties to full market economies, implementing structural adjustment policies. According to World Bank and IMF prescriptions, these states have to cut or decrease government expenditures, privatize public-sector firms and enterprises, lift subsidies, align domestic prices to international market prices and curb salaries. So-called free education becomes very expensive for the poor, who not only have to supply children with clothes and books but have to pay a substantial part of their meager incomes for private tutoring, as public education is of poor quality. Health services are overburdened and inadequate, forcing many to resort to private practitioners. Unemployment is on the rise due to the elimination of guaranteed employment and the restructuring of production away from traditional work, especially in the manufacturing and service sectors. Poverty levels are increasing. Women are especially hard hit by the structural-adjustment policies. All of these factors are limiting women's economic participation and their levels of income, education and health.

The UNDP gender indicators do not reflect these variations in economic structures and policies. Nor do they reflect the real and important differences in access to resources that underline the concept of gender development.

Gender Empowerment Measures (GEM)

The GEM index is even more devastating for the Arab countries than the GDI index. Three of the adopted measurements are economic: earned-income shares, percentage share of administrative and managerial posts, and professional and technical posts held by women (a measure of the share of women in decision making).

All Arab countries are below the 0.5 cut-off point set by the UNDP, leading to the conclusion that the whole region has a great aversion to gender equality. Regardless of these results, the UNDP classification is biased toward an urban model; it has eliminated the rural sector from its analysis

and focuses on the rights of middle-class and upper-middle-class women. This is clear in the choice of professional and technical categories. It does not really reflect decision making or power but simply the UNDP's preference for white-collar positions. This also leads to bias against countries with substantial rural and agricultural sectors.

GENDER INDICATORS AND CLASSIFICATIONS

Due to the above distortions and to the outcry by many countries against the GDI and GEM measures, the UNDP revised its methodology. It maintained the same indicators but classified countries according

Gender Empowerment 1995 (Source: HDR 1995)

GEM Rank	GEM Value	Seats Held in Parliament (% women) 1994	Administrative & Managerial Posts (% women) 1992	Professional & Technical Posts (% women) 1992	Women's Earned Income Share (%)
47 - Iraq	0.386	10.8	12.7	43.9	17.7
81 - Syria	0.285	8.4	5.6	26.4	11.3
85 - Morocco	0.271	0.6	25.7	24.1	16.4
87 - Algeria	0.266	6.7	5.9	27.6	7.5
91 - Tunisia	0.254	6.8	7.3	17.6	19.5
93 - Kuwait	0.241	0.0	5.2	36.8	18.4
94 - UAE	0.239	0.0	1.6	25.1	6.8
96 - Egypt	0.237	2.2	10.4	28.3	8.2
99 - Jordan	0.230	2.5	5.4	33.8	9.4
102 - Sudan	0.219	4.6	2.4	28.8	18.5
103 - Lebanon	0.212	2.3	2.1	37.8	21.8
111 - Mauritania	0.163	0.0	7.7	20.7	18.5
113 - Comoros	0.157	2.4	0.0	22.3	31.9
115 - Djibouti	0.130	0.0	2.1	19.9	33.4

to human-development levels: high, medium and low.

With this new classification, the UNDP puts the majority of the Arab countries over the break line of 0.50. Only the countries in the low human-development category fall under the break line. It seems that the UNDP also re-estimated shares of earned income. This is not due to the new classification or rapid growth in

Arab states in the period 1995-2000, but is presumably due to the UNDP's access to more current data than that used in the 1995 HDR report.

The top six countries are still oil rich countries with relatively small populations, except for Saudi Arabia, which comes last in this category. Therefore, the same criticism of the measures in HDR 1995 can

Gender-related Development Index Arab States (Source: HDR 2003)

HDI Rank	GDI Rank/Value	Life Expectancy 2000		Adult Literacy 2000		Combined Primary, Secondary and Tertiary Enrollment 1999		Estimated Earned Income \$ PPP 2000		HDI-GDI
		F	M	F	M	F	M	F	M	
High Human Development										
39 - Bahrain	40 0.822	75.8	67.1	99.2	99.5	83	79	7010	21099	-2
45 - Kuwait	44 0.804	78.6	74.5	79.7	84.0	61	57	6895	22186	-2
46 - UAE	47 0.798	78.0	73.7	79.3	75.0	71	65	5320	24412	-4
51 - Qatar	48 0.794	71.3	68.7	83.1	80.4	75	75	6864	25277	-1
Medium Human Development										
64 - Libya	61 0.753	72.8	68.8	68.2	90.8	92	92	2921	11894	-4
71 - Saudi Arabia	72 0.731	73.0	70.5	66.9	83.1	60	62	5332	14736	-1
75 - Lebanon	69 0.739	74.6	71.5	80.3	92.1	81	76	2013	6704	-4
78 - Oman	78 0.722	72.6	69.7	61.6	80.1	56	59	3806	21804	-10
97 - Tunisia	81 0.709	71.4	69.0	60.6	81.4	72	75	3347	9320	0
99 - Jordan	84 0.701	71.8	69.1	83.9	95.1	57	53	1749	6014	-1
106 - Algeria	90 0.679	71.0	68.1	57.1	76.2	69	75	2389	8150	-2
108 - Syria	92 0.669	72.4	70.0	60.5	88.3	61	65	1537	5522	-2
115 - Egypt	99 0.628	68.8	65.7	43.8	66.6	72	80	2003	5227	-2
123 - Morocco	102 0.585	69.5	65.8	36.1	61.8	46	58	2019	5068	0
Low Human Development										
139 - Sudan	116 0.478	57.4	54.6	46.3	69.5	31	36	847	2736	1
144 - Yemen	128 0.426	61.6	59.4	25.2	67.5	29	72	405	1384	-7
149 - Djibouti		44.2	41.6	54.4	75.6	18	20			
152 - Mauritania	127 0.429	53.1	49.9	30.1	50.7	37	44	1212	2150	1
157 - Eritrea	133 0.410	53.3	50.6	44.5	67.3	24	29	571	1107	-8

be leveled against the measures of HDR 2003.

For the GEM indicators, Egypt is the only country among all the Arab states that has available statistics for all indicators. Therefore, it is useless to discuss here the relevance of the GEM 2003 indicators in the absence of data except for those measuring women's share of parliamentary seats. We do not know why Arab states do not have complete GEM data (except for Egypt), but the UNDP might have made a political decision to not list them, especially as they listed all the GDI indicators for the same time period.

ALTERNATIVE MEASUREMENTS

Income levels heavily influence the UNDP GDI and GEM indexes. Therefore, income levels should be adjusted according to the following criteria:

- Source of income: rent or labor productivity
- Size of the population
- Real estimates of female economic activities, including the agricultural sector
- Adjustment of the national wage level to take into account average wages in the informal sector

Educational achievement is biased towards literacy. Therefore, it is preferable to give equal weight to combined school enrollment in the primary, secondary and tertiary levels. As a matter of fact, the category of educational achievement should give equal weight to the following indicators: literacy, enrollment in primary and secondary education, and enrollment in tertiary education as an independent indicator. The stress on enrollment at the tertiary level is justified by the great need for advanced education in the age of the information revolution.

The GEM indicator of professional and technical posts should perhaps be changed to an indicator that directly measures women's economic independence. This indicator may be formed of the following measures: percentage of women employers, percentage of women who are self-employed, and percentage of female owners of land and real estate. This is a better predictor of women's economic independence than is the share of women in professional and technical posts. This measurement will better assess women's economic independence if it includes the very large informal sector, where women form a large percentage of the labor force.

All the above recommendations are valid for international GDI and GEM measurements but are even more so in the Arab states, where a majority of women work in agriculture and the informal sector and do not rely on the government as a main employer of middle-class educated women.

CONCLUSION

The actual measurements of women's development and female empowerment adopted by the UNDP have not been derived in a context suitable for developing countries. Thus, they are biased towards high-income countries regardless of background, development policies and sources of income. In the context of the Arab states, some countries are classified high on the GDI and GEM scales just because of high levels of income, derived mostly from rent through the exploitation of natural resources. Other states are said to be deficient in gender development when they are squeezed by structural-adjustment policies and high poverty levels and blessed by very large populations.

Our alternative measures may not fare better if the classification of states is the same. Thus, countries that derive a substantial percentage of their income from rent should be classified in a separate category. There is no means of comparison between these countries and the others if we take into account economic context and income derivation. Income allows certain countries to achieve high levels of life expectancy, literacy and even high economic-activity rates for women. Most women in rich countries in the region can go to work full time because the government guarantees employment for all

nationals; they can afford domestic labor to alleviate women's double burden of work. At the same time, women in some of these countries do not have the right to vote; they cannot marry on their own. Indeed, sometimes their opinion is not even taken into consideration about marriage, and they suffer high rates of discrimination in all other fields.

Finally, GDI and GEM should include the real degree of female emancipation and move away from the economic-deterministic approach that has been used until now in attempts to measure women's human development and female empowerment.

¹ UNDP: *Human Development Report*, 1995.

² *Ibid.*

³ Kaplana Bardhan and Stepan Klasen: "UNDP's Gender-Related Indices: A Critical Review," *World Development*, June 1999, 27:6 and DA. Geske Dijkstra and Lucia C. Hanmer; "Measuring Socio-Economic Gender Equality: Towards an Alternative for UNDP's GDI," *Feminist Economics*, 2000, 6:2.

⁴ Nadia Ramsis Farah: *Egypt Gender Indicators*. Prepared for UNIFEM & Egyptian National Council for Women. Cairo, February 2002.

⁵ Tomson Ogwang and Abdella Abdou: "The Choice of Principal Variables for Computing Some Measures of Human Well-Being," Paper prepared for the twenty-sixth General Conference of The International Association for Research in Income and Wealth, Krakow, Poland, August 2000.

⁶ Nadia Ramsis Farah: *Women and Children Situation Analysis in Kuwait*. Kuwait Ministry of Planning, 2000.