To the extent that development should be thought of as not just a change in incomes but also a change in capabilities that improves and expands the control of poor people over their lives, it is important to look at human development indicators side by side with income or consumption measures. Information on trends in human development indicators can supplement the information obtained from consumption-based surveys for a better understanding of poverty performance. In particular, such information can provide additional texture to the poverty results by showing how changes in income or consumption are reflected in such tangible outcomes as, say, child mortality or school enrollment.

**Regional Comparisons**

A summary overview of changes in such human development indicators as education attainment, female education attainment, child mortality, and life expectancy shows remarkable progress in the Middle East and North Africa Region between 1960 and 2000. In these four decades, years of education for people age 15 and above rose sixfold, years of education for females (age 15 and above) rose ninefold, and child mortality fell more than fivefold; life expectancy rose by 44 percent (see table 2.1).

To place this progress in perspective we need to compare the region’s performance with that of other countries. Most international comparisons are done among countries falling within similar income groups (such as low income, lower-middle income, upper-middle income, and so on). We have developed a set of comparators by choosing countries that fell within the same range of per capita incomes (in PPP terms) as did the Middle Eastern and North African countries in 1980. The 30 countries thus selected into the comparator group had a population-weighted mean income of $11.29 per capita per day, whereas the Middle East and North Africa group (MENA10) had a mean income of $11.17 per capita per day.
The comparator group mostly comprises presently middle-income and lower-middle-income countries from Latin America and East Asia (see appendix 2 for a list of the comparator countries).

The comparison shown in the four panels of figure 2.1 is quite favorable to MENA10. In each area of comparison, MENA10 started with a worse level of the indicator of interest in 1960 but ended in 2000 by having substantially narrowed the gap with the comparator group (as in years of education for all and for females) or even having eliminated it (as for child mortality and life expectancy).

By subperiod, the relevant indicators show a pattern that is different from that observed in the case of poverty. Whereas poverty reduction effectively stalled after the mid-1980s, there is no such break for the human development indicators, which show substantial improvement in both subperiods (1960–80 and 1980–2000). This is surprising in view of the fact that economic growth was so much slower for the Middle East and North Africa during 1980–2000 than in the 20 years before (see figure 2.2). The region’s performance is similarly surprising when viewed in comparative terms. Whereas its per capita income path diverged dramatically from that of its comparators (see figure 2.2), the region’s social indicators converged with those of comparators over the period 1980–2000 (see figure 2.1).

It is possible that the superiority of MENA10’s performance may be more apparent than real and may be a function of the measure being used for comparison. The simple linear percentage change that is reflected in figure 2.1 may be a misleading measure of policy and effort to the extent that it does not control for the initial level of each indicator nor for resources applied to human development. Adjusting for initial levels is important because these determine how hard it may be to bring about a change in the relevant indicator. For example, if the level of child mortality is already quite low, it will be harder to bring about further reductions than if the level is higher at the outset. Similarly, for countries starting from a very low level, it is likely to be easier to increase the level of female

### TABLE 2.1

**Human Development in the Middle East and North Africa, Selected years, 1960–2000**

<table>
<thead>
<tr>
<th>Indicator</th>
<th>1960</th>
<th>1980</th>
<th>2000</th>
</tr>
</thead>
<tbody>
<tr>
<td>Years of education (average per person over 15)</td>
<td>0.9</td>
<td>2.6</td>
<td>5.5</td>
</tr>
<tr>
<td>Years of education (average per female over 15)</td>
<td>0.5</td>
<td>1.8</td>
<td>4.6</td>
</tr>
<tr>
<td>Child mortality (deaths per 1,000 births)</td>
<td>262</td>
<td>138</td>
<td>47</td>
</tr>
<tr>
<td>Life expectancy (years expected at birth)</td>
<td>47</td>
<td>58</td>
<td>68</td>
</tr>
</tbody>
</table>

education than it might be for countries that are already much farther ahead on this score. Adjusting for resource application is also important because countries that grow faster and/or devote higher levels of resources to improving social indicators should show better results.

### Country-Specific Performance

The figures in this section show the comparative performance of individual MENA10 countries for several indicators when the above-mentioned adjustments are made. Specifically, we have estimated econometric equa-
sions for the year 2000 where the dependent variable is the change in social indicator between 1980 and 2000 and the independent variables are initial income in 1980; initial level of indicator in 1980; growth of income per capita between 1980 and 2000; and average level of education spending per capita during 1980–2000. The last-mentioned variable is used as a proxy for a country’s stance with respect to social spending. The charts show the extent to which each country exceeds or is below the indicator level that would have been predicted for it (in the year 2000) on the basis of the econometric model.

The results are striking. They show that most MENA10 countries for which suitable data are available have performed better than predicted on the basis of the four determinants used and better than most comparator countries across all selected indicators.

Educational Attainment (All)

Five of the eight Middle Eastern and North African countries for which we have data on this variable have performed better than expected, and three have performed worse than expected (see figure 2.3). The Republic of Yemen has been the star overperformer, whereas Tunisia has been a notable underperformer. Tunisia’s performance should be viewed in the context of two observations. First, the rating applies to performance compared with prediction and so is a relative concept; in absolute terms, of

\[ \text{FIGURE 2.2} \]

**Per Capita GDP Trajectories, 1960–2000**

(PPP dollars per day)

![Graph](image)

Source: Staff calculations.

Note: MENA10 includes Algeria, the Arab Republic of Egypt, the Islamic Republic of Iran, Jordan, Lebanon, Libya, Morocco, Syria, Tunisia, and the Republic of Yemen.
course, Tunisia has one of the region’s better records in education. Second, Tunisia had higher income growth and education spending than other countries in the region during the last two decades; accordingly, a higher performance bar had to be met. The weaker-than-expected performance may reflect inefficiencies in Tunisia’s education delivery system.\textsuperscript{2}

Educational Attainment (Females)

The performance of Middle Eastern and North African countries is especially impressive in the case of improvements in number of years of education for females. For a region that is supposed to have substantial cultural obstacles to female education, its relative performance is remarkable. Not only did most of the countries perform better than expected with respect to female education during 1980–2000; they also outperformed many comparators in East Asia and Latin America (see figure 2.4). Indeed, Egypt, Libya, and the Republic of Yemen outperformed all comparators in the set.
Child Mortality

Nine of the region’s 10 countries for which child mortality data are available show better-than-expected results (see figure 2.5). Performance has been exceptionally good in countries such as Egypt, Libya, Morocco, and Syria, and relatively good in Algeria, Tunisia, and the Republic of Yemen. The only country that appears to have done less well than expected is Lebanon, perhaps because the country was in a state of conflict during the 1980s and/or possibly because there was a lack of attention paid to public provision of health care. Once again, most Middle Eastern and North African countries are seen to perform better than most comparators (with the exception of Malaysia).

Life Expectancy

The results for life expectancy are similar to those for child mortality. All countries in the region, except Lebanon, have done better than expected in the last two decades and better than all comparators (see figure 2.6). Egypt and the Republic of Yemen stand out in having especially good performance.
The impressive performance of the region, especially after controlling for income and public spending factors, suggests that gains in efficiency in the systems of education and health care delivery must have played an important role. Health gains, in particular, may also have come about from improvements in other areas, such as education (of mothers), access to safe water, access to food subsidies, and enhanced transport infrastructure. It is also possible that education and health gains may have occurred as a consequence of rising private expenditures. These factors are explored in more detail in later chapters on education, health, and social safety nets. For the moment, we take up the gender aspect of human development.

**Gender Dimensions of Human Development**

Gender may be considered an important aspect of human development to the extent that the health and education of women are important contributors to the living standards of future generations, and women’s participation in the
formal economy is an important determinant of economic growth. In particular, the education of girls has well-documented indirect effects in overcoming poverty at both household and national levels. Aside from the immediate impact on household earnings, educated women marry later and have smaller families with healthier and better-educated children, thus transforming the development capacity of future generations. Accordingly, in this section, we look at some gender-specific indicators of human development. In particular, we document trends in literacy and life expectancy as measures of female education and health, and fertility and labor force participation rates as measures of the degree of autonomy over their life choices and roles achieved by women in the region. We provide only a brief overview of the relevant issues because a detailed discussion is available in *Gender and Development in the Middle East and North Africa: Women in the Public Sphere* (World Bank 2004c).

**Trends in Female Literacy**

Female literacy trends are shown in figure 2.7. They show that female literacy had risen from less than 10 percent in 1960 to 60 percent by 2000.
Moreover, the rate of change was steady and similar to that of comparator countries until approximately 1990. After 1990 there are signs of convergence with comparators. However, given the large gaps that have persisted in this dimension between MENA10 and its comparators, full convergence is still a long way off. Whereas average female literacy rates are around 60 percent for the region, they are as high as 85 percent among comparators. Another interesting dimension (not shown in the figure) is the one relating to the literacy gap between men and women. Here there is clear evidence of a rapidly equalizing trend. Whereas the ratio of literate females to literate males was only 0.63 in 1980, it had risen to almost 0.87 by 2000. Once again, the rate of progress was faster than among comparator countries.

**Trends in Female Life Expectancy**

Since 1960 female life expectancy has increased steadily in MENA10 countries, rising from 48 years on average in 1960 to almost 70 years in 2000 (see figure 2.8). By now, the region has the same average female life expectancy rate as comparator countries. The gap between female and male life expectancy also has increased in favor of women in most MENA10 countries, although the gap is still below the five years or so that is observed in most middle-income countries.¹

**Trends in Fertility**

Figure 2.9 shows that the Middle East and North Africa Region as a whole has achieved significant reductions in fertility (births per woman aged between 15 and 49 years) over the past four decades. Indeed, the pattern of reduction is remarkable in that, during the period 1980–2000,

**FIGURE 2.7**

**Trends in Female Literacy**

![Graph showing trends in female literacy](image)

*Sources: World Development Indicators, CD-ROM 2004, and staff calculations.*
the pace was faster than among comparators, to the extent that average fertility levels are now almost at par with those among comparators—and this despite the fact that in the two decades between 1960 and 1980 the gap with comparators actually had widened.

**Trends in Labor Force Participation**

The Middle East and North Africa Region appears to have made rapid gains in rates of female labor force participation (see figure 2.10). From a situation where only about a fifth of the female labor force (21.9 percent)
was participating in the formal economy in 1960, the region now has a participation rate of almost a third (32.2 percent). The pattern of change over time shows the bulk of the increase as having occurred in the last decade: the participation rate climbed as much between 1990 and 2000 as in the previous three decades between 1960 and 1990. However, it also should be noted that, despite the increase in recent decades, the level of participation in MENA10 countries remains far below that of regions with much lower per capita incomes, such as Sub-Saharan Africa (62.5 percent) and South Asia (46.5 percent).

We must once again ask the question, are these patterns of rapid change an accurate measure of performance? And, as before, one way to measure performance is to compare the actual change over time with what would have been predicted on the basis of some reasonable determinants. An exercise carried out along these lines and reported in World Bank (2004c) shows that, in the case of female labor force participation, the performance of the Middle East and North Africa Region was less than might have been expected on the basis of changes in its fertility rates, female education levels, and age profile. So on this dimension of human development, we must conclude that the “potential to integrate women into the regional economy, determined by past investment in female education and recent fertility trends, has not been realized” (World Bank 2004c, p. 62).

Notes

1. MENA10 in this chapter refers to the following 10 countries for which data on social indicators since 1960 were available: Algeria, Egypt, the Islamic Re-
public of Iran, Jordan, Lebanon, Libya, Morocco, Syria, Tunisia, and the Republic of Yemen. For the education variables used in table 2.1, data were not available for Lebanon and Morocco.

2. Because data on years of education completed were not available for Lebanon and Morocco, we have checked these countries’ performance by running regressions using gross secondary enrollment change (between 1980 and 2000) as the dependent variable. Seven of the MENA10 countries in the sample do better than expected (including Lebanon) and three do worse (including Morocco).

3. Maternal mortality is another relevant dimension here. Unfortunately, data on this are limited to the 1990s. According to a recent report by the United Nations Development Programme, only two Arab countries (Kuwait and the United Arab Emirates) have maternal mortality rates that are low by international standards of five or less per 100,000 live births (UNDP 2002, p. 40). Nevertheless, this is also an area where improvements have occurred among Middle Eastern and North African countries (see World Bank 2004c, p. 161).