



**TURKEY 2001** 

# HUMAN DEVELOPMENT REPORT







**TURKEY 2001** 





### Foreword

The National Human Development Report for Turkey is released at a time when the country is facing many challenges. The financial crisis marking the first quarter of this year, exacerbates some of the challenges caused by the human and material losses incurred with the two devastating earthquakes of 1999, prompting a broad based national program for combating inflation and reforming the state economy.

As national planners seek to implement the reform policies – in both the financial and administrative sectors, there is a clear effort on their side to transform bottlenecks into opportunities for Turkey's further integration in global markets and to bolster its candidacy status to the European Union. This report seeks to contribute to this effort by presenting an overview of the national development process from 1965 to 1998 in Turkey.

The National Human Development Report for Turkey for 2001 provides an in depth analysis of what the Human Development Index (HDI) reveals in terms of Turkey's successes and setbacks in providing a decent standard of living for all. This analysis is set against an international comparison background which has strong relevance for Turkey's European integration objectives – and significant implications for the attainment of living standards in Turkey that are comparable to those enjoyed by people in EU member and fully industrialised countries.

The HDI is a statistical index which gives approximately equal weight to knowledge

and longevity as it does to the income levels of people. It is essentially a statistical tool to measure the level of well-being of people living in a given country, region or province.

The general inclination among many, however, is to focus on how countries are ranked in the overall HDI lists as provided in the global Human Development Reports. This national Report critically analyses the ranking issue, and advises researchers, planners and managers of development to focus on what this measurement tool can reveal in terms of poverty and inequality in a given setting.

The HDI analysis as presented in this report seeks to capture how the HDI measures national development performance and the implications of this measurement for assessing the situation of poverty. As policy makers try to balance social demands and potential costs with the overall aim to lift the economy for international integration objectives, the National Human Development Report's analysis of the poverty situation in Turkey may come as a cautiously optimistic statement. Its analysis of the situation of inequality in Turkey, however, begs concerted action from national planners and managers of development.

This Report's analysis of Turkey's development performance points first of all at a trend of constant yet unbalanced development. The Report takes stock of Turkey's human development progress by offering trend data for the years 1965-1998. This approach, which extends in time, allows

for the readers to capture the trends in Turkey's quite remarkable development performance during this period. If this trend can be maintained, argues the Report, Turkey will enter into the ranks of "high development" within almost a decade. The trends captured in the Report also point that knowledge persists as Turkey's major weakness in the race to attain high development – at par with the European Union member states.

The report argues further that despite the several financial and economic setbacks faced in the past decade and unlike the prevailing experiences of other developing countries, Turkey has been able to prevent poverty levels associated with deprivation. This, in turn, indicates that bo the national economy and traditional social structures have been relatively strong and supportive in ensuring that the people of Turkey are not directly impaired by the fluctuations of the economy. Deprivation from food, shelter or other vital requirements has not arisen in global terms.

On the other hand, the Report's analysis signals caution for national planners. The analysis argues that while deprivation per se is not the case for the poverty situation in the country, vulnerability – especially among rural populations, the uneducated and the unskilled – continues to be a main challenge. In other words, an important segment of the Turkish society, and in particular the rural poor, is alarmingly vulnerable to the threats of poverty.

The statistical analysis presented in this year's report does not benefit from data for the past two years, when two major earthquakes inflicted devastation on the country and an economic crisis caused great difficulties for many - and especially vulnerable population groups. A cursory analysis of the consequences of these major events confirms the conclusion of this report

that the already precarious livelihoods of vulnerable groups are further threatened.

As part of its international mandate to build partnerships in the effort to combat poverty, UNDP cooperates with governments and their civil society partners to support the design and implementation of policies that will eliminate absolute poverty and strengthen the capacities of the vulnerable population groups. This mandate is pursued in Turkey through a matrix of programs and policy analysis with key national institutions. Promoting regional development, combating environmental degradation, strengthening national and local good governance mechanisms and the national machinery for the advancement of women are some of the areas in which UNDP builds partnerships to reduce the vulnerability among selected target groups and to reduce development disparities between genders and geographical regions.

The analysis presented in this and past years' National Human Development Reports as well as in successive annual global Human Development Reports are utilised by UNDP and its national partners in shaping both ongoing and planned technical cooperation programs. For instance, in recent months UNDP program interventions are being designed and in some places re-framed to promote the use of information and communication technologies. Information and Communication Technologies are effective tools for spurring social development and especially for supporting the national development actors in promoting Turkey's knowledge indicators while fostering good governance schemes at local and national levels.

The National Human Development Report for 2001, unlike the Reports of prior years, has been authored by a single expert. This is mainly due to the singularity of the statistical analysis the Report presents and

the absence of sectoral or inter-sectoral assessments called for by the contextual coverage of this year's national Report. Prof. Halis Akder, Economist, of the Middle East Technical University is an important contributor to the global Report preparations. **Prof. Akder** has authored this year's National Human Development Report. UNDP is grateful to him for his insightful analysis, his contributions to UNDP's international efforts to promote human development concerns and for his authorship of this publication. The report benefits from the editorial inputs of Mr. Tom Hemingway who was seconded to UNDP by the Southeast Anatolia Regional Development Administration (GAP RDA). UNDP thanks both Mr. Hemingway and the GAP RDA for this support.

We also thank the offices of the State Planning Organisation for the substantive direction they have provided to the author in early preparatory stages and the State Institute of Statistics for its kind contribution of most of the statistical data used in the report.

We believe that the analysis presented will be useful in the context of the national and international efforts developed to cope with the effects of the economic crises. Therefore, we are certain that this report will find an audience among national policy makers and civil society actors engaged in human development work at all levels as Turkey goes through this period of challenge – and opportunity.

Alfredo Witschi-Cestari Resident Representative United Nations Development Programme



# Foreword

Since 1990, Human Development Reports have provided significant guidance both at international and national levels for development of societies worldwide. The realistic presentation of development related data as well as the very concrete policy recommendations emanating from these Reports have formed the basis of national planning and policy making while contributing greatly to the global agenda for development.

These Reports aim at a process of development which fosters equal access to opportunities by all and thereby an increase in living standards enjoyed by all in a given society. The Reports advocate for a social transformation in which men and women have equal opportunities in social, economic and political fields; where human rights are respected and peace prevails.

The National Human Development Reports which have been prepared since 1992 in Turkey are an important source in policy making for gender equality in the country. Increased democratisation of daily life-for men and women alike-constitutes an important part of the mandate of the General Directorate for Women's Status and Problems which is under the State Ministry. The annual Human Development Reports released by UNDP provide us with the opportunity to benefit from the experiences of other countries in this field. These Reports direct policy makers and civil society actors to think about and to produce solutions for development problems and carry historical significance in terms of the effort to transform the global public arena in an equitable manner.

I wish to underline that the strong ties of our cooperation with the UNDP have had important contributions to the social development and democratisation process in Turkey and take this opportunity to congratulate all who have contributed to the preparation of both the global and the national Human Development Reports.

> Hasan Gemici Minister of State



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### Abbreviotions

GDI Gender-related Development Index

GDP Gross Domestic Product

GEM Gender Empowerment Measure

GNP Gross National Product

HDI Human Development Index

HDR Human Development Report

HPI Human Poverty Index

OECD Organisation for Economic Co-operation and Development

PPP Purchasing Power Parity

UNDP United Nations Development Programme

SIS State Institute of Statistics (Devlet İstatistik Enstitüsü)

TÜSİAD Turkish Industrialists and Businessmen's Association

TESEV Turkish Economic and Social Studies Foundation



## Executive Summary

### **Partnership to Fight Poverty**

Poverty eradication is an important issue in Turkey's development agenda. The government of Turkey and non-governmental organisations are promoting national strategies and participatory non-traditional approaches, sometimes in partnership with UNDP and other international organisations. This report was prepared to promote in Turkey a multi-actor partnership to fight poverty and should also serve to enrich the debate on the relationship between poverty and attaining development objectives.

This report uses the human development approach as the main tool to monitor and devise policies to fight poverty and presents other new measurements for international comparison. Data on trends in human development measurements for 1965-1998 and disaggregated HD profiles for the years 1975 and 1997 are also presented for Turkey's provinces, along with the disaggregated gender-related development index (GDI), the gender empowerment measure (GEM) and the human poverty index (HPI) for 1997<sup>1</sup>. All human development indices have been calculated in accordance with recent revisions to the global HDR. The report suggests policy implications of these measurements and highlights increasing inequality as a key trend marking Turkey's development performance.

### HDI High human development 0.800 1997 0.732 Medium human development 0.500 1965 0.438 Low human development

Turkey's HDI has increased from 0.438 in 1965 to 0.732 in 1997

### Turkey passed from the low to the medium human development category in the 1970s.

In 1965, Turkey's Human Development Index was 0.438 out of a maximum score of 1.00. A country with that rating today would rank as the 152<sup>nd</sup> out of 174. In 1972, Turkey moved into the medium human development category. In 1998, Turkey's HDI was 0.732, which is 0.068 short of the threshold for the high human development category. Turkey ranks now 85<sup>th</sup> out of 174 countries.

From 1965 to 1998, adult literacy increased from 53% to 84%, and the combined enrolment ratio from 44.9% to 61%. Life expectancy has improved from 53 to 69.3 years and per capita GDP at purchasing power parity, from \$791 to \$6,486. The longevity and knowledge components of recent HDIs each comprised 34% of the HDI, and the income index comprised 32% of the HDI for 1997.

# Turkey is among the fastest progressing countries but has yet to reach the high human development category.

There is no direct relationship between HDI and rank improvement. In 1975, Turkey ranked 54<sup>th</sup> among 100 countries listed in the global HDR 2000. In 1980, despite HDI improvements, Turkey dropped in rank by one increment. Improvements until 1985 were sufficient only to maintain Turkey's ranking at 55. The largest improvement was observed from 1990 to 1998, when Turkey

climbed from 54<sup>th</sup> to 51<sup>st</sup> rank. The index increases show that Turkey is progressing in its fight against poverty. Modest rank improvements for Turkey indicate that countries which had higher indices than Turkey are doing at least as well as Turkey. The only countries which had earlier ranked higher than Turkey, but now rank lower, are Ecuador, South Africa, Dominican Republic and Guyana.

# 1997 0.732

# If Turkey continues with the pace of 1988 - 1998 it may take eleven years to reach the threshold of the high human development category.

It would be premature to forecast the impacts of the current economic crises on Turkey's Human Development performance for the upcoming years. Nevertheless, if Turkey can improve the quality and the effectiveness of its public services and social support to its population, together with a sustained level of economic growth, there will be an average yearly improvement of 0.007 in its HDI. At this rate, to reach the threshold value of 0.800 for the high human development category will take about ten years.

If Turkey can add each year 0.7% improvement to its HDI it will take about ten years for passing into high human development category.

The recent extension of primary school education from five to eight years may add 0.010 to 0.015 to Turkey's HDI, assuming universal compliance<sup>2</sup>. Certainly many policies such as the extension of compulsory education will produce positive changes in Turkish society, but these changes will have a very limited effect on the HDI. When considering the costs of this reform in terms of public investments, the overall cost of progress in human development for Turkey become apparent. Of course these costs need not be uniform for each component of HDI and for each period of time, but they should not be underestimated. Equitable

development requires adequate resources and the elimination of poverty is a vital investment for Turkey and its aspirations.

# International comparison indicates clearly that Turkey lags in the knowledge component.

There are 38 countries (ranks) between Turkey (85<sup>th</sup> rank) and the high human development threshold. Within the same range there are twenty-six countries with a lower income index than Turkey. However, there are only three countries (Saudi Arabia, Libya and Mauritius) which have a lower literacy rate than Turkey and only one country (Saudi Arabia) which has lower school enrolment than Turkey. These are clear indications that income is the strongest and knowledge is the weakest component of the three indices indicating the level of human development in Turkey.

# The disaggregated approach indicates important achievements concerning the dynamics of human development in Turkey.

In 1975, low human development was observed in all regions of Turkey except the western Marmara and Aegean Regions. Five provinces in Central Anatolia, seven in the Black Sea Region, one in the Mediterranean Region, five in Southeastern Anatolia and eleven in Eastern Anatolia (about one-third of the population) were in the low human development category. Within twenty-two years all these provinces, except the new province of Sırnak, passed into the medium human development category. Five large industrial provinces in Western Turkey, with 25% of Turkey's total population, passed from the medium to high human development category during the same period. However, these measurements do not consider disparities and the prevalence of low human development within provinces.

### Turkey is progressing, but with persistent inequality.

A very simple measure of inequality, the difference between the HDIs of Turkey's provinces, suggests that inequality between provinces is growing. In 1975, the difference between the highest and lowest HDI among provinces was 0.324 HDI, but in 1997, this range widened to 0.345 HDI.

In 1975, the knowledge component was the apparent reason for inequality in HDI values among provinces in Turkey. From 1975 to 1997, the primary factor in HDI improvement was increasing income. Income increases have played an important role in fighting deprivation, however a more fundamental factor, uneven educational attainment, has resulted in uneven increases in income and exacerbated inequality.

Therefore, in addition to ongoing regional development policies, narrowly focused short-term policies targeting the most deprived groups (the poorest of the poor) in society may lead to higher efficiency and growth and may shorten the period required for passing into the high human development category.

The fight against poverty is made on two fronts: against deprivation and against inequality. Turkey seems to be successful only in its fight against deprivation. Absolute poverty is not widespread in Turkey, apparently due to a trickle-down effect. However, the same cannot be said for inequality. Inequality in Turkey cuts across regions, incomes, knowledge and human development and gender, as well as across households, age groups, and residence (urbanrural). This inequality can result in inefficiency and trigger social problems such as uncontrolled urbanization, crime and social unrest.

In 2000, several studies on poverty in Turkey were published, almost all of which were based on the household income distribution survey of 1994, published in 1997 by the State Institute of Statistics (SIS). These studies indicated a common concern among different institutions and offered a platform for a better coordinated partnership to fight poverty, which could certainly increase the effectivenesss of related policies.

The World Bank's "Social Welfare Study 2000" compares data from SIS surveys in 1987 and 1994 (see Box 3.1). Another study published by TÜSİAD in 2000 uses the same data as the World Bank, however, the household income distribution is translated here into personal income distribution and compares income distribution in Turkey to countries of the EU. Another study was prepared by TESEV regarding Turkey's candidacy to the EU, with rural and urban poverty studies focused on the state reforms required for membership (see Box 1.4). This study differs from the first two studies in regard to the data and approach, in that it follows the human development approach instead of emphasising income alone, yet the main results of all studies support each other with no contradiction among the results and policy implications.

Common concerns and common results are interpreted in this study as an opportunity for creating a partnership in the fight against poverty. Policies which may be derived from these studies will necessitate strong partnerships: among cabinet members and relevant public institutions, between the executive and legislative powers, between central and local authorities, between public and private sectors and, in a truly coordinated manner, with bilateral and multilateral representatives of the international community.



## Trends in Human Development

### **Average Perspective**

Since 1990, eleven global and five national (Turkey) Human Development Reports have been published. The Human Development Index (HDI) was calculated in almost every report by a different method. Progress and setbacks in Turkey's ranking and index value were not due as much to the achievements or failures during that given period, as to differences in assumptions, changes in the number of countries reporting, and refinements in the calculation methodology. The recent Human Development Reports of 1999 and 2000 have finalised the methodology issue and published new longterm trend data (1975-1998) for about 100 countries. These together now present a good opportunity for revising past publication records (Tables 1.1 and 1.2) and for assessing Turkey's human development performance by international comparison.

### Table 1.1 Turkey's HDI by "old" and "new" Formulas

	HDI (old formula)	HDI (new formula)
1995 REPORT	0.792	0.696
1996 REPORT	0.711	0.689
1997 REPORT	0.772	0.711
1998 REPORT	0.782	0.714

#### Box 1.1

The HDI values by the old formula are taken from the global reports of 1995, 1996, 1997 and 1998, respectively. The recalculations are done according to the new formula introduced by the 1999 global Human Development Report. The new method has decreased Turkey's index value considerably, and Turkey lost 25 increments in rank because of this change in methodology (See 1999 global report, page 165). This doesn't mean of course that human development in Turkey has deteriorated. On the contrary the data series using the new formula reveals that Turkey's progress up to 1998 has been continuous, without a setback.

The human development index, based on three components, longevity, education and per capita income, aims to broaden the scope of development analysis and is more comprehensive than the per capita income approach alone. The simplicity of the HDI is at the same time its strength, yet understanding and skilful use of the HDI for development policy purposes are not necessarily simple. The following guidelines for interpreting the indices might be useful.

HDI reflects the most basic achievements in human development. With normalised values for three variables, life expectancy, educational attainment and income, the value of the index ranges from 0 to 1. (The methodology is discussed fully in the technical notes).

The trend analysis offered in this report covers a longer period (1965 to 1998, Table 1.2) than does the global report 2000 (1975-1998). It was worthwhile in this report to include the period when Turkey passed from the low to the medium human development category.

Changes in the HDI value for each year show the progress that Turkey has made towards the maximum value of 1. One may convert this "achievement" approach to a "shortfall" analysis, too, defining the shortfall as the distance between the maximum value 1 and the index itself (1-HDI). The shortfall may be interpreted actually as the development challenge.

These indices are internationally comparable, yet neither the HDI nor any other composite development index reflects the complete picture of the development process. Rather, this index has to be considered as a supplement for other human development indicators.

### **Box 1.2** The impact of recent economic crises on the measurement of human development

The change of the index from one year to another does not necessarily reflect the results of the policies within those two years. That is, the sensitivity of HDI towards short term policies and changes is low. For example, adult literacy and life expectancy are stock variables and change slowly over time, in spite of any immediate effect of "good" or "bad" policies.

The recent economic crisis will have its most severe impact on incomes. The HDI will be affected by these changes only in proportion to changes in income. It is not likely that adult literacy, combined school enrolment and life expectancy will be significantly affected if the current crisis and its implications can be overcome in a short period of time.

The HDI puts more emphasis on quality of life than on economic cycles. However, the low sensitivity of the HDI towards economic crises should not induce reluctance to implement human development policies addressing the crises. At any rate, human development policies target socially weak, vulnerable groups, who will be hit most severely by the negative impact of the crisis. Therefore, investments in human development may be the most important strategy for overcoming economic crises in an effective and socially peaceful manner. In other words, those who are in partnership to fight poverty should never accept an economic crisis as a justification for omitting investment in and reliance on human development.

Table 1.2 Trends in Human Development Indices for Turkey, 1965-1998

	Life expectancy at birth (years)	Adult Literacy rate (%) Age 6 and above	Combined Enrolment Ratio %	GDP Per capita PPP US\$	Life Expectancy Index	Education Index	GDP Development	Human Index (HDI) value
1965	53.0	53.0	44.9	791	0.467	0.503	0.345	0.438
1966	53.7	53.8	47.2	919	0.478	0.516	0.370	0.455
1967	54.3	54.6	48.8	994	0.488	0.527	0.383	0.466
1968	54.9	55.4	50.1	1,075	0.498	0.536	0.396	0.477
1969	55.5	56.2	50,5	1,173	0.508	0.543	0.411	0.487
1970	56.1	57.0	50.6	927	0.518	0.549	0.372	0.480
1971	56.7	∍ 58.2	50.4	1,007	0.528	0.556	0.385	0.490
1972	57.3	59.4	50.8	1,104	0.538	0.565	0.401	0.501
1973	57.9	60.7	50.9	1,182	0.548	0.574	0.412	0.512
1974	58.5	62.0	50.5	1,334	0.558	0.582	0.432	0.524
1975	59.2	63.3	50.9	1,523	0.570	0.592	0.455	0.539
1976	59.9	64.3	51.3	1,753	0.582	0.600	0.478	0.553
1977	60.5	65.4	51.0	1,898	0.592	0.606	0.491	0.563
1978	61.2	66.5	51.0	2,030	0.603	0.613	0.502	0.573
1979	61.6	67.6	51.4	2,152	0.610	0.622	0.512	0.581
1980	61.9	68.7	51.1	2,252	0.615	0.628	0.520	0.588
1981	62.3	69.7	51.2	2,542	0.622	0.635	0.540	0.599
1982	62.6	70.8	52.6	2,724	0.627	0.647	0.552	0.609
1983	63.0	71.9	55.5	2,914	0.633	0.664	0.563	0.620
1984	63.5	73.0	55.9	3,174	0.642	0.673	0.577	0.631
1985	64.0	74.1	56.4	3,340	0.650	0.682	0.586	0.639
1986	64.5	74.9	56.8	3,582	0.658	0.689	0.597	0.648
1987	65.1	75.6	58.0	3,965	0.668	0.697	0.614	0.660
1988	65.6	76.4	58.0	4,114	0.677	0.703	0.620	0.667
1989	65.9	77.2	58.2	4,213	0.682	0.709	0.624	0.672
1990	66.3	78.0	58.4	4,691	0.688	0.715	0.642	0.682
1991	66.6	78.8	60.0	4,822	0.693	0.725	0.647	0.689
1992	66.9	79.6	61.0	5,105	0,698	0.734	0.656	0.696
1993	67.3	80.4	62.0	5,562	0.705	0.743	0.671	0.706
1994	67.7	81.2	62.5	5,280	0.712	0.750	0.662	0.708
1995	68.1	82.0	62.4	5,620	0.718	0.755	0.672	0.715
1996	68.5	82.3	62.0	5,999	0.725	0.755	0.683	0.721
1997	68.9	83.2	61.0	6,463	0.732	0.758	0.696	0.728
1998	69.3	84.0	61.0	6,486	0.738	0.763	0.696	0.733

Source for data: State Institute of Statistics and State Planning Organization, Global Human Development Reports.

### Human Development Trend of Turkey (1965-1998)

The data displayed in bold in Table 1.2 was collected from various sources and the gaps were filled by ordinary statistical techniques which assumed a constant rate of change. The aim was to observe Turkey's human development efforts over a long period of time in a way that is consistent with the results of the global human development reports in order to allow international comparison. Data for Turkey in the global HDR differs somewhat from the data in this report mostly due to differences in methodology. These differences are displayed in Table 1.3<sup>3</sup>.

Turkey's HDI has increased from 1965 to 1998 in absolute terms by 0.295 (Table 1.2), which is a considerable improvement. By this performance Turkey would surely rank among the fastest progressing countries<sup>4</sup>.

The absolute change of the index value shows how a country progresses against deprivation but it says very little about its relative position within the international community. According to the long-term trend data given in the global HDR 2000, Turkey's ranking within 100 countries has changed very little. In 1975, Turkey was at the 54<sup>th</sup> rank. The largest improvement has been observed from 1990 to 1998, when Turkey climbed from the 54<sup>th</sup> to the 51<sup>st</sup> rank<sup>5</sup>.

	Table 1.3 HDI Tr	end Data	
	Global Report	Table 1.2	Difference
1975	0.590	0.539	0.051
1980	0.614	0.588	0.026
1985	0.651	0.639	0.012
1990	0.683	0.682	0.001
1998	0.732	0.733	-0.001

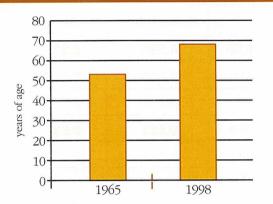
Source: HDR 2000 and Table 1.2

HDI
1.000
0.900
0.800
0.700
0.600
0.500
0.400
0.300
0.200
0.100
0.000

**Box 1.3 Trends in Human Development Index for Turkey** 

Turkey's human development index moved out of the low human development category (0-0.499) in the early 1970's. Since 1972, Turkey has improved its position steadily within the medium level (0.500-0.799). The challenge for Turkey is now to pass into the high human development ranks (0.800– 1.000).





Tabl	e 1.4 Turk	ey's HDI a	nd Rank, 1	1975-199	8
	1975	1980	1985	1990	1998
HDI	0.590	0.614	0.651	0.683	0.732
Rank	54	55	55	54	51

Source: HDI values are taken from Global HD Report 2000, which provides full data for only 100 countries out of 174.

Turkey's overall ranking is in the middle. The index increases show that Turkey is progressing against deprivation, while the slow changes in rank indicate that countries which have a higher index than Turkey are progressing at least as well as Turkey.

### The Dimensions of Human Development

The HDI reflects achievements in the most basic human capabilities – leading a long life, being knowledgeable and enjoying a decent standard of living. Three variables have been chosen to represent those dimensions: life expectancy, educational attainment and income.

### Longevity

Life expectancy at birth is a proxy variable for longevity. "A long and healthy life" is the best wish one may make for someone else in almost any culture. Longevity is strongly associated with health, but health does not depend alone on medicine, doctors and hospitals. For example, food and environment are as important, and it is also becoming more and more evident that the mother's level of health knowledge -and therefore her level of education- is among the most important prerequisites for longevity.

Among the three indices which make up the HDI, the life expectancy index is weighted between education and income. In 1965 its contribution to the HDI was 36% (Figure 1.3), but in 1998 it had only a 34% share of the HDI (Figure 1.4).

Life expectancy at birth has increased in Turkey from 54 years in 1965 to 69 years in 1998 (Figure 1.2)<sup>6</sup>. Japan has in 1998 the highest life expectancy of 80 years and Sierra Leone the lowest, at 37.9 years.

### **Educational Attainment**

Educational attainment is measured by two different variables: adult literacy rate (for ages 15 and up) and combined enrolment ratio, with the literacy rate having twice the weight of the enrolment ratio. In Table 1.2, literacy figures taken from various global HDRs are in bold characters, with figures for intervening years projected from them. These figures deviate slightly from SIS census results because of different definitions for adult illiteracy. The figures concerning the period up to 1980 are slightly higher than SIS findings and the figures after 1980 are slightly lower. Data on enrolment were available from several sources but they were not consistent. The figures here have been calculated from data available in various SIS yearbooks.

The simple adult literacy rate increased from 53% in 1965 to 84% in 1998. Data on recent primary school crude enrolment, which is close to 100%, indicates that illiteracy in Turkey is primarily a stock of adult illiteracy. 82% of all illiterates in 1990 were above 11 years of age (Table 1.5 lists net enrolment ratios), having bypassed compulsory primary school education. 42% of these illiterates were older than 50 years of age (71% above 25 years of age) and 70% of them were female.

The educational attainment index value of 0.763 is the highest value among the three factors in the HDI, yet the change in this index from 1965 to 1998 is less than the change in the income index during the same period.

### **Per Capita Income**

Data on per capita real GDP were taken from OECD (1999), and are shown in Table 1.2 with bold characters, with figures for preceding years projected from these results in normal type. Real GDP and enrolment are the only two time series where fluctuations are observed. GDP setbacks are mainly due to currency devaluations. The income index has the least weight of the three factors in the HDI, yet it has contributed most to the increase of Turkey's HDI. The improvements in rank after 1985 are also mainly due to increases in per capita real income, which increased from US \$1,000 in 1970 to US \$6,486 in 1998. This index's weight in calculating the HDI was increased in 1998 to 32% (Figures 1.3 and 1.4).

Figure 1.3 Weighting of HDI factors, 1965

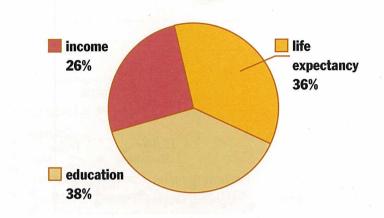
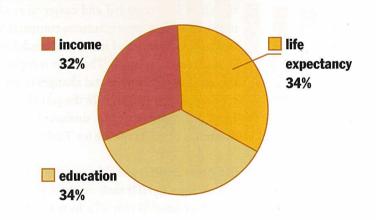
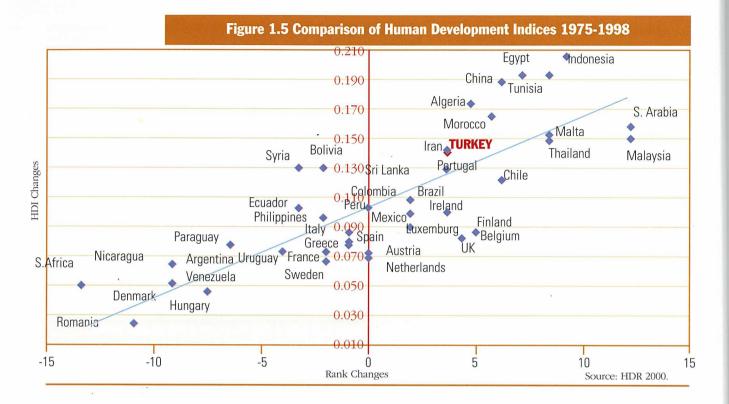


Table 1.5 Schooling Ratio by Educational Level **General High** Higher **Junior High Primary Schools Schools** Education **Schools** 90.74 50.90 18.38 Total 64.47 Male 93.13 74.03 59.03 21.89 88.26 53.93 42.22 14.74 **Female** 

Source: SIS, Statistical Yearbook, 1998.

Figure 1.4 Dimensions of HDI 1998





#### **International Comparison**

Figure 1.5 compares Turkey's human development performance with other countries. The data on changes in rank was taken from the global HDR 2000. To make the chart less crowded and easier to read, only medium income countries comparable to Turkey, European Union and candidate countries were selected. The chart compares the variables of incremental changes in HDI rank and in absolute HDI for the period 1975-1998, in order to help understand the dynamics of HDI ranking for Turkey.

Increases in HDI are shown on the y axis and changes in HDI rank on the x axis. The first observation is that all selected countries increased in HDI from 1975 to 1998, although some advanced and others dropped in rank. Countries on the left half of the chart dropped in rank even though their HDI increased, and countries on the right-half advanced in rank as well as experienced an increase in HDI. Turkey is among this last group.

The diagonal line stretching from lower left to upper right is the trend line (linear regression) which shows the "average" around which the data points are distributed. This line goes through the data point for Peru just in the middle of the y axis. Peru's HDI increased in absolute terms from 1975 to 1998 by 0.102, with a net change in rank of zero. Countries above the trend line and to the right of Peru experienced above average increases in HDI and in HDI rank (the average HDI increase of 100 countries is around 0.099).

HDI (1975-1998)				
Changes in Ran (1975-1998)	ık	HDI Changes (1975-1998)		
Saudi Arabia	12	0.159		
Malaysia	12	0.152		
Indonesia	9	0.205		
Thailand	8	0.145		
Tunisia	7	0.192		
China	6	0.188		
Mauritius	6	0.135		
Algeria	5	0.175		
Swaziland	3	0.150		
Iran	3	0.143		
Turkey	3	0.142		
Brazil	2	0.108		
Colombia	2	0.107		
Mexico	2	0.097		
Sri Lanka	1	0.121		
Dominican Rep.	0	0.118		
Peru	0	0.102		
Fiji	0	0.089		
Belize	0	0.077		
Bolivia	-2	0.131		
Philippines	-2	0.096		
Trinidad	-2	0.074		
Syria	-3	0.130		
El Salvador	-3	0.115		
Ecuador	-3	0.102		
Costa Rica	-3	0.065		
Honduras	-4	0.133		

-5

-6

-9

-11 -11

-13

-13

0.056

0.076

0.062

0.049

0.020

0.052

0.033

Venezuela

**Paraguay** 

**Nicaragua** 

Jamaica

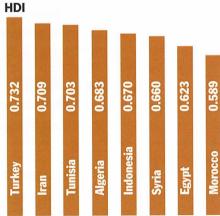
Romania South Africa

Guyana

**Table 1.6 Changes in Rank and** 

The slope of the linear regression implies that, on average, for every increase of 0.006 in the HDI beyond an initial increase of 0.102, a country may advance one increment in rank. To apply this to Turkey, we can hypothesize that Turkey would advance in rank if any of the following increases were achieved:

- An increase in literacy by 2.7%;
- An increase in school enrolment by 5.4%;
- An increase in life expectancy at birth by 1 year; or
- An increase in per capita GDP(PPP) by US\$ 750.00



These counturies have a lower HDI index than Turkey,

yet, Indonesia, Egypt, Tunisia, Algeria, Morocco have increased their HDI between 1975 - 1998 more than Turkey. Box 1.4 There is a strong link between fighting poverty, attaining sustainable human development and meeting EU accession criteria.

The Turkish Economic and Social Studies Foundation (TESEV) has published a collection of conference documents entitled "Regional Development and Rural Poverty". The focus of the conference organised by TESEV was not only on poverty but also on accession to EU, with an aim to present the regional development policies of the EU and candidate countries. Discussions focused on the relevance of these policies for mobilizing Turkey's own potential at local and national levels.

Turkey will approach regional development policy within the accession context at three levels: subnational, national and transnational. Elimination of regional disparities within Turkey is important, but Turkey's rapid growth is probably just as important, since the accelerated development of the economy will improve European economic and social cohesion. Trans-national policies such as the common agricultural policy and common transport policy will make up the third level of regional development policy.

The EU's regional development support to Turkey will most likely be similar to the pre-accession support offered to other candidate countries. The aim of such pre-accession support is usually to assist a candidate country's government in adapting its legal and institutional structures to the necessities of the acquis communautaire, and to provide financial support for pilot projects that could precede future projects and programs under the Union's structural funds directives. The European Union has no explicit policy favouring decentralization or deconcentration, and attainment of a certain regional development level is not a precondition for accession to the European Union.

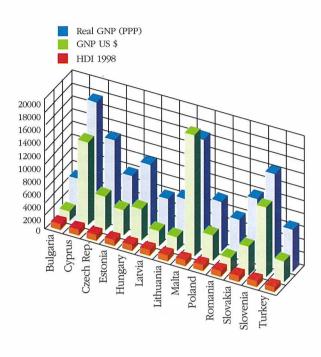
Contrary to some evaluations, economic criteria will not pose the greatest challenge towards accession for Turkey, if one looks at the picture from the human development perspective. Turkey has among the candidate countries the lowest HDI but not the lowest income (see Table 1.7). While Turkey's living standards have indeed improved, the analysis made through all methodologies applied for the calculation of the HDI indicate that there is still need for considerable effort for Turkey to meet the minimum social and political requirements for EU accession within the not too distant future.

**Table 1.7 Development Indicators for Turkey and Other EU Candidate Countries** 

	HDI 1998	GNP US\$	Real GNP (PPP)
Bulgaria	0.772	1,372	4,809
Cyprus	0.886	12,857	17,482
Czech Republic	0.843	5,142	12,362
Estonia	0.801	3,951	7,682
Hungary	0.817	4,920	10,232
Latvia	0.771	2,328	5,728
Lithuania	0.789	2,197	6,436
Malta	0.865	18,620	16,447
Poland	0.814	3,877	7,619
Romania	0.770	1,310	5,648
Slovakia	0.825	3,822	9,699
Slovenia	0.861	10,637	14,293
TURKEY	0.732	3,167	6,422

Table 1.8 Net Change in HDI for Turkey and other EU Candidate Countries

	1975-80	1980-85	1985-90	1990-98
Bulgaria		0.020	0.001	-0.010
Cyprus				••
Czech Republic			0.007	0.013
Estonia		0.008	-0.006	-0.005
Hungary	0.016	0.012	-0.001	0.019
Latvia		0.012	-0.001	-0.026
Lithuania				-0.020
Malta	0.035	0.027	0.035	0.053
Poland		0.004	0.006	0.029
Romania	0.033	0.006	-0.018	-0.001
Slovakia			0.006	0.013
Slovenia				0.021
TURKEY	0.024	0.037	0.032	0.049



A more simple interpretation of this rule, however, may be that relatively small increases in HDI may result in a loss in rank, while relatively large increases in HDI may result in advances in rank. In fact, changes in rank do not depend only on absolute HDI changes but also on how countries at more or less the same level of HDI have performed. In 1998, there were 46 countries in the high development category, spread over a range of less than 0.200. Likewise, there were 35 countries in the low development category. Although the category is defined by the range 0.000 to 0.500, the countries in this category were actually spread over a range similar in size to countries in the other categories. Consequently, except for countries that are clustered around a particular HDI value, it usually requires a higher than average HDI improvement in order to also gain a rank improvement, since rank changes do not depend only on how one country fights deprivation but also on how this is performed relative to countries of similar rank.

### **Policy Perspective**

To clarify the policy implications for the above analysis, the following question may be asked: "How can Turkey pass into the high-human development category?"

In 1998, Turkey achieved an HDI value of 0.732. To pass into the high development category, Turkey must increase its HDI by at least 0.068. This of course is a simple and mechanical reply. With an average yearly increase of 0.007 in its HDI, it will require about ten years for Turkey to reach the threshold of the high development category.

However, Turkey cannot increase its HDI by 0.068 if there is no improvement in the three factors that comprise the HDI, especially the income component. The income index is based on real GDP, so additional increments of the same value are proportionally smaller when compared to the total. For Turkey, to keep increasing the HDI at a constant rate, an increasing amount of income must be added each year.

Income increases in the last decade contributed 0.025 to the HDI (35% of the total increase). If income continues to increase at the same rate for the next decade, the contribution by the year 2009 would be

"How can Turkey pass into the high-human development category?"

The goal of policy should be human development, and not simply an improvement of the HDI.

If the literacy measured is not functional literacy, then it is questionable whether it measures human development at all.

Table 1.9 Comparative Impact of Selected Development Targets

Average Improvement in Coefficient	Impact on HDI
1% increase in adult literacy	0.002
1% increase in school enrolment	0.001
1 year increase in life expectancy	0.006
Per capita increase in GNP (PPP) by US \$1000 in:	0.006
1998	0.008
2000	0.006
2005	0.004
2009	0.003

only about 0.017 HDI, meaning it would take at least one more year for Turkey to reach the high-human development threshold. Table 1.9 shows the relative impact on Turkey's HDI of improvements in the different HDI components, for the purpose of understanding the meaning of percentage increases of HDI.

Given these coefficients, various combinations and scenarios may be worked out to total the 0.068 needed to reach the high development category, but one should not forget that the threshold values or variables for measuring high human development or any other category may be revised upward in the future. Plans which are extended too far into the future are in risk of not being realised at all under these terms.

Besides, one should not confuse measurements of human development (outcome) with human development policy. The goal of policy should be human development, and not simply an improvement of the HDI. Human development emphasises knowledge rather than the literacy rate or enrolment, but for the purposes of international comparison, knowledge is measured by these indicators. If the literacy measured is not functional literacy, then it is questionable whether it measures human development at all. So it is not appropriate to define a broad policy concept based on a very specific variable. For example, there cannot be a specific policy for increasing life expectancy at birth for a certain amount of years. Rather, a collection of policies addressing maternal and child health, the environment, safe water, income and education and many other issues may result in an increase of life expectancy.

One should also not underestimate the cost of such increases in the measures to attain higher human development. Turkey has realised its most important human development policy change by extending compulsory primary school education from five to eight years in 1997-1998. This was possible only by the additional taxation of various income groups. If fully realised, this may add 0.010 –to 0.015 to Turkey's HDI and may help Turkey attain the threshold HDI for the high human development category. However, even a very small percentage increase has its costs and sometimes it might be unrealistic to set high targets.

Since in the long run almost all countries progress in their HDI, does international comparison present any human development policy implications for Turkey? In fact, yes. Comparison indicates clearly that the knowledge component of the human development index in Turkey is lagging behind other countries, and if Turkey seriously wants to catch up, this area has to be emphasised much more than it was in the last decade. The improvement in enrolment may be considered a good start.

The HDR also shows the difference between a country's GDP rank and its HDI rank, in

order to contrast countries of similar rank. There are 38 countries ranked between Turkey (85th rank) and the high-human development threshold. Within this range Turkey has the highest GDP-HDI difference except for Saudi Arabia, which suggests that human development is not progressing at the same rate as income. For example, twenty-six countries in the same category have a lower income index than Turkey, and vet they rank higher than Turkey in their HDI. However, there are only three countries (Saudi Arabia, Libya and Mauritius) which have a lower literacy rate than Turkey and only one country (Saudi Arabia) which has a lower enrolment ratio. These are clear indications that income is the strongest and knowledge is the weakest component of Turkey's human development index.

This perspective based on national averages indicates to policy makers in Turkey the achievements of the past, the new challenges, a time perspective and which component to target. This policy perspective may be enhanced by the "deprivation" and "inequality" perspective of the next chapter.

### Box 1.5 Policies for reducing disparity/inequality

The Eighth Five Year Development Plan of Turkey describes the Turkish government's regional development and poverty eradication programs. Chapters seven and eight are devoted to issues directly related to human development, and refers to most of the problems stated in this report, especially regional disparities and inequality in income distribution. The will to fight poverty is present in the Eighth Plan, which may form a platform for creating partnerships to fight poverty.

The key issue of better targeted government spending is still an important problem. Social assistance schemes in Turkey are sparse and divided, and the social insurance-pension system does not reach the most vulnerable groups. The agricultural support system distributes subsidies towards richer regions and larger farms. The education system is extensive yet the poor groups still have the least access to education opportunities. Many regional programs become diluted over time or spread too thinly. In 1968, there were only 22 provinces in regions designated as development priorities. In 1999, the coverage had been extended to 50 provinces.



## Disaggregated HDI as a Cumulative Distribution Function

If all individuals in Turkey were completely equal in their HDI, the distribution of the HDI across the population would look something like Figure 2.1, which depicts the 1975 national HDI of 0.530 in uniform distribution.

Of course, the HDI is not distributed equally across the population. To get a better picture of the variation in the HDI across Turkey, these values were disaggregated by province. In 1975, there were sixty-seven, and in 1997, seventyeight provinces in Turkey of different population and area sizes.

An ideal disaggregation could be achieved if one could calculate the HDI of each individual in a country. Relevant statistics are, however, available in Turkey only at the province level. Therefore this is the level that will be used to approximate the true profile. If the share of population (y axis), at or below a given HDI (x axis) is presented graphically in ascending order, the HDI profile may be presented as a cumulative distribution function (Figure 2.2)7. Displaying human development information this way may be helpful to understand some aspects of inequality.

#### Figure 2.1 Average HDI Profile, 1975 Cumulative Percent of Population 1.00 0.80 0.60 0.400.20 0.00 0.50 0.60 0.70 0.80 0.90 1.00 0.10 0.40 0.20 0.30 0.00 Human Development Index (HDI)

The disaggregated HDI profile in Figure 2.2 displays a curve which represents the distribution of province level HDI values and the cumulative proportion of Turkey's total population. The curve starts at 0.343 on the x axis, where the lowest provincial HDI value was observed in 1975. Looking at the intersection of the curve with the HDI value 0.500 (the low/medium human development threshold) and reading from the y axis, one can see that almost 32% of the population at that time was in the low human development category. The end point of the profile touches the ceiling at the maximum HDI value of 0.667, implying that the majority of the population was within

the medium human development category in 1975; there was no province in the high human development category at that time.

The maximum HDI value is 1.00 and maximum population is also 100%, or 1.00, so the total area of Figure 2.2 is equal to one (1x1=1). The area to the right of the curve then represents the relative lack of development, expressed as 1-HDI.

Figure 2.3 depicts the uniform distribution for Turkey's 1975 HDI from Figure 2.1 and also for the 1997 HDI. The area between the two profiles represents the progress attained in Turkey over twenty-two years, and the area to the right of the 1997 profile is the remaining deprivation. The analysis of these two sections may be considered an "average-deprivation" analysis.

The index value of the area between the two profiles is around 0.198 HDI. 40% of this increase occured because of increases in income, 32% because of increases in life expectancy and 28% because of increases in literacy and enrolment.

The area to the right of the 1997 profile, which represents the remaining amount of deprivation, has an index value of 0.27. 33% of this deprivation is because of deficiencies in longevity, 30% for knowledge deficiencies and 37% because of insufficient income.

Figure 2.2 Disaggregated HDI Profile for Turkey, 1975

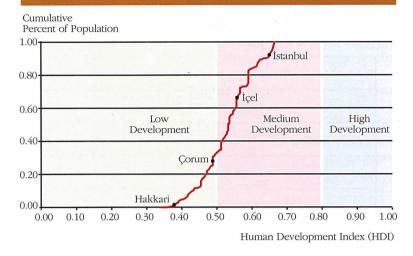


Figure 2.3 Average HDI Profile for Turkey, 1975 and 1997

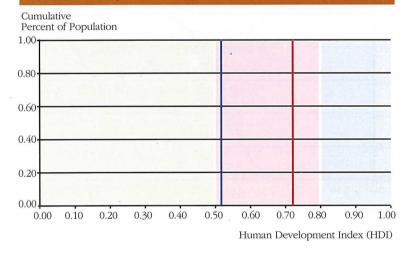


Figure 2.4 Average and Disaggregated HDI Profiles for Turkey, 1975 and 1997

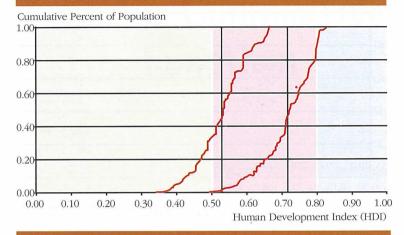
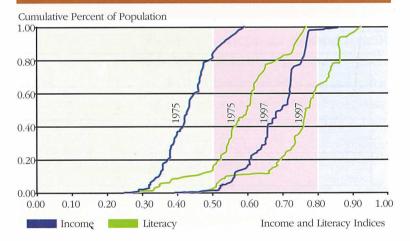


Figure 2.5 Disaggregated Income and Literacy Indices, 1975 and 1997



#### **Inequality Perspective**

Figure 2.4 shows the disaggregated HDI profiles for 1975 and 1997 superimposed on the average profiles. The disaggregated profile may be interpreted as a clockwise rotation of the vertical average profile, and the triangular areas created by the positive slope of the profile and the average profile as the amount of inequality, expressed as the deviation of one province's average from the national average. The range of province level HDIs from least to greatest is also a simple measure of inequality. It is important to visualize that there can be several disaggregated profiles with the same average

but with different degrees of slope, with a flatter disaggregated profile indicating greater inequality.

The fight against poverty has two important components: the fight against deprivation and the fight against inequality. Figure 2.4 presents 1975 and 1997 results together and summarizes the deprivation and inequalty components of Turkey's performance. The rightward shift of the average and disaggregated HD profiles are clear steps against deprivation. However, the gap between the maximum and minimum province level HDI's increased during the same period, from 0.324 in 1975 to 0.345 in 1997. In the figure, one can see that the share of the population living below the national HDI average has increased, and that the lowest ranks are further behind the average in 1997 than they were in 1975.

The steeper part of the curve representing the population above the national average HDI shows that there is less deviation from the national average. This is partly because higher ranking provinces also have high population and these provinces are represented by their averages.

The source of this inequality may be observed in Figure 2.5, which depicts disaggregated income and literacy index profiles for 1975 and 1997. For 1975, both profiles start at about the same point on the x axis, but even though income deprivation was much greater than literacy deprivation, it appears to be distributed more equally, with a range from minimum to maximum of 0.316, as compared to a range of 0.517 for literacy. In 1997 the range for both the literacy and the income indices increased, with the literacy gap widening more than the income gap.

At the lowest level of development, the provinces with HDIs between 0.49 and 0.59, have an average deprivation (1-HDI) of 0.436; 36.8% of this deprivation is due to illiteracy

and low enrolment, 35.6% due to insufficient income and 27.6% due to short life expectancy.

Provinces in the high level human development category show a different pattern. Here total deprivation is 0.190, with only 26.7% of it due to illiteracy and low enrolment, but 40.4% due to insufficient income and 32.8% due to short life expectancy.

If development policy aims to fight the inequality component of poverty, emphasis on educational attainment at low levels of human development is critical.

### The Dynamics

The disaggregated approach produces valuable results concerning the dynamics of human development in Turkey. In 1975, there were 29 provinces out of 67 in the low human development category. It was only in the western part of Turkey, in the Marmara and Aegean Regions, where low human development was not observed. There were five provinces in Central Anatolia, seven in the Black Sea Region, one in the Mediterranean Region, five in Southeastern Anatolia and eleven in Eastern Anatolia in the low human development category, comprising almost 32% of Turkey's total population. Thus, roughly one third of Turkey's population was in the low human development category and two-thirds in the medium human development category.

Within twenty-two years all of these provinces passed into the medium human development category, with the exception of one new province in Southeastern Anatolia, **Şırnak**, with an HDI of 0.492.

During the same period, five large industrial provinces in western Turkey, whose combined population constitutes 25% of Turkey's total population, passed from the

medium to the high human development category.

Adryaman, a province in Southeastern Anatolia where the GAP Project is underway (see Box 2.1), has yielded the largest increase in HDI: 0.213. This performance has brought Adryaman from the 57<sup>th</sup> up to the 52<sup>nd</sup> rank. The next largest increase in HDI was observed for provinces in southwestern Turkey. The HDI of Muğla has improved by 0.212 and by this performance Muğla climbed from the 12<sup>th</sup> to the 6<sup>th</sup> rank. Niğde in Central Anatolia, Trabzon in the Black Sea and Bilecik in the Marmara Region were the next best performers. The HDI for each of these provinces has increased by more than 0.200.

The provinces with the smallest HDI improvement were **Mus** and **Ağrı** in the East, followed by **İstanbul**, whose HDI increased by only 0.145. **İçel**, in the Mediterranean Region, dropped in rank by twelve increments in spite of an increase in its HDI by 0.160, making it the province with the largest net drop in rank.

An analysis of the provinces grouped into regions produces similar results. As seen in Table 2.1, with Turkey's regions listed in HDI rank order, Eastern and Southeastern Anatolia had the lowest HDIs in 1975, and although they moved from the low to the medium human development category, they remain at the bottom. As these regions' improvements were smaller than the average, inequality in the geographic distribution of HDI values has increased. The Marmara Region, however, experienced a moderate improvement, yet it passed into the high human development category.<sup>8</sup>

The Black Sea and Cental Anatolian Regions experienced the greatest improvement in their HDI.

If development policy aims to fight the inequality component of poverty, emphasis on educational attainment at low levels of human development is critical.

### **Box 2.1 Southeastern Anatolia Project Sustainable Development Program**

The Southeastern Anatolia Regional **Development Administration (GAP RDA)** is unique in Turkey for being the only government institution which focuses solely on regional development. Since its establishment in 1989, the GAP RDA has promoted a series of integrated regional development strategies and has cooperated since 1995 with the UNDP in the management of a Sustainable **Human Development Program targeting** the people of this less developed region. In addition to pilot projects scattered throughout the GAP Region, the Program is supporting the formulation of an updated regional development strategy for Southeastern Anatolia. This strategy takes vulnerable groups as its focus and proposes a string of public and private investment approaches that will serve to lift HDI values -the living conditions of the people - in this region to national levels.

In order to mobilize employment creating investments, the UNDP and the GAP RDA have also been operating Entrepreneur Support Centres in Adıyaman, Şanlıurfa, Gaziantep, Diyarbakır and Mardin. In addition, participatory approaches to local development planning and project implementation are fostered through grassroots level projects employing Local Agenda 21 modalities and principles of good governance.

Participatory approaches also seek to mobilise the cultural and non-material assets in the Region's historical cities, such as Mardin.

The GAP RDA's work and its cooperation with the UNDP in promoting sustainable human development approaches is considered by many as an important step in aligning Turkey's regional development strategies with those in EU member countries. However, further policy guidance and improvements are necessary both for establishing the optimal institutional structures for regional development and for the mobilisation of the necessary public, private, national and local resources to lift the human development levels of the people in this region.

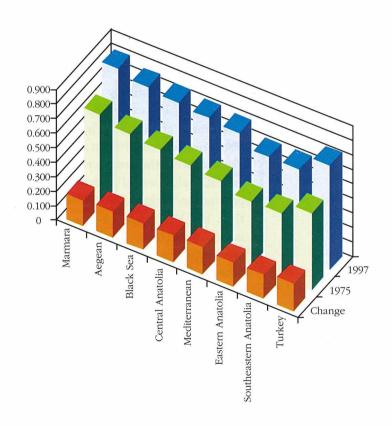
### **Policy Implications**

It might be useful to ask, "What would happen if Turkey increased its national human development average to 0.800, that is, to the high human development category threshold in about a decade, but without changing the geographic distribution of the HDI in 1997.

This may be visualised easily by shifting the HD profile in Figure 2.5 to the right by about 0.077 HDI. Accordingly, only 24 out of 80 provinces will pass into the high human development category, leaving 56 provinces behind within the medium human development category. In other words, about 53% of the population would be living in provinces in the high human development category, while about 47% would remain in provinces in the medium human development category. All provinces of the Marmara Region would pass into the high human development category, and almost all the Aegean coastal provinces (Muğla, Aydın, İzmir, Denizli, Manisa) and Mediterranean provinces (Antalya, Burdur, icel) would also make this transition. The western section of Central Anatolia, Eskişehir, Ankara, Konya, and the western Black Sea provinces of Zonguldak and Bolu would also pass into the high human development category.

Although the level of development would change, the disparities between Eastern and Western Turkey would remain. Turkey is progressing, but not by the most desirable pattern. Progress with inequality is winning only half the battle against poverty. Improving the national average for a particular measure of development does not eradicate all poverty problems. Failing to address inequality now will only increase the cost of future remedies.

REGION	1975	1997	Change
	4		
Marmara	0.627	0.801	0.174
Aegean	0.573	0.757	0.184
Central Anatolia	0.549	0.736	0.187
Mediterranean	0.528	0.713	0.185
Black Sea	0.504	0.694	0.190
Southeastern Anatolia	0.447	0.612	0.165
Eastern Anatolia	0.446	0.612	0.166
	-		_
TURKEY	0.530	0.720	0.190





# What do the Human Development Indices Reveal for Turkey?

To stress the inequality in the distribution of human development, this report provides three additional disaggregated, composite indices for all provinces, which are the Gender-related Development Index (GDI), the Gender Empowerment Measure (GEM), and the Human Poverty Index (HPI). The first two qualify the HDI by indicating gender inequality and the HPI indicates the presence and magnitude of poverty independent of the national HDI.

The GDI is measured by the same variables as the HDI: life expectancy, educational attainment and income, but adjusted for disparities between women and men. If the averages were the same for both, the GDI and HDI values would be identical. For every province in Turkey the GDI value is lower than the HDI value, indicating gender inequality in Turkey. **Bursa** and **izmir**, which are within the high human development category, fall into the medium human development category when gender inequality is considered.

This inequality may be assessed also in relative terms by comparing the HDI and GDI ranks of the provinces. Seventeen provinces have the same rank in both HDI and GDI. In thirty-six provinces the GDI rank is higher than HDI rank. This suggests a relatively more equitable distribution of average human development achievements than in the twenty-seven provinces where GDI rank is lower than the HDI rank. **İçel**, in the Mediterranean Region, **Konya** in

Central Anatolia, **Afyon** in the Aegean, and **Bartin** and **Karabük** in the Black Sea Region show marked gender inequality relative to their human development indices.

The Gender Empowerment Measure (GEM) is intended to measure gender inequality in key areas of economic and political participation and decision making. This index focuses more on opportunities rather than on capabilities. The GEM has been calculated for the 73 provinces in Turkey for which data was available, although this data is not uniform in time. Data on administrative and managerial positions are from the 1990 census. Seats held in provincial and municipal parliaments are from the 1993 elections and income data is from 1997. The index is specific to Turkey and is based on data that is not suitable for international comparison. It is most informative to compare the GEM and HDI ranking of selected provinces.

Ankara is the top ranking province for the GEM. Bursa's GEM ranking is eleven increments below its HDI, indicating that while Bursa has been able to promote social and economic opportunities for its population, women in Bursa have not had the opportunity to advance in professional fields. The Black Sea provinces of Rize, Trabzon and Gümüşhane have GEM rankings significantly lower than their HDI rankings. However, the highest disparity is in Konya, where the rank difference between HDI and GEM is twenty-three. Sakarya in

the Marmara Region, **Afyon** in the Aegean, and **Kayseri** in Central Antolia also show considerable disparities in their ranking for HDI and GEM.

The third composite measure presented in this report is the human poverty index (HPI). The HDI is designed to measure national average in achievements, whereas the HPI is intended to measure deprivation, using the following indicators:

Figure 3.1 Components of the HPI		
Index	Deprivation measure	
Longevity	Percentage of people not expected to survive to the age of 40	
Knowledge	Adult illiteracy rate	
Income	Percentage of people without access to safe water	
	Percentage of people without access to health services	
	Percentage of children under 5 who are moderately or severely underweight	

Like the HDI, the HPI ranges from 0 to 100, but with higher scores denoting greater deprivation. HPI among Turkey's provinces ranges from 6% in **istanbul** to 39% in **Şırnak**. Eleven provinces out of seventy eight have an index value of less than ten. Only thirteen provinces have an index higher than twenty and three of them have an index value higher than 30%.

There are considerable differences in HDI rank and HPI rank among the provinces, but there is no automatic link between the HDI and HPI. One may assume that, between provinces of similar HDIs, the province with a lower HPI value has a more equitable distribution of achievements.

Table 3.1 Provinces with the same HDI but different HPI

HDI (%)

HPI (%)

Ardahan

62

16

Diyarbakır

62

29

Bartın

68

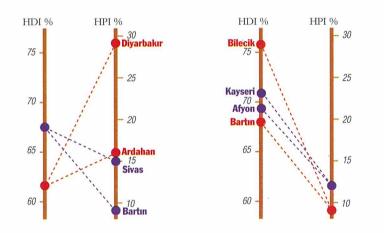
9

Sivas

68

15

Table 3.2 Provinces with the same HPI but different HD		
	HDI (%)	HPI (%)
Kayseri	71	12
Afyon	69	12
Bilecik	76	9
Bartın	68	9



For example, Ardahan and Diyarbakır had the same HDI level in 1997, but Diyarbakır had a higher poverty incidence than Ardahan, implying that human development is less equally distributed in Diyarbakır than in Ardahan. The same is true for Sivas and Bartın, which also had the same HDI in 1997. Compared to Bartın, the achievements in Sivas indicate higher inequality. Kayseri and Afyon have the same poverty index yet Afyon has a lower HDI. This indicates a less equitably distributed human development in Afyon as compared to Kayseri.

### **Policy Implications**

Economic inequality cuts across not only regions, income, knowledge and gender, but also across households, age, residence (urban-rural). Inequality results in economic inefficiency and waste, as well as social problems such as crime, uncontrolled urbanization and social unrest.

The question asked in chapters one and two may apply here as well: Is it possible for Turkey to pass into the high development category in less than a decade? As already shown, Turkey's overall human development index is progressing quite well, yet achievements are not distributed equally and there is no sign of improvement in that respect. Economic inequality cuts across not only regions, income, knowledge and gender, but also across households, age, residence (urban-rural). Inequality results in economic inefficiency and waste, as well as social problems such as crime, uncontrolled urbanization and social unrest. In addition to ongoing regional development policies that target, for example Southeastern or Eastern Anatolia, carefully targeted shortterm policies toward the most deprived groups in society –as part of a larger program for more equitable and sustainable human development- may lead to higher efficiency and growth. This may shorten the period required for passing into the high human development category.

The World Bank, Poverty Reduction and Economic Management Unit, published a report on Turkey in May 2000: "Economic Reforms, Living Standards and Social Welfare Study." The data and approach of the study are different from the National Human Development Report, yet the results seem to support and complement each other. The following highlights are of interest:

"...While Turkey has been successful in sustaining positive GDP growth rates throughout most of the recent period, it has been less successful at generating employment.

Employment to working-age population rates have declined sharply since the 1970's, suggesting that a much smaller fraction of Turkey's potential labor force is economically active and employed today than it was 20 years ago...During 1981-97, total employment grew by only 1.5% per year, while the working age population grew by over 3% per annum.

### Report from the World Bank on Economic Reforms, Living Standards and Social Welfare

Turkey is a country with large and entrenched inequalities. Income differentials across regions and social groups are wide and persistent. A significant share of total inequality in Turkey is explained by differences in endowments, geography and opportunities faced in the labor market. Two critical variables, education and employment status, each explain between a fifth and a quarter of all observed inequality. Rural/urban differences explain more than 10% of the total inequality in the country. Regional factors explain another 11%.

**Comparisons over time suggest that inequality** between regions is growing. We find that the share of overall inequality explained by differences in regional means has grown by 10%. Similarly, using provincial-level data on GDP for the 1975-95 period, we find that productivity differences between provinces are getting bigger; not smaller. This is true not only for productivity levels but also for productivity growth rates...while provinces in the middle of distribution show some mobility over the 20year period of observation, those at the top or bottom of the distribution do not change very much at all. Of the 13 poorest provinces in 1975, 10 were still in the bottom quintile 20 years later. And of the 13 richest in 1975, 11 remained in the top quintile in 1995.

Absolute poverty in Turkey is low based on an international standard. When we use the internationally comparable "One-Dollar-a-Day" line, we find an extremely low incidence of poverty. Only 2.5% of the population have monthly consumption below this level...However, unlike absolute poverty, economic vulnerability is a widespread problem. A substantial number of households (31%) and an important fraction of population (36%) have consumption below the economic vulnerability line (equal to the food line plus an allowance for non-food items).

The main factor driving the worsening of the distribution of money incomes appears to be the labor market, and specifically the emergence of growing wage differentials by educational attainment.

Government spending needs to be better targeted to the economically vulnerable and key elements of a strategy to improve living standards and reduce poverty: Provide a macroeconomic environment that is conductive to growth and price stability... Remove biases against employment creation outside of agriculture... Facilitate the outflow of resources from agriculture and provide a basis for productivity growth in the sector... Invest in the education, and especially in that of poor children... Reallocate government expenditures so that they are better targeted to the economically vulnerable..."

#### In conclusion:

Human development measurements place critical emphasis on income. However, income can be- and often is- a misleading measure of overall development. Rapid increases in income have often been paralleled with rising inequalities or even increasing levels of absolute poverty. Turkey is a good example of this scheme. Despite rapid progress in income, disparities have widened. However, there are also opposite examples: in some countries inequality has diminished with rising income. It is therefore evident that to understand the relationship between income and inequality in general is a complex endeavour that requires demanding research efforts. For the specific case of Turkey, we know only very little about the relationship between inequality and per capita income growth trends. Inequality is often the outcome of interdependent forces such as markets, institutions and demographic changes. Understanding this complex relationship is a challenge. Yet, steps in this direction promise to open up new policy options.

The 2001 Human Development Report and this National Human Development Report both point to the critical role of education in fostering Turkey's development performance. The former does so by presenting Turkey's overall development performance in an internationally comparable index, leading to the conclusion that education is the lead human development component which keeps Turkey from attaining higher development levels. The latter makes the same argument on the centrality of education by pointing at existing disparities and widening inequalities in Turkey. Focusing on education for attaining rapid human development offers more insight and operational policy options. Improving people's access to systematically progressing education possibilities will dramatically impact on people's ability to improve their health and living conditions. It will also ensure a more equal distribution of national income.

### Future human development reports...

The concern of human development is much deeper and richer than the four updated sets

of indices in this report. Future topics on human development presented will surely include refinements of the human development index and the design of a political freedom or human rights index (Streeten 1999). Another area for research will be the exploration of the precise meaning and interpretation of some of these indicators. Knowledge is measured by literacy rates, but it could have been measured by the number of published books, the number of scientists or the functional literacy rate. Which measure is best for Turkey? Are the increasing number of divorces or single parent families positive indicators of development? The choice, weights, interpretation and causal links of relevant indicators for Turkey are for the most part unexplored.

Regional disparities in Turkey will make decentralisation, deregulation, privatisation and liberalisation important topics. These will gain additional importance with integration to EU regional policies.

The role of women in development is another area where research has started and will continue. Promising areas of research include the development of gender-sensitive methods of cost benefit analysis, national and social accounting, micro-based examination of differential patterns of expenditure, consumption, use of savings and leisure time by men and women. This in turn has implications for the differences in household welfare, including the welfare of children.

Research into poverty and social exclusion will also become important topics. Income group-specific research, for example income group-specific price indices, and the impact of public expenditure on poverty reduction and income distribution will become relevant research areas.

Policies which may be derived from these issues will necessitate strong partnerships: among cabinet members and relevant public institutions, between the executive and legislative powers, between central and local authorities, between the public and private sectors, and in a truly coordinated manner, with bilateral and multilateral representatives of the international community.

# NOTES

- <sup>1</sup> For more details on how these indices are calculated, see the technical note.
- <sup>2</sup> This is strictly a mechanical exercise with the factors of the HDI.
- <sup>3</sup> The differences are mainly due to income data. The income figures of the global report are estimated by a certain methodology and this method produces overestimated income figures when compared to official Turkish statistics. This in turn under-represents the rapid progress Turkey has achieved. Table 1.2 is a more suitable source for evaluating Turkey on its own. The trend series in the global report are, however, more adequate for international comparison. That report has used the same methodology for all countries. All biases may be in the same direction, therefore the comparisons may be more consistent. As results for recent years are almost identical in both reports, final conclusions for the existing situation will not differ no matter which source is used.

<sup>4</sup>The range for low (0-0.499), medium (0.500-0.799) and high human development (0.800 -1.000) were defined in 1990 when the first global report was published. These limits were set by empirical observation and common sense but without any theoretical justification. In other words, they were set according to the ranking of countries at that time rather than according to critical levels of the index value. The methodological changes which altered the index values several times have not been followed by revisions of those critical values. One may always keep in mind that these development levels reflect the standards of a specific period of time, that is, the 1990's. This may be accentuated by the following observation: The HDI value for Turkey in 1965 was 0.438, which today would rank only a low 152nd out of 174 countries. According to this interpretation it is obvious that Turkey has progressed from low to medium human development. However, one can not know what Turkey's actual ranking would have been during the 1960s with the same HDI (0.433). If development levels were defined the same way during the sixties, that is, relative to the ranking of the countries at that time, the borderline of low-medium level of human development could have been set to at a different point than 0.499.

<sup>5</sup> Turkey ranked in the middle position among 174 countries in 1998 and among 100 countries from 1975 to 1998.

<sup>6</sup> Time series data on life expectancy for Turkey was obtained from the web site of the State Planning Organization of Turkey (www.dpt.gov.tr). There is only one life table for Turkey, published in 1989 by State Institute of Statistics. Aysel Alpay (1969) presented another abridged life table in a publication on Turkish demography (see references).

<sup>7</sup> As provinces are not of equal size they are weighted here by their share of Turkey's total population. Actually the overall HDI of Turkey cannot be built up in a strictly consistent manner from the data about the subgroup index values and population shares only. The average life expectancy at birth and the average literacy rate for the national population are not necessarily the population weighted averages of life expectancy and literacy at province level. However, the weighted average is a useful statistic for the discussion of disparities among provinces.

<sup>8</sup> Data used for this discussion does not include 1999 and after. The impact of the major earthquakes in August and November of 1999 are not considered in this document.

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HUMAN DEVEL	LOPMENT	Life expectancy at birth (years) 1997	Adult literacy rate (%) 1997	Combined first-,second and third level gross enrollment ratio (%) 1997	Real GDP per capita (PPP\$) 1997	Life expectancy index	Education index	GDP index	Human development index (HDI)value 1997	Real GDP per capita (PPP\$) rank minus HDI rank
High hun	nan development									
	Kocaeli	74.8	90.8	65.3	16,991.8	0.83	0.82	0.86	0.837	0
2	Yalova	73.8	93.1	71.1	10,735.8	0.81	0.86	0.78	0.817	0
3	İstanbul	73.3	93.1	71.1	10,237.8	0.81	0.86	0.77	0.812	0
4	Bursa	76.2	88.8	71.1	7,420.2	0.85	0.83	0.72	0.801	11
	İzmir	73.1	89.7	72.2	9,394.9	0.85	0.84	0.76	0.800	0
	human developme		07.1	12.2	7,071.7	0.00	0.01	0.70	0.000	0
	Ankara	67.6	92.4	90.5	7,590.5	0.71	0.92	0.72	0.784	7
7	Muğla	72.9	88.6	58.4	8,776.2	0.80	0.79	0.75	0.777	0
8	Sakarya	76.2	87.4	60.7	5,861.6	0.85	0.79	0.68	0.773	20
9	Eskişehir	67.8	91.9	79.1	7,144.2	0.71	0.88	0.71	0.768	11
	Bilecik	69.3	89.4	65.3	8,815.0	0.74	0.81	0.75	0.766	-4
10	DITCCIK	07.0	07.4	00.0	0,013.0	0.74	0.01	0.73	0.700	Albany Street
11	Tekirdağ	70.1	89.9	66.5	7,678.9	0.75	0.82	0.72	0.766	-1
	Balıkesir	73.5	84.7	68.8	5,868.0	0.81	0.79	0.68	0.761	15
	Antalya	72.1	86.8	56.2	7,377.1	0.78	0.77	0.72	0.756	4
	Kırklareli	66.0	90.7	61.9	9,453.1	0.68	0.81	0.76	0.751	-10
	Aydın	73.7	84.0	55.0	6,557.9	0.81	0.74	0.70	0.751	8
15	11yuiii	10.1	04.0	33.0	0,001.2	0.01	0.7	0.70	0.701	0
16	Çanakkale	68.5	86.6	67.6	7,616.4	0.72	0.80	0.72	0.750	-4
	Denizli	72.8	85.3	55.0	6,407.0	0.80	0.75	0.69	0.748	7
	Edirne	65.8	87.7	76.1	7,409.4	0.68	0.84	0.72	0.748	-2
	Manisa	72.2	82.5	55.0	7,193.8	0.79	0.73	0.72	0.745	0
	Bolu	69.1	85.5	64.2	3,635.5	0.73	0.79	0.70	0.740	2
20	Doru	07.1	65.5	04.2	0,000.0	0.70	0.17	0.70	0.740	2
21	Burdur	65.9	88.0	72.2	5,893.9	0.68	0.83	0.68	0.730	4
	İçel	67.4	86.9	53.9	7,534.4	0.71	0.76	0.72	0.729	-8
	Zonguldak	67.1	83.0	58.4	7,965.6	0.70	0.75	0.73	0.727	-15
	Konya	69.6	87.0	58.4	5,115.7	0.74	0.78	0.66	0.725	10
	Artvin	67.5	83.3	66.5	5,878.8	0.71	0.78	0.68	0.722	1
20	Mitvili	07.5	00.0	00.5	3,070.0	0.71	0.70	0.00	0.122	1
26	Uşak	70.6	82.3	64.2	4,660.8	0.76	0.76	0.64	0.721	18
	Adana	65.1	82.6	63.0	7,659.5	0.67	0.76	0.72	0.718	-16
	Kayseri	67.2	85.1	66.5	4,954.0	0.70	0.79	0.65	0.715	13
	Samsun	68.9	81.0	65.3	5,072.5	0.73	0.76	0.66	0.715	87
	Trabzon	68.5	83.5	66.5	4,632.8	0.72	0.78	0.64	0.714	15
00	11802011	00.0	00.0	00.0	4,002.0	0.72	0.70	0.01	0.711	10
31	Nevşehir	65.3	85.5	56.2	6,980.4	0.67	0.76	0.71	0.713	-10
	Kırıkkale	62.0	86.6	68.8	7,239.1	0.62	0.81	0.71	0.713	-14
	Hatay	68.9	81.2	58.4	5,523.1	0.73	0.74	0.67	0.712	-2
	Isparta	67.1	88.8	60.7	4,535.8	0.70	0.79	0.64	0.712	13
	Kilis	70.9	80.1	52.7	5,042.4	0.76	0.71	0.65	0.710	4
33	171110	10.7	00.1	04.1	0,072.7	0.70	0./1	0.00	0.710	Market To
26	Kütahya	67.9	84.0	58.4	5,059.6	0.72	0.75	0.65	0.708	2
	Kutanya Karabük	67.1	84.3	49.3	5,850.8	0.70	0.73	0.68	0.703	-8
	Rize	64.3	82.3	67.6	5,600.7	0.76	0.77	0.67	0.700	-8
	Gaziantep	70.9	75.9	52.7	4,921.6	0.76	0.77	0.65	0.700	3
				65.3	4,921.6	0.76	0.68	0.65	0.699	3
40	Amasya	65.1	83.9	03.3	4,902.2	0.67	0.70	0.05	0.098	0

human Index 1:	DEVELOPMENT 997	Life expectancy	Adult	Combined first-,second and third level	Real GDP	Life	Education	GDP	Human development	Real GDP per capita
		at birth (years) 1997	rate (%) 1997	gross enrollment ratio (%)	per capita (PPP\$) 1997	expectancy index	index	index	index (HDI)value 1997	(PPP\$) rank minu
				1997						HUHlani
	41 Karaman	61.4	86.6	53.9	7,773.7	0.61	0.76	0.73	0.697	-32
	42 Kırşehir	63.7	83.8	71.1	4,568.1	0.65	0.80	0.64	0.693	4
	43 Afyon	69.0	84.9	49.3	3,824.3	0.73	0.73	0.61	0.690	11
	44 Niğde	63.9	80.7	63.0	5,499.4	0.65	0.75	0.67	0.688	-12
	45 Çorum	67.7	77.3	51.6	5,100.6	0.71	0.69	0.66	0.685	-10
	3				,					
	46 Malatya	67.1	80.2	59.6	4,106.8	0.70	0.73	0.62	0.685	5
	47 Bartın	67.1	94.7	49.3	2,789.6	0.70	0.80	0.56	0.685	20
	48 Sivas	68.2	79.9	57.3	3,647.6	0.72	0.72	0.60	0.681	10
	49 Giresun	65.3	77.4	57.3	5,076.9	0.67	0.71	0.66	0.678	-13
	50 Osmaniye	65.1	82.6	. 63.0	3,690.7	0.67	0.76	0.60	0.677	7
	51 Elazığ	63.6	75.0	67.6	5,020.8	0.64	0.73	0.65	0.674	-11
	52 Kastamonu	63.9	73.8	57.3	5,469.2	0.65	0.68	0.67	0.667	-19
	53 Tokat	65.3	78.3	51.6	4,279.2	0.67	0.69	0.63	0.664	-4
	54 Sinop	65.6	77.3	55.0	3,736.0	0.68	0.70	0.60	0.660	2
	55 Çankırı	65.7	82.3	44.7	3,416.9	0.68	0.70	0.59	0.655	5
	56 Aksaray	62.8	79.6	55.0	3,942.9	0.63	0.71	0.61	0.652	-4
	57 Ordu	67.3	77.3	43.5	3,326.4	0.71	0.66	0.58	0.650	4
	58 Gümüşhane	65.6	80.7	51.6	2,854.2	0.68	0.71	0.56	0.649	7
	59 Erzincan	60.6	83.4	43.5	4,359.0	0.59	0.70	0.63	0.641	-11
	60 Yozgat	65.6	78.4	50.4	2,750.8	0.68	0.69	0.55	0.640	8
	61 Bayburt	67.4	81.0	42.4	2,330.4	0.71	0.68	0.53	0.638	11
	62 Erzurum	63.1	76.7	58.4	2,852.1	0.63	0.71	0.56	0.633	4
	63 K.Maraş	61.4	77.3	47.0	3,871.8	0.61	0.67	0.61	0.630	-10
	64 Ardahan	61.1	87.3	56.2	2,198.9	0.60	0.77	0.52	0.629	13
	65 Diyarbakır	69.0	58.9	40.1	3,738.1	0.73	0.53	0.60	0.621	-10
	66 Tunceli	60.3	76.4	42.4	4,195.1	0.59	0.65	0.62	0.621	-16
	67 Adıyaman	63.9	69.8	48.1	2,683.9	0.65	0.63	0.55	0.608	2
	68 Iğdır	61.1	75.8	45.8	2,477.0	0.60	0.66	0.54	0.598	2
	69 Kars	61.1	75.6	48.1	2,222.6	0.60	0.66	0.52	0.594	7
	70 Batman	63.8	60.6	39.0	3,522.5	0.65	0.53	0.59	0.592	-11
	71 34 1	(7.0	560	25.5	0.001.7	0.70	0.40	0.50	0.505	0
	71 Mardin	67.0	56.0	35.5	2,901.7	0.70	0.49	0.56	0.585	-8
	72 Şanlıurfa	64.8	58.1	36.7	2,962.0	0.66	0.51	0.57	0.580	-10
	73 Siirt	64.4	57.2	35.5	2,901.7	0.66	0.50	0.56	0.573	-9
	74 Van	64.4	58.6	43.5	2,270.0	0.66	0.54	0.52 0.52	0.571 0.554	-1
	75 Bingöl	60.3	64.5	37.8	2,224.8	0.59	0.56	0.32	0.554	0
	76 Bitlis	60.6	63.4	27.5	2,196.7	0.59	0.51	0.52	0.541	2
	77 Muş	62.8	60.6	29.8	1,644.9	0.63	0.50	0.47	0.534	2
	78 Hakkari	61.4	56.1	22.9	2,263.6	0.61	0.45	0.52	0.526	-4
	79 Ağrı	61.2	60.2	32.1	1,603.9	0.60	0.51	0.46	0.525	1
1	Low human development									
	80 Şırnak	58.3	44.5	28.7	2,354.1	0.56	0.39	0.53	0.492	-9

nder-rela Man deve			Gender-related development	Lif expect at bi	tancy	Adu litracy		secondary	ed primary and tertiary ollment ratio		er capita PP\$)	HD ran min
DEX	Rank	GDI Rank	index 1997 Value	(%) 1997 Female	(%) 1997 Male	(%) 1997 Female	(%) 1997 Male	(%) 1997 Female	(%) 1997 Male	(%) 1997 Female	(%) 1997 Male	GD
	man developm	ent										
_	Kocaeli	1	0.834	78.0	72.0	84.5	97.1	59.4	70.2	12,362	21,273	C
2	Yalova	2	0.812	76.4	70.7	88.0	98.2	66.2	74.6	8,095	13,316	C
3	İstanbul	3	0.810	76.4	70.7	88.0	98.2	66.2	74.6	8,235	12,087	C
4	Bursa	5	0.796	79.4	73.4	82.7	95.3	62.5	79.1	5,845	8,959	-
5	İzmir	4	0.795	75.9	70.7	83.7	96.0	68.2	75.0	6,504	12,150	50
	human develo		0.,,,0	, 0.5	, 0.,	001,	,			-/	30 <b>X</b> 33 3	
6	Ankara	6	0.781	72.9	62.8	86.9	98.0	86.8	93.0	6,367	8,755	(
7	Muğla	8	0.774	75.7	70.6	82.2	94.8	56.8	59.0	5,962	11,345	
8	Sakarya	11	0.767	79.3	73.3	79.8	95.5	51.2	68.8	4,617	7,080	
	Eskişehir	7	0.763	73.1	62.8	87.0	97.4	70.8	86.7	5,879	8,399	
	Bilecik	13	0.763	72.0	66.9	83.2	95.6	58.1	69.7	6,839	10,651	-
11	Tekirdağ	9	0.764	72.9	67.7	84.6	94.8	65.3	66.4	5,855	9,265	
12	Balıkesir	10	0.757	75.7	71.6	78.0	91.6	63.2	72.5	4,593	7,091	
13	Antalya	16	0.751	74.7	69.9	79.4	94.1	52.4	58.7	4,907	9,658	-
14	Kırklareli	15	0.750	65.0	67.1	85.6	95.5	67.0	57.9	7,207	11,393	-
15	Aydın	17	0.744	76.1	71.5	75.9	92.4	50.6	57.3	4,564	8,514	-
16	Çanakkale	14	0.748	71.1	66.1	80.9	92.3	66.6	67.0	5,909	9,188	
17	Denizli	i8	0.741	75.3	70.5	76.8	94.1	51.9	57.8	4,476	8,300	-
18	Edirne	12	0.746	68.4	63.6	80.9	92.9	77.3	79.6	5,704	8,929	
19	Manisa	20	0.737	74.6	70.0	73.9	91.5	49.6	58.3	5,006	9,332	-
20	Bolu	19	0.735	71.0	67.3	78.1	94.0	54.0	74.5	5,253	8,014	
21	Burdur	21	0.724	68.0	64.1	81.1	95.0	65.4	77.9	3,979	7,741	
	İçel	30	0.722	69.7	65.4	79.7	94.4	48.0	57.9	5,101	9,879	-
23	Zonguldak	23	0.719	70.7	63.6	74.6	92.4	48.9	68.1	6,358	9,654	
24	Konya	31	0.719	72.1	67.1	79.3	95.5	50.1	65.1	3,548	6,688	_
25	Artvin	22	0.714	69.7	65.5	74.9	92.7	58.1	74.1	4,727	7,082	
	Uşak	24	0.712	73.8	67.4	73.0	92.4	57.5	71.0	3,284	6,055	
	Adana	25	0.713	67.7	62.7	73.5	92.3	54.8	70.6	7,224	8,088	
	Kayseri	27	0.708	69.5	65.0	76.2	94.6	57.4	73.5	4,104	5,803	
	Samsun	26	0.706	71.5	66.2	72.3	91.0	55.8	74.8	4,115	6,089	
30	Trabzon	28	0.704	71.7	65.2	73.2	95.0	55.6	76.2	3,745	5,573	
	Nevşehir	34	0.707	66.3	64.5	76.7	95.0	50.4	61.6	5,783	8,194	-
	Kırıkkale	29	0.707	64.3	59.8	78.3	95.3	57.0	78.9	5,944	8,489	
	Hatay	33	0.702	71.7	66.1	70.7	92.2	52.3	62.4	3,794	7,241	
	Isparta	37	0.705	69.5	65.0	81.7	96.0	54.8	64.4	3,044	5,934	-
35	Kilis	32	0.708	73.4	68.5	73.7	87.8	45.5	60.1	4,678	5,383	
	Kütahya	38	0.700	71.1	64.8	76.6	91.8	47.0	68.9	3,541	6,569	-
	Karabük	44	0.696	70.1	63.6	76.2	93.4	40.9	57.3	4,829	6,854	-
	Rize	35	0.681	66.6	61.9	70.8	95.8	53.5	82.7	4,573	6,727	
	Gaziantep	39	0.692	73.4	68.5	62.6	89.4	45.5	60.1	4,458	5,375	
40	Amasya	36	0.693	67.3	63.1	. 77.1	91.2	57.0	72.3	3,883	5,907	

UMAN	-RELATED DEVELOPMENT		Gender-related development	Lif expect at bi	tancy		lult y rate	secondary	d primary and tertiary Iment ratio	GDP pe (PP	r capita P\$)	HDI rank
IDEX _		GDI Rank	index 1997 Value	(%) 1997	(%) 1997	(%) 1997	(%) 1997	(%) 1997	(%) 1997	(%) 1997	(%) 1997	minus GDI Rank
	HDI Rank	Harik	Value	Female	Male	Female	Male	Female	Male	Female	Male	
	41 Karaman	43	0.690	63.8	58.8	80.6	93.5	46.5	60.1	6,521	9,073	-2
	42 Kırşehir	40	0.684	65.5	61.8	75.8	93.0	61.4	79.8	2,858	6,383	2
	43 Afyon	50	0.682	71.6	66.4	76.4	94.1	41.0	58.1	2,690	4,963	-7
	44 Niğde	41	0.679	66.2	61.5	70.0	93.1	51.4	76.2	4,642	6,412	3
	45 Çorum	47	0.677	69.8	65.6	69.4	86.7	41.6	62.7	4,157	6,114	-2
	46 35 1	40	0.670	(0.5	(10	60.6	01.1	<i>E</i> 11	66.8	3,651	4,554	4
	46 Malatya	42	0.678	69.5	64.9	69.6	91.1	51.1			3,364	-7
	47 Bartin	54	0.679	70.7	63.6	90.2	100.0		57.3	2,237		
	48 Sivas	45	0.674	70.7	65.7	69.5	90.8	48.0	67.2	3,247	4,049	3
	49 Giresun	48	0.668	67.7	62.9	64.7	91.1	50.9	61.7	4,073	6,105	1
	50 Osmaniye	49	0.672	67.7	62.7	73.5	92.3	54.8	70.6	2,512	4,867	1
	51 Elazığ	46	0.662	65.2	62.1	61.5	89.4	51.0	83.7	4,500	5,549	5
	52 Kastamonu	51	0.655	65.4	62.3	64.3	85.1	45.7	68.7	4,446	6,585	1
	53 Tokat	53	0.656	67.5	63.2	69.8	87.8	42.6	59.9	3,449	5,134	0
	54 Sinop	52	0.660	68.2	62.9	70.0	86.1	46.1	64.9	3,053	4,488	2
	55 Çankırı	59	0.649	62.2	64.3	74.6	90.7	36.9	52.2	2,822	4,016	-4
			0.440		<b></b>	60.4	01.6	45.4	(2.0	2.257	4.570	1
	56 Aksaray	55	0.642	64.7	60.7	69.4	91.6	45.4	63.9	3,357	4,579	1
	57 Ordu	57	0.642	69.4	65.4	66.6	89.1	37.6	48.6	2,677	3,996	0
	58 Gümüşhane	56	0.638	68.0	63.2	70.8	92.4	40.6	62.9	2,333	3,415	. 2
	59 Erzincan	61	0.638	62.9 68.0	58.5 63.2	73.3 68.8	92.9 89.3	40.2	46.4 59.2	3,803 2,320	4,867 3,204	-2 2
	60 Yozgat	58	0.633	08.0	03.2	00.0	09.3	41.9	39.2	2,320	3,204	
	61 Bayburt	64	0.631	69.9	64.9	70.7	92.5	35.0	49.6	1,894	2,784	-3
	62 Erzurum	60	0.624	64.4	61.8	63.8	90.1	44.9	71.4	2,543	3,156	2
	63 K.Maraş	65	0.617	63.3	59.1	65.5	89.5	40.0	53.5	2,662	5,062	-2
	64 Ardahan	62	0.624	63.8	58.4	78.7	95.1	46.9	66.1	1,999	2,389	2
	65 Diyarbakır	63	0.604	71.4	66.7	39.0	78.4	30.9	49.0	3,398	4,064	2
	(( Truncali	66	0.616	62.7	57.9	65.7	87.3	41.9	41.3	3,714	4,663	0
	66 Tunceli	67	0.597	66.2	61.6	55.1	85.2	39.5	56.7	2,469	2,889	0
	67 Adıyaman	69	0.593	63.8	58.4	63.9	91.7	35.5	56.4	2,202	2,749	-1
	68 Iğdır	68	0.586	63.8	58.4	62.9	88.5	42.2	51.9	1,984	2,458	1
	69 Kars 70 Batman	70	0.573	66.2	61.5	40.7	80.2	28.1	48.7	3,204	3,826	0
	(0 200											
	71 Mardin	71	0.566	69.6	64.7	35.3	76.9	28.3	42.5	2,659	3,139	0
	72 Şanlıurfa	72	0.562	67.3	62.5	37.9	77.6	27.7	45.6	2,690	3,218	0
	73 Siirt	74	0.551	66.5	62.4	37.0	77.2	23.2	46.4	2,669	3,123	-1
	74 Van	73	0.551	64.9	64.1	39.2	78.0	29.3	57.8	2,047	2,485	1
	75 Bingöl	75	0.542	62.3	58.2	49.7	80.3	28.7	47.8	2,005	2,447	0
	76 Bitlis	77	0.526	63.0	58.5	45.5	80.5	18.1	36.1	1,957	2,420	-1
	76 Bittis 77 Muş	76	0.514	65.2	60.6	39.4	81.6	21.5	38.0	1,482	1,801	1
	77 Muş 78 Hakkari	79	0.514	63.9	59.4	30.0	77.0	16.5	28.4	1,482	2,569	-1
		79	0.505	63.2	59.4	39.8	80.9	21.9	41.9	1,452	1,752	1
	79 Ağrı		0.303	03.2	37.3	37.0	60.9	21.9	71.7	1,702	1,102	1
	Low human developm 80 Şırnak	ent 80	0.466						33.4	2,081		(

ASUR	E	WERMENT	Gender empowerment measure (GEM) rank	Seats held in municipal and provincial parliament (% women)	Administrators and managers (% women)	Professional and technical workers (% women)	Earned income share (% to women)	GEM value
		Rank						
Hi	igh hun	ıan development						
	1	Kocaeli	4	0.2	5.0	28.7	37.2	0.305
	2	İstanbul	2	3.8	8.9	34.2	38.6	0.318
	3	Bursa	14	0.7	5.0	31.8	38.9	0.247
	4	İzmir	3	3.4	7.5	37.4	33.8	0.311
M	ledium	human developmen	ıt					
	5	Ankara	1	4.1	13.9	36.7	40.9	0.350
	6	Muğla	5	1.2	7.2	31.6	32.4	0.279
	7	Sakarya	26	1.1	4.1	24.1	39.0	0.216
	8	Eskişehir	8	1.0	6.1	34.0	41.0	0.265
	9	Bilecik	19	0.0	4.7	26.8	37.4	0.230
	10	Tekirdağ	6	1.6	5.1	35.0	35.5	0.270
	11	Balıkesir	18	0.8	4.5	31.3	38.3	0.235
		Antalya	16	0.4	6.0	30.9	31.9	0.241
		Kırklareli	7	0.4	5.5	34.8	35.3	0.269
		Aydın	13	0.7	5.8	34.3	34.5	0.259
		Çanakkale	9	0.6	5.3	32.0	37.2	0.256
	10	quitarraio		0.0	0.0	02.0		0.40
	16	Denizli	25	0.1	4.0	30.9	34.6	0.217
		Edirne	15	0.4	5.0	39.0	36.3	0.247
		Manisa	21	0.1	3.3	31.1	34.4	0.220
		Bolu	17	0.1	4.8	28.5	39.5	0.235
		Burdur	29	0.0	4.4	30.7	33.1	0.215
	20	Durdur	47	0.0		00.7	00.1	0.210
	21	İçel	12	1.2	4.4	33.3	33.2	0.249
		Zonguldak	10	1.8	5.3	28.9	40.9	0.253
		Konya	46	0.0	2.4	25.1	41.5	0.182
		Artvin	35	0.0	3.3	25.7	41.1	0.195
		Uşak	31	0.6	2.4	31.2	35.4	0.193
	23	Uşak	31	0.0	2.4	31.2	00.4	0.200
	26	Adana	11	0.6	6.4	31.9	46.8	0.249
		Kayseri	41	0.0	2.6	26.6	41.4	0.249
		Samsun	20	1.6	3.6	31.4	41.4	0.187
		Trabzon	44	0.0	3.2	26.8	41.6	0.223
		Nevşehir	28	0.0	4.8	26.8	41.6	0.183
	30	Nevşelili	20	0.0	4.0	20.2	41./	0.213
	21	Kırıkkale	30	0.0	2.9	21.3	40.3	0.219
		Hatay	23	0.0	3.7	32.2	34.2	0.219
			23	0.4	6.0	30.3	33.3	0.218
		Isparta		0.2		23.1	33.3	0.217
		Kütahya	40		2.0	23.1	42.7	0.187
	35	Rize	54	0.0	2.2	23.2	42./	0.1/4
	27	C	26	0.7	1.0	002	44.0	0.104
		Gaziantep	36	0.6	1.8	28.3	44.8	0.194
		Amasya	27	1.1	3.6	31.0	39.3	0.216
		Karaman	22	0.0	3.9	25.2	42.7	0.219
		Kırşehir	52	0.0	2.6	24.5	43.4	0.177
	40	Afyon	55	0.0	2.8	25.7	35.2	0.173

GENDER I MEASURE	EMPOWERMENT	Gender empowerment measure (GEM) rank	Seats held in municipal and provincial parliament (% women)	Administrators and managers (% women)	Professional and technical workers (% women)	Earned income share (% to women)	GEM value
	HDI Rank	Turk	(70 Women)		(10 Monton)		
	41 Niğde	32	0.0	2.7	32.8	43.5	0.204
	42 Çorum	50	0.3	2.0	24.1	42.2	0.181
	43 Malatya	42	0.0	1.5	29.5	41.0	0.186
	44 Sivas	56	0.0	2.5	25.7	41.5	0.173
	45 Giresun	43	0.0	3.8	28.0	40.6	0.175
	45 Gifesuii	40	0.4	3.0	20.0	40.0	0.100
	46 Elazığ	49	0.0	1.7	25.6	45.1	0.182
	47 Kastamonu	57	0.0	2.6	23.1	42.4	0.172
	48 Tokat	38	0.5	3.8	26.6	40.9	0.191
	49 Sinop	33	0.0	4.9	30.4	42.8	0.199
	50 Çankırı	53	0.0	3.4	24.8	41.5	0.174
	o government						
	51 Aksaray	37	0.0	7.7	24.5	44.3	0.192
	52 Ordu	45	0.6	2.6	28.6	40.9	0.183
	53 Gümüşhane	70	0.0	1.5	20.1	42.3	0.135
	54 Erzincan	47	0.5	2.4	27.1	41.7	0.182
	55 Yozgat	66	0.0	0.9	22.3	47.3	0.147
	56 Bayburt	69	0.0	0.7	22.4	46.1	0.138
	57 Erzurum	48	0.0	3.0	26.8	44.2	0.182
	58 K.Maraş	58	0.0	1.7	25.1	34.1	0.171
	59 Diyarbakır	39	0.0	2.7	28.7	44.5	0.189
	60 Tunceli	34	0.0	2.1	34.2	43.7	0.195
	61 Adıyaman	59	0.0	2.3	24.4	45.2	0.161
	62 Kars	51	0.7	1.8	29.4	44.3	0.180
	63 Batman	72	0.0	1.2	18.3	43.5	0.134
	64 Mardin	65	0.0	2.2	19.9	45.2	0.147
	65 Şanlıurfa	63	0.0	1.5	21.4	43.1	0.150
	66 Siirt	67	0.0	1.8	19.4	44.9	0.143
	67 Van	60	0.0	1.2	25.9	45.1	0.156
	68 Bingöl	68	0.0	0.4	24.4	45.3	0.142
	69 Bitlis	61	0.0	0.7	26.1	42.9	0.150
	70 Muş	62	0.0	1.0	26.5	44.1	0.150
					10 (	20.2	0.105
	71 Hakkari	71	0.0	1.1	19.6	38.2	0.135
	72 Ağrı	64	0.0	0.8	26.9	44.7	0.149
Lo	ow human development						0.110
. 3	73 Şırnak	73	0.0	1.2	14.6	40.4	0.113

INDE				People not expected to survive to age 40 (as %) of total population	Moderately and severely underweight children under five	Population without access to health services	Population without access to safe water (%)	Adult illiteracy rate (%) 1997	Human poverty index (HPI) value	HPI rank minus HDI rank
	HDI	Rank	HPI Rank	(1990-95)	(%)	(%)			(%)	
	High h	uman developm	ent							
	1	Kocaeli	2	5.0	6		0.0	9	7	1
	2	İstanbul	1	6.2	6		0.0	7	6	-1
	3	Bursa	4	4.0	6		0.0	11	8	1
	4	İzmir	3	6.3	6		0.0	10	8	-1
	Mediu	m human develo	pment							
	5	Ankara	11	12.0	8		0.0	8	9	6
	6	Muğla	7	6.5	10		3.8	11	9	1
	7	Sakarya	6	4.0	6		0.0	13	9	-1
	8	Eskişehir	9	11.8	8		0.0	8	9	1
	9	Bilecik	10	9.9	8		0.1	11	9	1
		Tekirdağ	5	9.2	6		0.1	10	8	-5
		0								
	11	Balıkesir	18	6.0	6		0.0	15	11	7
		Antalya	12	7.2	10		1.1	13	10	0
		Kırklareli	14	13.4	6		0.0	9	10	1
		Aydın	21	5.9	6		0.2	16	11	7
		Çanakkale	17	10.8	6		0.0	13	11	2
	10	çanarran	17	10.0	0	•	0.0	10	1.1	
	16	Denizli	16	6.6	6		0.3	15	11	0
		Edirne	24	13.8	6		0.1	13	12	7
		Manisa	27	7.1	6		0.1	17	12	9
		Bolu	19	10.2	8		0.6	14	11	0
		Burdur	22	13.6	10	•	0.3	12	11	2
	20	buruur	22	13.0	10		0.3	12	11	2
	0.1	taal	20	11.0	10		0.5	1.2	11	
		İçel	20	11.9	10		0.5	13	11	-1
		Zonguldak	33	12.4	8	•	1.0	17	13	11
		Konya	13	9.7	8		0.3	13	10	-10
		Artvin	32	11.9	8		0.3	17	13	8
	25	Uşak	31	8.8	8		1.5	18	13	6
	2.1	7.9								
		Adana	38	14.7	10		0.1	17	14	12
		Kayseri	25	12.2	8		0.0	15	12	-2
		Samsun	36	10.5	8		2.3	19	14	8
		Trabzon	29	10.9	8		0.0	17	13	0
	30	Nevşehir	30	14.3	8		0.0	14	13	0
					80.64					Sel-Sel-Sel-Sel-Sel-Sel-Sel-Sel-Sel-Sel-
		Kırıkkale	48	18.4	30		0.1	13	16	17
		Hatay	35	10.5	10		0.0	19	14	3
		Isparta	15	12.3	10		0.0	11	10	-18
		Kilis	39	8.4	10		1.1	20	14	5
	35	Kütahya	26	11.5	8		1.0	16	12	-9
	71									
		Karabük	28	12.4	8	in	1.0	16	13	-8
		Rize	41	15.6	8		0.0	18	15	4
		Gaziantep	58	8.4	10		0.3	24	17	20
		Amasya	34	14.6	8		0.0	16	13	-5
	40	Karaman	43	19.2	8	Taraka,	0.8	13	15	3

INDEX			People not expected to survive to age 40 (as %) of total population	and severely underweight children under five	Population without access to health services (%)	Population without access to safe water (%)	Adult illiteracy rate (%) 1997	Human poverty index (HPI) value (%)	HPI rank minus HDI rank
	HDI Rank	HPI Rank	(1990-95)	(%)	(70)			(70)	
	41 Kırşehir	40	16.4	8		0.0	16	14	-1
	42 Afyon	23	10.3	8		0.1	15	12	-19
	43 Niğde	47	16.1	8		0.0	19	16	4
	44 Çorum	52	11.7	8		1.6	23	16	8
	45 Malatya	44	12.3	19		0.2	20	15	-1
×	40 Maiatya	77	12.0	17		0.2	20	10	
	46 Bartın	8	12.4	8		1.4	5	9	-38
	47 Sivas	45	11.2	19		1.9	20	15	-2
	48 Giresun	57	14.4	8		2.6	23	17	9
	49 Elazığ	60	16.4	19		0.0	25	19	11
	50 Kastamonu	61	16.2	8		4.7	26	20	11
	30 Kastamonu	01	10.2	U		7./	20	20	
	51 Tokat	51	14.5	8		0.4	22	16	0
	52 Sinop	56	14.1	8		0.6	23	17	4
	53 Çankırı	37	14.0	8		2.6	18	14	-16
	54 Aksaray	55	17.5	8		0.2	20	17	1
	55 Ordu	53	12.1	8		0.8	23	17	-2
	33 Oldu		12.1	U		0.0	20	11	2
	56 Gümüşhane	46	14.1	19		2.1	19	15	-10
	57 Erzincan	54	20.1	19		0.8	17	17	-3
	58 Yozgat	50	14.1	8		1.2	22	16	-8
	59 Bayburt	42	12.0	19		0.0	19	15	-17
	60 Erzurum	59	17.0	19		0.7	23	18	-1
	00 Lizurum	39	17.0	19		0.7	20	10	-1
	61 K.Maraş	65	19.4	19		17.4	23	20	4
	62 Ardahan	49	19.6	19		10.5	13	16	-13
	63 Diyarbakır	72	10.3	19	1.124	5.5	41	29	9
	64 Tunceli	63	20.5	19		1.4	24	20	-1
	65 Adıyaman	66	16.2	19		1.4	30	22	1
	05 Haryaman	00	10.2	1)	***	1.7	00	22	1
	66 Iğdır	62	19.6	19		1.8	24	20	-4
	67 Kars	64	19.6	19		2.3	24	20	-3
	68 Batman	69	16.2	19	200	5.4	39	28	1
	69 Mardin	76	12.4	19		2.9	44	31	7
	70 Şanlıurfa	74	15.0	19		6.7	42	30	4
	70 Şailliulla	/ 4	13.0	1)		0.7	72	00	-
	71 Siirt	75	15.5	19		2.4	43	30	4
	72 Van	73	15.4	19		2.4	41	29	1
	73 Bingöl	67	20.5	19	11.	0.6	35	26	-6
	74 Bitlis	68	20.1	19		0.3	37	27	-6
	75 Muş	70	17.4	19		2.9	39	28	-5
	10 Iviuş	/ 0	1/.4	17		۵.۶	09	20	-3
	76 Hakkari	77	19.0	19	3	0.3	44	31	1
	77 Ağrı	71	19.4	19		4.0	40	29	-6
	ow human developme		17.7	1)		1.0	10	27	O

Note: Osmaniye and Yalova are not included due to insufficient data.

rends in uman dev di 1975	ELOPMENT:	Life expectancy at birth (years) 1975	Adult literacy rate (%) 1975	Combined first, second and third level gross enrolment ratio (%) 1975	Real GDP per capita (PPP\$) 1975	Life expectancy index	Education index	GDP index	Human development index (HDI) value 1975	Real GDP per capita (PPP\$) rank minus HDI rank
Modiu	m human develo	nmont		1373					The second second	
		-	02.1	60.0	2 201	0.65	0.76	0.50	0.667	1
1		64.3	83.1	62.8	3,291	0.65	0.76	0.58	0.667	1
2		65.5	74.8	51.2	3,731	0.68	0.67	0.60	0.650	-1
3		64.1	76.7	57.7	2,308	0.65	0.70	0.52	0.626	0
4		66.8	71.0	53.8	2,010	0.70	0.65	0.50	0.617	2
5	Ankara	58.8	77.7	65.6	1,736	0.56	0.74	0.48	0.592	3
	T 1	50.5	77.1	(0.7	1 745	0.57	0.70	0.40	0.500	1
6	3	59.5	77.1	62.7	1,745	0.57	0.72	0.48	0.592	1
7		64.4	69.1	56.8	1,613	0.66	0.65	0.46	0.590	6
8		66.8	67.9	48.2	1,421	0.70	0.61	0.44	0.584	11
9	-	58.8	69.6	53.3	2,011	0.56	0.64	0.50	0.569	-4
1	0 Aydın	64.6	66.0	47.3	1,468	0.66	0.60	0.45	0.569	8
1	1 Tekirdağ	61.4	73.0	42.4	1,663	0.61	0.63	0.47	0.568	-2
	2 Muğla	63.9	68.7	48.4	1,289	0.65	0.62	0.43	0.565	15
	3 Antalya	63.2	67.4	48.5	1,391	0.64	0.61	0.44	0.562	7
	4 Bilecik	60.7	71.3	46.5	1,524	0.60	0.63	0.45	0.560	2
	5 Manisa	63.3	64.1	43.7	1,643	0.64	0.57	0.47	0.559	-5
1	o manisa	00.0	07.1	40.7	1,040	0.04	0.57	0.47	0.557	
1	6 Denizli	63.8	64.4	51.6	1,298	0.65	0.60	0.43	0.559	10
	7 Çanakkale	60.0	70.0	46.8	1,624	0.58	0.62	0.47	0.557	-5
	8 Zonguldak	58.9	63.3	53.7	2,046	0.56	0.60	0.50	0.556	-14
	9 Kırklareli	57.9	75.5	42.0	1,578	0.55	0.64	0.46	0.551	-4
	0 Edirne	57.7	72.1	45.8	1,636	0.54	0.63	0.47	0.548	-9
					,					
2	1 Bolu	60.5	67.4	49.2	1,360	0.59	0.61	0.44	0.547	1
2	2 Uşak	61.8	60.0	58.5	1,208	0.61	0.60	0.42	0.542	9
2	3 Kayseri	58.9	65.5	57.0	1,327	0.57	0.63	0.43	0.541	2
2	4 Adana	57.0	65.6	54.6	1,579	0.53	0.62	0.46	0.538	-10
2	5 Burdur	57.8	66.4	51.2	1,485	0.55	0.61	0.45	0.537	-8
	6 Konya	59.5	66.8	49.3	1,254	0.57	0.61	0.42	0.535	2
	7 Isparta	59.1	69.1	50.9	1,147	0.57	0.63	0.41	0.535	8
	8 Kütahya	59.5	62.8	47.5	1,354	0.58	0.58	0.43	0.529	-5
	9 Artvin	59.2	65.0	52.6	1,152	0.57	0.61	0.41	0.529	5
3	0 Gaziantep	62.1	54.9	47.3	1,353	0.62	0.52	0.43	0.526	-6
				A.						
	1 Nevşehir	57.3	65.6	51.5	1,245	0.54	0.61	0.42	0.523	-2
	2 Samsun	60.4	57.2	50.0	1,239	0.59	0.55	0.42	0.519	2
	3 Rize	56.4	60.4	55.1	1,360	0.52	0.59	0.44	0.515	-12
	4 Hatay	60.3	58.2	49.9	1,102	0.59	0.55	0.40	0.514	2
3	5 Afyon	60.4	60.8	45.6	1,046	0.59	0.56	0.39	0.513	4
	( )	F7 1	(0.0	FO.4	1 101	0.52	0.50	0.41	0.510	4
	6 Amasya	57.1	62.3	52.4	1,191	0.53	0.59	0.41	0.513	-4
	7 Trabzon	60.0	58.9	48.9	970	0.58	0.56	0.38	0.506	8
	8 Kırşehir	55.8	58.7	55.5	1,168	0.51	0.58	0.41	0.500	-5
	uman developme		F7.0	50.7	025	0.57	0.55	0.07	0.407	10
	9 Malatya	58.8	57.8	50.7	935	0.56	0.55	0.37	0.497	10
4	0 Çankırı	57.6	61.7	45.2	968	0.54	0.56	0.38	0.495	6

TRENDS I HUMAN I HDI 1975	N DEVELOPMENT:	Life expectancy at birth (years) 1975	Adult literacy rate (%) 1975	Combined first, second and third level gross enrolment ratio (%) 1975	Real GDP per capita (PPP\$) 1975	Life expectancy index	Education index	GDP index	Human development index (HDI) value 1975	Real GDP per capita (PPP\$) rank minus HDI rank
							0 = 1	0.05	0.400	1.5
	41 Sivas	59.8	55.4	51.1	822	0.58	0.54	0.35	0.490	15
	42 Çorum	59.4	53.8	47.2	965	0.57	0.52	0.38	0.489	5
	43 Giresun	57.2	55.7	50.9	1,029	0.54	0.54	0.39	0.489	-2
	44 Elazığ	55.7	57.3	53.3	1,066	0.51	0.56	0.39	0.489	-6
	45 Tokat	57.2	57.0	48.6	912	0.54	0.54	0.37	0.483	5
	46 Nigde	56.0	57.1	48.1	973	0.52	0.54	0.38	0.473	-2
	47 Erzincan	53.1	61.4	47.8	961	0.47	0.57	0.38	0.471	1
	48 Sinop	57.5	55.3	47.4	789	0.54	0.53	0.34	0.471	9
	49 Gümüşhane	58.1	57.7	47.6	671	0.55	0.54	0.32	0.471	14
	50 Kastamonu	56.0	52.8	44.0	1,086	0.52	0.50	0.40	0.471	-13
	51 Yozgat	57.5	55.3	46.2	754	0.54	0.52	0.34	0.467	7
	52 Ordu	59.0	49.8	48.1	673	0.57	0.49	0.32	0.459	10
	53 Diyarbakır	60.4	40.8	34.8	1,043	0.59	0.39	0.39	0.457	-13
	54 Erzurum	55.3	53.1	44.3	853	0.50	0.50	0.36	0.455	-2
	55 Tunceli	52.8	55.3	52.6	823	0.46	0.54	0.35	0.453	0
	56 Kars	53.5	53.4	47.0	731	0.47	0.51	0.33	0.440	3
	57 K.Maraş	53.6	51.6	38.1	858	0.48	0.47	0.36	0.435	-6
	58 Mardin	58.8	35.4	34.1	850	0.56	0.35	0.36	0.423	-5
	59 Ş.Urfa	56.8	35.4	33.6	987	0.53	0.35	0.38	0.420	-16
	60 Muş	55.0	38.7	35.9	824	0.50	0.38	0.35	0.410	-6
	•									
	61 Siirt	54.5	34.3	30.7	994	0.49	0.33	0.38	0.402	-19
	62 Adıyaman	56.0	36.5	40.0	566	0.52	0.38	0.29	0.394	3
	63 Bingöl	52.8	46.8	33.8	566	0.46	0.42	0.29	0.392	3
	64 Ağrı	53.6	46.0	31.5	561	0.48	0.41	0.29	0.392	3
	65 Van	56.4	31.6	27.9	690	0.52	0.30	0.32	0.383	-5
	30 , 311	55	02.0							
	66 Bitlis	53.1	36.5	26.9	686	0.47	0.33	0.32	0.374	-5
	67 Hakkari	53.8	26.1	22.1	616	0.48	0.25	0.30	0.343	-3
		00.0			111111111111111111111111111111111111111	100000000000000000000000000000000000000	THE STREET, SALES	3800 00 000	2   2	

JLATIO FISTIC		7	OTAL		LIDDAN DO	DIII ATION		DUDAL DO	DULATION.	
		Contract of	JIAL	annual increase	URBAN PC	PULATION	annual increase	RURAL PC	PULATION	annual increase
	11010	1990 (in 1000)	1997 (in 1000)	rate ‰	1990 (in 1000)	1997 (in 1000)	rate %	1990 (in 1000)	1997 (in 1000)	rate ‰
	HDI Rank									
Higi	h human develop									
	1 Kocaeli	920.9	1.177.4	34.6	513.5	629.3	28.6	407.3	548.0	41.7
	2 Yalova	134.5	163.9	27.8	87.0	110.1	33.1	47.5	53.8	17.0
	3 İstanbul	7,195.8	9.198.8	34.5	6,779.6	8,506.0	31.9	416.2	692.8	71.
	4 Bursa	1,596.2	1.958.5	28.8	1,153.2	1,484.8	35.6	443.0	473.7	9.
	5 İzmir	2,694.8	3.114.8	20.4	2,137.4	2,544.4	24.5	557.3	570.5	3.
Wed	lium human deve									
	6 Ankara	3,236.4	3,693.4	18.6	2,837.4	3,294.2	21.0	398.9	399.2	0.
	7 Muğla	562.8	640.0	18.1	198.1	240.6	27.4	364.7	399.4	12.
	8 Sakarya	683.3	731.8	9.7	295.6	331.4	16.1	387.7	400.4	4.
	9 Eskişehir	641.3	660.8	4.2	477.4	518.6	11.6	163.9	142.2	-20.
	10 Bilecik	175.5	192.1	12.7	90.5	115.0	35.0	85.1	76.1	-15.
	11 Tekirdağ	468.8	567.4	26.8	258.4	358.9	46.2	210.4	208.5	-1.
	12 Balıkesir	974.3	1,031.0	8.0	468.8	538.2	19.4	505.5	492.8	-3.
	13 Antalya	1,132.2	1,509.6	40.5	602.2	866.5	51.2	530.0	643.1	-3. 27.
	14 Kırklareli	309.5	318.9	4.2	149.5					-16.
	15 Aydın	824.8	900.0	12.3	384.7	176.3 465.1	23.1	160.0	142.6	
	13 Hydin	024.0	900.0	12.3	384./	465.1	26.7	440.1	434.9	-1.
	16 Çanakkale	432.3	448.8	5.3	168.5	198.6	23.1	263.7	250.2	-7.
	17 Denizli	750.9	816.3	11.7	337.3	381.8	17.4	413.6	434.4	6.
	18 Edirne	404.6	398.1	-2.3	210.4	225.3	9.6	194.2	172.9	-16.
	19 Manisa	1,154.4	1,232.0	9.2	590.4	696.0	23.2	564.0	536.0	-7.
	20 Bolu	536.3	553.0	4.2	206.2	265.1	35.3	330.7	288.0	-19.
									*	
	21 Burdur	254.9	252.8	-1.2	129.1	132.6	3.8	125.8	120.1	-6.
	22 İçel	1,267.3	1,508.2	24.5	788.6	955.6	27.0	478.7	552.7	20.
	23 Zonguldak	653.7	612.7	-9.1	234.1	239.2	3.0	419.6	373.5	-16.
	24 Konya	1,752.7	1,931.8	13.7	963.1	1,140.0	23.7	789.5	791.8	0.
	25 Artvin	212.8	184.1	-20.4	66.1	80.3	27.4	146.7	103.8	-48.
	26 Uşak	290.4	311.8	10.0	146.8	171.2	21.6	143.6	140.6	-3.
	27 Adana	1,549.2	1,682.5	11.6	1,125.1	1,272.9	17.4	424.1	409.6	-4.
	28 Kayseri	943.8	974.0	4.4	606.0	681.8	16.6	337.8	292.2	-20.
	29 Samsun	1,161.2	1,153.8	-0.9	526.5	590.4	16.1	634.7	563.4	-20. -16.
	30 Trabzon	795.8	846.9	8.7	316.0	419.9	40.0	479.8	427.0	-16.
	00 11452011	193.0	040.9	0.7	310.0	419.9	40.0	4/9.8	427.0	-10.
	31 Nevşehir	298.5	287.9	-0.8	113.0	123.8	12.9	176.7	164.1	-10.
	32 Kırıkkale	350.2	357.5	2.9	243.4	240.5	14.9	106.9	87.0	-28.
	33 Hatay	1,109.8	1,197.1	10.7	531.7	591.5	15.0	578.0	605.7	6.
	34 Isparta	434.8	461.6	8.4	229.8	266.9	21.1	205.0	194.6	-7.
	35 Kilis	130.2	109.9	-23.8	87.2	66.8	-37.6	43.0	43.1	0.
	26 77 11									
	36 Kütahya	577.9	639.6	14.3	242.6	309.2	34.1	335.3	330.4	-2.
	37 Karabük	244.2	227.5	-10.0	152.5	160.0	6.8	91.7	67.5	-43.
	38 Rize	348.8	325.6	-9.7	133.4	172.7	36.3	215.4	152.9	-48.
	39 Gaziantep	1,019.4	1,127.7	15.5	738.2	866.6	22.5	272.2	261.1	-5.
	40 Amasya	359.2	346.2	-5.2	162.3	183.0	16.8	196.9	163.2	-26.

POPULA STATIST		TOT	·AI		URBAN PO	ΡΙ ΙΙ ΔΤΙΩΝΙ		RURAL PO	PULATION	
		1990	1997	annual increase rate	1990	1997	annual increase rate	1990	1997	annual increase rate
	HDI Rank	(in 1000)	(in 1000)	%	(in 1000)	(in 1000)	<b>%</b> 0	(in 1000)	(in 1000)	<b>‰</b>
	41 Karaman	215.2	224.3	5.8	106.1	131.6	30.3	109.1	92.7	-22.9
	42 Kırşehir	256.7	241.5	-8.6	126.1	140.1	14.1	129.9	101.4	-34.8
	43 Afyon	739.0	797.6	10.7	306.2	370.9	27.0	432.8	426.7	-2.0
	44 Nigde	301.7	315.9	6.5	97.3	119.3	28.7	204.4	196.6	-5.5
	45 Çorum	608.7	578.2	-7.2	253.8	289.6	18.6	354.8	288.6	-29.1
	3	•								
	46 Malatya	702.1	815.2	21.0	372.1	509.7	44.3	330.8	305.4	-10.9
	47 Bartın	205.8	187.0	-13.5	43.7	45.4	5.6	162.2	141.6	-19.1
	48 Sivas	766.8	698.0	-13.2	384.8	395.5	3.8	382.0	302.6	-32.8
	49 Giresun	499.6	460.8	-11.4	222.1	239.0	10.3	277.5	221.8	-31.5
	50 Osmaniye	384.1	438.4	18.6	237.8	298.4	31.9	146.3	140.0	-6.1
	51 Elazığ	498.2	518.4	5.6	274.0	334.2	27.9	224.2	184.2	-27.6
	52 Kastamonu	423.2	363.7	-21.3	148.9	157.6	8.0	274.3	206.1	-40.2
	53 Tokat	718.8	695.9	-4.6	309.0	335.1	11.4	409.8	360.8	-17.9
	54 Sinop	265.2	214.9	-29.5	86.4	87.5	1.7	178.7	127.4	-47.0
	55 Çankırı	249.3	248.6	-0.4	104.1	117.7	17.3	145.2	130.9	-14.0
	34444									
	56 Aksaray	330.6	347.2	6.9	144.2	169.1	22.4	186.4	178.1	-6.4
	57 Ordu	826.9	840.1	2.2	342.3	394.0	19.8	848.6	446.2	-11.
	58 Gümüşhane	168.8	154.0	-13.0	59.0	63.2	9.6	109.8	90.8	-26.
	59 Erzincan	299.3	280.1	-9.3	144.1	158.9	13.7	155.1	121.2	-34.
	60 Yozgat	579.2	599.7	4.9	208.9	266.0	34.0	370.3	333.7	-14.
	(1 Daybyyut	107.2	99.9	-10.5	41.3	47.0	18.2	66.0	52.6	-31.9
	61 Bayburt	107.3 848.2	873.3	4.1	401.0	511.9	34.4	447.2	361.4	-30.
	62 Erzurum 63 K.Maraş	892.3	1,008.1	16.9	407.2	551.9	42.8	487.0	456.3	-9.
	64 Ardahan	169.7	128.6	-39.0	34.0	33.8	-1.2	135.7	94.8	-50.
	65 Diyarbakır	1,096.4	1,282.7	22.1	594.9	832.6	47.3	501.6	450.1	-15.
	oo Diyandarar	1/0/01	-,							
	66 Tunceli	133.6	86.3	-61.5	50.8	55.4	12.2	82.8	30.9	-138.
	67 Adıyaman	513.1	679.0	39.4	222.1	394.3	80.7	291.0	284.7	-3.
	68 Iğdır	142.6	145.4	2.7	51.9	68.8	39.8	90.7	76.5	-23.
	69 Kars	349.8	323.0	-11.2	130.0	149.1	19.3	219.8	173.8	-33.
	70 Batman	344.1	400.4	21.3	194.4	273.1	47.8	149.7	127.3	-22.
	71 741:	EE0.2	6460	20.7	249.0	362.4	52.8	309.2	284.4	-11.
	71 Mardin	558.3	646.8	37.1	551.6	784.9	49.6	449.8	518.7	20.
	72 Şanlıurfa	1,001.5 243.4	1,303.6 262.4	10.5	110.2	158.8	51.4	133.2	103.5	-35.
	73 Siirt 74 Van	637.4	762.7	25.2	259.1	381.1	54.3	378.3	381.7	1.
	74 van 75 Bingöl	249.1	234.8	-8.3	86.6	127.5	54.4	162.4	107.3	-58.
	76 Bitlis	330.1	339.6	4.0	142.9	198.3	46.1	187.2	141.3	-36.
	77 Muş	376.5	422.2	16.1	103.1	153.0	55.6	273.5	269.2	-2.
	78 Hakkari	172.5	219.3	33.8	71.5	128.8	82.8	101.0	90.5	-15.
	79 Ağrı	437.1	466.1	9.0	158.8	217.9	44.6	278.3	248.1	16.
	Low human developm			20.	1050	1070	(0.1	10/7	100 5	
	80 Şırnak	262.0	316.5	28.4	125.3	187.0	60.1	136.7	129.5	-7.

RESS IN IVAL	one year	ant deaths under of age in total leaths		percentage of deaths	Persons killed as percent of total traffic accidents		
	1991 (%)	1997 (%)	1991 (%)	1997 (%)	1991 (%)	1997 (%)	
High human developmen	ıt						
1 Kocaeli	13.2	6.8	0.4	1.0	4	1	
2 Yalova	0.0	2.3	0.0	0.5		2	
3 İstanbul	14.4	9.6	0.4	0.8	1/4	0	
4 Bursa	7.7	6.9	0.5	0.6	4	1	
5 İzmir	11.1	8.9	0.8	1.1	2	0	
Medium human develop	ment						
6 Ankara	11.5	8.0	0.7	0.9	2	0	
7 Muğla	6.5	5.1	6.1	1.9	5	3	
8 Sakarya	6.2	3.6	0.6	0.8	9	3	
9 Eskişehir	16.8	8.6	0.6	1.3	8	4	
10 Bilecik	7.1	3.1	0.3	1.4	6	4	
					Ü	10-1	
11 Tekirdağ	7.5	5.9	1.2	2.0	9	3	
12 Balıkesir	7.1	6.8	0.5	1.2	6	2	
13 Antalya	12.7	9.4	1.3	1.7	7	2	
14 Kırklareli	11.0	2.9	0.5	1.6	11	5	
15 Aydın	8.1	6.3	1.4	1.8	8	3	
	0.1	0.0	1.1	1.0	Ö	J	
16 Çanakkale	6.2	5.6	0.8	3.5	11	3	
17 Denizli	9.9	9.2	1.4	1.5	4	2	
18 Edirne	7.1	6.9	1.9	1.4	8	3	
19 Manisa	7.8	5.3	1.9	1.3		3	
20 Bolu	5.5	3.8	2.4	4.3	6 11	5	
20 5014	0.0	0.0	2.7	т.0	11	3	
21 Burdur	5.5	5.3	0.4	2.9	13	5	
22 İçel	17.0	10.4	1.4	1.8	5	4	
23 Zonguldak	9.3	10.5	1.7	4.3	8	3	
24 Konya	13.3	12.3	0.5	1.1			
25 Artvin	8.1	4.8	1.6	5.2	10	5	
23 1111111	0.1	4.0	1.0	3.2	11	4	
26 Uşak	9.0	6.1	1.5	1.1	7	3	
27 Adana	15.5	12.0	0.8	0.8	6	2	
28 Kayseri	11.3	11.1	1.0	0.6	16	3	
29 Samsun	16.4	14.7	0.1	0.1	11	3	
30 Trabzon	16.5	18.2	1.7	1.1	7	2	
00 11002011	10.0	10.2	1.7	1.1		2	
31 Nevşehir	8.7	3.5	1.4	1.2	8	5	
32 Kırıkkale	9.2	5.4	0.3	0.7	9	8	
33 Hatay	9.8	6.2	0.6	1.7	12	5	
34 Isparta	7.7	6.7	1.5	3.1	11	7	
35 Kilis	0.0	9.0	0.0	0.6	11	7	
			0			1	
36 Kütahya	12.6	9.3	2.6	1.6	9	2	
37 Karabük	0.0	2.8	0.0	1.0	N. O. Valley	1	
38 Rize	7.6	1.9	0.0	2.1	10	3	
39 Gaziantep	26.3	27.7	0.3	0.9	7	5	
40 Amasya	8.3	8.4	0.0	0.5	11	6	

OGRESS IN RVIVAL	one year o	int deaths under of age in total eaths		percentage of deaths	Persons killed as percent of total traffic accidents		
	1991 (%)	1997 (%)	1991 (%)	1997 (%)	1991 (%)	1997 (%)	
41 Karaman	3.8	4.6	1.0	1.3	24	3	
42 Kırşehir	8.4	3.9	3.1	2.7	6	9	
43 Afyon	16.2	9.4	1.3	1.1	11	6	
43 Aryon 44 Niğde	12.5	5.2	0.3	1.7	. 8	6	
	12.3	8.1	2.3	1.4	10	4	
45 Çorum	12.1	0.1	2.3	1.4	10		
46 Malatya	14.1	16.7	0.7	1.2	6	3	
47 Bartın	0.0	5.6	0.0	3.3	9	5	
48 Sivas	15.0	10.4	0.5	2.0	11	3	
49 Giresun	6.1	7.3	0.0	0.9	11	4	
50 Osmaniye	0.0	19.1	0.0	0.9		5	
51 Elazığ	15.9	10.4	1.3	1.1	10	4	
51 Elazig 52 Kastamonu	7.9	4.9	1.4	1.3	11	11	
52 Kastamonu 53 Tokat	11.8	9.7	0.3	1.1	9	3	
	10.0	2.5	1.6	1.5	7	3	
54 Sinop	7.5	5.2	1.3	0.5	13	9	
55 Çankırı	7.3	5.2	1.0	0.5	10	1 3h 2 1 1 1	
56 Aksaray	12.0	11.4	0.0	4.1	7	6	
57 Ordu	17.9	4.2	2.5	1.1	9	3	
58 Gümüşhane	11.3	14.7	1.7	5.9	11	4	
59 Erzincan	13.8	11.7	0.5	1.0	10	5	
60 Yozgat	11.3	9.0	0.9	1.7	8	8	
61 Bayburt	14.4	7.4	0.0	1.1	8	6	
62 Erzurum	21.6	16.9	0.7	0.3	7	4	
63 K.Maraş	16.9	14.5	2.9	3.8	11	4	
64 Ardahan	0.0	15.7	0.0	6.9		14	
65 Diyarbakır	27.4	25.6	0.6	1.4	10	6	
					10		
66 Tunceli	11.3	5.9	2.5	4.9	13	6	
67 Adıyaman	30.9	18.6	1.5	4.0	7	4	
68 Iğdır	0.0	4.3	0.0	3.2	TIME IL	13	
69 Kars	16.7	11.4	4.9	3.8	14	9	
70 Batman	19.9	13.4	1.5	6.2	12	9	
71 Mardin	18.8	14.3	2.5	4.7	13	8	
72 Şanlıurfa	29.3	28.3	0.4	1.8	12	10	
73 Siirt	21.7	12.8	0.4	1.3	8	1	
74 Van	36.1	29.3	0.5	2.7	15	9	
75 Bingöl	21.0	18.3	1.9	2.8	9	9	
7/ nult	22.0	0.5	1.6	3.6	16	12	
76 Bitlis	33.0	9.5	1.6	0.7	17	7	
77 Muş	33.3	15.7	2.1	2.4	5	13	
78 Hakkari	36.8	19.2			10	10	
79 Ağrı	22.6	11.3	4.1	13.5	10	10	
Low human developm	ent	26.2	1.9	3.6	27	10	

HEAL'	TH PRO	OFILE					Number of	population	per healt	h persone	el			
			Spe	ecialist	Pra	ctitioner	De	ntist	N	urse	Heal	th Officer	N	1idwife
			1990	1997	1990	1997	1990	1997	1990	1997	1990	1997	1990	1997
		l Rank									1000	1007	1000	1007
	High h	uman developi	ment											
	1	Kocaeli	3,030	2,521	3,217	2,251	6,283	6,330	1,657	1063	4,752	1,890	2,346	1,519
	2			2,687		1,656		3,725		1,232		1,725	44.00	1,591
	3	İstanbul	929	1,046	1,563	1,294	2,036	2,461	1,061	941	4,899	3,116	2,469	2,919
	4	Bursa	1,805	1,815	2,602	1,805	5,471	4,431	1,254	1023		1,638		1,678
	5	İzmir	1,157	1,008	1,218	822	2,910	2,866	729			1,396		1,438
		n human deve	lopment										,	V
	6	Ankara	856	702	879	637	2,345	1,962	600	482	1,311	863	1,899	1,533
	7	Muğla	3,829	2,302	2,745	1,730	6,052	5,289	843	591	2,269	1,565	1,297	
	8	Sakarya	3,753	3,210	4,435	3,012	6,831	5,762	2,121	1,560	3,253	1,946		1,601
		Eskişehir	1,931		1,864	1,139	5,673	5,417	784	545	1,579	1,003		1,114
	10	Bilecik	7,632	4,802	2,090	1,715	8,776	10,108	1,553			1,762		1,289
	600													
		Tekirdağ		2,404		1,762	5,718	5,563	1,227	987	5,692	1,854	1,853	1,292
		Balıkesir	3,299			2,042	4,679	4,483	1,051	823	2,609	1,534	1,321	877
		Antalya		1,591		1,301	6,660	6,038	1,201	955	2,789	2,007	1,715	1,164
		Kırklareli	4,073			2,044	8,598	4,621	1,228	906	3,095	1,392	1,426	1,022
	15	Aydın	3,197	2,278	3,032	1,493	4,768	4,663	1,090	789	2,205	1,565	1,574	1,087
	12	0 11 1												
		Çanakkale		3,095		1,960	6,088	5,100	1,271	684	2,588	1,496	1,351	806
		Denizli	3,559	***		1,597	6,529	3,677	1,249	860	2,296	1,354	1,722	794
		Edirne		1,442		1,076	5,255	4,977	939	723	1,891	1,368	836	70
		Manisa	3,608			1,799	6,791	6,318	1,560		3,436		1,889	1,301
	20	Bolu	4,751	2,957	3,486	2,609	10,737	7,000	1,380	993	3,254	1,831	1,858	1,627
	0.1	Danidan	( 700	0.500	0.074	2.522	0.004							
		Burdur		8,508		3,522		13,488	1,294		1,536			1,339
		İçel Zonguldak		3,790	4,892		6,599	5,823	1,517		3,144			1,197
				3,208		2,278	9,672	5,726	1,675		5,650			1,608
		Konya Artvin		1,831		1,249	9,889	4,728	962		3,098	-		1,226
	23	Altvill	9,0/4	3,409	1,745	134	12,520	10,226	1,150	614	1,542	844	647	635
	2.6	Uşak	4 920	3,583	2,399	1 702	7,443	5,028	1,091	1.010	2.016	1.007	1 417	(75
		Adana	3,371		3,038		6,537	8,809	1,347	1,019 1,032			1,416	
		Kayseri	2,599		1,854		8,424	7,730	1,373		2,307		1,866	
		Samsun	2,853		2,535		10,343	4,868	1,155				1,596 1,771	
		Trabzon	3,171		2,248		8,651	8,065	1,155				1,771	
			<b>/</b>	,	_/	-/-//	0,001	0,000	1,100	010	1,011	1,110	1,000	1,317
	31	Nevşehir	7,238	4,429	1,983	2,071	10,340	7.197	2.335	1,454	1 2.11	847	1,868	1 556
		Kırıkkale	4,853		3,459		11,271			1,430			3,459	
	33	Hatay	4,586	4,086	4,999	***		6,139		2,082			2,185	
	34	Isparta	3,685		3,106			5,770	925		1,924	944	1,279	704
	35	Kilis		5,495		1,691		18,318	E19-	1,047		2,114		1,249
													15.50	, /
		Kütahya	6,215		3,753	2,508	18,063	13,054	1,871	1,355	2,766	1,428	2,502	1,560
		Karabük		3,345		2,126		10,832	1.00			1,591		1,379
		Rize	5,206		3,059	2,342	11,626	11,227	1,637	1,229			1,896	
		Gaziantep	4,581		3,815		10,464			1,526			3,177	150
	40	Amasya	5,761	5,770	2,813	2,339	25,514	17,310	1,076			1,072		995

HEALTH PROI	FILE	Number of population per health personel											
		Speci	alist	Pract	itioner	Denti	ist	Nur	se	Health 0	fficer	Mid	wife
		1990	1997	1990	1997	1990	1997	1990	1997	1990	1997	1990	1997
HDI R	lank	,,,,,,	1007										
41	Karaman	6,398	5,603	2,500	1,567	11,449	10,186	2,314	1,685	2,940	1,883	2,092	1,524
	Kırşehir	4,586	5,061	3,022	2,873	11,676	10,286	2,023	1,944	1,712	1,250	1,451	1,111
	Afyon	7,247	5,697	3,345	2,508	17,191	11,559	2,059	1,570	2,448	1,453	1,825	1,387
	Niğde	6,951	5,096	2,832	1,975	20,391	11,701	2,067	1,269	4,565	1,289	1,709	1,029
	Çorum		4,778	3,407	2,547	14,521	13,141	2,346	1,620	4,765	1,580	2,147	1,841
	,												
46	Malatya	5,616	3,483	3,966	1,904	11,509	10,450	1,192	856	3,066	1,485	1,382	1,075
	Bartın		3,896	·	2,200		8,500		1,238		1,746		1,546
	Sivas	2,508	3,456	2,326	1,388	20,743	17,898	1,454	1,016	3,537	1,639	2,669	1,741
	Giresun		5,178			13,134		1,434	728	1,680	991	1,293	974
	Osmaniye		10,195		3,593		15,116		2,011	-	1,712		1,245
	,						,						
51	Elazığ	4.258	2,658	2.102	1.667	10,168	9,599	1,181	770	2,622	1,364	1,183	1,197
	Kastamonu	9,013		2,315		13,238	9,329	1,540	945	2,463		1,681	1,438
	Tokat	8,462		3,315		19,979			1,094		1,310	1,329	1,219
	Sinop	7,576		3,195		13,258	8,955	1,396	892	1,756		1,396	1,075
	Çankırı		7,769				11,838			1,586		1,661	1,801
00	Şum	1.,0,1	. ,	_/	_/			1		,	,	,	,
56	Aksaray	7 096	5,599	2.994	2.117	21,760	16.532	5.100	2,428	7,591	2.269	1,667	2,591
	Ordu	8,558		3,825			17,875		1,182			1,705	1,344
	Gümüşhane						13,999		1,540		1,555	1,293	1,510
	Erzincan	6,959		2,963			15,562	1,672			1,291	1,519	2,001
	Yozgat		9,086	1.50		27,579				2,669		1,833	2,019
	102841	10,000	7,000	2),00	2,000	_,,		-/	_/		,		,
61	Bayburt	8 944	9,058	2.555	1.329	35.777	24,910	2.236	1.582	4.128	1.607	1,412	2,430
	Erzurum	4,178		2,256			19,406	1,309		1,483		1,676	2,335
	K.Maraş	8,930		5,379			14,402		1,355		1,836	1,660	1,565
	Ardahan		9,893	0,0,7	1,919		18,372		9,186	28.4	1,568		1,261
	Diyarbakır	2,102		2,276			9,363	1.334	1,001		2,103	2,365	2,429
00	Diyarbakii	2,102	1/120	2,210	2,200	11/202	7/000	/	-/	/	,	/	
66	Tunceli	22.191	17 254	2.048	1.092	44,381	9.585	1.100	529	1.463	713	510	474
	Adıyaman		12,574				32,333					1,900	
	Iğdır		7,652	.,,,,,,	2,237		14,538		1,118		2,237		976
	Kars		9,499				16,149				2,084		1,210
	Batman		8,897				23,552					3,252	1.5
7.0	Datillair	11,102	0,001	0,020	.,272	20,010	20,002	.,000	_,	./-	_/	,	
71	Mardin	19.919	15,042	4.72.7	3.300	37.182	64,683	2,656	1.758	3,187	2.812	2,558	3,535
	Şanlıurfa		7,949				27,158					3,372	
	Siirt		10,495				29,152					2,174	
	Van		5,051			31,872			1,220			2,529	
	Bingöl		8,696				19,566					1,684	
13	Diligoi	22,013	0,090	0,024	2,700	22,010	17,000	2,010	1,021	4,100	1,210	1,001	1,700
76	Bitlis	22 000	13,063	4 287	3 602	36,679	42.456	3 550	1 749	4 344	2.830	2,579	3.174
	Muş					125,514						2,035	
	Muş Hakkari		19,940			73,120			1,556			1,895	
						145,698						2,541	
	Ağrı		20,203	4,400	0,020	143,070	31,704	2,430	2,010	1,000	2,009	2,0+1	0,004
	man developm	12 660	25 171	2 740	1506	262,006	62 207	5 2/17	2.055	6 719	3 222	4 367	3 908
80	Şırnak	43,008	35,1/1	3,/43	4,380	202,006	03,307	3,34/	4,000	0,/10	0,002	4,007	0,700

EDUCATION PROFILE			Gross enrolment r	atios 1995-1996		
	Primary	schools	General junio	r high schools	General hi	gh schools
	male	female	male	female	male	female
HDI Rank						
High human developm	ent					
1 Kocaeli	100.4	98.1	73.4	56.6	53.1	45.4
2 Yalova						
3 İstanbul	109.0	106.2	80.2	61.7	43.5	47.7
4 Bursa	101.8	99.0	76.9	57.3	52.7	43.5
5 İzmir	106.5	102.5	73.0	63.1	47.5	48.8
Medium human develo						
6 Ankara	111.0	109.2	87.2	77.8	66.8	65.6
7 Muğla	98.3	102.7	63.3	55.5	38.7	40.6
8 Sakarya	97.9	96.8	60.8	39.8	51.7	33.2
9 Eskişehir	98.8	96.1	89.1	70.0	68.4	55.0
10 Bilecik	90.5	88.9	77.5	54.0	61.2	48.6
	, 0.0	001)	77.0	01.0	01.2	40.0
11 Tekirdağ	96.2	95.2	76.7	67.1	56.4	51.1
12 Balıkesir	105.4	104.3	75.6	58.6	50.7	47.0
13 Antalya	98.9	98.5	64.9	54.1	41.0	36.6
14 Kırklareli	96.8	97.6	79.6	70.4	65.1	62.6
15 Aydın	92.5	87.6	57.57	49.7	42.6	38.0
,	,2.0	07.0	07.07	77.1	42.0	36.0
16 Çanakkale	95.0	94.6	78.4	64.0	57.8	45.6
17 Denizli	88.8	89.2	57.0	46.1	42.2	37.3
18 Edirne	96.6	99.5	76.3	61.2	56.0	49.2
19 Manisa	91.5	87.1	56.9	45.3	39.0	30.3
20 Bolu	102.0	98.3	63.8	45.1	49.4	35.4
20 Bolu	102.0	70.0	03.8	43.1	49.4	33.4
21 Burdur	91.3	95.2	65.5	58.1	16.0	12 (
22 İçel	89.5	85.9	55.9	47.8	46.2	43.6
23 Zonguldak	89.7	88.0	66.8	43.9	40.2	35.2
24 Konya	84.1	83.2	51.8		56.3	36.3
25 Artvin	105.9	98.4		32.6	38.4	23.4
23 Aitviii	103.9	98.4	95.7	79.1	73.2	44.7
26 Uşak	101.1	101.5	661	E1 2	50.0	27.0
27 Adana	98.1	91.6	66.4	51.3	50.8	37.0
28 Kayseri	94.4	89.7	62.1	49.4	47.8	37.4
29 Samsun	95.7		70.0	56.2	50.4	38.1
30 Trabzon	93.7	92.3 90.6	53.4	38.0	47.1	33.5
30 Habzon	92.0	90.6	60.7	43.2	55.3	36.6
31 Nevşehir	95.4	02.1	(12	16.6	41.0	22.5
32 Kırıkkale		93.1	64.3	46.6	41.9	32.5
33 Hatay	99.4	97.5	89.9	63.7	64.6	40.0
34 Isparta	96.6	95.0	57.3	43.1	43.8	32.8
35 Kilis	70.5	78.2	57.4	46.3	43.9	38.8
oo Kiiis			10.			
36 Kütahya	70 (	70.0	745	20.0	160	2.1.2
37 Karabük	79.6	78.9	64.5	32.9	46.9	24.3
38 Rize		112.0				
	112.8	113.2	68.4	43.4	65.7	40.8
39 Gaziantep	101.0	97.5	47.2	27.2	30.4	18.3
40 Amasya	91.4	89.0	67.2	47.4	56.5	37.0

EDUCATION PROFILE	Gross enrolment ratios 1995-1996								
	Primary s	chools	General junior	high schools	General high schools				
	male	female	male	female	male	female			
HDI Rank									
				20.0	75.7	27.0			
41 Karaman	85.6	87.9	54.9	38.9	45.7	37.0			
42 Kırşehir	93.6	92.5	75.1	53.6	61.1	41.2			
43 Afyon	96.5	70.1	49.1	28.5	37.7	21.7			
44 Niğde	86.8	86.8	50.7	32.8	36.4	20.6			
45 Çorum	90.3	86.0	57.5	28.1	45.4	22.6			
46 Malatya	94.2	89.8	52.9	38.6	51.6	35.4			
47 Bartin	84.5	86.1	61.9	31.3	39.7	20.3			
48 Šivas	88.4	87.2 .	58.8	36.0	44.4	25.3			
49 Giresun	89.4	91.6	61.4	44.8	48.2	33.6			
50 Osmaniye									
51 Elazığ	97.7	92.5	74.7	40.8	56.2	27.6			
52 Kastamonu	86.7	89.5	59.1	33.6	52.2	24.2			
53 Tokat	79.5	76.5	54.3	30.0	38.6	21.5			
54 Sinop	96.1	91.0	50.1	30.9	37.5	25.7			
55 Çankırı	67.6	69.2	56.5	32.4	37.9	22.2			
55 Çalıkılı	07.0	07.2	30.0	02.1	01.0	22.2			
56 Aksaray	92.4	89.7	50.96	30.9	39.0	19.4			
	73.5	73.1	47.4	31.8	32.5	22.5			
57 Ordu		79.1	55.2	29.1	42.9	14.3			
58 Gümüşhane	85.9		51.8	37.9	40.2	23.9			
59 Erzincan	73.7	73.8	55.6	29.4	39.8	17.9			
60 Yozgat	84.8	84.1	33.0	29.4	37.0	17.7			
(1 D 1	02.0	07.5	46.2	23.0	34.7	10.9			
61 Bayburt	83.0	87.5		21.6	45.9	14.8			
62 Erzurum	84.5	76.8	53.3		33.6	18.3			
63 K.Maraş	83.0	81.7	48.2	30.3					
64 Ardahan	99.0	95.0	56.9	34.5	44.7	17.3			
65 Diyarbakır	71.6	55.9	35.4	19.0	25.6	11.7			
	<b>70.0</b>	60.0	(1.0	51.0	20.6	20.7			
66 Tunceli	72.2	68.2	61.3	51.8	39.6	32.7			
67 Adıyaman	83.1	81.4	45.3	24.7	36.3	16.0			
68 Iğdır	79.6	64.5	39.6	27.3	34.6	19.7			
69 Kars	89.4	86.1	51.1	28.3	36.0	16.1			
70 Batman	70.3	54.0	36.8	15.2	24.2	7.8			
				11.0	2.1	. 7			
71 Mardin	68.8	59.0	33.0	11.3	24.7	6.7			
72 Şanlıurfa	68.3	55.1	30.6	12.2	20.5	6.2			
73 Siirt	62.4	43.2	37.1	9.7	31.6	7.6			
74 Van	67.4	50.9	36.6	12.1	29.7	7.5			
75 Bingöl	75.1	60.0	33.3	14.5	28.8	9.3			
7( p:/!:-	4E 0	22 5	30.1	10.6	25.3	5.2			
76 Bitlis	45.9	33.5	25.9	9.5	19.6	5.8			
77 Muş	56.4	42.5			25.3	6.1			
78 Hakkari	46.8	29.9	29.1	9.6	19.8	5.3			
79 Ağrı	56.9	40.4	30.5	9.9	19.8	5.5			
Low human development		0.0	02.2	90	12.3	2.6			
80 Şırnak	67.6	2.2	23.3	8.0	12.3	2.0			

Map 1: Province and Regions of Turkey



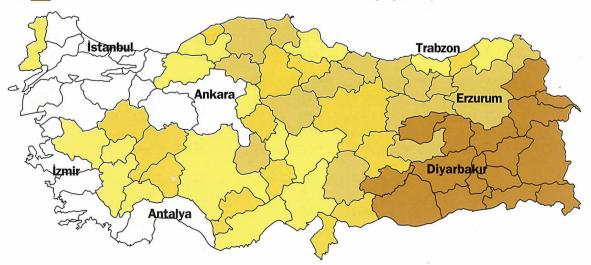
# Disparities in regional development

Using data from the tables presented in this report, the provinces of Turkey were ranked according to the overall HDI and also for each of the component indices. This ranking was divided into quintiles, and the provinces were shaded accordingly on the maps.

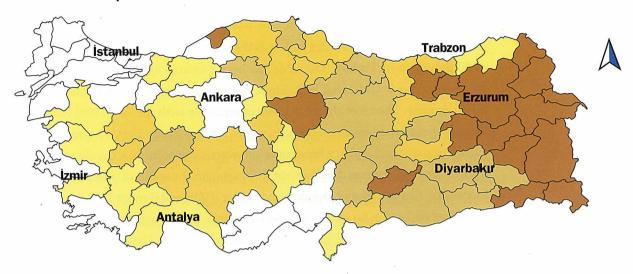
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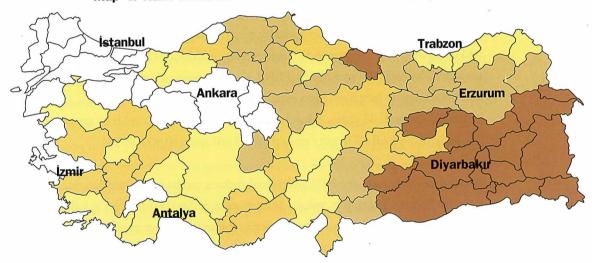
Map 2: Rank distribution of province HDI values by quintile, 1997



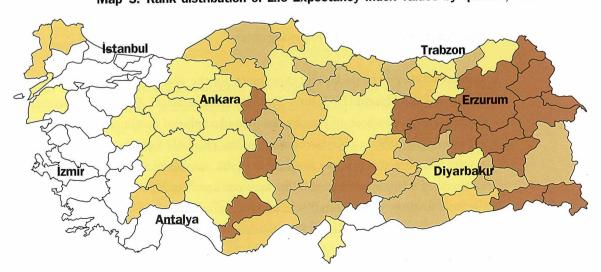
Map 3: Rank distribution of GDI values by quintile, 1997



Map 4: Rank distribution of Education Index values by quintile, 1997



Map 5: Rank distribution of Life Expectancy Index values by quintile, 1997



# **TECHNICAL NOTE, COMPUTING THE INDICES**

The Human Development Index table lists the years and relative levels of human development of 80 provinces in Turkey. The table has been prepared by using 1997 data. The income component has been treated by a different discount method as the 1999 and 2000 global HDRs suggest. Therefore the table is not comparable with the last (1998) National Human Development Report results. The index values are now lower. This is because of the different calculation method and not because of the worsening of human development in Turkey! Two measures of human development that highlight the status of women for measuring the inequality, Gender-related Development Index (GDI) and Gender Empowerment Measure (GEM) are updated as far as new data was available. The disaggregated Human Poverty Index (HPI) is also updated and presented for each province. The HDI and GDI results are internationally comparable, yet GEM and HPI are not suitable for international comparison.

The HDI is based on three indicator: longevity, as measured by life expectancy at birth; educational attainment, as measured by a combination of adult literacy (two- thirds weight) and combined primary, secondary and tertiary enrolment ratios; and standard of living, as measured by real GDP per capita (PPP\$). For the construction of the index, fixed minimum and maximum values have been established for each of these indicators: Life expectancy at birth: 25 years and 85 years; Adult literacy: 0% and 100%; Combined gross enrolment ratio: 0% and 100%; Real GDP per capita (PPP\$) \$100 and \$40,000 (PPP\$).

For any component of the HDI, individual indices can be computed according to the general formula: index = (Actual  $x_i$  value - Minimum  $x_i$  value) (Maximum  $x_i$  value - Minimum  $x_i$  value). The HDI for a province is calculated as the arithmetic average of these three components (indices), namely life expectancy (IL), educational attainment (IE) and adjusted income (IY):

HDI = (IL + IE + IY) / 3

The indices are based on the following data:

Life expectancy at birth (L): Life expectancy for the year 1997 is calculated using a Ph.D. thesis by Seref Hoşgör (1997) and "East-life table models". Educational attainment (E) is composed of two indicators: literacy rate (R) and combined enrolment ratio (C). Literacy rates are taken from 1990 population census results. The 1997 figures are extrapolations of these results. Combined enrolment is the ratio of the number of students in primary, secondary and tertiary schools to the population between ages 7 to 21. 1995/96 figures are taken from the State Institute of Statistics (Social and Economic Characteristics of Population). However, the figures have been modified. SIS calculates the enrolment ratio of Eskisehir province by assuming that all students of the "Open University" are resident in this province, which is not the case. Open University students have been redistributed in this study to all provinces

according to their shares in tertiary education. 1997 data on "Per Capita Gross Domestic Product by Provinces" has been taken from the web-site of the State Institute of Statistics (www.die.gov.tr).

#### The gender-related development index

The GDI adjusts the average achievement in each province in life expectancy, educational attainment and income in accordance with the disparity in achievement between women and men. For this gender sensitive adjustment the harmonic mean of the male and female values are calculated. The GDI also adjusts the maximum and minimum values for life expectancy, to account for the fact that women tend to live longer than men. For the women the maximum value is 87.5 years and the minimum value 27.5 years; for men the corresponding values are 82.5 and 22.5 years.

The calculation of the income index is not straightforward. Female and male shares of income are derived from data on the ratio of the average non-agricultural female wage to the average non-agricultural male wage and male percentage shares of economically active population aged 12 and above. (The HDR considers actually population aged 15 and above). The wage ratios are derived from a SIS publication: Employment and Wage Structure 1994. The publication itself does not contain data on wage rates by geographic region, however, the respective division in SIS provided kindly the unpublished wage by region data. Here wage ratio data were available only for seven geographic regions and four largest towns. For each province in a region, the same wage ratio has been assumed. Before income is indexed, the average adjusted real GDP per capita of each province is discounted on the basis of the disparity in the female and male shares of earned income in proportion to the female and male population shares. The indices for life expectancy, educational attainment and income are added together with equal weight to derive the final GDI value. An illustration is provided in HDR 2000.

### The gender empowerment measure

To derive an "equally distributed equivalent percentage" EDEP for all three variables (parliamentary representation, administrative and professional positions, share of earned income) the methodology of population weighted (1-€) averaging has been used. Data on parliamentary representation has been collected from the Office of the Prime Minister (T.C. Başbakanlık Kadının Statüsü ve Sorunları Genel Müdürlüğü verileri, Ankara, 1993) Data on employed population by occupation has been derived from 1990 census. Each variable is indexed by dividing the EDEP by 50%. The three indices (for economic participation and decision-making, political participation and decision-making, and power over economic resources- are added together to derive the final GEM value. An illustration is provided in HDR 2000.

# The human poverty index

In constructing the HPI, the deprivation in longevity is represented by the percentage of people not expected to survive to age 40 (P1), and the deprivation in knowledge by the percentage of adults who are illiterate (P2). Data on survival has been derived from the Ph.D. thesis of Hosgör and "eastern life tables". The illiteracy data has been projected from 1990 census. The deprivation in a decent living standard in terms of overall economic provisioning is represented by a composite (P3) of three variables: the percentage of people without access to safe water (P31), the percentage of people without access to health services (P32) and the percentages of moderately and underweight children under five (P33). Data on "safe water" has been taken from a publication of Agricultural Ministry: "Yolu ve Sağlıklı İçme Suyu Olmayan Köy Envanteri (01.01.1998 tarih itibariyle)", Ankara, 1998. Data here is available on a provincial basis, however, including only the rural population. There was information on P<sub>33</sub> in a SIS-UNICEF (Ankara) preliminary-study (1995), yet, only for five regions. The provinces in these regions have been assigned the same regional values. Data on access to health services, as it is defined in HDR 1999 (the percentage of population that can reach appropriate local health services on foot or by local means of transport in no more than one hour) is not available in Turkey. The global HDR consider the variable for Turkey as zero. For consistency it has been assumed here also there is no access problem to health services in Turkey.

The composite variable  $P_3$  is constructed by taking a simple average of the  $P_{31}$ ,  $P_{32}$ , and  $P_{33}$ . Thus  $P_3 = (P_{31} + P_{32} + P_{33}) / 3$ .

The formula for HPI =  $[1/3 (P_1^3 + P_2^3 + P_3^3)]^{1/3}$ . An example is provided in HDR 2000.

#### **DEFINITIONS OF STATISTICAL TERMS**

**Combined gross enrolment ratio:** The number of students enrolled in a level of education, regardless of age, as a percentage of the population of official school age for that level. The combined gross primary, secondary and tertiary enrolment ratio refers to the number of students at all these levels as a percentage of the population of official school age for these levels.

**Education index:** One of the three indicators on which the human development index is built. It is based on the combined primary, secondary and tertiary gross enrolment ratio and the adult literacy rate.

**Enrolment ratio, age group (adjusted):** The primary school age group enrolment ratio is the enrolments of primary school age (regardless of the education level in which the pupils are enrolled) as a percentage of the population of official primary school age. The secondary school age group enrolment ratio is the enrolments of secondary school age (regardless of the education level in which the pupils are enrolled) as a percentage of the population of official secondary school age. The term adjusted indicates that the age groups used to calculate the ratios correspond to the structure of the education system in each country.

**Functional illiteracy rate:** The proportion of the adult population aged 16-65 scoring at level 1 on the prose literacy scale of the International Adult Literacy Survey. (IALS).

**GDP index:** One of the three indicators on which the human development index is built. It is based on GDP per capita (PPP US \$).

**GDP per capita (ppp US\$):** The GDP per capita of a country converted into US dollars on the basis of the purchasing power parity. (PPP) exchange rate.

**Gross domestic product (GDP):** The total output of goods and services for final use produced by an economy by both residents and non-residents, regardless of the allocation to domestic and foreign claims. It does not include deductions for deprivation of physical capital or depletion and degradation of natural resources.

**Gross national product (GNP):** Comprises GDP plus net factor income from abroad, which is the income residents receive from abroad for factor services (labor and capital), less similar payments made to non-residents who contribute to the domestic economy.

**Gender empowerment measure (GEM):** A composite index using variables constructed explicitly to measure the relative empowerment of women and men in political and economic spheres of activity. Three indices – for economic participation and decision making, for political participation and decision making and for power over economic resources – are added to derive the final GEM value.

**Gender related development index (GDI):** A composite index using the same variables as the human development index. The difference is that the GDI adjusts the average achievement of each country in life expectancy, educational attainment and income in accordance with the disparity in achievement between women and men.

**Human development index (HDI):** A composite index based on three indicators: longevity, as measured by life expectancy at birth; educational attainment, as measured by a combination of adult literacy (two-thirds weight) and the combined gross primary, secondary and tertiary enrolment ratio (one-third weight); and standard of living, as measured by GDP per capita (PPP US\$).

**Human poverty index (HPI):** The human poverty index for developing countries (HPI-1) measures deprivations in three dimensions of human life – longevity, knowledge and a decent standard of living. The HPI for industrialized countries (HPI-2) includes, in addition to these three dimensions, social exclusion.

**Illiteracy rate (adult):** Calculated as 100 minus the literacy rate (adult).

**Life expectancy at birth:** The number of years a newborn infant would live if prevailing patterns of mortality at the time of birth were to stay the same throughout the child's life.

**Life expectancy index:** One of the three indicators on which the human development index is built. For deals how the index is calculated, see the technical note.

**Literacy rate (adult):** The percentage of people aged 15 and above who can, with understanding, both read and write a short, simple statement on their everyday life.

**Probability of surviving to age 40 (60):** The probability of a newborn infant surviving to age 40 (60) if the prevailing patterns of age-specific mortality at the time of birth remain the same throughout the child's life.

**Purchasing power parity (PPP):** At the PPP rate, one dollar has the same purchasing power over domestic GDP as the US dollar has over US GDP. PPP could also be expressed in other national currencies or in special drawing rights (SDR's). PPP rates allow a standard comparison of real price levels between countries, just as conventional price indices allow comparison of real values over time; normal exchange rates may over- or undervalue purchasing power.

**Safe water (access to):** The proportion of the population using any of the following types of water supply for drinking: piped water, public tap, borehole or pump, well (protected or covered) or protected spring.

**Sanitation (access to):** The proportion of the population who have, within their dwelling or compound, a toilet connected to a sewerage system, any other flush toilet, an improved pit latrine or a traditional pit latrine.

**Seats in parliament held by women:** Refers to seats held by women in a lower or single house and an upper house or senate, where relevant.

**Underweight children under age five:** The percentage of the population under five years of age with moderate or severe underweight, defined as a weight below minus two standard deviations from the median weight.



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