THE EFFECTS OF POPULATION GROWTH ON SOCIAL WELFARE IN LDC's AND TURKEY

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The objective of this paper is to investigete problems created by rapid population growth. They are grouped as urnemployment, urbanization (rural-urban migration), income distribution, poverty, hunger and malnutrition, and environmetal degradation-main indicators of social welfare. Each problem is first examined in relation to LDCs in general and then in the context of Turkey in sepcific.

1. INTRODUCTION

Since the turn of the 20th Centruy, as the doubling time for the world population has become shorter the Malthusian Theory of Population has been a renewed concern to politicians, and to all concerned people. It has taken 1650 years to double world population from a mere 250 million in A.D.1 to 545 million in 1650. The doubling time sharply declined from 200 years between 1650 and 1850 and 100 years between 1850 and 1950 to only 40 years between 1950 and 1990. The estimated annual increases in world population were 0.53, 0.65, 0.91, 2.09, 2.0, and 1.8 percents between the periods 1800-1850, 1850-1900-1950, 1950-1965 1965-1980, 1989, respectively (Norton and Alwang, 1993: 58; Todaro, 1981: 159-61).

As long as the population of a country increases in uniformity with investment and employment opportunities its effect on the economy and consequently on the welfare of people is more likely to be positive. Beginning with the Industrial Revolution in West the death (mortality) rates considerably declined while the birth (fertility) rates ramained high thus creating a population explosion, compared to the to the previous centuries, that alarmed T. Malthus in 1798. However, a high rates of capital accumulation and emigration opportunities for the Western European countries facilitated a rather smooth absorption of growing numbers of people over a relatively large span of time. By the end of the 19th Century, the birth rates in West also decreased and the rate of population growth in most of the developed countries (DC) now remains more or less at replacement level.

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The fear of population exlosion is now mainly centered within the developing countries (LDC). As most of these countries began to join the development momentum only during the last half of the 20th century, the death rates have drastically decreased - thanksto modern medicine - while the birth rates have still stuck high thus pushing up the rate of population growth to unprecedented levels. Experiences indicate that it is much more difficult to reduce birth rates than death rates.Therefore, the population of the world, especially that of LDCs, will continue to increase for deades even if concerted policies to bring down fertility rates were implemented (Todaro, 1981: 169).

The world population has reached to 5.3 billion in 1990, more than doubling in 40 years from 2.5 billion in 1950. Between 1985 and 1990, every year about 88 million people were added to the world population. Ninety percent of this increase (about 80 million) was accounted by LDCs (UN, 1992: 100).

For the period 1986-1990 the average annual rate of the world population was around 1.74 percent. However, the rates for DCs and LDCs were 0.64 and 2.08 percents, respectively. This enormous difference has been contributing to a lopsided distribution of world population. As a result, the share of LDCs in world population has been increasing at an alarming rate, from 66.8 percent in 1950 to 77.1 percentin 1990, and is expected to grow to 84 percent in 2025 (UN, 1992: 100, 103).

The problem of population growth is not simply a problem of numbers. It is a problem of human welfare and of development. Unrestrained population growth is seen as the major crisis facing mankind today. It is claimed to be the principal cause of poverty, unemployment, malnutrition, ill health, abnormal urbanization, environmental degradation, and a wide array of other social problems.

In the next section, the major problems in LDCs created by rapid population growth will be broadly examined. Then in the following section, the demographical trends in Turkey will be outlined and its economic and social implications will be analyzed.

2. POPULATION GROWTH AND SOCIAL WELFARE

Population growth is desirable as long as a country has plenty of land or human made capital. More people will be used to utilize tehese resources; then it is more likely that total and per capita output will increase (Cigolla, 1965: 115). Also, larger population can have positive effect of providing market for domestically produced goods. On the other hand, population growth will have negative effect if there is already a dense population in

limited area and little capital. In such case, as a result of diminishing marginal returns for labor, savings necessary for capital accumulation will dry up; unemployment will spread; income distribution will worsen; government revenues will not be suficient to provide people with social services; and finally social welfare vill diminish.

Some of the problems created by the rapid population growth in LDCs are: unemployment, urbanization, income distribution, poverty, hunger and malnutrition, and environmental degradation. Although all six major problems or issues are intertwined, the each will be separately described from a global perspective.

2.1. Unemployment

The economic development of Western Europe and North America has often been described in terms of continuous transfer of economic activity and people from rural to urban areas both within and between countries which spread over two centuries (Ruttan, 1982: 38, 39). On the other hand, today many LDCs are plagued by massive rural to urban population movements prompted by development strategies and high population growth in much shorter time.

The development strategies of the 1950's and 1960's emphasized the development of industrial sector to serve the domestic market and to facilitate the absorption of surplus rural laborers in the urban econnomy. Then, a LDC could proceed most rapidly toward the achievement of self sufficiecy (Lewis, 1965: 233-5).

An inevitable outcome of those strategies has been rapid growth of urban centres resulting from an accelerated influx of rural unskilled workers in search of scare urban jobs. Unfortunately, predictions regarding the ability of the industrial sector to absorb these migrants have not been realized. This has been the most obvious failure of the development process over the past four decades.

It is now realized that too much emphasis can not be placed on the expansion of the modern industrial sector to solve unemployment problem as long as the rates of population growth in most LDCs remains in the range of 2.5 - 3.5 percent per annum. For example, if the industrial sector employs 20 percent of a country's labor force it will need to increase employment by 15 percent - that is a rate hardly achieved by any developing country - just to absorb the increase in a total work force growing 3 percent a year (Todaro, 1981: 209). Any rate of employment growth in industrial sector les than 15 percent will mean more unemployment and underemployment, increased share of population in agricultural and service sectors. Therefore, high population growth is inimical to the economic transformation of a LDC.

Furthermore, the western technology that is imported by LDCs for the industrial sector has become more capital - intensive nature to suit West's labor - scarce economies. The indiscriminate transfer of technology from West has obviously lessened labor absorption capacity of the industry in LDCs. If the industrial sector is to contribute to employment creation the imported western technology must be tailored to the conditions of labor-abundant LDC's (Xenses, 1991: 123, 130).

2.2 Urbanization (Rural-Urban Migration)

One of the most significant of all postwar demographic phenomena and the one that promises to be more catastrophic is the rapid growth of cities in LDCs. In 1950, 275 million people were living in the cities of LDCs (38 percent of total world urban population), the numbers increased to 651 million in 1970 (48 percent) and it is estimated to reach 2.12 billion in 2000 (66 percent) (Todaro, 1981: 228).

One of the major consequences of the rapid urbanization process has been the swolle supply of urban laborforce that far exceeds the demand thus creating extremely high rates of unemployment and underemployment in urban areas.

In the 1950's rural-urban migration was vieved favorably in economic development literature. It was thought to be a natural process in which zero or low productivity surplus labor was gradually withdrawn from the rural sector to provide needed manded manpower for high productivity modern industrial sector (Lewis-Fei-Ranis Model).

In contrast to the viewpoint above, it is now clear from the four-decade experiences of LDCs that the rates of rurual-urban migration, that naturally fuelled by the high rate of population growth, continue to exceed the rates of urban job creatino. Therefore, no longer migration is viewed by development econoists as a beneficial process tosolve problems of growing urban labor demand. Dather, migration is seen as the major contributing factor to growing economic and structural imbalances between urban and rural areas, to mounting needs for investment in urban infrastructure, and to ever worsening socioeconomic problems in cities.

The Lewis-Fei-Ranis Model of the surplus labor for industrial development was challenged by M.P. Todaro, indicating that investment in urban industrial sector would create jobs much less than the numbers seeking jobs. Because, as long as the income differentials between rural and urban areas are in favor of the urban, and the probability (or chance) of earning higher income in urban areas is gerater, the number of people migrating to cities will be greater than the number of jobs created .

Since 1970's, development economists have been proposing policies to slow down the rural-urban migration trend and, therefore, to solve worsening uran unemployment problem. These policies are grouped in five key elements by Todaro (Todaro, 1981: 241-46):

a) The imbalances in rural-urban employment opportunities must be reduced. The creation of more urban job without simultaneous attempt to improve rural incomes and employmentleads to growing urban unemployment and rural-urban migration. Therefore, urban job creation is an insufficient solution for the urban unemployment problem.

b) The factor-price distortions must be eliminated. The industrialization palicies of past decades have introduced various capital subsidies, on the other hand, actual urban wages generally have exceeded the market wage as a result of a variety of institutional factors. The reversing of these distortions can encourage more labor-intensive modes of production.

c) Appropriate labor-intensive technologies must be chosen to encourage the expansion of small-scale industries. One of the principal factors inhibiting the success of employment creatinon programs is the technological dependence of LDCs on imported machinery and equipment from DCs. There is an urgent need to develop and/or to adapt technologies suitable to the conditions of labor-abundant LDCs.

d) The direct linkage between education and employment must be modified. The emergence of the "educated unemployed" in many LDCs is calling into question the appropriateness of massive quantitative expansion of educational systems espencially at the higher levels. Government overinvestment in postprimary educational facilities often turns out to be an investment in idle human resources. By creating attractive economic opportunities in rural areas and in small-scale labor-intensive industries it may become easier to redirect educational system towards their needs.

e) Programs of integrated rural development should be implemented. Development economists agree on the central importance of agricultural development if the urban unemployment and rural-urban migration problems is to be solved. They propose the restoration of a proper balance between rural and urban incomes through the reorientation of economic activity and social investents toward the rural areas.

2.3. Income Distribution

In most LDCs where labor/land and labor/capital ratios are high, there is an inverse relationship between population growth and income distribution. As mentioned earlier, if the industrial sector employs around 20 pecent of the wor force and the rate of populaton

growth is in the range of 2.5-3.0 percent it is most likely that the rate of growth in the industry will not be sufficient to absorb the increasing number of people. The absolute number of people in agriculture will ihcneabe causing land fragmentation and reduced incomes. The people who migrate to urban centers are most likely to be unemployed or underemployed in informal service sectors where incomes are also low.

The high rates of population growth in LDCs will aggravate the existing imbalances in income distribution. Universally, people with low incomes and low educational level have higher fertility rates than others. Therefore, as the number of people in low income groups increases the income disstribution worsens. In some countries, high fertility rates and poverty together from a vicious circle that thereatens the welfare -or even survival- of the population, especially children. Through malnutrition and disease, poverty leads to more infant and child deaths, which in turn induce couples to have more children to guarentee the survival of some (W.B., 1991: 58).

Undoubtedly, policies to create jobs, to increase incomes, and to provide universal education will have a positive effect on reducing the rate of population growth in the long run. However, these policies must be accompanied by family planning programs. In fact, income growth is neither necessary nor sufficient to control population. The implementation of these programs has contributed to the decline of fertility in low- income countries such as Indonesia and Sri Lanka (W.B. 1991: 60).

2.4. Poverty

Poverty is the direct consequence of the high population growth in most LDC's, and can be described as the failure to achieve certain minimum standards of living for some segment of population in a country. Poverty has many facets; hunger and malnutrition, poor health, high infant mortality, low life expectancy, illiteracy, urban blight, poor housing, encironmental degradation, and so on.

While poverty is found in every country, developing or developed, the extent and magnitude of "absolute poverty" is more profound in LDCs. More than 1 billion people in LDCs live in poverty. This number could be reduced by a strategy of both labor-intensive economic growth and efficient social spending. Economic growth is necessary to reduce poverty, but experience shows that it is insufficient. Social expenditure on health care and schooling exhand opportunities for the poor, but again may not be enough (W.B., 1991: 64).

Measures to eliminate poverty, to create jobs, to improve income distribution will not be successful unless they are accompanied by persistent family planning programs.

2.5. Hunger and Malnutrition

Hunger and malnutrition are the most obvious forms of poverty as being the primary cause of poor health, high infant mortality, and low life expectancy.

Food supplies, that would increase arithmetically in contrast with population that would increase geometrically, were the essential ingredients of T. Malthus's theory of population. According to his theory, insufficient supply of food would be the ultimate check on population growth.

As we near the end of the second centruy since this prediction was made, it is generally concluded that Malthus has been proven wrong. First, Malthus did not foresee the advances in food production that have enaled the food supply to grow faster than arithmetically, Second, world population has not grown geometrically due to increases in per capita real income, improved health and nutrition, and spread of universal education (Knutson, Penn and Boehm, 1983: 92).

However, as mentioned earlier, as the doubling time for population growth has become shorter since 1950's the alarm bells rang in both academic and political fronts, concerning the ability of the World Planet to sustain such a large population (Meadows et al., 1972). Then, the concerted efforts of the U.N. and various governments on controlling population growth produced positive results (U.N. World Population Conference, first held in 1974, Bucharest, Romania; second in 1984, Mexico Citiy; and recently held in September 1994, Cairo, Egypt); the rate of world population growth started to decrease from an all-time high 2.09 percent Between 1950-1964 to 1.7 percent in 1990.

For over thirty years, the global food production has been sufficient to feed all the people in the world. If the world's food supply were evenly divided among the world's population, each person would receive substantially more than the minimum amounts of nutrients for survival. However, World Bank estimates that malnutrition affects more than 1 billion people who live in poverty in LDCs (W.B., 1991: 61). Hunger is both an individual problem related to the distribution of income and food within countries and national and regional problem related to the geographic distribution of food, income, and population. While hunger and poverty are found in every region of the world, Sub-Sharan Africa is the only region where per capitka food production has experienced a downward trend for the past 20 years. Low agricultural productivity, wide variations in yields due to natural, economic,

and political causes, and rapid population growth have combined to create a very precarious food situation in these countries (Norton and Alwang, 1993: 4,5).

2.6. Environmental Degradation

As population grows in LDCs, where labor/land ratio is high, environmental problems become more severe. Deforestation, farming of marginal lands, overgrazing, and misuse of pesticides have contributed to soil erosion, desertification, poisoning of water supplies, and even climatic changes. These problems are particularly severe in parts of Africa but exist in every region of the world (Norton and Alwang, 1993: 12).

The pressure of population can raise agricultural demand, leading in turn to the abuse of marginal land and other natural resources. The annual rate of deforestation in Nepal caused land erosion and floods in India and Bangladesh. Although many parts of Sub-Saharan Africa still have large areas of potentially cultivable lands and relatively low population densities, a rapidly expanding population moving into the tropical forests already poses encironmental problems. Cote d'Ivoire is said to have an annual deforestation rate of 6-16 percent; its forests could disappear in in less than twenty years (W.B. 1991: 59).

The environmental problems caused by high population growth are not limited to rural areas, urban areas also get their shares. People moving to urban areas in search of a livelihood crowd cities in excess of infrastructural and social services provided by local and central governments. As a result, inappropriate garbageand sewer disposal, poor city and traffic planning, insufficient provisions of housing health, and educational services are all indicators of social and environmental degradation. In fact, cities in most LDCs give the mirror images of poverty, poor income distribution, and unemployment caused by high population growth.

3. THE DEMOGRAPHY OF TURKEY

3.1. Introduction

Turkey is the 17th most populous country in the world. The rate of population growth (2.13 percent between 1986 and 1990) is higher than the world average (1.74 percent), and the highest in Europe (U.N., 1992: 104-6, 114).

After the proclamation of the Turkish Republic in 1923, population censuses have been carried out regularly; the first in 1927 and the second in 1935. Since then 13 censuses

have been conducted every five years. After the 1990 Population Census, a government decree with the force of law stipulates that "General Population Censuses will henceforth be held in years ending with "0" (meaning that every 10 years) (SIS, 1990: III).

Table 1 below shows the population of Turkey and the rates of annual increases by census years. The population of Turkey more than doubled in 33 years from 13.6 million in 1927 to 27.8 million in 1960. As the rate of population growth speeded up after 1950's, the time for doubling decreased to 29 years; the population increased from 27.8 million in 1960 to 56.5 million by the 1990 Population Census (SIS, 1993: 51-2). As noted earlier, the world population doubled only in 40 years between 1950 and 1990.

TABLE 1

Population of Turkey and Annual Increases By Census Years

Years	1927	1935	1940	1945	1950	1955	1960
Population (Million)	13,6	16,2	17,8	18,8	20,9	24,1	27,8
Annual ÿncrease		2,11	1,96	1,06	2,17	2,78	2,85

TABLE 1

Population of Turkey and Annual Increases By Census Years cont.

Years	1965	1970	1975	1980	1985	1990
Population (Million)	31,4	35,6	40,3	44,7	50,7	56,5
Annual ÿncrease (Percent)	2,46	2,52	2,5	2,07	2,49	2,17

Source: SIS (State Institute of Statistics), Statistical Yearbook of Turkey, 1993: 52.

Although the rates of population growth in Turkey since 1927 has been higher than the world averages its growth trend has been following that of the world (see Page 1). The both trends peaked highest in the period 1960-70, then have been gradually declining since. UN estimates indicate that the population of Turkey will reach to 68.2 and 88.1 million in

years 2000 and 2020, respectively. The rate of population growth will decline to 1.89 and 1.11 percent in respective years (UN, 1993: 106, 115). By the period 2015-20, Turkey's population will stabilize when the fertility rate declines to 2.1 children per woman that is the replacement rate for population (DPT, 1993: 6).

There are wide variations in fertility rates among the Regions of Turkey, especially between East and West, and between rural and urban areas. According to the 1989 SPO (State Planning Organization) Population Study, the fertility rates are 2.64 and 5.65 children in West and East, respectivel. THe rates are found as 3,48, 3,07, and 2.02 children for Black Sea, Central, and Mediterranean Regions, respectively. The total rate for Turkey is 3.9 children. In urban areas, as expected, there is a tendency for the fertility rate to decrease. However, the fast migration from East and rural areas to the urban centers is making this thendency rather slow (DPT, 1993: 7).

The 1994 UNDP Human Development Report presents an interesting ranking of the human development indicators (HDI) for 97 LDCs which are the outcomes of the level of development, and are obviously the certain indications of population problem.

Table 2 below shows Turkey's ranking among 97 LDC's with respect to chosen indicators of human development.

TABLE 2

Ranking of Human Development Indicators (HDI) of Turkey (1992)

Indicators	Ranking	Notes
The overall HDI	23rd	
Access to safe water	19th	
Daily calorie supply	19th	3,080 per day
Child malnutrition	23rd	
Real GDP per Capita (1991)	25th	PPP $ 4,840
GNP per capita (1991)	27th	US $ 4,840
Adult literacy	28th	81,9 percent
Life expectancy	31st	66,7 years
Infant mortality	38th	61 per 100 live birth
Mean years of schooling	43rd	3,6 years

Source: UNDP, 1994: 45.

Almost all of the socioeconomic problems in LDCs created by rapid population growth can be in certain degress traced in Turkey: unemployment, rapid urbanization stemming from rural-urban migration, unequal income distribution, poverty, hunger and malnutrition, and enviromental degradation.

Although these issues are interwined or overlapped with each other each will be separately dealt.

3.2. Unemployment

In the early years of the Turkish Republic (1923-39) and especially during the period of planned industrialization (1930-39), the industrial sector that grew 8,5 percent between 1924-29 and 11.6 percent between 1930-39 had difficulties in finding sufficient supply of workforce, not to mention the most needed skilled labor. As the composition of the population was mainly rural (remained 75 percent until 1945) the demand for industrial labor had to be met by the increase in urban population. The dynamics of urban sectors were not in force to induce migration from rural areas (Kepenek and Yentürk, 1994: 73). Also, the rate of population growth in that period was still rather low.

In the period 1946-60, the winds of change blew in jTurkey affecting both political and economical aspects of the country. The Democratic Party Winning elections in a multi-party system carried out populist policies together with a sincere dive to modernize the country that mainly emphasized on the development of urban sector.

Urbanization was the most significant phenomenon in that period speeded by intorduction of tractors in farming that released rural labor, by integration of rural secto with national markets, and finally by the rate of population growth gaining momentum.

The government, unaware of the problems the country would face in not-so-distant future, had no serious policies to deal with rapid urbanization, migration, and population issues. Consequently the cities soon became unable to accommodate growing number of peoplep; shortage of housing led to high rents and speculation in land, and especially to the creation of shanty-towns (gecekondu) surrounding the major cities of Turkey (Kepenek and Yentürk, 1994: 113-4).

The initial neglect of urbanization, migration, and population issues in 1950's must be the primary cause of the current problems plaguing the Turkish cities.

Unemployment in Turkey began to be a major issue since 1950's as the country entered a period of socioeconomic transformation. However, the the gowernment of 1950's and the development plans since 1963 assumed that if a target rate of economic growth was

achieved it would suffice to create jobs for the growing labor force; the development paradigm of same nature was widely accepted by other LDCs and DCs in the same period. Evidently, after the second half of 1960's the emigration of the Turkish labor force in large numbers to european countries alleviated the burden of potentially high unemployment.

The passive approach to unemployment problem in Turkey continued even after the January 24th 1980 Economic Stabilization Program. As in most aspects, the Program relied on instituting a liberal economic encironment for the labor market. It predicted that if the labor supply exceeded the demand the wage rate would go down thus stimulating labor-intensive economic activities, and eventually the labor marked would clear (Kepenk and Yentürk, 1994: 186-8). In order to facilitate functioning of a free labor market, with a clear aim at substantially reducing wages, the government, with the military backing, imposed certain restrictions on labor unions, strikes, and wage negotiations (Boratav, 1993: 134). However, the program was less than satisfactory with respect to employment creation. The wages vere kept under control but the rate of unemployment continued to increase as the public sector became reluctant to hire new employess and the population growth was still high (xenses, 1983: 283-4).

The neo-classical approach to unemployment issue was unlikely to be successful give the institutional rigidikies and rapidly changing mode of production. The modern technology has become imperative to be used even in traditional labor-intensive sectors such as textiles. There would be some gain in adaptaing imported western technology to the country's conditions, but this would not much change capital-intensive mode of production.

Even in DCs where population rowth is stable capital-intensive technology (e.g. computers, robots, etc.) have been rapidly expanding at the expense of labor thus pushing the rate of unemployment to unprecedented levels since the Great Depression. Considering this fact, Turkey and most LDCs have and will continue to have enormous difficulties in solving unemployment problems as long as their rates of population growth remain in the range of 2.0-3.5 percent a years.

In Turkey, there were two sources of data concerning employment situation until 1988: State Employment Agency (SEA) and State Planning Organization (SPO). Unfortunately, the data from SEA were incomplete since the Agency reported only those who contacted with it in search of a job. On the other hand, SPO used to tryto give a much global estimates of employment situationin the country through population censuses. However, SPO's methodology used in its estimation kept changing. For example, SPO in the fifth development plan (1985-89) assumed that labor force participation rate would

decrease to 56.9 percent in 1989 from 65.5 percent in 1979. This would obviously result in lower unemployment rate as the supply of labor decreased. Therefore, the data concerning unemployment situation are incomplete, unreliable, and sometimes distorted by governments (Kepenek and Yentürk, 1994: 375-7).

Therefore, there was a need for continuing labor force survey to be carried out by SIS as a regular feature of the national stasitical program. Accordingly, in the context of the project on Labor Market Information Systems coordinated by UNDP, in 1988 SIS launched a laor force survey to be conducted semiannually. The survey was designed using the latest international (ILO) standards (SIS, 1993: 233).

TABLE 3

Labor force status of non-institutional civilian population, Turkey (1989-1992)

	1989	1990	1991	1992
Total population (million)	54.292	55.523	56.776	58.090
Population over 12 year (million)	37.699	38.586	39.484	40.439
Labor force (million)	20.677	21.146	20.730	21.184
Labor force participation (%)	54.8	54.8	52.5	52.4
Overall unemployment (%)	8.8	7.4	8.3	7.8
Urban unemployment (%)	13.2	10.9	12.1	11.7
Rural unempolyent (%)	5.6	4.8	5.4	4.7

Source: SIS, 1993: 238.

Note: The figures in Table confrom with SIS survey data taken in October of each year.

Table 3 indicates that although overall unemployment rates through 1989-92 seem somewhat similar to, and even lower than in many DCs (SIS, 1993: 691), the rate of urban unemployment is more than double the rate of ruaral unemployment. This clearly indicates the inability of urban sectors (manufacture, trade, and services) to create jobs. However, due to special characteristics of the agricultural sector, the lower rate of rural unemployment does not reflect the extent of disguised and seasonal unemployment issues.

A final word on the employment characteristics of Turkey, the labor force participation is rather low due to a very large number of people who are counted as "not in labor force" that include discouraged workers, housewives, seasonal workers, students, retired, disabled, and property income earners. A large number of these people would most likely be willing to work if employment opportunities were available. In 1992 tehere were 19 million people in this category compared to 21 million people in labor force. It is, therefore, obvious that unemployment is the most serious problems Turkey has to solve.

3.3 Urbanization (Rural-Urban Migration)

As economic development proceeds in a LDC it is expected that socioeconomic transformation will take place; the share of urban population will increase at the expense of the rural; the relative contribution to GNP will decrease in agricultural sector but will increase in industrial and service sectors. As mentioned earlier, this socioeconomic transformation that had spread over two centuries in DCs has been occurring in LDCs in less than half a century.

In Turkey, the distribution of population between rural and urban areas remained stable until 1945, 75 percent in rural and 25 percent in urban. By the 1990 Population Census the share of urban population rose to 59.01 percent leaving 40.99 percent to the rural. Table 4 shows the changes in rural and urban composition of the population by census years.

TABLE 4

Ratio of rural and urban in total population, Turkey, 1927-1990

Years	1927	1935	1940	1945	1950	1955	1960
Urban (%)	24.22	23.53	24.39	24.94	25.04	28.79	31.92
Rural (%)	75.78	76.47	75.61	75.06	74.96	71.21	68.08

TABLE 4

Ration of rural and urban in total population, Turkey 1927-1990 cont.

Years	1965	1970	1975	1980	1985	1990
Urban (%)	34.42	38.45	41.81	43.91	53.03	59.01
Rural (%)	65.58	61.55	58.19	56.09	46.97	40.99

Source: SIS, 1993: 54.

Although the share of rural population has been decreasing since 1945, the increase in absolute rural population continued until 1980 reaching to a total of 25 million. However, the decrease in absolute numbers was substantial after 1980, going down to 23.8 million in 1985, and to 23.1 million in 1990.

Parallel to the rural-urban migration, as expected, the distribution of labor force among the sectors of the Turkish economy has changed (Table 5).

TABLE 5

Distribution of labor force among sectors, Turkey, 1962-1992

(Percent)

	Agriculture	Industry	Services	Total
1962	77.0	7.9	15.1	100.0
1967	72.2	9.2	18.6	100.0
1972	66.9	10.7	22.4	100.0
1977	61.8	12.6	25.6	100.0
1983	60.7	12.3	27.0	100.0
1988	50.6	15.2	34.2	100.0
1992	43.7	18.1	38.2	100.0

Source: SIS (Various Publications).

Table 5 indicates that some transformation has occurred in the structure of the Turkish economy. The share of agriculture in total labor force decreased from 77.0 percent in 1962 to 43.7 percent in 1992. The decrease in agricultural labor force has been absorbed by the industrial and service sectors, both rising from 7.9 and 15.1 percents in 1962 to 18.1 and 38.2 percents in 1992, respectively.

It can be asserte that the real transformation in Turkey's population structure began after 1980. Between 1980-85 the urban population grew 6.26 percent a year while for the first time the rural population had a negative growth rate of 1.06 percent a year. Hawever, betwee 1985-90 the so-called population transformation slowed down; the urban population grew only 4.31 percent while the rural population decreased 0.56 percent (SPO, 1993: 8-10).

As for the number and sizes of the rural settlements and the cities; between 1965-90 the rural settlements with population less than 2.000 inhabitans slightly decreased from 34.905 to 34.420 while their share in total population dropped from 66 percent to 30 percent. On the other hand, the cities with population over 100.000 inhabitants increased from 14 in 1965 to 73 in 1990, their share in total population also rose from 10 percent in 1965 to 37 percent in 1990 (SIS- 1993: 55).

So far, the rural-urban migration was simply meant as the movement of rural people to urban areas; in fact there has been migration from the urban centers (small and large) in less developed regions to the urban centers in more developed regions. Therefore, economic disparities in Turkey are the real cause of migration (SPO, 1993: 8).

As compared to DCs'urban-rural population composition, Turkey's population is still rural. As long as the socioeconomic transformation continues (no doubt it will) and the rate of population growth remains high it is easy to predict that the cities will continue to grow 4-6 percent a year as in between 1980-90. this will in turn aggravate the problems already facing the local and central goernments, and the economy, in terms of urban infrastructural investments (housing, water supply, sewer system, city and inter-city transportation, communication, health care, schools, and etc.) and in terms of enormous task of creating job opportunities for rapidly increaing urban labor forces.

3.4. Income Distribution

The unequal income distribution has origins in differences in labor productiviy between rural and urban sectors in the beginning of a country's development process as marginal productivity of labor and hence income are lower in rural areas. In addition to this, the unequal distribution of land and other assets represents a second series of income inequality among rural people. As the socioeconomic transformation takes place, the rural-urban migration tends to reduce income inequality as experienced by DCs.

However, the unfortunate experiences of most LDCs indicate that even a reasonable socioeconomic transformation achieved has not been sufficient to improve income distribution. As discussed earlier, the capital accumulation in urban sectors has created less jobs than the supply of labor as rural-urban migration and high population growth continued. Consequently a second from of income inequality between the people who have only wage and salaries but no significant assets and the people who are asset owners and entrepreneurs. Also, governments'fiscal and monetarypolicies, and sectoral subsidy programs have directed income distribution in favor of or against certain groups of people.

The degree of income inequality in a country is expressed by Gini coefficients. Where income distribtion is close to equality Gini coefficient approaches to zero as it is 0.201 for Japan and 0.212 for S. Korea. Conuntries with more unequal income distibution have Gini coefficients between 0.40, 0.50, and even higher (Kazgan et al., 1992: 1).

With respect to the information above, Turkey has severe income distribution problem, her Gini coefficient has ranged between 0.56-0.43 in the period 1968-87 (Table 6).

In Turkey there have been five major surveys to studythe extent of household income distribution between 1963-87. The summary results of these surveys are shown in Table 6 by quintiles.

TABLE 6

Household Income Distribution in Turkey By Quintiles
(1963-87)

	1963	1968	1973	1986	1987
1st 20 %	4.5	3.0	3.5	3.9	5.24
2nd 20 %	8.5	7.0	8.0	8.4	9.61
3rd 20 %	11.5	10.0	12.5	12.6	14.06
4th 20 %	18.5	20.0	19.5	19.2	21.15
5th 20 %	57.0	60.0	56.0	55.9	49.94
Gini coefficient	0.55	0.56	0.51	0.46	0.43

Source: Kazgan et al., 1992: 4; SIS, 1993: 290.

A simple glance at Table 6 will reveal the enormous disparity in the distribution of income in Turkey. While the richest 20 percent has been receiving over 50 percent of the national income, less than 50 percent is shared by 80 percent of the population. The difference in incomes of the lowest and the highest 20 percents has ranged over 10-15 times in the period 1963-87.

There is a problem of comparability among the survey results presented in Table 6. Although the first-four surveys show somewhat similar income distribution among the five quintiles, the 1987 survey conducted by SIS as the first survey covering Turkey as a whole

produced results as if the first four quintiles improved income shares against the top 20 percent. This is contradiction considering the trend in the sectoral distribution of national income through 1978-87. Over this period the shares of agricultural and wage-salary incomes decreased from 26.7 and 35.2 percents to 19.1 and 18.1 percents, respectively. On the other hand, the share of capital income increased from 38.1 percent to 62.8 percent over the same period (Özmucur, 1992: 23). It is obvious that the households with agricultural and wage-salary incomes fall in the lower quintiles and therefore it is most unlikely for them to have improved income shares.

3.5. Poverty

Poverty is the consequence of, first, the low level of national income and of income growth; second, the maldistribution of national income; and third, the high rate of population growth. Unfortunately, Turkey satisfies all these conditions. Although Turkey is the 17th most populous country in the world, she is the 28th in the GNP and 53rd in per capita GNP scales (W.B., 1991; 204; SPO, 1993: 16); her Gini coefficient and rate of population growth are higher than world averages.

The low level of Turkey's GNP represents itself, first, in overall welfare of the people in terms of the country's ability to provide essential social services such as scholls, hospitals, housing, justice, social security coverage, and etc. Second, the poverty of some people is eminent due to maldistribution of already low GNP. Finally, the high population growth in Eastern part of the country and in rural areas, and among low income groups aggravate the extent of poverty.

The low level of GNP and the inability of effective taxation by governments have caused reductions in the already-insufficient level of social spending in Turkey. Spending on education decreased form 18.1 percent of the total public expenditure in 1972 to 15.7 percent in 1989; spending on health also decreased from 3.2 percent to 2.9 percent; spending on housing and social security remained 3.1 percent in respective years (W.B., 1991: 225).

The extent of social security coverage in a country is an important indication of government's ability of and determination to securing welfare of its people. In Turkey, the percentage of non-agricultuarl laborforce covered by social security schemens reached to 83 percent in 1983 from 42.9 percent in 1962; however it decreased to 69.6 percent in 1992. The percentage of people with healt security coverage was only 58.3 percent in 1992 (Kepenek and Yenturk, 1994: 394). It is obvious that the people who are not covered by any social security scheme are unemployed, city vendors, old, and mainly small farmersand

landless rural people who are in the lower social and economic echelenos; poverty and desperation must be precalent among them.

3.6. Hunger and Malnutrition.

Although Turkey is one of the few countries in the world that has achieved self-sufficiency in food production, and the rate of growth in agricultural output has exceeded that of population, malnutrition axists among the poor, especially among children and women in poor families.

Availability of food in a country, poor or rich, is not a guarantee for its efficient or equal distribution among people. The unequal distribution of national income and the extent of unemployment are the real factors behind hunger and malnutrition. However, there is no outright hunger problem in Turkey as seen in some LDCs.

3.7. Environmental Degradation

As in most LDCs where population pressure on natural resources is high, Turkey has been having environmental problems at increasing rate. As the rural population has increased in absolute numbers until 1980, the numbur of farm households have also increased from 2.5 million in 1950 to 3.1 million in 1980 (İTalim, 1981: 40-1). However, the 1991 Agricultural Census reported 4.09 million farm households as of 1991. The direct consequence of increasing number of farm housholds has been the expansion of cultivated land from 14.5 million hectares in 1950 to 23.9 million hectares in 1991 (SIS, 1993: 305). A great deal of this increase in cultivated land has been gained at the expense of pasture land and forest areas which had the functions of water and soil protection. As a result of this, Turkey has been faced with alarming soil erosion (It is estimated that Turkey loses top soil equal to the area of Cyprus each year), flooding, and siltation of dam reservoirs. The pollution of water resources by indiscriminate use of herbicides and insecticides is another serious concern.

The extent of the environmental degradation in urban areas is no less than in countryside. As discussed earlier, the problems created by rapid urbanization since 1950's have overpowered any efforts by local and central governments in terms of proper urban planning and provision of most urgent social services. The concentration of industrial plants in or near cities has been causing extensive air, water, and noise pollution.

Probably the most fearful degradation for a nation created by rapid population grmowth is the social degradation. In addition to government's helplessness to provide adequate education, housing, health, and social security services for a fast growing

population, unemployment, unequal distribution of national income, and hence poverty hinder the most desired improvements in social welfare of a country.

4. CONCLUSION

The rapid population growth in LDCs and Turkey has been the major contributing factor to low levels of living for people. The development models of 1950's and 60's that emphasized economic growth to raise income and social welfare in LDC's have not been so successful, and have even created new problems such as rapid urbanization, unemployment, and income distribtion.

It has been realized that populaton control in LDCs is the tey to improve social welfare and to solve economic problems and must be carried out simultaneously with economic development efforts. Because, even a high rate of economic growth may worsen income distribution and social welfare as long as population growth is high (Kazgan et al., 1992: 6).

Education has the highest priority in terms of slowing population growth and stimulating economic growth. Provision of universal education for all has been the major factor in bringing down the rate of population growth in some LDCs. And the educated people have higher productivity and therefore can contribute more to economic growth.

Increased public spending on social services such as health, food aid to pregnant women and children, public services in rural areas will help to bring down the rate of population growth, and increase productivity. This sort of public spending will also, to some degree, reduce income inequality as the taxpayers are in the higher income brackets.

Above all, an integrated rural development program can bring together various socioeconomic programs to deal with the issues of population growth, rural-urban migration, urban unemployment, and even income distribution.

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