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Turkmenistan
A Profile of Living Standards in Turkmenistan

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Acronyms

CIS	Commonwealth of Independent States
FSU	Former Soviet Union
GDP	Gross Domestic Product
GNP	Gross National Product
HMI	Human Development Indicators
HIV/AIDS	Human Immunodeficiency Virus/Acquired Immune Deficiency Syndrome
PPP	Purchasing Power Parity
TLSS	Turkmenistan Living Standards Survey
UNDP	United Nations Development Programme

A Profile of Living Standards in Turkmenistan

by

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Executive Summary

Living standards in Turkmenistan have been shaped by three main factors: the legacy of the Soviet system; the severe economic decline which took place throughout the 1990's until the last two years when economic growth resumed; and the approach and policies adopted by the Government.

The Soviet Legacy: Turkmenistan benefited from many of the social achievements of the Soviet system and its per capita income in 1991 is estimated to have been about $3,450 in Purchasing Power Parity (PPP) terms. However, living standards in general were not high; and in 1989 about 12 percent of the population were in "relative" poverty, as they had an income level below the "socially acceptable minimum". Life expectancy in Turkmenistan (at 66 years) was the lowest in the Soviet Union.

Economic Decline Since Independence: Turkmenistan's economy experienced precipitous decline throughout the 1990's, and by 1998 it had fallen to about half of the 1991 level. The latest estimate by the World Bank of the country's gross national product (GNP) per capita is only $660. Estimates of "income" poverty obviously depend on the choice of the poverty line: using the criterion of $2.15 PPP per day and taking into account all forms of income, the World Bank has estimated that income poverty in 1998 was then only about 7 percent. This places Turkmenistan in the seventh position compared to all Former Soviet Union countries, according to the World Bank's recent report, "Making Transition Work for Everyone". Using the same data from the 1998 survey of living standards, the Turkmenmillihasabat (formerly the Turkmenstatprognoz) has estimated that about 58 percent of the population then had incomes below the minimum wage of Manat 80,000. Since then, the economy has started to recover, with the resumption of gas sales to Russia and increased oil and cotton exports, and living standards may have improved somewhat. Indeed, the Government reports that only 1 percent of the population now have incomes less than 50 percent of the median per capita income. However, there are no recent representative survey data on living standards to compare directly with those of 1998, and the future economic picture is generally uncertain.

Current Approaches and Government Policies: Turkmenistan has attempted to ensure good living standards for its population by maintaining one of the highest levels of subsidization of basic goods in the region. Water, gas, fuel and flour, as well as social services, are close to free. The poor do benefit from these subsidies to some extent, but there are several troubling issues associated with this approach.

- *High Non-Transparent Costs*: Maintaining these large and non-targeted subsidies is highly expensive for the Government. The costs are largely not transparent, because they are primarily paid by the providing agency which may in turn receive subsidized inputs. Nevertheless, the costs are real and make it very hard for the providing institutions to operate on a commercial or efficient basis.

- *Low Degree of Targeting*: Most of the subsidized services are not well targeted, and it is unclear who benefits most from them. This is partly because the

Government budget is not fully consolidated, and so the overall incidence, equity and efficiency of spending is hard to assess. Nevertheless, although disputed by the Government, there is reason to believe that the bulk of the benefits may go to those who are better off. For example, the better off tend to have larger homes with more water pipes, while the poorer groups have to hand carry water from wells or rivers.

- *Poor Quality and Maintenance:* The lack of payments for the maintenance and improvement of services has led to generally poor quality services, and there are few alternatives even for those willing and able to pay. For instance, basic medicines are often not available, water and gas pipes are ill-maintained, and the quality of water supplies is low. These problems contribute to the low health indicators and the extent of "capability" poverty in the country. Fortunately, there is some evidence that the health status of the people may be improving somewhat, but the situation may be getting worse in some other respects: for example, enrollment rates in both preschool and higher education are declining and there are concerns about the quality of general education.

- *Limited Opportunity:* The alleviation of poverty is about more than just providing the means for survival through subsidization. It is also measured in access to opportunity. By this standard, the poverty situation is serious and may be seen in a number of ways. For example, the level of unemployment particularly among the young is quite high; in the agricultural sector, farmers are still highly circumscribed by many administrative regulations, despite the ongoing land reform program; and there are few mechanisms for enabling the poor to benefit effectively from most of the country's huge export earnings from the energy sector.

The overall picture, then, is of only a rather small proportion of the population living below an absolute poverty line of $2.15 PPP per day. However, there are many people living only just above it, and over half of the population in 1998 then had cash incomes below the minimum wage. The level of inequality is also very high by international standards, with a particularly large differential between those living in Ashgabat and those living in the regions (and especially in Dashkovuz). Even though there has been substantial economic growth since 1999, it is clear that many people in the country still have inadequate living standards and unsatisfactory health status. They are mostly kept out of absolute poverty through a large number of subsidies. But these subsidies are untargeted and potentially unsustainable. There are also few opportunities for advancement. Some of the country's past social and human development achievements are now being undermined, as the services provided by the Government are mostly of inadequate quality and in need of reform.

In these circumstances, the challenge of poverty alleviation lies in (i) moving from large hidden subsidies to a more transparent and targeted budget process, ensuring a more efficient and less distortionary allocation of public resources, (ii) providing a freer environment and improved governance for the creation of private sector opportunities and employment, both in agriculture and in non-farm employment; and (iii) improved rural infrastructure, and especially better water supplies and sanitation, and higher quality social services. The key to this lies in improving the analysis of the existing situation, particularly concerning the patterns and incidence of public spending both inside and outside the budget;

more research into the reasons for ill-health and "capability" poverty; and a detailed review of the options for improving the targeting of the existing generalized subsidies in the various sectors. These are not easy issues to address, as they involve institutional reforms as well as technical and financial considerations, but Turkmenistan does have the advantage of being able to learn from international and regional experiences if it wishes to do so. The current level of economic growth in the country is encouraging, but it is narrowly based and fragile, and the budgetary process through which such growth translates into raising the living standards of the poor is unclear. Steps now need to be taken to deepen reforms and to develop a more sustainable and transparent approach to the provision of services to the poor, in order to improve the living standards of the Turkmen people generally.

1. Historical Background

1.1 **The Legacy of the Soviet Union:** Turkmenistan clearly benefited from many of the social achievements of the Soviet system. Its per capita income in 1991 is estimated to have been about $3,450 in PPP terms and it had close to 100 percent adult literacy.

1.2 But living standards in general were not high, and poverty existed in Turkmenistan even before the break-up of the Soviet Union. It is estimated that in 1989 about 12 percent of the population had a monthly per capita income below the level of 75 rubles, which was the "socially acceptable minimum" used to define under-resourced households[1]. Turkmenistan was not the least developed republic of the Soviet Union, as it had a human development index (according to the UNDP) above that of Tajikistan, Kyrgyzstan and Uzbekistan. However, its life expectancy was the lowest in the region (Table 1) and its infant mortality (at 55/1,000) was the highest.

Table 1 Human Development Indicators in Selected Countries (1991)

	Urban pop. in 1992 (%)	Pop. growth (p.a.)	Life expectancy at birth (years)	Adult literacy rate (%)	Real GDP per capita (PPP$)	UNDP Human Development Index
Armenia			72.0	98.8	4,610	0.801
Kazakhstan	58	1.8	69.0	97.5	4,490	0.774
Turkey	64	2.4	66.7	81.9	4,840	0.739
Azerbaijan			71.0	96.3	3,670	0.730
Turkmenistan	**45**	**2.8**	**66.0**	**97.7**	**3,540**	**0.697**
Kyrgyzstan	38	2.3	68.0	97.0	3,683	0.685
Iran	58	3.3	66.6	56.0	4,670	0.672
Uzbekistan	40	2.9	69.0	97.2	2,790	0.664
Tajikistan	31	3.1	70.0	96.7	2,180	0.629
Pakistan	33	2.9	58.3	36.4	1,970	0.393
Afghanistan	19	1.8	42.9	31.6	700	0.208
Medium HDI	-	-	68.0	80.4	3420	0.649
Low HDI	-	-	55.8	47.4	1170	0.355

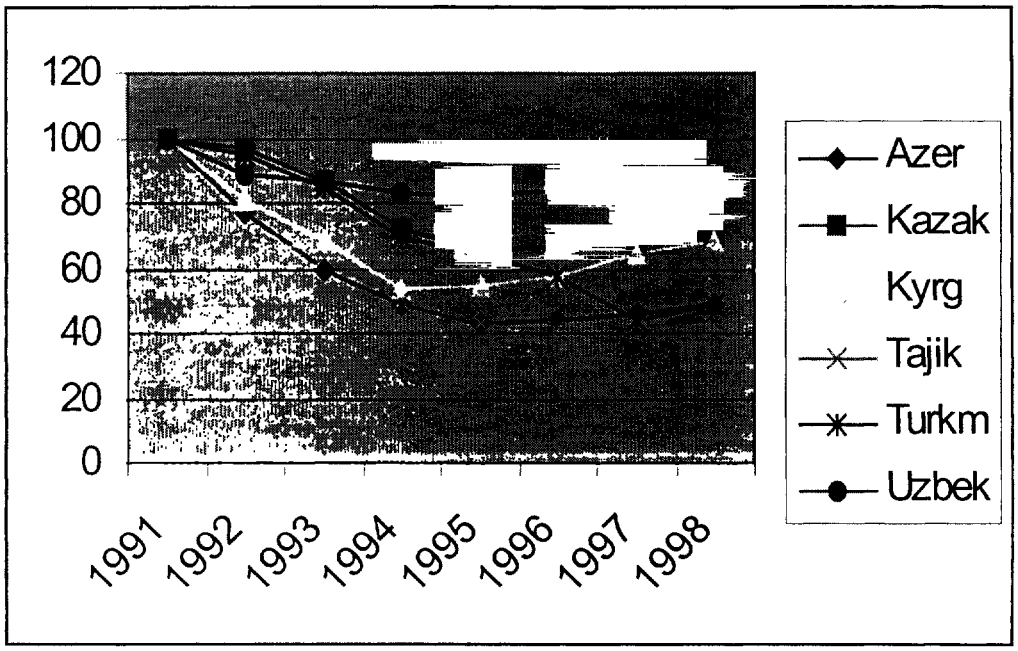
Source: Table 1.1 Falkingham, J., Klugman, J., Marnie, S. and Micklewright, J. (eds) (1997) *Household Welfare in Central Asia*. Basingstoke: Macmillan Press, with additional data for Armenia and Azerbaijan from UNDP *Human Development Report 1994*.

[1] Atkinson, A.B. and Micklewright, J. (1992) Economic Transformation in Eastern Europe and the Distribution of Income. Cambridge: CUP.

1.3 **Trends Since 1991:** As can be seen from Figure 1, all of the countries of Central Asia experienced precipitous economic decline throughout the 1990's. In the case of Turkmenistan, the size of the economy is estimated to have fallen to about half of the 1991 level by 1998. Apart from Tajikistan, this relative drop was the highest in the Central Asian region, and inevitably had a significant effect on consumption. The latest estimate of GNP per capita (World Bank Atlas, 1999) is $660. However, the effects were mitigated by the Government's policies of trying to protect living standards through a high level of subsidization of basic goods (with water, gas, fuel and flour, as well as social services, close to being free of charge).

1.4 Turkmenistan's economy then started to recover in 1998 with real GDP increasing 5 percent. In 1999 GDP growth accelerated to 16 percent, by far the highest growth rate among the CIS countries. Agriculture and energy, particularly oil extraction, were the locomotives of growth. This trend in the period since 1998 may be expected to have led to some improvement in living standards, though the distribution of the benefits remains unclear.

Figure 1 Trends in Real GDP in Central Asia (1991-98)



1.5 **The Future**: The current economic and social strategy of the Government is laid out in the Program of Economic and Social Development until the Year 2010, as approved by the President in 1999. It seeks to achieve an extraordinary growth in the real economy, based largely on an import substituting and export diversifying industrialization strategy, with industrial output planned to quadruple by the end of the period. The industrialization would be financed through a vast public investment program. Another policy priority is the aim to achieve food self-sufficiency, in particular in grain, with agricultural production projected to triple by the Year 2010.

1.6 If achieved, these developments would clearly have a most significant impact on living standards. However, there are serious risks and pitfalls inherent in this approach, including a reliance on a large level of expensive and non-transparent subsidies. It is therefore considered unlikely that the recent growth record will be sustained. This makes it even more important for policy choices to be made to place services and support for the poor on a more sustainable path.

2. Living Standards

2.1 Comprehensive and nationally-representative data on poverty and living standards in Turkmenistan only became available for the first time following the carrying out of the Turkmenistan Living Standards Survey (TLSS) in 1998. That survey was conducted by the Turkmenmillihasabat (formerly the Turkmenstatprognoz, National Institute for Statistics and Forecasting of Turkmenistan), in conjunction with the Research Triangle Institute, in 1998[2]. Before that survey, information on living standards was primarily available from the monthly Family Budget Survey (FBS), which had been inherited from the Soviet Union and which still continues to be conducted. The data obtained from the FBS can be used to contribute to a picture of trends in living standards in the country, but the survey is not fully representative of the country and the questionnaire is limited.

2.2 The TLSS collected information on incomes and expenditures, formal and informal activities, and home production and consumption. However, it excluded data on barter transactions. Figure 2.1 illustrates the distribution of consumption in Turkmenistan in 1998, using these data. This shows that about 10 percent of the population were then responsible for about 44 percent of total consumption, while the other 90 percent of the population were responsible for the remaining 56 percent of total consumption. However, in order to analyse the survey data further and measure living standards in Turkmenistan, it is also necessary to consider: (i) absolute and relative levels of poverty; (ii) the location and characteristics of the poor; and (iii) some non-economic human development measures. Only after reviewing all these can a full picture be developed[3].

Absolute and Relative Levels of Poverty

2.3 The standard approach to poverty measurement is to utilize economic measures and to adopt a poverty line against which absolute or relative income or consumption is compared, based on a person's physiological needs for water, clothing and shelter etc. There are several ways to construct such a poverty line, and these approaches yield a wide range of results, due to the various definitional options.

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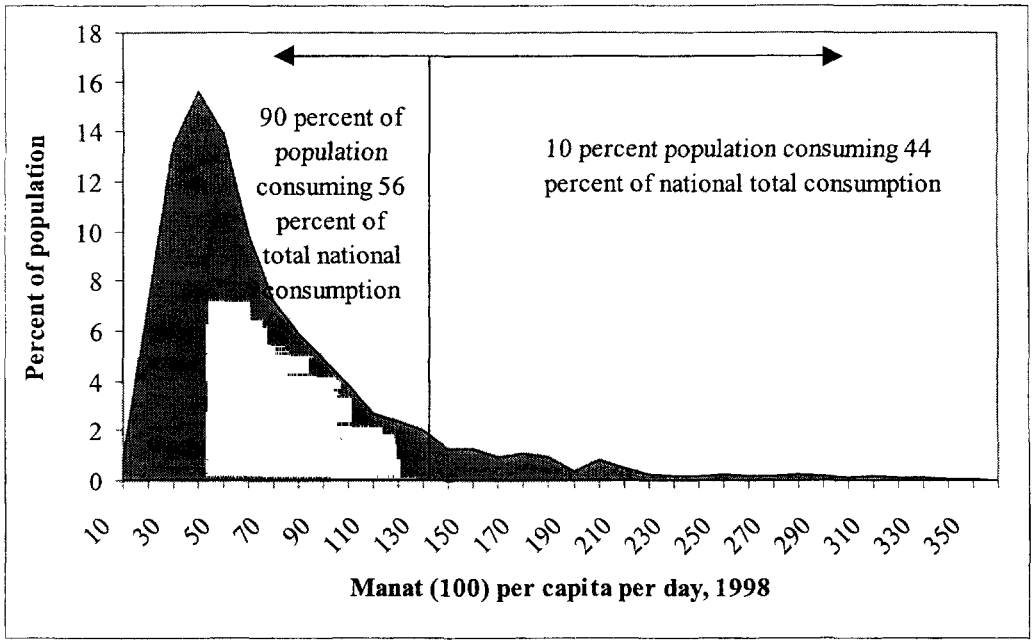
[2] The survey was prepared during the period from July 1997 to January 1998, and the data were collected from February to April 1998. There were 2,094 households in the sample, and the sample was representative at the urban and rural levels in the six velayats (regions) of the country. The survey was financed by the World Bank through the Institution Building Technical Assistance Project.

[3] Other data are also available from the Turkmenstatprognoz on different aspects of living conditions, such as employment and the social services. Important statistics can also be found in such sectoral plans and reports as the recent "Education For All Report" and the "Lukman Health Plan". In addition, the UNDP has compiled a "Common Country Assessment Information Base", and many of the data are summarized in the annual Human Development Report which it produces. A Demographic and Health Survey has recently been carried out, and its results should be available later in Year 2000. This will add considerably to the knowledge of living standards in Turkmenistan. In addition, a mini-census (based on a sample of 5 percent of the total population) had also been planned for Year 2000, but it has recently been delayed and will be carried out probably in Year 2002.The statistics from different sources are not always consistent, and so some enigmas remain in the overall picture of living standards in Turkmenistan.

Figure 2.1 Distribution of Consumption in Turkmenistan (1998)



Source: Turkmenistan Living Standards Survey (1998)

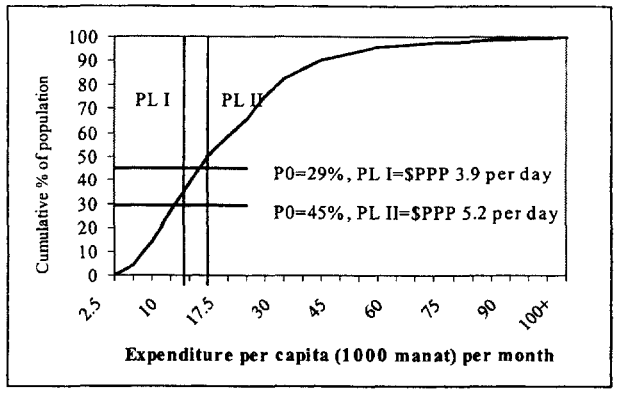
2.4 **Absolute Internationally Accepted Poverty Line:** In the case of countries in the Europe and Central Asian Region, the poverty line set by the World Bank uses $2.15 per capita per day. This is weighted by the purchasing power of the local currency. Specifically, the purchasing power parity (PPP) of the Manat in 1998 has been calculated to be 890 to the dollar, and so the poverty line is taken as Manat 1,914 per day (or roughly Manat 57,000 per month). By this definition, and taking into account all consumption (including home production), the incidence of poverty in Turkmenistan in 1998 is estimated to have been just 7 percent. This figure compares very favorably with most other FSU countries (see Annex 1). Although the $2.15 line is widely used for estimating poverty levels, clearly the line can be set at other levels too. If, for example, one were to double the poverty line to PPP $4.30 per capita per day (which is an alternative line sometimes used by the World Bank), the incidence of poverty, would (it is estimated), have been 34 percent in Turkmenistan in 1998.

2.5 **Absolute Domestic Living Standards Comparison Line:** The living standards comparison line used by the Turkmenmillihasabat in its report on the 1998 survey[4] is based on the use of the official minimum wage (which was Manat 80,000 in 1998, and which is now Manat 500,000). However, rather than include all forms of income, whether in cash or in-kind, the Turkmenstatprognoz only considered the former: using that approach of monetary incomes only, it was estimated that 58 percent of the population had less than the minimum wage of Manat 80,000. Ideally, the national estimate of living standards or poverty should be based on an estimate of the cost of a basket of goods and services which would be required for minimum human consumption. In the case of Turkmenistan, although

[4] "Living Standards Measurement Survey for the Population of Turkmenistan". Ashgabat, 1998. Page 156.

such a line has been estimated, it has not been approved by the authorities and is still considered to be confidential. It has not been possible, therefore, for a poverty rate to be calculated on this basis.

Figure 2.2 Poverty Increase with an Increase in Poverty Line



Source: Turkmenistan Living Standards Survey

Table 2.1 Living Standards Estimates for Turkmenistan using Different Definitions (1998)

Definition	Source of Calculation	Definition Used	Estimate of Population below the Line
Official minimum wage	Turkmenstatprognoz	Only cash incomes	58 percent
Minimum consumption line	N/A	N/A	N/A
$2.15 (PPP) per day	World Bank	All forms of income	7 percent
$4.30 (PPP) per day	World Bank	All forms of income	34 percent
50 percent mean consumption	World Bank	All forms of income	29 percent
67 percent of mean consumption	World Bank	All forms of income	45 percent
50 percent of median income	Government	All forms of income	1 percent

Source: Turkmenistan Living Standards Survey, 1998

2.6 **Relative Poverty Lines:** Instead of using an absolute poverty line, a relative approach may be used. Such an approach goes beyond basic physiological needs by defining poverty in relation to a generally accepted standard of living in a specific society at a specific time. One commonly used relative poverty line is households living below half the average income. In particular, it is useful to consider 50 percent of mean consumption as an alternative poverty line. In the case of Turkmenistan in 1998, this is estimated to have been Manat 208,000. Using this approach, about 29 percent of the population may be considered to have been poor in 1998. Alternatively, using the criterion of incomes less than 50 percent

of the median per capita income, the Government has recently reported that only 1 percent of the population are now below that line.

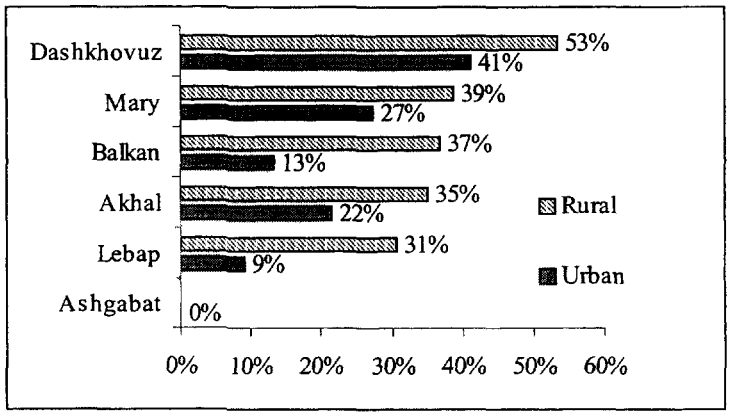
2.7 The estimate of the extent of relative poverty is also quite sensitive to the choice of the relative poverty line. For example, Figure 2.2 shows that the rate of poverty would change from 29 to 45 percent if the criterion of the poverty line were to be changed from 50 percent of mean expenditure per capita (or about PPP $3.9) to two thirds of mean expenditure per capita (or about PPP $5.2). This means that the cushion between the poor and the non-poor is quite thin.

Location and Characteristics of the Poor

2.8 Besides the estimates of living standards for the country as a whole, it is important to consider the characteristics of the poor and especially where they are located. The following tables show several dimensions of this. In these tables, the poverty line used relates to 50 percent of mean consumption, although the relative positions of the regions (valayats) would not differ if other lines were used.

2.9 **Regional and Rural/Urban Dimensions of Poverty:** Figure 2.3 illustrates that living standards vary by velayat. In 1998 all of the surveyed residents in Ashgabat lived above the level of 50 percent of mean consumption, whereas in Dashkovuz roughly half of the population consumed less than 50 percent of the national average. This included 53 percent of the rural population and 41 percent of the urban population there. The reason for the differential rates of poverty between the regions may partly be explained by the differences in family size.

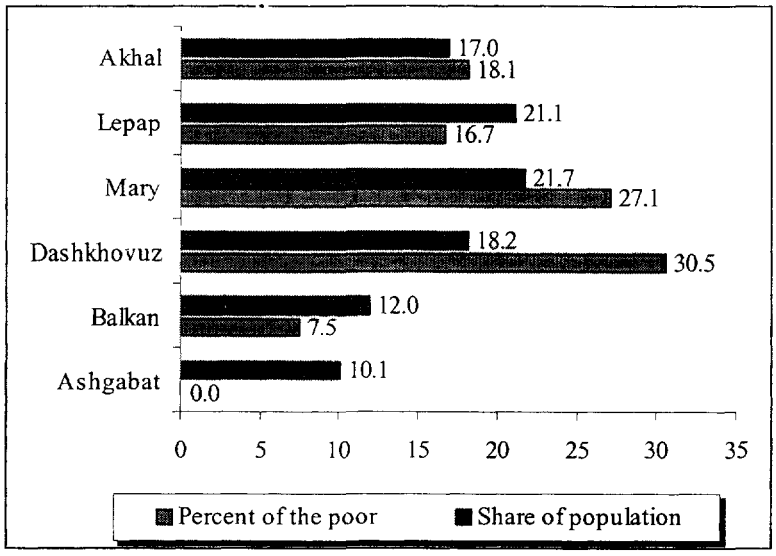
Figure 2.3 Proportion of the Population below 50 Percent of Mean Consumption by Velayat (All Regions)



Source: Turkmenistan Living Standards Survey, 1998

2.10 Figure 2.4 shows that, in addition to differences in the respective rates of poverty between the velayats, there were also large variations in the absolute numbers of poor people in each region. For example, while only 18 percent of total population lived in Dahkhovuz, the poor population of that region accounted for 30 percent of the total number poor in the whole country. Mary is another velayat that had a proportionally larger poor population than the national average.

Figure 2.4 Population Share and Proportion of the Total Poor by Velayat



Source: Turkmenistan Living Standards Survey, 1998

2.11 However, the issue of the relative extent of poverty in the urban and rural areas of the country needs to be considered carefully. The TLSS data suggest that, in 1998, there may have been more rural poverty than urban poverty. Specifically, according to the TLSS, just over three quarters of the poor lived in the rural areas, and less than one quarter of the poor were in the urban areas. However, the rural urban gap may be somewhat exaggerated for several reasons. First, barter transactions, which are probably more prevalent in the rural than in the urban areas, were not counted in the 1998 survey. Second, the prices were not regionally deflated, and the prices for basic foodstuff and locally produced goods may have been lower in the rural areas than in urban areas. Also, the nature of the poverty could be quite different between the rural and urban areas. In rural areas, with a piece of land or a few livestock, and especially if they have access to some water, poor people can always try to produce some food. The community is also usually stronger in rural than in urban areas. For these reasons, the rural poor population may feel less desperate than the urban poor, or even than the urban population just above the poverty line. In addition, the majority of farmers own their houses, while many urban residents live in government subsidized housing (and will eventually have to buy their own house). Indeed, the more important distinction may be between the rural areas away from the main rivers and canals, and those near to them. In the agricultural areas, economic prosperity may well depend most on irrigation and access to water, and that this factor may be a major criterion in determining living standards. This issue is not easily analyzed using the TLSS data, and differential living standards by geographical location need additional research.

2.12 **Income Inequality:** As noted earlier, about 10 percent of the population accounted for about 44 percent of total consumption, while the other 90 percent of the population were responsible for the remaining 56 percent of total consumption. The bottom 20 percent of the population accounted for only 6 percent of the total national consumption. According to the 1998 survey results, the gini coefficient in Turkmenistan, at 41 percent, is relatively high by

international standards[5]. This may be compared, for example, to Poland (where the gini coefficient is 33 percent) and Romania (where it is 30 percent). Compared to other countries in the Former Soviet Union, however, the gini coefficient in Turkmenistan is not particularly high.

2.13 In addition to the analysis of the gini measurement, it is also possible to analyze the extent of inequality within each velayat and also between the different velayats, using the Theil entropy measure and index (see Table 2.2). The main conclusions from such analysis are that there is considerable inequality between Ashgabat[6] and all of the other velayats in the country; and also that there is considerable inequality within each of the velayats (especially in Mary, Lebap and Akhal).

Table 2.2 Regional Inequality and Contribution to National Inequality

Velayat	E(1) The Theil index	Contribution to inequality %	Population share, %
	(1)	(2)	(3)
Ashgabat	15.7	50.4	10.1
Balkan	23.4	11.7	12.0
Dashkhovuz	21.9	-8.1	18.2
Mary	32.4	5.8	21.7
Lebap	29.6	31.0	21.1
Akhal	30.0	9.2	17.7
Turkmenistan	31.0	100	100

Source: Turkmenistan Living Standards Survey, 1998

2.14 **Characteristics of the Poor**. Beyond focussing on the location of the poor and income inequality, it is also useful to look at relative poverty in Turkmenistan by focussing on the characteristics of the bottom 20 percent of the income or expenditure distribution who may be considered to represent the extremely poor (see Table 2.3 which gives selected characteristics of households by quintile group.)

2.15 On the consumption side, the poorest quintile of households on average consumed about 40 percent of the consumption of the middle quintile of households. Interestingly, the food expenditure share as a percentage of the total household budget does not vary greatly across expenditure quintiles, being about 55 percent for the first three quintiles and about 44 for the richest group. Also, the education levels of the poorest quintile do not seem to be much lower than other households. This is presumably due to the effective implementation of basic education policies in the past. In terms of housing, the poorest group has about one

[5] When the gini coefficient equals 0, there is a perfectly equal distribution, with everyone having the same level of income or expenditure. When the gini equals 1, then there is absolute inequality, as one person possesses all of the income in the economy.

[6] It is worth noting, however, that some rich households in Ashgabat refused to provide answers in the 1998 survey. Thus the low inequality in Ashgabat probably partly reflects the fact that a large proportion of the Ashgabat work force has government jobs with similar rates of pay (though their consumption levels may still have been different). In spite of the low inequality within Ashgabat, its income level is much higher than in other velayats. Therefore, Ashgabat contributes a great deal to the overall national level inequality. With 10 percent of population, it contributes about 50 percent of the total inequality in the country.

half room and 12.2 square meters per person, while the richest group has about 0.8 room and 15.5 square meters per person. Overall, the most distinguishing features of the poorest group are the high numbers of children in the families and their low access to some infrastructure (such as piped water).

Table 2.3 Household Characteristics by Expenditure Quintile

	Percent of Population Living in Rural Areas	Dependent Ratio of Children 17 or Younger	Dependent Ratio of Old People 60 or Older	Average Years of Education of Household Head	Average Age of Household Head
Poorest 20%	79.5	51.0	4.5	9.6	47
II	66.6	46.7	6.0	9.9	46
III	64.7	41.4	6.1	9.9	48
IV	46.8	39.6	9.7	9.7	47
Richest 20%	27.9	27.8	19.5	10.4	50
Poorest 20%	Mean Expenditure Per Capita Manat/month	Food Budget Share	Number of Rooms Per Person	Square Meters Per Person	Percent of Population with Piped Water
Poorest 20%	63,476	54.5	0.49	12.2	24.0
II	107,228	54.7	0.53	12.6	32.4
III	151,124	54.8	0.61	14.1	39.3
IV	224,523	51.6	0.67	15.0	60.3
Richest 20%	494,496	44.4	0.79	15.5	74.2

Source: Turkmenistan Living Standards Survey, 1998

Non-Economic Human Development Measurements

2.16 Instead of an economic approach, measures of poverty can also be based on trends in selected capability-based indicators, such as the health and education of the population or their access to services and resources; or on demographic-based measures, reflecting the people's expectations and perceptions about the future; or on socio-environmental indicators, such as social relationships, power and security. All of these approaches provide different and complementary information about the quality of life of the people, and can be used in a variety of ways.

2.17 **Basic Human Development Indicators:** To supplement the economic poverty estimates, Table 2.4 provides some data on selected human development indicators. This table shows that Turkmenistan's life expectancy was the lowest, its infant mortality was the highest, and its fertility level was also the highest compared to other selected FSU and Eastern European countries in the period 1995-97. The country's human development index was better than those in the Kyrgyz Republic, Albania and Moldova, but worse than those of the other countries shown. However, it should be noted that the index is dominated by various health indicators, whereas Turkmenistan is reported to have had the highest level of adult literacy among the countries selected.

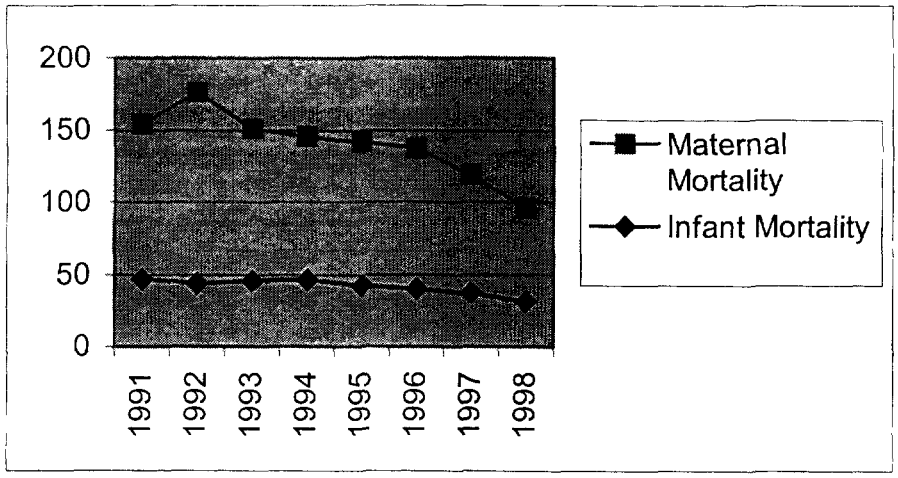
Table 2.4 Human Development Indicators in Selected Countries

Selected Human Development Indicators						
	Life Expectancy 1997 [1]	Fertility Rate 1995	Infant Mortality 1997[2]	Mortality Rate Under 5 1997[2]	Adult Literacy Rate 1997[1]	HDI Rank[1]
Poland	72.5	1.6	10	12	99	44
Hungary	70.9	1.6	11	12	99	47
Croatia	72.6		-	10	98	55
Bulgaria	71.1	1.2	18	24	98	63
Romania	69.9	1.4	22	26	98	68
Russia	66.6	1.4	17	25	99(3)	71
Latvia	68.4	1.3	15	19	99	74
Kazakhstan	67.6	2.3	24	29	99	76
Georgia	72.7		17	21		85
Armenia	70.5	1.8	15	-	99	87
Ukraine	68.8	1.5	14	17		91
Turkmenistan	65.4	3.8	33	14	100(2)	96
Kyrgyz Republic	67.6	3.3	24	-		97
Albania	72.8	2.6	33	40	85	100
Moldova	67.5	2.0	20	24	98(3)	104

[1] Figures are cited from UNDP "Human Development Report", 1999.
[2] The figures are from the World Bank Live Data Base as of March 30, 2000. The Turkmenistan figure given in the UNDP "Turkmenistan National Human Development Report, 1999" is somewhat higher, at 38/1,000.

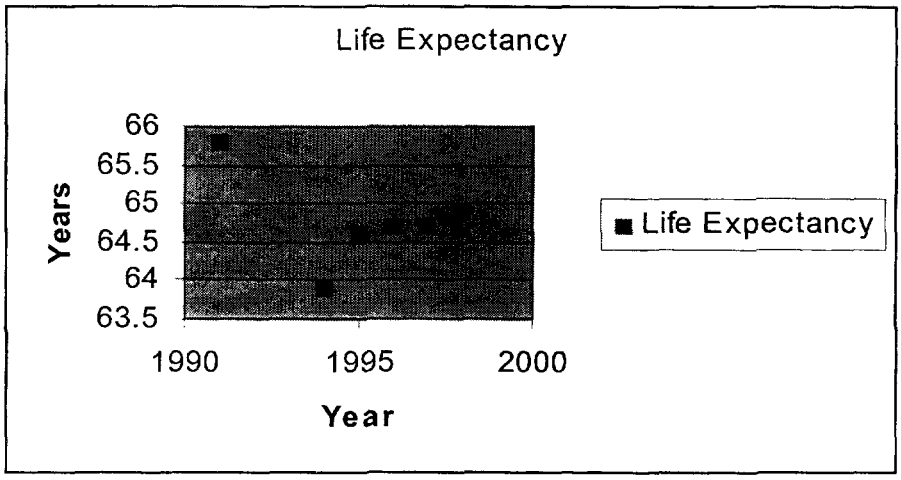
2.18 **Trends in Human Development Indicators Over Time:** It is also important to consider what has been happening to these human development indicators in Turkmenistan over time. Figure 2.5 shows the trend in reported infant and maternal mortality figures, while Figure 2.6 shows the trend in the life expectancy. There are two particularly interesting features of these graphs. The first notable feature is that the trends in the three demographic indicators are broadly consistent with each other: maternal mortality shows a steady improvement after 1992, infant mortality also shows a steady improvement after 1994 (and the latest reported official statistics suggest that it may have fallen to as low as 26/1,000 in 1999, in contrast to the World Bank live database figure of 33/1,000), and life expectancy increases each year after 1994. However, the second feature is that these improvements in the human development indicators do not match the performance of the economy, which was continuing to decline significantly until 1998.

Figure 2.5 Trends in Infant and Maternal Mortality, 1991-1998



Source: United Nations Common Country Assessment Information Base

Figure 2.6 Trend in Life Expectancy, 1991-1998



Source: United Nations Common Country Assessment Information Base

Note: The latest figure for estimated life expectancy in Turkmenistan in the World Bank Live Database is 66 years.

2.19 This contrast between the economic indicators in Turkmenistan and the health indicators is very interesting. While questions may reasonably be asked about the reliability of the statistics and particularly about the absolute values of the indicators, it is believed that the trends may indeed be correct as there were some important developments in the health sector which may have improved the health of the population, despite the serious fall in official economic activity. This includes new policies towards the health sector, improved family planning services, the retraining of many health workers, and some new initiatives to address HIV/AIDS. The results of the forthcoming Demographic and Health Survey (now being carried out), and especially the anthropometric data being collected, will be of critical importance in confirming or adjusting this view.

2.20 **School Attendance and the Quality of Education**: In the education sector, the data suggest that the overall picture is still impressive, although some strains are beginning to appear. The system of pre-school, primary school (for children aged 7-9 years, in grades 1-3) and secondary school (for children aged 10-15 years, in grades 4-9) covers some 95 percent of children. There are no obvious differences between the coverage of boys and girls; about 85 percent of children leave school without having had to repeat any grades; and virtually the whole population is literate.

2.21 However, attendance in pre-schools has dropped from about 34 percent at the time of independence to about 25 percent now. Almost one third of the primary and secondary school children are taught in shifts; many teachers are now leaving the education sector due to lack of adequate salaries and inadequate textbooks; and the shift in the language of instruction to Turkmen has added substantially to the challenges that they face. In recent years, there has also been a decline in the higher education enrollment rates (in contrast to trends elsewhere in the region). While this does not affect the adult literacy rate, it does not bode well for the future, as the country will need an increasing number of technical and managerial professionals for its economic development.

2.22 **Rural Opportunity**: In addition to the economic and human development approaches to poverty, it is also useful to consider other dimensions of poverty, such as social relationships, opportunity, power and security. In particular, it is necessary to have some understanding of the social environment in which most people live, especially in the rural areas. This is particularly important as the Government has chosen an approach to land reform and farm restructuring, which is unlike the procedures and mechanisms adopted by other FSU republics. Instead of distributing the former collective land into paper certificates of entitlement, the collective holdings are now being transformed gradually and from within through a process of dividing collective land into plots leased to families. According to the provisions of the program, the leased land can be privatized if the leaseholders show a satisfactory record of performance for at least two years. In the interim, the land remains within the collective structure, but the collective has been reorganized into an entity known as a peasant association.

2.23 From an economic perspective, this approach to land reform and farm restructuring has produced a significant shift to individual or household-based farming. There is evidence that leaseholders are now, in general, more satisfied with the standard of living of their families. A recent survey found that both managers and leaseholders also expressed enthusiasm for the ongoing reforms; and it appears that the financial situation of farms has improved as the leaseholders now have much greater incentives to work. They are also able to cultivate vegetables on additional leased land. All of this is positive.

2.24 Nevertheless, the individual production and behavior of farmers are still mostly circumscribed by administrative regulations. In the case of wheat and cotton, the lease contracts specify the crop that the leaseholder is required to produce, and set a specific quantity target for delivery to the state at prices much below the level of prices prevailing on international markets (although their inputs are also subsidized). Production and marketing requirements are conditions for gaining access to land. Furthermore, while the leaseholders are generally satisfied with their standard of living, in absolute terms the rural population in Turkmenistan is quite poor. Moreover, while the rural people may be able to maintain an acceptable level of living at present due to policies that reduce prices for essential items, such

as flour, electricity, and gas, the subsidies may not be sustainable in the longer run. There is, therefore, a need to move from the legal change in status to providing greater opportunity to develop commercial activities.

Conclusion

2.25 While the extent of absolute poverty (as measured by PPP $2.15) is quite small in Turkmenistan, there are also many people whose quality of life is rather low and there is a high degree of inequality. In particular, there is considerable inequality between Ashgabat and the rest of the country, and there is also a substantial amount of inequality within each of the velayats. Most of the poor do not have a piped water supply, but rather have to obtain water from wells or canals (which are often polluted). Despite some apparent significant improvements in recent years, the levels of life expectancy and infant mortality remain unsatisfactory, although the causes of ill-health are complex. The education system is also beginning to feel some significant strains. In the rural areas, there have been some important policy developments with the leasing of agricultural land and with the establishment of some private farming. But there is a clear need for further reform, as farmers still face limited opportunities for advancement and need to have increased opportunities for production.

2.26 This analysis has important implications for Government policies, for the choice of pro-poor investments, for regional policies between the various velayats, and also for the targeting of assistance to poorer groups within individual velayats. As noted earlier, the cushion between the poor and the non-poor is quite thin, and any economic shock (such as bad weather) could send a significant proportion of the population into greater income poverty. On the other hand, economic growth which reaches many people could reduce the extent of poverty quite significantly.

3. Employment Opportunities

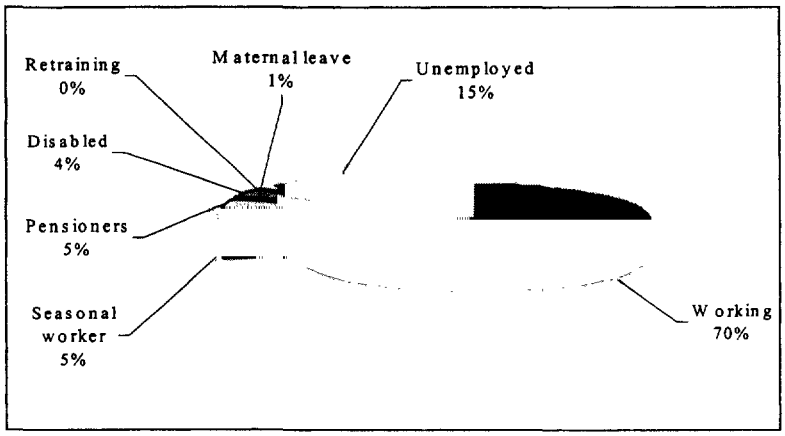
3.1 Only a rather low proportion of people in Turkmenistan are living below a poverty line of PPP $2.15, but many more are not far above it. They are mostly kept out of absolute poverty through a large number of untargeted and eventually unsustainable subsidies. But so far they have had only limited opportunities for advancement, and the services which they are provided by the Government are of inadequate quality.

3.2 Economic growth could potentially lead to a significant reduction in poverty and a corresponding improvement in living standards, as the data from the 1998 survey of living standards suggest that the elasticity of poverty reduction with respect to economic growth is about 1.75. In other words, a 5 percent increase in the income of the population who live around the poverty line could reduce poverty by almost 9 percent. For that to happen, however, it is necessary for the benefits to accrue to the poor through the development of productive opportunities and employment for as many people as possible.

The Characteristics of the Unemployed

3.3 Based on TLSS survey data, the overall unemployment rate is estimated then to have been about 15 percent[7] (see Figure 3.1). This result is consistent with the results of the Workforce Survey which was also carried out by the Turkmenmillihasabat.

Figure 3.1 Employment Status of the Labor Force aged 17 to 60 Years



Source: Turkmenistan Survey of Living Standards, 1998.

3.4 **Urban and Rural Unemployment:** The TLSS survey results indicate that unemployment puts a particular stress on the economic well-being of a household in the urban areas. In contrast, in the rural areas, a plot of land can usually take in some extra labor,

[7] The labour force is regarded as adults aged 17 to 60 years old. It includes pensioners, seasonal workers and women on maternal leave as being among the employed. People looking for a job, and people who not looking because they thought that there were no jobs available, are all counted within the labour force. However, students, people not wanting to work or without sufficient time to do so, and adults taking care of children, are not counted as being in the labour force.

even though the return to the labor may be low. Table 3.1 shows that unemployment in 1998 was 19 percent in the urban areas, significantly higher than the rate of 11 percent in the rural areas. Among the poorest quintile in the urban areas, the unemployment rate was extremely high, reaching 31 percent. It decreased consistently as income level increased, with 13 percent among the top 20 percent of the urban population. In rural areas, however, the unemployment ratio was quite similar among the four bottom quintiles. It only showed a significant decrease for the top quintile households. Interestingly, even the lowest unemployment rate of 13 percent in urban areas (among the richest households) was higher than the average rural unemployment rate of 11 percent. This may explain why in rural areas there is a rather similar level of economic well-being between people who work and people who do not work. It also suggests that there may be a substantial amount of "underemployment" in the rural areas, as people may work only for a few hours.

Table 3.1 Employment Status by Expenditure Quintile and by Rural/Urban

	Urban			Rural		
	Actively working	Beneficiary	Unemployed	Actively working	Beneficiary	Unemployed
Poorest	59	9	31	81	6	13
II	66	8	26	80	10	11
III	75	6	19	81	8	10
IV	72	8	20	76	11	13
Richest	78	9	13	80	13	7
Total	73	8	19	80	9	11

Source: Turkmenistan Survey of Living Standards, 1998.

3.6 **Unemployment by Age Group:** According to the TLSS results, the younger generation was much more likely to be unemployed than the older ones. Table 3.2 shows that in the urban areas, 37 percent of the youngsters (aged 17 to 22 years) were not employed, whereas in rural areas the rate was 19 percent. This age group had the highest unemployment ratio among all age groups.

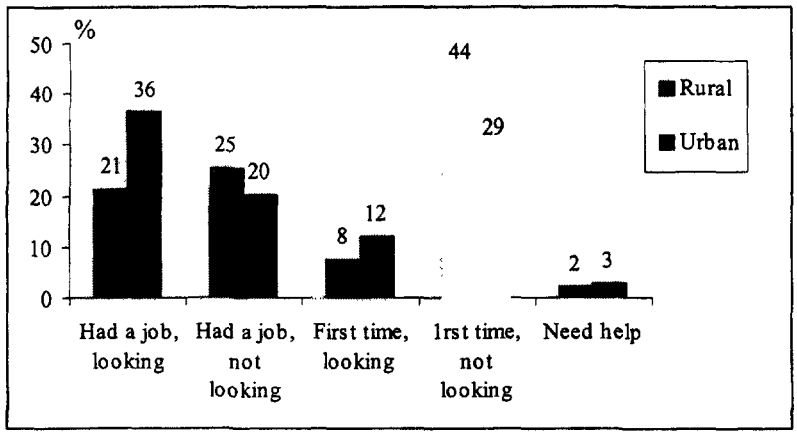
Table 3.2 Employment Status of the Labor Force Aged 17 to 60 Years

	Percent of Labor Force					
	Urban			Rural		
	Working	Beneficiary	Unemployed	Working	Beneficiary	Unemployed
17-22	60	2	37	78	3	19
23-30	78	3	19	87	3	10
30-61	76	12	13	79	14	7

Source: Turkmenistan Survey of Living Standards, 1998.

3.7 **Job Seeking Status:** Figure 3.2 shows the job seeking status of the unemployed. In the urban areas, 48 percent of the unemployed people were looking for a job, whereas in rural areas only 29 percent were looking. This suggests that the majority of unemployed people lacked confidence in the existence of, or possibility to find a job, especially in the rural areas. In addition, very few people had thought of trying to start a private business. This may reflect the existence of many serious constraints on the development of the private sector development in the country.

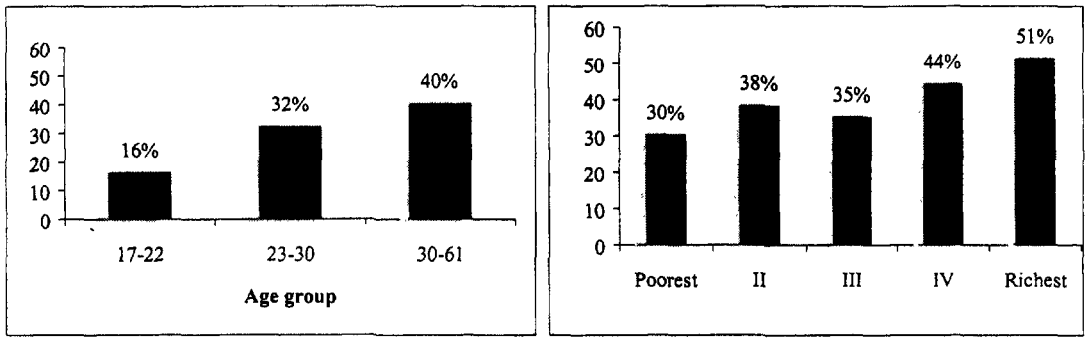
Figure 3.2 Job Seeking Status among Unemployed



Source: Turkmenistan Survey of Living Standards, 1998.

3.8 Figures 3.3 and 3.4 show how income status and age affect confidence in employment opportunities: in general, younger people were less likely to look for a new job, as only 17 percent of people aged 17 to 22 years had been looking for a job in the previous seven days. People in low income households were also less likely to look for a new job: Figure 3.4 shows that 30 percent of the unemployed labor force in the lowest quintile had been seeking a job in the previous week, while over 50 percent of the unemployed labor force in the top quintile had been seeking a job. Only a few people had registered with the Government labor offices, which have responsibility for assisting in job searching, as most people did not even know of the existence of the offices.

Figures 3.3 and 3.4 Proportion of Unemployed Seeking a Job in Past Week



Source: Turkmenistan Survey of Living Standards, 1998.

3.9 **Link Between Employment and Education:** Employment status is closely related with education level, as people with a higher education have a better chance to be employed. Table 3.3 shows that, in the urban areas, there is a small difference in the unemployment rate between those people who have completed secondary education and those who have not. However, the unemployment rate dropped significantly between those who had had only secondary education and those who had had a higher education. In rural areas, unemployment was less closely related with education as in the urban areas, with 7 percent

unemployment among the population with a higher education, and about 10 percent among people with some kind of secondary education.

Table 3.3 Employment Status in the Labor Force by Educational Status

Education	Percent of Labor Force					
	Urban			Rural		
	Working	Beneficiary	Unemployed	Working	Beneficiary	Unemployed
Primary or less	43	48	10	60	30	10
Secondary incomplete	57	17	26	62	27	10
Secondary complete	71	6	23	83	5	12
Higher education	82	5	13	88	4	7

Source: Turkmenistan Survey of Living Standards, 1998.

3.10 In summary, the unemployment rate in 1998 was much higher in the urban areas than in the rural areas. In the rural areas, it appears that underemployment was the major issue. In the urban areas, the unemployment rate reached over 30 percent among the poorest quintile population. The unemployment rate among young people (aged between 17 to 22 years) was particularly extremely high (at 37 percent in the urban areas and at 19 percent in the rural areas). Possessing a higher education seems to give one a better chance to have a job in the urban areas, but even some people with higher education were unemployed in 1998. Most unemployed people in 1998 were not actively searching for a job, mainly due to lack of confidence in finding a suitable one. This was especially true among the poor, the youth and the less educated.

Living Standards, Employment and the Transition

3.11 The 10 Year Plan envisages the transformation of the country's centrally planned economy to a socially oriented market economy, without social or economic turmoil and conflict. From a labor point of view, this transition requires a change from life-time guaranteed employment to people securing and having productive jobs through their own efforts and initiative. So far, the Government reports that the share of private sector employment in Turkmenistan was 54 percent in 1997, which is rather limited compared to other FSU countries (see Table 3.4). Most of the private sector employment created has been in the retail sector (75 percent), though, as noted above, many collective farmers have also leased their land and are managing agricultural production at the private household level.

Table 3.4 Sectoral Distribution of Employment in Selected FSU Countries, 1997

	State Sector	Private Sector	Non-Profit Organization	Joint Ventures
Kazakhstan	32.7	48.5	0.0	18.8
Kyrgyz Republic	24.1	72.0	0.9	3.0
Tajikistan	44.1	53.9	0.3	1.7
Uzbekistan	23.5	73.3	0.3	2.9
Turkmenistan	**45.5**	**53.9**	**0.3**	**0.3**

Sources: Central Asia 2010, Prospects for Human Development, UNDP, 1999; Turkmenistan Human Development Report, UNDP, 1999.

3.12 The challenge of the transition is to create sufficient employment opportunities in the private sector. This could be done through a combination of existing activities, the privatization of state owned enterprises, and allowing the private sector to operate freely. In this process, inevitably a proportion of the labor force would lose their jobs and therefore be exposed to new uncertainties. The transition therefore implies the need for a change in the social psychology of employment. More than this, the education and training sectors need to contribute as well. This was confirmed also by the Workforce Survey carried out by the Turkmenstatprognoz. It found that nearly one third of the unemployed believed that they need vocational training or retraining in order to be able to get a job or to start a private business; and about 10 percent believed that they needed a loan. The survey also concluded that the development of the private sector would depend on the simplification of the registration process for businesses, changes in the taxation system, and reforms in the housing sector. In general, therefore, it appears that major adjustments would be needed in the legal framework and in the financial sector in order to provide a suitable environment for private sector development.

4. The Rural Economy and Living Standards

4.1 The development of the rural economy is a key consideration in raising living standards in the country. While an in-depth assessment of the agricultural sector is beyond the scope of this poverty profile, it is clear that the reform of the sector would have a major impact on the livelihoods of many of the poor. With the coming of such reforms, identifying how people living in rural areas can best utilize their land to improve their income is of major importance.

4.2 Farmers are already allowed an increasing amount of choice and decision-making. Already 80 percent of irrigated land is held under long-term lease arrangements and another 2 percent is held under private ownership. The share of private farming is 67 percent in fruit growing, 72 percent in melon growing, and 61 percent in vegetable growing. As of August 1999, private farmers produced 86 percent of meat, 93 percent of milk, 93 percent of eggs, 35 percent of karakul and 75 percent of wool. Apart from wheat and cotton, other agricultural products are liberalized, with farmers making decisions on production and with no subsidies on inputs.

4.3 However, there are many price distortions in the sector, and having a choice is not the same as being given the opportunity to exercise it. Some of these distortions are in the "favor" of the farmers. For example, the Government guarantees soft credits to leaseholders; farmers are exempted from taxes; water, gas and electricity are charged by fixed amount based on the acreage of land leased and the crops due to be planted, rather than on the actual usage of water (which is not monitored); and the inputs to wheat and cotton production are subsidized 50 percent by the Government. On the other hand, in 1999, 50 percent of all sowing areas in the country were allocated for grain production, and wheat had to be sold to the Government at pre-determined, state prices.

4.4 **Choice of Crops**: Table 4.1 shows that households growing wheat and cotton (which are still subject to state orders) tend to be poorer than households who do not grow these two crops. Among the farming households who grew wheat and/or cotton, there were proportionally more living in the bottom three quintiles. In contrast, the farming households which did not grow wheat and/or cotton had a higher proportion in the third and fourth quintiles.

Table 4.1 Household Well-being by Type of Crop Production

	Proportion of Population Producing		
	Wheat/cotton	No wheat/cotton	Total
The Poorest	26	18	23
II	24	18	22
III	22	21	22
IV	17	23	19
The Richest	11	19	14
Total	100	100	100

Source: Turkmenistan Survey of Living Standards, 1998.

4.5 **Livestock:** In addition to crops, farmers also raise livestock. Of the agricultural households in the 1998 survey, 68 percent had some kind of livestock while 32 percent had only crop productions. Table 4.2 suggests that raising livestock is a significant income source for farmers. Among households without livestock, 34 percent of the population live in the bottom quintile. For households with livestock, their living standards are comparable to the general population, with more people living in the middle quintile.

Table 4.2 Household Well-being by Type of Livestock Ownership

	Proportion of Population Raising		
	Livestock	No livestock	Total
The Poorest	19	34	24
II	21	24	22
III	24	17	22
IV	20	15	19
The Richest	18	9	14
Total	100	100	100

Source: Turkmenistan Survey of Living Standards, 1998.

4.6 **Non-Farming Activities:** The Government has identified the development of non-agricultural economic activities, including processing and service activities, as of critical importance to employment creation and the improvement of living standards in the rural areas of Turkmenistan. However, at present, the non-farming sectors in the rural areas are weak and do not contribute significantly to the incomes of the rural population. According to the results of the 1998 survey, the majority (68 percent) of people in agricultural households do not have a single household member engaged in non-agricultural economic activities.

4.7 It would normally be expected that households with more diversified income sources would be better-off than households which are solely dependent on agricultural incomes. However, as can be seen in Table 4.3, this is not the case in Turkmenistan: the proportions of populations in the different poverty quintiles are very similar across the two types of households. If anything, it is the households which are totally dependent on agricultural incomes which are slightly better off.

Table 4.3 Economic Well-being by Agricultural Household Type

	Proportion of Population with		
	Diversified Incomes	Agricultural Incomes only	Total
The Poorest	29	30	30
II	26	23	24
III	21	22	21
IV	17	16	16
The Richest	8	10	9
Total	100	100	100

Source: Turkmenistan Survey of Living Standards, 1998.

4.8 The small contribution of the non-farming sectors to rural incomes is largely due to the fact that the Government still conducts most of the profitable non-agricultural activities in rural areas, such as transportation, food processing, and trade. For households with non-

agricultural incomes, 81 percent of non-farm workers in 1998 worked in state owned enterprises, such as industry, education, health and financial services. Only six percent of them worked in commerce and seven percent in transportation.

4.9 As agricultural products are becoming sufficient to supply the Turkmenistan population, an environment needs to be created to allow private and cooperate identities to take over the management of these economic activities. This could perhaps happen first in non-essential and low technology sectors, such as the transportation of vegetables and the repair of farm machines. The 1998 survey indicated that a large proportion of the unemployed rural population felt that no jobs were available. Allowing non-essential agricultural services to be developed privately by the rural population would bring them many profitable employment opportunities.

5. Basic Social Services: Education

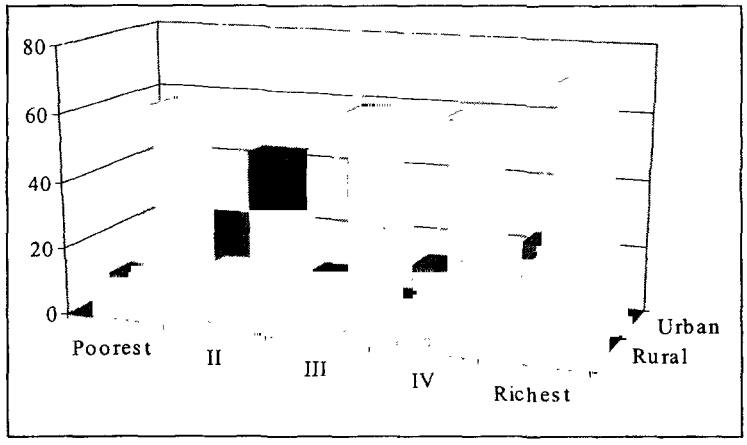
5.1 The education system in Turkmenistan consists of preschool, primary school, secondary school and higher education. The preschool system educates children from 3 to 6 years old, mostly free of charge, but with some symbolic payments for meals. Primary education (comprising grades 1 to 3, for children aged 7 to 9) is free and obligatory, as is secondary education (which comprises grades 4 to 9 or 10, for children aged 10 to 15). Grades 1 to 9/10 are also known collectively as general secondary education.

Preschool education

5.2 The preschool education program aims to give young children artistic, language, elementary mathematical, physical and social training, and to compensate for any gaps in early childhood family education due to the varying economic and education backgrounds of parents. The Government attaches great importance to preschool education, but through the 1990s there was a decline in the preschool enrollment rate from 34 percent to 25 percent. The preschools used to be financed by the collective and state farms, and the abolition of the collective farm system in the rural areas led to a collapse of financing of preschools in those areas. Based on the 1998 survey data, the gross preschool enrollment rate was then only 17 percent in the rural areas and 59 percent in the urban areas.

5.3 A further analysis among children of different income groups indicates that proportionally fewer children from poor families benefit from preschool education than children from higher income families. This is especially true in rural areas. Figure 5.1 presents the gross preschool enrollment rate by rural and urban areas and among different expenditure quintile groups. In rural areas, household income is a definite factor correlated with preschool enrollment. While only 11 percent of the poorest children are in preschool, 32 percent of the children from the richest households are in preschool. In urban areas, income seems to be less of a factor. While there is still a gap between the poorest and the richest, the gap is much narrower at 57 percent versus 71 percent.

Figure 5.1 Gross Preschool Enrollment Rate (1998)



Source: Turkmenistan Survey of Living Standards, 1998.

5.4 In the 1998 survey, a question was asked about the reasons for not sending children to preschool [8]. In rural areas, among those who answered the question, 43 percent cited that the "preschools were closed" and 21 percent cited that the preschools "cost too much". In urban areas, however, the reasons are unclear as most parents cited "other" as the reasons for children not going to preschool. In the urban areas most parents paid some fees, but there was no clear differentiation or pattern by household income level. In the rural areas, a smaller proportion of poor families paid fees than higher income families. The payment is generally higher in rural than in urban areas. The poorest 20 percent of households paid less, but there is no consistent payment pattern among parents of the other 80 percent of households.

Table 5.1 Preschool Payments

	Proportion of Parents Paying Fees		Average Payment	
	Urban	Rural	Urban	Rural
Poorest 20%	94	66	3693	4805
II	91	85	5713	7100
III	94	81	5340	6796
IV	94	97	7078	6090
Richest 20%	94	95	6783	6584

Source: Turkmenistan Survey of Living Standards, 1998.

5.5 From the 1998 survey data, it therefore appears that the current subsidies for preschools benefit the urban population much more than they benefit the rural population. In addition, there is a gap between the poorest and the richest groups, with the richest groups being able to take a greater advantage of the subsidized preschool education than the poorest groups. In spite of low fees of less than Manat 8,000, the cost of attending preschool is a concern for the rural population, but less so for the urban population. Since current preschool education is biased towards urban children and the children of higher income families, the system effectively invests more resources into children with more family advantages and thus gives them an advantage in later entering general secondary education.

General Secondary Education

5.6 General secondary education is obligatory and free. Like most of the other FSU republics, the general secondary education system has nearly 100 percent coverage of the population, and thus there is little apparent gender or income level discrimination. The adult literacy rate is also high, at nearly 100 percent. However, while it is a great achievement to have reached a high level of basic education, there are now some differences in the quality of basic education across the different segments of the population.

5.7 **Language Instruction:** Turkmen is now the predominant instruction language in the general secondary education system: based on 1998 survey, it appears that about 82 and 12 percent of students study in Turkmen and Russian language schools, respectively. However, using Russian as the language of instruction in general secondary education gives those students an advantage later in higher education, since its use is much more prevalent in the

[8] The possible reasons included: "facility closed"; "cost too much"; "low quality of care"; "prefer other care"; "parent left organisation providing the care"; and "other". Only a small sample of parents answered the question, 45 and 67 in urban and rural areas respectively.

higher education system (where 44 percent of students use the Russian language). In the general secondary education, the Russian language is almost exclusively used by urban students. Table 5.2 shows that 43 percent of students from the richest quintile group in the urban areas attended Russian language schools, compared to an average of 20 percent among the students from the four lower quintile families in urban areas. An increase in the use of Russian and other foreign languages as a second language is needed to increase the opportunities in higher education for the disadvantaged children.

Table 5.2 Language of Instruction

	Proportion of Students in Schools with Instruction Language in:			
	Turkmen		Russian	
	Urban	Rural	Urban	Rural
Poorest 20%	82	93	13	0
II	92	91	7	0
III	83	85	14	3
IV	75	94	24	1
Richest 20%	54	100	43	0
Total	74	92	23	1

Source: Turkmenistan Survey of Living Standards, 1998.

5.8 **Duration of Education:** Primary education is meant to start when children are 7 years old, but many now start school later. In addition, compulsory education (including primary and secondary education) has been reduced to only nine years for children going to schools using Turkmen as the language of instruction. Also, one third of schools have to work on a shift basis.

5.9 **Shortage of Teachers:** Population growth rates (2.4 percent at present) will create the need to enroll 230,000 additional children by the year 2005. Over the next three years the system of general education will need about 10,000 new teachers each year for demographic expansion, plus replacements for 2,000 teachers, compared with the present output capacity of teacher training institutions of only 2,000 annually.

5.10 **Education Expenditures:** The problems facing the education sector are in part related to the financial constraints facing the Government. Expenditures on education have dropped precipitously over the past five years, from 17 percent to 10 percent of government budgets. The allocations for primary and secondary education have been protected from severe cuts, preserving the high coverage of the school-age population. However, sustained under-financing seems to be undermining quality. For example, textbook are already less available and teachers are leaving the system or working multiple jobs because salaries are so low. Increased public spending is clearly justified to avoid deterioration of a basically sound system and to generate the educated work force that is needed to support Turkmenistan's future development.

5.11 **Private Educational Expenditures**: The completion of general secondary education (9 or 10 years worth of education in Turkmenistan) is generally sufficient for basic employment opportunities, but higher education is usually necessary for employment requiring any technical or managerial background. As noted above, the children of urban residents and higher income families evidently have an advantage in the higher education system, based on their higher preschool enrollment rate and their higher use of Russian as the

language of instruction. In addition, there is evidence that the richer households contribute more private resources for their children's general secondary education than do the poor households (see Table 5.3). However, it is interesting that, proportionally, the rich do not spend much more than the poor on education, so the poor probably sacrifice even more than the rich in order to supplement their children's education.

Table 5.3 Private Investment in General Secondary Education

	Expenditure on Child Development		Gift to Teacher		Expenditure on Teaching Environment		Other Expenditures		Education Expenditure Share
	% Paid	Average Amount	% Paid	Average Amount	% Paid	Average Amount	% Paid	Average Amount	%
Poorest 20%	2	77	7	33	49	1,290	14	51	1.6
II	4	143	14	57	60	2,814	15	167	2.0
III	4	188	19	94	62	3,508	16	112	1.8
IV	7	710	28	181	71	4,643	26	277	2.1
Richest 20%	12	4,852	36	752	80	8,357	38	755	2.2

Source: Turkmenistan Survey of Living Standards, 1998.

5.12 **School Attendance Rates:** The 1998 survey also asked about the time missed in school, about the reasons for missing school, whether students had help for homework, and the average time spent on homework after school. About 28 percent of students had missed school in the previous year, with the poorest and the richest groups having the highest percentage (Table 5.4). The two most often cited reasons for missing school were illness (58 percent) and agricultural work (30 percent). Agricultural work is a more frequently cited reason among the poorest students, while illness is cited more frequently among both the poorest and the richest children. On average, the richest children missed 1.4 weeks of school, while other students missed about one week. Over 80 percent of children received help on their home work, regardless of income levels. The richest children on average spent more time than the poorest children on after-school homework. In conclusion, the private non-monetary inputs in basic education are broadly similar across income groups, although the rich tend to spend a little more time on home work than other children.

Table 5.4 School Attendance

	% Missed School	Reasons to Have Missed School, %		Average Length of School Time Missed	Proportion Getting Help with Homework	Average Homework Hours
		Agricultural Work	Illness			
Poorest 20%	32	12	13	1.1	85	1.7
II	24	7	13	1.0	85	1.8
III	26	9	14	1.2	90	1.8
IV	26	6	17	1.1	84	1.9
Richest 20%	35	7	27	1.4	82	2.0

Source: Turkmenistan Survey of Living Standards, 1998.

Higher education

5.13 In recent years there appears to be a serious decline in higher education enrollment rates. Attendance in higher education decreased by 39 percent between 1991 and 1995. This decline is also evident from the 1998 survey data. Among the population aged 23 to 49 years, who should have completed the higher education in the period up to1998, 37 percent had obtained some kind of higher education qualification. By comparison, the survey data show that the gross enrollment rate (for children aged 18 to 21 years) in higher education in 1998 was then only 11 percent (Table 5.5)[9].

5.14 Not surprisingly, the attendance rate was much higher among the richest households (at about 28 percent), while attendance among the poorest 40 percent of the population was a rare event. Only 20 students from the poorest 40 percent households (about 5 percent of total school age children) had gone to higher education. Table 5.5 also illustrates education expenditure by quintiles, but there is no clear pattern to illustrate that the rich spent proportionally more than the poor on their children's higher education, although they spend more in absolute amounts.

Table 5.5 Expenditures and Enrollments in Higher Education

	Education Expenditure Share %	Number of Students	Gross Enrollment Rate %
Poorest 20%	4.1	12	6
II	6.2	8	4
III	7.6	20	9
IV	4.9	23	11
Richest 20%	3.7	52	28

Source: Turkmenistan Survey of Living Standards, 1998.

5.15 As further evidence of this decline, for children aged 18 to 21 not in school and who had never entered higher education, only about 9 percent of them said that they planned to continue to study. For those students who did not plan to continue their education, about 29 percent said that they had "finished study" and 39 percent cited that they "do not like studying". There will be a problem to recruit additional numbers of students into higher education in the country if a significant proportion of potential students believe that the completion of general secondary education is sufficient. For those people who wanted to continue to study, the most often cited reasons for not studying were "could not enter" and "cost too much".

5.16 Currently there are about 2,500 students from Turkmenistan studying in Turkey. However, the introduction of the 9 year general secondary education system may be making it much more difficult for Turkmen graduates to seek higher education abroad, such as in Russia or Turkey, since the higher education institutes there want to restrict admission only to students with 10 years of schooling.

[9] Since there were only 115 students enrolled in higher education, the sample was not divided into rural-urban, but only into expenditure quintiles.

5.17 By the year 2005, an additional 20,000 youth will enter the labor market annually. If these youth are not well trained, youth unemployment may grow accordingly. The decline in higher education enrollment will be felt in the near future, as the country will need more technical and managerial professionals for its modern economic development. In the future, for the Turkmenistan education system to provide sufficient professionals for the need of its modern economic development, it is imperative to increase and improve its basic and higher education, and to strengthen the connections between its education system and those abroad.

Summary and Conclusion

5.18 The results of the1998 survey suggest that the general secondary education system has been protected to some extent during the transition time and that it continues to benefit the entire population. This means that Turkmenistan possesses a good potential for a well trained labor force. However, this potential is being undermined by a significant decline in the enrollment rate which is already occurring in both preschool and higher education. The preschool enrollment rate has declined from 34 percent in 1990 to 25 percent in 1999, and it is mainly the children from the rural and low income families who have lost opportunities. In higher education, the attendance rate decreased by 39 percent between 1991 and 1995; and, based on 1998 survey results, the gross enrollment rate for post-secondary education is only about 11 percent. The enrollment rate is particularly low among the children from low income families, but it is somewhat higher among children of the most affluent families.

5.19 Besides enrollments, there are now increasing concerns about the quality of the general secondary education system, particularly due to the financial constraints facing the Government. For example, textbook are already less available and teachers are leaving the system or working multiple jobs because salaries are so low. Increased public spending is clearly justified to avoid the further deterioration of a basically sound system and to support the market reforms that are beginning to take root. For the future, the priority requirements for basic education include greater access to pre-schools in rural areas, the development and dissemination of better quality textbooks, the establishment of testing of student achievement

for monitoring performance and establishing accountability, re-inclusion of language training in addition to Turkmen, and the reorientation of curricula towards problem-solving and the application of skills. It will also be important for there to be a clear policy towards the development of information technology in the schools and higher education.

6. Basic Social Services: Health

6.1 A full investigation into the health sector is beyond the scope of this poverty profile, but it is possible to obtain some important insights from the results of the 1998 survey. As has already been indicated, Turkmenistan still faces some major health challenges. It provides a basic free health program to both poor and rich, but the quality of services is quite limited and it often takes some degree of payment to obtain adequate service.

Major Health Problems

6.2 Turkmenistan's health indicators (such as life expectancy and infant mortality) were historically among the worst in the FSU countries. Infant mortality in 1994 was 46/1000, compared to 27/1000 in Kazakhstan, 29/1000 in the Kyrgyz Republic, 28/1000 in Uzbekistan and 41/1000 in Tajikistan. The high maternal and infant mortality rates were probably related mainly to poor obstetric care and high fertility levels, although the rate of infant mortality may also be related to poor quality water and sanitation, diarrhea and acute respiratory infections. The low level of life expectancy is due to the high infant mortality rate and also to the considerable amount of premature death caused particularly by cardiovascular diseases.

6.3 According to the official data, however, there have been substantial improvements in recent years in the maternal and infant mortality rates. The latter is reported to have been 26/1,000 in 1999, although the latest figure in the World Bank Live Database is somewhat higher at 33/1,000. The vaccination coverage of children up to 14 years of age has also increased from 94 percent in 1997 to 98 percent in 1999. In addition, there has been a reported decline in several types of infectious diseases (such as blood circulation diseases, respiratory diseases and genital-urinary diseases). Overall life expectancy is apparently showing some signs of improvement.

The Health System and Resource Allocation

6.4 Turkmenistan has an extensive health care system inherited from the FSU. However, although the system has been protected from collapse since independence, it is in major need of rehabilitation. In 1995, a national health reform program was initiated; and under this program, a voluntary medical insurance system was established and a family doctor system was also created. The Government is committed to providing health care for its population, and it now allows the development of private medical practices.

6.5 However, the shortage of cash in the public health care system has been a chronic problem. Though the system exists and medical staff are often available, medicines and basic medical equipment (such as syringes) are in severe shortage, and patients often have to buy them themselves in order to get services. One of the fundamental reasons for the inefficiencies in the health care delivery system is the system of budgeting and the resulting lack of incentives for efficiency.

6.6 Some progress has been made within the health system since independence, but further reform is required. The continued reliance upon the use of norms to determine service

configurations and resource allocation needs to be ended, and more attention needs to be paid to quality of care provided. The health services are fragmented, with parallel systems and duplication of facilities. The culture remains one of administration rather than management, with little discretion and few managerial skills available at health facilities. Some training programs have started, but it is unclear if there is the commitment to make the transition away from centrally governed systems.

6.7 Primary care is central to the development of good health services in Turkmenistan. The expansion of family practice and the reconfiguration of primary care services are important and welcome strategies. However, the system of specialist referral remains complicated, and the secondary care system still faces a number of inherited challenges. In particular, the budget allocation system still militates against service rationalization and against a reduction of inappropriate hospitalization.

Level of Sickness

6.8 According to the data from the 1998 TLSS, about 9 percent of people reported chronic disease, 11 percent reported sickness in the last month, and 6 percent reported having been hospitalized in the past year. As can be seen from Table 6.1, the self-reported morbidity prevalence is higher in the urban than in the rural areas, and higher among the rich than among the poor. For example, 14 percent of the urban population and 5 percent of the rural population claimed to be chronically ill. This is consistent with most self reported morbidity data, as generally, the richer are more likely to report illness than the poor are (since they can afford to be sick more than the poor can).

Table 6.1 Morbidity Prevalence by Income Group

% of Population	Urban Total	I	II	III	IV	V
Chronically Ill	14.0	4.2	5.7	10.4	13.2	22.8
Recently Ill	13.7	7.3	9.0	11.4	13.2	19.3
Hospitalized	6.5	3.2	3.6	6.0	6.4	9.0
% of population	Rural Total	I	II	III	IV	V
Chronically Ill	4.7	2.4	3.8	3.9	6.9	12.1
Recently Ill	8.3	6.5	6.2	8.6	10.3	14.3
Hospitalized	5.0	3.3	4.2	4.6	5.9	10.9

Source: Turkmenistan Survey of Living Standards, 1998.

Access to Health Care

6.9 There appears to be evidence that the poor do not seek medical care as much as higher income people (see Table 6.2). As there is no reason to believe that the poor would be sick less frequently than the rich, this indicates that the poor do not benefit as much as the rich from the health care system. Table 6.2 in fact shows that among the total population in the urban areas, 11 percent of people from the highest quintile sought medical care, compared with 5 percent from the bottom quintile. In rural areas, 11 percent from the top quintile sought medical care, but only 3 percent from the bottom quintile sought the services.

Table 6.2 Access to the Health Care System by Income Group

	Urban Total	I	II	III	IV	V
Sought Medical Care among Total Population	7.8	5.2	4.2	7.7	7.0	10.9
Sought Medical Care among Sick population	57	72	47	68	53	56
	Rural Total	I	II	III	IV	V
Sought Medical Care among Total Population	4.8	3.3	3.4	5.0	5.4	11.1
Sought Medical Care among Sick population	58	51	55	58	53	77

Source: Turkmenistan Survey of Living Standards, 1998.

6.10. It is also interesting to examine the proportion of people who sought medical care among people who reported illness. If people reported illness but did not seek medical care, this would indicate either that they cannot afford it or that they do not trust the medical services. In urban areas, there is no consistent pattern across the quintile groups in terms of the proportion of sick people who sought medical care. In rural areas, while 77 percent in the top quintile sought medical care, only 50 percent in the bottom quintile did so.

Household Expenditures on Health

6.11 Although the medical services are meant to be free, people need to use their own resources to purchase medicine and medical equipment which are often unavailable in the health facilities. Table 6.3 shows that the share of household budgets spent on medical care is quite high, at 10 percent for urban residents and 8 percent for rural areas. The share reaches 13 and 16 percent, respectively, for the top quintile income groups in the urban and rural areas.

Table 6.3 Household Medical Expenditures

	Urban Total	I	II	III	IV	V
Share of Medical Expenditure	10.1	4.7	6.1	6.2	7.0	13.4
Mean Medical Expenditure Per Capita per Month	52209	2785	6955	9272	16100	83231
	Rural Total	I	II	III	IV	V
Share of Medical Expenditure	8.1	3.6	5.0	5.9	11.4	16.4
Mean Medical Expenditure Per Capita per Month	27243	2261	5466	9042	25221	106132

Source: Turkmenistan Survey of Living Standards, 1998.

6.12 However, income levels do not appear to be an overwhelming factor preventing the poor from seeking health care. This is corroborated by the fact that the majority of people who were sick but who did not seek medical services cited that the reason for this was

because they did not need medical attention or because they self medicated (80 percent in urban and 67 percent in rural areas). The second most often cited reason for not seeking medical care was the "poor service" in urban areas, and because it was "too far" and or a "poor service" in the rural. Only a few people cited "too expensive" as the reasons.

Summary

6.13 Turkmenistan has a basic health system that appears to deliver a minimum level of services – such as the vaccination program – to the poor and the rich alike. However, for curative health care, the system tends to serve the higher income population more than it serves the poorer population. This is because the poor are less intended to seek and use medical care: among all people who sought medical care, 36 percent were from the top quintile income group, while only 12 percent were from the bottom quintile income group.

6.14 Although the health care services are meant to be free, medication and basic medical equipment are often not available from the health facilities. Among 632 people who bought medicine, only 24 percent of them were able to use an insurance policy. The higher income households are able to supplement public health care with a much higher level of medical expenditure than the poor are able to do. In short, although the health care is free, the poor obtain less frequent and lower quality medical services than the rich. However, improvements and reforms are being introduced, especially in maternal and child health care. There is also an interesting program to raise awareness of the emerging problems of HIV/AIDS. This suggests that significant progress can be made in reducing the existing level of "capability" poverty, though more needs to be done including in improving the rural infrastructure and water supplies in particular.

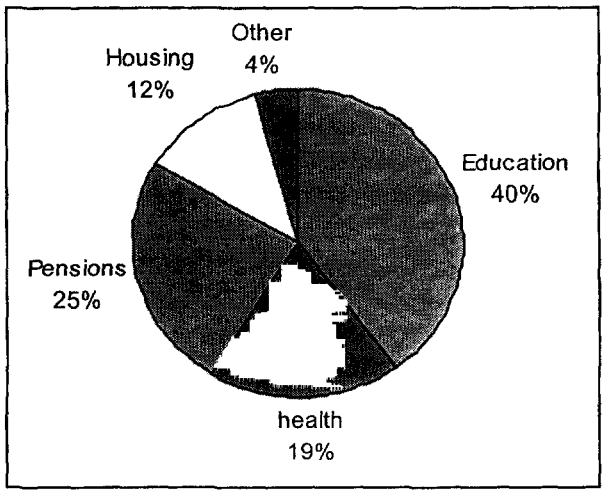
7. Paying for Services to the Poor

7.1 There are two primary vehicles through which Turkmenistan provides for social services: (i) through budget allocations and (ii) through the transfer of certain basic commodities and services in an off-budget manner.

Budget Allocations for Social Services

7.2 The FY2000 state budget for Turkmenistan is 3.4 trillion manat ($680 million at the official exchange rate). Of this, a very large portion, 66 percent was spent on social and cultural services. The largest portion of social and cultural services was spent on education, followed by health and pensions, as can be seen from Figure 7.1 below.

Figure 7.1 Breakdown in State Social and Cultural Spending FY2000



Source: UNDP National Human Development Report, 1999.

7.3. Despite difficulties with data availability, it does appear that substantial funds are being made available within the state budget for social services. However, there are three main concerns. First, most of these funds are poorly targeted, as they are provided as services to the entire population regardless of income level. The Government has indicated that it wishes to find ways to improve the targeting of expenditures and services to the poorer groups, but so far only very limited progress has been made. Second, significant gains which could be made by using these funds more efficiently: for example, through allocating the funds spent on hospitals on the basis of needs rather than on the basis of hospital bed norms. Third, as the state also provides resources through a number of extra-budgetary funds, which taken together exceed the size of the entire state budget, it is unclear how much is spent on the social sectors and what is the detailed breakdown of such spending.

7.4 The existing budget appears to contain few programs that are well targeted to protect the vulnerable population from falling into relative or absolute poverty. However, a new program just launched appears to have the potential to provide such targeting at the local

level. In late-1999, the Government decided to introduce a new system of providing assistance to the most needy in local communities. The approach uses commissions established at the etrap and town level, and consisting of representatives of the local government; the ministries of economics, health and education; and the councils of elders. This system is new, it is limited to just one-off payments to people in particular need, and its effectiveness is yet to be assessed. But, in principle, this could be an important development, if accompanied by the reduction in generalized subsidies.

7.5 It is also worth noting that the state currently controls investments in many enterprises which provide social services, such as pharmaceutical firms. If these could be separated from the state and run on a commercial basis (and more targeted and with transparent subsidies provided in parallel to enable the poor to purchase these services), this could enable more equipment and supplies to be delivered and have a major impact on the provision of services to the poor in terms of both quality and access.

Non-Budgetary Subsidies

7.6 Non-budgetary social transfers constitute a very important part of Turkmenistan's approach to social welfare. After independence, many subsidies were initiated to prevent a decline in the living standards of the population during the process of price liberalization. After 1995, the number of subsidized food items was reduced, but many services still remain on the list. Currently, the state controls the prices of 29 types of goods and services, including education, health care, natural gas, electricity, water (cold and hot), sewerage, apartment rent, central heating, construction materials and resort services.

Box 7.1: **Limits of Free Goods**

Water	250 liters per day per person
Natural Gas	50 cub.m. per month per person
Electricity	--90 k w/h per 2 people per month -- 35 k w/h for each added person

7.6 Water, gas and electricity are provided to virtually the total population at a very low subsidized price, although there are some nominal community charges. Despite some attempt to contain these subsidies (see Box 7.1), there are no meters for water and gas. There are electricity meters, and there is a nominal charge for electricity consumed over a set limit per person. However, the limit is high and the price is so low that it is often not worth collecting the dues. There is, therefore, no economic incentive to conserve these natural resources; waste is inevitable and the environmental damage is considerable. Lights seem never to be turned off, gas burners are left on, and water is seen freely running out of pipes with no faucets attached to the ends. There has not been an estimate of the full environmental impacts, but there are high estimates of the losses of water in Ashgabat and it is believed that the water table there has been dangerously affected. Not only does this constitute a tremendous waste of resources, but also the quality of the services provided is low due to a lack of funding for the maintenance of the systems.

7.7 Since the actual usage of these resources in individual households cannot be measured, it is necessary to estimate their usage based on other measurable parameters, such as the availability of the services or the size of the housing that requires these services. Table 7.1 shows the basic housing conditions by income groups. It clearly shows that subsidies on housing are not well targeted to the poor, as larger spaces need more energy to heat, more

lights to illuminate, and more water to keep clean. The price subsidies on construction materials may be somewhat targeted to the poor, since a larger proportion of the poor own their own house than the non-poor. However, this trend is offset by the fact that the non-poor have larger living areas and more rooms per person than the poor. In addition, over 80 percent of households who do not own a house live in state-owned housing. This means that the state housing mainly subsidizes the living standard of the better-off households.

Table 7.1 Housing Condition by Income Group

	Percent of Households (Population Weighted)							
	Living in Detached House	Living in Separate Apartment	Own the House	Own Additional Real Estate	Number of Rooms Per Person	Space ($M^{2)}$ per person	Average Distance to Water	Average Distance to a Bus Stop
Poorest 20%	85	6	93	14	0.49	12.2	71	19
II	74	13	84	14	0.53	12.6	44	16
III	72	14	83	16	0.61	14.1	46	17
IV	59	29	70	18	0.67	15.0	39	14
Richest 20%	39	51	58	20	0.79	15.5	15	10

Source: Turkmenistan Survey of Living Standards, 1998.

7.8 In fact, all the subsidized services are available more to the rich than to the poor. According to Table 7.2, 74 percent of the richest households have access to centralized, piped and free water, while only 24 percent of the poorest population have such access. This suggests that the richest 20 percent of the population may consume at least 32 percent of total centrally supplied water, while the poorest 20 percent consume only 10 percent. It is true that poorer families tend to have more children, and that water for personal consumption does not vary too much between individuals. But the poor tend not to have access to piped water systems, and the actual consumption by the rich is likely to be higher as they have flush toilets and larger houses. Specifically, while 50 percent of the richest households have flush toilets, only 7 percent of the poorest households have them. The free services of centralized heating and garbage collection also benefit the rich more than they benefit the poor.

Table 7.2 Availability of Public Services by Income Group

	Proportion of Households (Population Weighted) Who Have						
	Centralized Piped Water	Centralized Gas	Indoor Flush Toilet	Centralised Heating	Individual Heating	Fireplace	Garbage Collected by Truck
Poorest 20%	24	71	7	4	47	17	28
II	32	80	10	7	43	28	34
III	39	87	13	9	39	31	40
IV	60	91	28	21	34	27	55
Richest 20%	74	93	50	34	23	25	68

Source: Turkmenistan Survey of Living Standards, 1998.

7.9 Table 7.3 presents the availability of household equipment which mostly require electricity to operate. Because the more wealthy families own more electronic equipment, they consume more energy than the poor and therefore benefit more from the energy subsidies. The subsidization of gasoline also benefits the rich more than the poor.

Table 7.3 Availability of Equipment by Income Group

	Refrigerator	Washing machine	Air condi-tioning	Color TV	Any TV	Car	Telephone in the Dwelling	No Telephone Access
Poorest 20%	75	33	11	19	87	31	21	42
II	83	38	20	31	92	46	27	32
III	91	43	29	39	94	41	29	32
IV	92	49	33	48	95	43	34	26
Richest 20%	95	61	60	66	94	48	53	15

Source: Turkmenistan Survey of Living Standards, 1998.

7.10 As mentioned earlier, utility services are free, but their quality tends to be low. For example, in the 1998 survey, 64 percent of households with a centralized piped water supply indicated that their water is not always available to them; and 57 percent of households said that they do not always have electricity. In short, these data confirm the findings from elsewhere that a unified price subsidy regime tends to benefit the rich more than it benefits the poor. This is because the rich normally have a higher capacity than the poor to consume the services.

7.11 This is not to say that these services should not be provided, but rather that they should be provided at the cost of production, with cash subsidies targeted to the poorest households as required and appropriate. This would not only provide needed funding to maintain the system and thus improve the quality of the services, but it would also encourage conservation of precious natural resources, the maintenance of water and gas pipes, and the provision of better services.

7.12 The provision of non-targeted subsidies also undermines the commercial basis on which the enterprise providing the service operates. If it is unable to charge a market price for its goods, it must in turn rely on subsidies or transfers itself.

Conclusion

7.13 Although it is not possible to gain a full view of the state budget of Turkmenistan, there is evidence that the funding for social services represents a significant portion of transparent expenditures. However, there is also evidence that these funds are not being used efficiently. Further, there is evidence that the non-budgetary and non-transparent subsidized commodities are disproportionately benefiting the more wealthy. This reduces incentives for conservation and maintenance, and undermines the commercial nature of the supplying institution. The quality of services could be increased and the cost lowered by moving towards market pricing of these commodities, with appropriate meters and faucets, while providing more transparent and direct support to those most in need.

Annex 1 Regional Estimates of Poverty

Poverty Estimates Across Selected Countries

	Poverty Headcount $2.15/day	Poverty Headcount $4.30/day	GNP/Capita 1998 $	GNP/Capita 1998 $ PPP
Tajikistan	68.3	95.8	370	1040
Kyrgyz Republic	49.1	84.1	380	2247
Armenia	40.0	74.7	460	2074
Moldova	30.1	68.6	380	1995
Azerbaijan	23.5	64.2	480	2168
Russia	18.8	50.3	2260	6186
Georgia	14.6	47.1	970	3429
Albania	11.5	58.6	810	2864
Turkmenistan	**7.0**	**34.4**	**540**	**2875**
Latvia	6.6	34.8	2420	5777
Kazakhstan	5.7	30.9	1340	4317
Lithuania	3.1	22.5	2540	6283
Ukraine	2.7	24.6	980	3130
Belarus	1.1	20.5	2180	6318
Estonia	2.1	19.3	3360	7563

Source: World Bank. "Making Transition Work for Everyone" (2000).