

***MILLENNIUM DEVELOPMENT GOALS REPORT:***

***TURKMENISTAN***

*ASHGHABAT- TURKMENISTAN-2003*

## **Introduction**

### *1. Why this Report is necessary.*

On the threshold of the new millennium heads of state and governments set out their vision of the world in the UN General Assembly and accepted their responsibility for the fate of mankind, confirming commitment to principles of human dignity, justice and equality. They approved the Millennium Declaration, which defines concrete goals for development and eradication of poverty. In resolution 55/162, dated December 14, 2000, and resolution 56/95, dated December 14, 2001, the UN General Assembly directed the UN Secretary General to prepare annual reports on progress of the UN Organization and its member states in realization of the Millennium Declaration..

In the interests of a just world, Turkmenistan supported the UN initiative and was one of the 189 signatory states to the Millennium Declaration. As a member of the UN, Turkmenistan unflinchingly recognizes human rights and freedoms, and supports socio-political initiatives, aimed at peacemaking, bringing together of nations and peoples, and defense of humanism and democracy.

However, it is important to note that, although achievement of these goals is undoubtedly dependent on combined efforts of UN member states, such achievement also depends on the states themselves and their ability to overcome their own difficulties.

### *2. What does the Millennium Declaration reflect?*

The Millennium Declaration reflects the overall vision of UN member states of a more peaceful, just and flourishing world, in which all people would enjoy a more prosperous and secure life.

### *3. What does this Report reflect?*

This Report on the development of Turkmenistan, developed in accordance with the Millennium Declaration, reflects Turkmenistan's vision, as a UN member state and a neutral country, of its own prosperous ordering and of a just and secure order in the world, in which we live.

### *4. What is the task of this Report?*

In accordance with the Millennium Declaration, this Report defines eight goals, by which Turkmenistan's development progress can be evaluated. Development proposals are offered with respect to each goal on the basis of economic and social data, and potential for achieving the UN goals is determined.

### *5. What specific qualities of Turkmenistan are taken into account in preparation of the Report?*

A number of the UN goals and targets set for development up to 2015 have already been attained in Turkmenistan. For this reason the authors have made appropriate corrections to the content of goals and framing of targets.

### *6. Hopes and aspirations*

We hope that this Report will serve as guide to the future socio-political and economic development of Turkmenistan and will help to achieve the goals of the UN Millennium Declaration.

“We recognize that, in addition to our separate responsibilities to our individual societies, we have a collective responsibility to uphold the principles of human dignity, equality and equity at the global level. As leaders we have a duty therefore to all the world’s people, especially the most vulnerable and, in particular, the children of the world, to whom the future belongs.”

UN Millennium Declaration

## **A. THE MILLENNIUM DECLARATION AND THE REGIONAL ASPECT**

### **A.1. Development goals on the threshold of the Millennium**

#### *1. What are MDGs?*

The MDGs are the UN Millennium Development Goals. These development goals incorporate the results of numerous international conferences, forums and consultations, held during the 1990s under the aegis of the UN. At the Millennium Summit in September 2000 heads of state and representatives of 180 countries drew up these development goals in the Millennium Declaration, which was approved by the UN General Assembly on September 8, 2000.

#### *2. Form and essence of the MDG*

On the basis of the UN Millennium Declaration, the UN Development Program, together with other UN institutions, various other foundations and programs, the World Bank, IMF, and OECD have carried out major work to give a concise formulation of goals, tasks, and quantitative indicators for assessing the results of efforts to attain the MDGs. These new points of orientation are referred to as the “UN Goals for Millennium Development”.

The Millennium Declaration represents the outlook and responsibilities of UN member states regarding attainment of the oldest aims of human development. The most significant among these are long and healthy life, education, optimal living standards, political and civil freedoms, and creating conditions for participation in civil life. Reduction of poverty is central among the problems to be solved. The conceptual basis of the development goals in the Millennium Declaration is observance of the principles of human dignity, freedom and equality, solidarity, tolerance, shared responsibility for the future of mankind, and concern for the environment.

*Freedom.* All people have the right to live in decent conditions, free from hunger, fear, oppression, violence and injustice.

*Equality.* All people are equal regardless of sex, nationality, race and creed.

*Solidarity.* International challenges and challenges facing different peoples must be addressed with mutual participation by countries and fair distribution of costs in accordance with principles of social equality.

*Tolerance.* Belief, culture and languages of different peoples must be respected. People must not be persecuted due to differences in their views or convictions.

*General duty.* The world community must consolidate its efforts under the aegis of the UN to combat threats to security.

*Respect for nature.* The immense riches of nature must be preserved for our descendants though prudent and economical use of natural resources.

### 3. Goals and tasks of the Millennium Declaration

The aim of development goals for the period from 1990 to 2015, as formulated in the Millennium Declaration, is to consolidate the World Community and make it easier for people living in various conditions to live a full and rewarding life. The efforts of states should be focused on the following goals:

- Goal 1. Eradicate extreme poverty and hunger.
- Goal 2. Achieve universal primary education.
- Goal 3. Promote gender equality and empower women.
- Goal 4. Reduce child mortality.
- Goal 5. Improve maternal health.
- Goal 6. Combat HIV/AIDS, malaria and other diseases.
- Goal 7. Ensure environmental sustainability.
- Goal 8. Develop a global partnership for development.

Despite generality of the goals and their attainment, the specifics of each country will dictate the formulation of targets, on which the efforts of society in that country should be focused.

In Turkmenistan many of the issues, set out in the Millennium Declaration, have already been resolved. For example, the third target proposed in the framework of Goal II is: "To ensure that, by 2015, children everywhere, boys and girls alike, will be able to complete a full course of primary schooling."

This is already the case in Turkmenistan, so the present Report envisages a new, higher level of education, which is formulated in target 2: "Broadening people's access to high-quality education at all levels and achievement of international standards in education."

The whole list of tasks relating to the Millennium Goals has been revised in a similar way, so that, instead of 18 tasks to be resolved by 2015 in the framework of the Goals, Turkmenistan envisages solution of 13 goals, expressed in a qualitatively different form (Table A.1).

Table A.1

**Development Goals in the Millennium Declaration, and Targets for Achievement of those Goals**

	Content of the Goal in the Millennium Declaration	Tasks for 1990-2015	
		In Millennium Declaration	Approved for this report, taking account of specifics of Turkmenistan
<b>Goal I</b>	Eradicate extreme poverty and hunger	<b>Target 1.</b> Halve, between 1990 and 2015, the proportion of people whose income is less than one dollar a day	<b>Target 1.</b> Reduce by three times, between 2000 and 2015, the proportion of people whose income is less than 50% of the average monthly income
		<b>Target 2.</b> Halve, between 1990 and 2015, the proportion of people who suffer from hunger	
<b>Goal II</b>	Achieve universal primary education	Target 3. Ensure that, by 2015, children everywhere, boys and girls	<b>Target 2.</b> Broaden access to high-quality education at all levels and attain

		alike, will be able to complete a full course of primary schooling	world standards in education
<b>Goal III</b>	Promote gender equality and empower women	<b>Target 4.</b> Eliminate gender disparity in primary and secondary education, preferably by 2005, and to all levels of education no later than 2015	<b>Target 3.</b> Eliminate gender disparity at all levels of education, particularly higher education
			<b>Target 4.</b> Reduce by 2015 gender inequality as regards incomes on the labor market
<b>Goal IV</b>	Reduce child mortality	<b>Target 5.</b> Reduce by two thirds, between 1990 and 2015, the under-five mortality rate	<b>Target 5.</b> Reduce infant mortality by 2.1 times between 2000 and 2015.
<b>Goal V</b>	Improve maternal health	<b>Target 6.</b> Reduce by three quarters, between 1990 and 2015, the maternal mortality ratio	<b>Target 6.</b> Reduce maternal mortality by two times between 2000 and 2015
<b>Goal VI</b>	Combat HIV/AIDS, malaria and other diseases	<b>Target 7</b> Have halted by 2015 and begun to reverse the spread of HIV/AIDS	<b>Target 7.</b> Prevent incidence of HIV/AIDS in the country
		<b>Target 8.</b> Have halted by 2015 and begun to reverse the incidence of malaria and other major diseases	<b>Target 8.</b> Reduce incidence of tuberculosis by one third between 2000 and 2015
<b>Goal VII</b>	Ensure environmental sustainability	<b>Target 9.</b> Integrate the principles of sustainable development into country policies and programs and reverse the loss of environmental resources	<b>Task 9.</b> Prevent exhaustion of natural resources
		<b>Target 10.</b> Halve by 2015 the proportion of people without access to safe drinking water	<b>Task 10.</b> Reduce the proportion of people without access to safe drinking water
		<b>Target 11.</b> By 2020 to have achieved a significant improvement in the lives of at least 100 million slum dwellers	<b>Target 11.</b> By 2020 to have achieved significant improvement in housing conditions
<b>Goal VIII</b>	Develop a global partnership for development	<b>Target 12.</b> Develop further an open, rule-based, predictable, non-discriminatory trading and financial system.	<b>Target 12.</b> Address the special needs of landlocked countries
		<b>Target 13.</b> Address the special needs of the least developed countries.	<b>Target 13.</b> Continue to combat terrorism and preparation of terrorist acts.

		<b>Target 14.</b> Address the special needs of landlocked countries and small island developing States (through the Program of Action for the Sustainable Development of Small Island Developing States and the outcome of the twenty-second special session of the General Assembly)	
		<b>Target 15.</b> Deal comprehensively with the debt problems of developing countries through national and international measures in order to make debt sustainable in the long term	
		<b>Target 16.</b> In cooperation with developing countries, develop and implement strategies for decent and productive work for youth	
		<b>Target 17.</b> In cooperation with pharmaceutical companies, provide access to affordable essential drugs in developing countries	

#### *4. The UN Development Program and the Millennium Declaration*

The UN General Secretary requested the Administrator of the UN Development Program (UNDP), as Chairman of the UN Development Group, to organize a campaign of support for the MDGs and to take responsibility for assessment of results, disseminating relevant information both within the UN and among countries. Efforts to achieve the MDGs should become an inseparable part of activities by UN branches worldwide.

#### **A.2. Millennium Goals and Turkmenistan’s National Development Programs**

1. Use of a scientific basis, with programs and goals, has been characteristic of economic and social development in Turkmenistan since the first days of the country’s independence.
2. A number of socio-economic programs and goals were devised for Turkmenistan’s development. These included the “New Village” and “Grain” programs for agriculture, The “Health” program for improvement of medical care, and the program “10 Years of Stability” for

political and socio-economic development. These programs were the basis for all aspects of Turkmenistan's development in the period 1991-1999.

The National Program of the President of Turkmenistan, Saparmurat Turkmenbashi, "Strategy of socio-economic transformation of Turkmenistan in the period to 2010" should be viewed as a complex development program for the country from 2000 until 2010. The program encompasses all sectors of the economy and social sphere in Turkmenistan. Targets are set for each sector, which should be attained in the set time frame.

3. Turkmenistan achieved impressive economic results in 2000-2002, showing one of the highest rates of economic development in the world. Growth of gross domestic product (GDP) was 118.6% in 2000 and 120.4% in 2001. Natural gas production rose by 2.3 times in 2000-2002, oil production rose by 1.3 times and electric power generation rose by 1.2 times. Program targets for development of agriculture, the textile industry, transport and telecommunications were significantly exceeded.

Average calorie content of nutrition in Turkmenistan exceeded norms, recommended by the World Health Organization, by 2% in 2000, 5% in 2001 and 6% in 2002.

4. An important event in the socio-political life of Turkmenistan took place in August 2002, when the 12th plenary meeting of the State Council of Elders of Turkmenistan and the Galkinish social movement approved a resolution calling for preparation of a national program for political, economic and cultural development of Turkmenistan in the period until 2020.

This program was prepared under the direct supervision of the President of Turkmenistan with broad participation by organs of executive power, ministries, government departments, state foundations, and other organs of the state administration, as well as social organizations.

5. The "Program for economic, political and cultural development of Turkmenistan in the period until 2020" was adopted by the 14th plenary meeting of the State Council of Elders of Turkmenistan and the Galkinish social movement in August 2003.

The "Program for economic, political and cultural development of Turkmenistan in the period until 2020" is based on principles, which will enable Turkmenistan to join the world's developed countries, measured by criteria of economic development, quality of life, and social security. For example, the Program envisages increase of gross production of goods by 14.7 times in 2015 compared with 2000. Turkmen society will be fully supplied with food products from domestic sources. Production of electric energy will rise by 6 times in 2020 compared with 2000, natural gas output will be 5 times higher and oil production will rise by 13.8 times over the same period. Much of this production will be exported. Wages should rise by 50% in the period to 2005 and then double every five years (in 2010, 2015 and 2020). As a result wages will be 12 times higher at the end of the period than in 2003. Pensions and grants will increase simultaneously. As a result, living standards in Turkmenistan will be 8-8.5 times higher than at the start of the period.

6. Millennium Declaration goals and targets, set out in this Report for achievement in Turkmenistan are closely linked with the country's own programs for economic, political and cultural development. Many of the targets set by the UN have already been attained in Turkmenistan. Therefore this Report sets other, higher targets.

### **A.3. General Information about Turkmenistan**

**The history of Turkmenistan** dates back several thousand years, but the country joined the international community as a self-determining, independent state on October 27, 1991. In the first centuries A.D. the powerful empire of Parthia was located on the territory of Turkmenistan, and a 1000 years later the great Seljuk Empire was located here. Irrigation has been used in

Turkmenistan since ancient times, as early as the Neolithic period (6000 B.C.), and the technology spread from here to other countries of Central Asia. Irrigated agriculture now covers an area of about 2 million hectares in Turkmenistan and is the main method of food production.

**Turkmenistan is located in Central Asia**, north of the Kopet Dag Mountains, between the Caspian Sea in the west and the Amu Darya River in the east. The distance between the country's western and eastern borders is 1100 kilometers, and the distance between its northern and southern borders is 650 kilometers. Turkmenistan borders with the Republic of Kazakhstan in the north, the Republic of Uzbekistan in the north-east, the Islamic Republic of Iran in the south, Afghanistan in the south-east, and meets the Caspian Sea in the west. The overall length of rivers in Turkmenistan is 14,300 kilometers, of which the longest is the Amu Darya (1200 kilometers).

**Turkmenistan covers an area of 491,200 square kilometers**, and has an elongated shape from east to west. There are a number of different land forms in Turkmenistan, but most of the country is covered by the Karakum Desert, which gives way in the south to valleys, hills and then the mountainous plateaus of the Kopet Dag and the Koiten Dag. The highest mountain peak in Turkmenistan is Airibaba (3139 meters above sea level). Deserts and mountains are used as pasture for cattle and camels. Water resources have been harnessed to develop oasis agriculture. The Turkmen sector of the Caspian Sea is used for shipping transport, fisheries, and oil drilling is also being developed on the sea floor.

**The climate in Turkmenistan** is severely continental and dry with major variations in temperature between the seasons. The minimum recorded temperature in Turkmenistan is -36 degrees centigrade and the maximum is +50.1 degrees centigrade. The soil surface in the Karakum Desert reaches daytime temperatures of +80 degrees centigrade during the summer.

Annual rainfall is extremely low: 100-150 millimeters in the Karakum, 250 millimeters in the mountain foothills, and somewhat more in the mountains.

**The population of Turkmenistan** is growing rapidly and exceeded 6 million people in 2003. Most of the population (54%) is rural. Large families are common in Turkmenistan, but high natural population growth is due not only to increase in birth rates but also to reduction of mortality rates, particularly infant and maternal mortality.

**The capital of Turkmenistan** is Ashgabat, which was founded in 1881 and had a population of 768,000 on January 1, 2003.

**Turkmenistan's administrative divisions** consist of 5 welayats (provinces) and the city of Ashgabat. The welayats themselves are divided into etraps (regions), settlements and gengeshi (villages). At the start of 2003 the 5 welayats and Ashgabat contained 54 etraps, 22 cities (Ashgabat itself, 12 welayat cities, and 9 etrap cities), 76 settlements and 560 gengeshi.

**Socio-economic features.** Turkmenistan has assured the international community of its commitment to a peaceful course of political development and to the ideas of a market economy. Turkmenistan is the only country in Central Asia where private land ownership has been permitted by the Constitution and by law for over 10 years. Economic reform is moving forward step by step, and the economic potential of the non-state sector is growing.

**Gross domestic product (GDP).** Turkmenistan has shown impressive increase of GDP, which is one of the main indicators of economic development. Average annual growth of GDP per capita in 1992 to 2002 was 15.5%, and overall GDP has risen by 4.5 times during the period since independence. Growth of GDP at purchasing power parity is shown in Table A.2.



Table A.2.

**GDP per capita in Turkmenistan at purchasing power parity (in USD)**

1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002
1190	1260	2001	2174	2285	3893	3472	3630	4209	4971	5350	5846

Source: Turkmenistan Reborn by the Genius of the Great Turkmenbashi. The Golden Age of Turkmenistan in Figures. Under the general editorship of V.M Khramov and Dzh. Bairamov - The Ministry of Economics and Finance of Turkmenistan, Turkmenistan National Institute of State Statistics and Information, Ashgabat, 2002, pages 21, 49.

**Average life expectancy** is a second key indicator of a country's level of socio-economic development and prosperity. Average life expectancy in Turkmenistan grew by 4 years in the period from 1991 to 2002.

**Literacy.** Turkmenistan has achieved major successes in education. The entire population of Turkmenistan was effectively literate in 1995, with literacy levels of 98.8% among those aged over 15 years. Literacy has been maintained at those levels in subsequent years, and implementation of the presidential program "Education" has significantly improved the quality of education.

Key socio-economic indicators for Turkmenistan are grouped and summarized in Table A.3.

Table A.3.

**Key indicators of socio-economic development in Turkmenistan**

Indicator	2001
Total surface area, thousands of square kilometers	491.2
Share of surface area, covered by forest, %	4.5
Carbon oxide emissions per capita, tons per year	0.03
Use of ozone-destroying substances, tons per year	57.7
Population (average for the year), thousands of people	5505
of which, urban, %	45.9
of which, rural, %	54.1
Average life expectancy, years	68.6
Literacy over 15 years old, %	98.8
Maternal mortality (per thousand live births)	48.2
Infant mortality	20.1
Foreign trade	4969
Export, million of USD	2620
Import, millions of USD	2349
Average annual growth of GDP per capita, 1999-2001, %	15.5

Source: Turkmenistan National Institute for State Statistics and Information

**A.4. Turkmenistan since Independence**

1. The sovereignty and national statehood of the people of Turkmenistan were proclaimed on October 27, 1991. The 12 years, which have passed since then, are a mere instant in the context of world history, but they have brought remarkable changes to the political structure, economic development and social security of the people of Turkmenistan - changes, which would have taken several decades in other historical circumstances.

The main results of independence have been stability, civil peace, unity and consent in Turkmen society. Thanks to the wise policy of President Saparmurat Niyazov, Turkmenistan is among those countries where collapse of the former state was not accompanied by inter-ethnic

conflicts and bloodshed. All nationalities and ethnic groups living in Turkmenistan have been given full rights as citizens.

Establishment of statehood, based on common human values and on humanism, have earned respect and high international standing for Turkmenistan.

2. The ruling of the UN General Assembly, dated December, 12, 1995, on permanent neutrality of Turkmenistan was an important historical event for the Turkmen people and the Turkmen state. Guided in external policy by humanistic principles, and sharing belief in a just world order, Turkmenistan entered the Non-aligned Movement as its 113<sup>th</sup> full member. Turkmenistan is now a member of 40 international organizations, including the World Bank, IMF, OSCE, the WLO, the Organization for Economic Cooperation and Development, the Islamic Conference, and others. Turkmenistan played an important role in regulation of the Tadjik conflict, and has worked with the UN in organizing international measures for providing political, economic and humanitarian aid to Afghanistan. More than 40% of humanitarian aid to Afghanistan passes through Turkmenistan, representing volumes of 220,000 tons. Electric energy is supplied to Afghanistan from Turkmenistan on the basis of bilateral agreements, and help is provided in construction of housing, schools, and hospitals, and in training of personnel.

3. Political will and stability have enabled economic transformations and creation of a democratic, secular state, oriented to a market economy. Turkmenistan has implemented a complex program of reforms, developed under the direct supervision of President Saparmurat Niyazov. Economic reforms have been carried out with emphasis on an evolutionary path for development, the leading role of the state, national mentality, social security and the country's own resources. The years since independence have been a transitional period from a centralized economic system to a market economy.

4. Since the first years of independence, Turkmenistan has applied a system of state support and social security for the least well-off sections of society. This system is mainly still in operation at the present time. Since 1993 families with low income have received a number of essential food products at low fixed prices. On the initiative of President Saparmurat Niyazov, Turkmenistan guaranteed unpaid supplies of electric energy, water, natural gas, and edible salt to its people. In 2003 this arrangement was extended until 2020.

Transfer of land to private ownership, which began in 1993, has been on an unpaid basis, and agricultural producers have been freed from all taxes, including taxes on land and water.

5. Despite unfavorable starting conditions, Turkmenistan has been highly successful in nurturing its economic potential and raising living standards, thanks to a prudent strategy of political, economic and social development. Gross domestic product per capita at purchasing power parity increased by 4.6 times since independence (from 1991 to 2002).

6. High rates of GDP growth have been due not only to increase of production and sale of natural gas, but also to development of agriculture, processing industries, construction and transport. Turkmenistan's chemical and petrochemical industries have been modernized with use of the latest technologies. Light industry sectors have been recreated to international standards, producing goods, which find demand on the world market. Thanks to the "Grain" program, production of grain rose from 205,600 tons in 1991 to 2.312 million tons in 2002, or by 11.2 times. Meat production (in terms of livestock) nearly doubled from 175,100 tons to 340,100 tons. Grain production in 2003 was 11% higher than in 2002, reaching 2.536 million tons. Turkmenistan has thus laid the foundations for self-sufficiency in foodstuffs, reducing the volume of food imports. Resulting savings have been directed to investments in the agricultural complex and other sectors of the economy.

7. Development of the economy has not been at the expense of social programs. Wages are being systematically increased,. Pensions, grants, allowances and other social payments have been indexed to inflation and purchasing power. There are almost no homeless people in

Turkmenistan, and no beggars on the streets, in contrast with many other countries (including highly developed countries).

The total area (floor space) of housing rose by 2.5% times from 1991 to 2002, compared with 45% growth of the population in the same period. Living space per person thus grew by 1.7 times (Table A.4).

Table A.4

**Living space per person in CIS countries (average per capita), square meters.**

Country	1991	2000	2001	Growth rates in 1991-2001, %
Turkmenistan	11.2	17.8	18.3	163
Russia	16.5	19.3	19.7	119
Uzbekistan	12.2	13.8	14.0	115
Tadjikistan	9.5	9.1	8.5	89
Kyrgyzstan	12.2	12.5	...	102
Azerbaijan	12.2	12.1	12.1	99

Source: The Commonwealth of Independent States in 2002. Statistical Directory. CIS Interstate Statistics Committee, Moscow, 2003, pages 204-364.

Source: Turkmenistan Reborn by the Genius of the Great Turkmenbashi. The Golden Age of Turkmenistan in Figures. Under the general editorship of V.M Khramov and Dzh. Bairamov - The Ministry of Economics and Finance of Turkmenistan, Turkmenistan National Institute of State Statistics and Information, Ashghabat, 2002, pages 22, 50.

8. State budget spending on the social sector is rising year by year in Turkmenistan (Table A.5).

Table A.5

**State budget spending on the social sector in Turkmenistan, 1999-2001**

Spending item	1999		2000		2001	
	Millions of USD	%	Millions of USD	%	Millions of USD	%
Total state budget spending	748	100	1177.5	100	1462.5	100
of which:						
Social sector	475.5	63.6	830	70.5	1107.5	75.7
of which:						
Education	173.8	23.2	325.6	27.6	390.9	26.7
Health	92	12.3	161.4	13.7	195.4	13.4
Recreation and culture	19.4	2.6	30.3	2.6	36.1	2.5
State social insurance, pensions and social security	112.7	15.1	224.5	19.1	371.3	25.3
Housing and municipal services	77.6	10.4	88.1	7.5	113.8	7.8

Source: Turkmenistan Reborn by the Genius of the Great Turkmenbashi. The Golden Age of Turkmenistan in Figures. Under the general editorship of V.M Khramov and Dzh. Bairamov - The Ministry of Economics and Finance of Turkmenistan, Turkmenistan National Institute of State Statistics and Information, Ashghabat, 2002, pages 223-224.

Spending on social needs and social security rose as a share of the budget from 63.6% in 1999 to 75.7% in 2001, and in absolute terms by 2.3 times or by USD 632 million. Spending on other social items increased analogously over the same period. For example, spending on education rose by 3.5% as a share of the budget and by 2.7 times in absolute terms.

9. Measured by GDP per capita, Turkmenistan ranks as a middle-income country. But assessment of life quality should also take account of life expectancy and levels of education. According to UN recommendations, these indicators can be used for a combined assessment of life quality, referred to as the Human Development Index (HDI). Judged by this Index, Turkmenistan has shown an improving trend. The country advanced from 103<sup>rd</sup> place in 1995 to 87<sup>th</sup> place in 2001 (Source: UNDP Human Development Report for 1998 and 2003).

“We will spare no effort to free our fellow men, women and children from the abject and dehumanizing conditions of extreme poverty, to which more than a billion of them are currently subjected”

-UN Millennium Declaration

## ⇒ Goal I Eradication of extreme poverty and hunger

Since target 1 of the MDGs, “to halve, between 1990 and 2015, the proportion of people whose income is less than one dollar a day”, was already attained in Turkmenistan by 2000, the country sets itself a new target

**Target 1:** Reduce by three times, between 2000 and 2015, the proportion of people whose income is less than 50% of the average monthly income

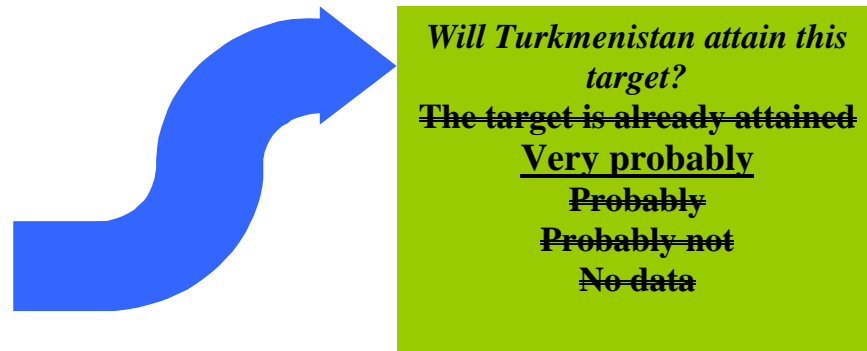


Table 1.1

**Proportion of the population with income less than 50% of the average monthly income (as % of total population)**

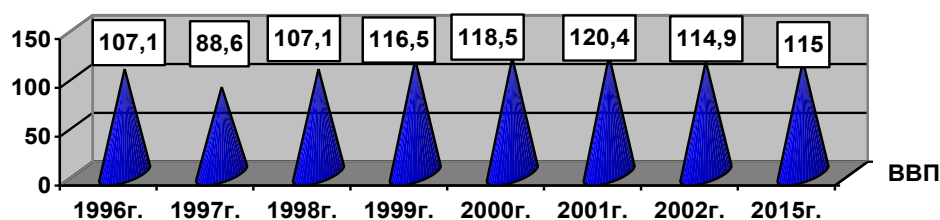
	Turkmenistan	Cities	Countryside
2000	15	14.8	15.2
2015	5	4.9	5.1

There are two main conceptions of poverty. The first, historically earlier, conception is based on an understanding of poverty as an absolute category. The poverty level is defined as the volume of goods, which are necessary to satisfy minimal standards of existence. The second conception, which has gained currency since WWII, views poverty as a relative category and treats families (or individuals) as poor if their incomes are lower than the average level of prosperity in a society (for example, the poverty level may be set as 50% or 60% of the average income in a country).

A “poverty line”, separating poor and non-poor layers of society, is calculated using these approaches. Each country uses whichever approach it considers acceptable for its specific conditions and for the targets, which it has set.

Economic development is the key condition for effectively countering poverty. Dynamics of real GDP in Turkmenistan in recent years prove steady growth of the country’s economy.

**Figure 1.1. Growth of GDP in Turkmenistan**  
(% change from the previous period)



As a result, the share of people with cash incomes below USD 2.15 per day at purchasing power parity was reduced to 0.71% in 2000 and 0% in 2001. Steady increase of real cash incomes of individuals since 1997 is proof of improvement of living conditions in Turkmenistan. Real cash incomes of individuals grew by 4 times in the period from 1996 to 2002 alone.

Turkmenistan has a low personal income tax rate (12%), which significantly increases disposable incomes and helps to ensure social stability. Many segments of society are exempt from payment of taxes or benefit from favorable rates. Low-income groups are exempt from income tax, and mothers of large families, invalids from childhood, the blind, students and pensioners are also exempt. People with three or more dependents have a discount of 30% on income tax, etc. According to the 1995 population census, more than 42% of families in Turkmenistan have three or more children and are therefore entitled to tax benefits.

The rural population is exempt from all forms of taxation, and also has virtually free use of land and water for irrigation. Material costs and services for production of grain and cotton are 50% subsidized by the state.

In addition to low taxation of personal incomes, people in Turkmenistan benefit from major price subsidies, grants and payments in kind.

More than 54% of the population lives in the countryside, and country dwellers have an additional source of income from plots. Farming on private plots receives state support via zero taxation and increase in the size of such plots, enabling steady growth of income in kind (by 1.2 times in 2000 and by 1.4 times in 2001-2002).

This mechanism of social support eases the pain of transition to a market economy by allowing every citizen of the country to benefit from Turkmenistan’s national (natural) resources through price subsidies (natural transfers). Since 1993 every citizen of Turkmenistan can consume gas, water and electricity free of charge, and table salt has also been a free commodity since 1994. This arrangement is unique in the world.

Flat rents in urban areas are subsidized in Turkmenistan, and there is no tax on privately owned housing. As a result, spending on housing and municipal services are only 0.2% of overall spending by households.

Public transport is also heavily subsidized. Tickets for air and rail transport are kept at low prices for all citizens (half of actual cost of the transport), and transport inside the country is free of charge for children under 5. The price of travel on buses and trolley buses is 12 times lower than the real cost of the service. WWII veterans and people with equivalent status ride free.

The fixed subscription for telephone services is less than 5% of the real cost.

Building materials are sold at low prices to assist in improvement of housing conditions. Bricks and cement are sold at discount prices (53% and 45% of cost, respectively).

Under the Constitution, the entire population also has a right to free education services (compulsory secondary education, and a guaranteed level of vocational and higher education) and free health care. There are currently no private educational establishments in Turkmenistan.

The level of material well-being of society in various regions of Turkmenistan depends on factors such as sex and age, natural and climatic conditions, ethnic features, territorial divisions of labor and other factors. However, the main factor determining average income is the ratio of working to non-working members of the household.

Statistics from the 1995 census show that the average size of households is 4.6 people in urban settlements and 6 people in rural settlements. The number of children per household is nearly 1.6 times higher in the countryside than in towns.

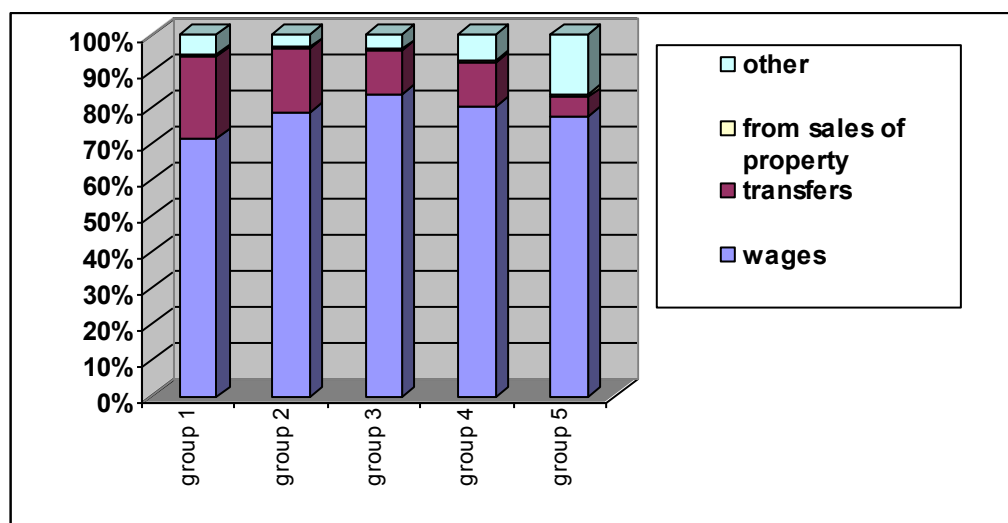
Research on living standards in Turkmenillikhasabat by the World Bank in 1998 showed that the first (lowest) quintile of the middle-income group consists of households with average 6.7 members, most of whom are children under 16 years of age (mainly rural households), while the fifth (highest) quintile, with the largest number of working members and lowest number of dependents, has average 4.7 members (mainly urban households).

The same research showed that labor incomes, including income from sale of produce from private plots, are the main part of total cash incomes in both the first and the fifth groups (71.1% and 77.3%, respectively).

The share of income from sales of crops and animal goods is twice higher in the quintile of households with lowest-incomes than in the quintile with highest incomes.

Social transfers were an important source of cash income (in 1998) for households in the first quintile, accounting for 23% of their cash incomes, compared with only 5.3% for the fifth quintile.

**Figure 1.2. Structure of average per capita income in households of quintile groups (in %)**



However, accumulated property as well as household incomes from the informal sector of the economy (14.5% of GDP in 2002) also need to be taken into account.

According to the research on living standards, 75% of households live in their own houses or apartments, including 87% in the lowest quintile and 60% in the highest, most prosperous quintile.

Naturally, households with the highest per capita incomes are better equipped with radios, TVs, domestic appliances, and more expensive goods. In the lowest quintile 70% of households have a black-and-white television and 25% have a color television compared with 51% and 61% in the highest quintile. Video players are owned by 8% in the lower quintile and 23% in the

upper. Car ownership is more evenly spread over the quintiles (about one in every five households in each of the quintile groups). Households with the lowest incomes have 1.3 times more cattle than those with the highest incomes, and 1.1 times more poultry.

Differentiation by average per capita incomes is determined by calculation of decile or quintile coefficients. The decile (quintile) coefficient of income differentiation is defined as the ratio of the maximum average per capita income of the 10% (20%) of individuals with lowest incomes to the maximum average per capita income of the 10% (20%) of individuals with highest incomes. The source of information is a breakdown of households by per capita incomes based on a sample survey of household budgets.

The Gini coefficient is a statistical measure of income equality, with possible levels ranging from 0 to 1. A reading of 0 represents absolute equality of incomes across social groups, and a reading of 1 represents absolute inequality, when all income belongs to one person. The Gini coefficient in Turkmenistan is 0.3, which is lower than in many other CIS countries.

The ratio of income of the 10% of households with highest-income to the 10% of households with lowest income was also relatively low in 2002 at 7.6.

In order to raise the level of people's well-being and reduce income differentiation, levels of wages, stipends, pensions and other social payments are increased almost yearly in Turkmenistan. The level of wages of employees in budget-funded institutions, self-financing state enterprises, and various other organizations, as well as stipends, pensions and income support payments were doubled in 2003 by decree of the President of Turkmenistan.

### **1.1 What reforms of the state can contribute to achievement of the Goal?**

Economic policy in this sphere will be targeted at:

- increase in the number of new work places in order to raise employment levels;
- raising income levels, organizing a system of socio-economic protection for hired workers and provision of state guarantees for labor payment;
- development of market mechanisms in regulation of wages and distribution of consumption funds of enterprises, raising the motivational potential of wage income;
- continuation of reform of the social welfare system in order to make it better targeted.

The share of people employed in the non-state sector of the economy should rise to 75.0% by 2015 from 64.9% in 2000.

Resolution 14 of the Halk Maslahaty in August 2003 extended unpaid provision of gas, electricity, water and edible salt to the population of Turkmenistan until 2020. According to the "Program for economic, political and cultural development of Turkmenistan in the period until 2020", which has been adopted by Turkmen lawmakers, subsidization of public housing rents, public transport and telecom services will also be kept, and there are no plans for taxation of privately-owned housing. In addition to price subsidies, all citizens of Turkmenistan will be entitled to free education and free health care. Wages in budget-funded sectors will grow by 50% from 2003 to 2005 and will double every five years thereafter.

These measures will assure attainment in Turkmenistan of the targets under Goal I.

The number of Turkmen citizens with high levels of consumption of material goods and services will grow, and consumption of basic food products will reach the level of European Union countries. Turkmenistan already attained World Health Organization norms for protein, fat and carbohydrate levels, as well as calorie content, in daily nutrition in 2000.

Conditions will be created for reorientation of the economy to new standards of well-being, based on high rates of wage growth and expansion of targeted assistance to vulnerable sections of society (using individual means testing).



*Education is a treasure house, created by man, to which literacy is the key. Literacy offers reading, writing and the other tools of knowledge, which open the door to the world of education.”*

Saparmurat Turkmenbashi (Rukhnama, page 350)

## ⇒ Goal II Achieve universal primary education

**Target 2** : *Ensure that, by 2015, children everywhere, boys and girls alike, will be able to complete a full course of primary schooling*



Table 2.1

	1990	2000	2015
Primary education (coverage in %)	98.5	98.9	100

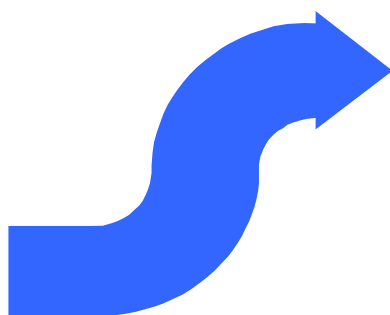
Since the target under Goal II, “to ensure that, by 2015, children everywhere, boys and girls alike, will be able to complete a full course of primary schooling”, has already been attained in Turkmenistan, the country has set itself a new target.

**Target 2. To broaden access to high-quality education at all levels and attain world standards in education.**

Provision of primary and secondary education to all children was achieved in Turkmenistan in Soviet times. The right to free secondary education is now guaranteed by the Constitution of Turkmenistan.

Education and professional training of the young generation is one of the most important factors for the present and the future of the country. The main targets for Turkmenistan’s education system in the period until 2015-2020 are:

- to create a national model for education and integrate it with international standards for education;
- to develop an efficient system of education, which offers high-quality (world-standard) educational programs to the broad spectrum of society.



*Will Turkmenistan  
attain this target?*

Very probably

~~Probably~~

~~Probably not~~

~~No data~~

Fairly high standards have been maintained in education despite difficulties of the transition period. Government spending on education in Turkmenistan averages more than 5% of budget spending (6.1% in 2001), which corresponds to levels in Western Europe.

Table 2.2

	1991	2000	2015
Secondary education (coverage in %)	93.0	96.0	100
Higher education (coverage in %)	11.0	4.0	17.0

A fall in the proportion of school-leavers going on to higher education during the transition period has been due to curtailment of some forms of higher education, which failed to provide proper professional training, as well as overhaul of the entire system of higher education. Renewal of the structure of higher education and its adaptation to the needs of society and the economy is based on a system of assessing the need for particular specialists, in order to match requirements of society, the state and other organizations. At the same time, the role of state priorities in professional education is being reinforced, mainly by assuring supply of experts for development of promising markets and technologies, and of specialists to work in budget-funded sectors (administration, education, health care, etc.).

The share of school children and students in their respective age group will rise to 87% by 2020, from 68% in 2000, 74% in 2010 and 81% in 2015.

Rapid development of the economy and of technologies are the main criteria for defining state priorities in the sphere of education, need for retraining, and creation of a system of continuous raising of qualifications.

Workers will be encouraged to deepen their knowledge and expertise in their existing specializations, and specialists in new professions will be trained for developing sectors.

A non-state education sector will be encouraged to develop, based on the corresponding legislative base. The share of schoolchildren and students studying on a paid basis will rise to 40% by 2010 and 48% by 2015. Great importance will be attached to assuring access to education for all segments of society, and maintaining a socially acceptable ratio of paid to unpaid services at all levels of education. Expansion of the non-state education sector will increase access of large segments of society to education services and ultimately create a healthy competitive environment, supplying qualified specialists to the private sector of the economy.

The large share of children in the overall population will lead to growth in the number of schoolchildren by 1.4 times in 2010 and 1.7 times in 2015 compared with the present, making it necessary to increase capacity of the school system. Plans for construction of new schools in Turkmenistan include alteration of construction regulations and installation of computers and

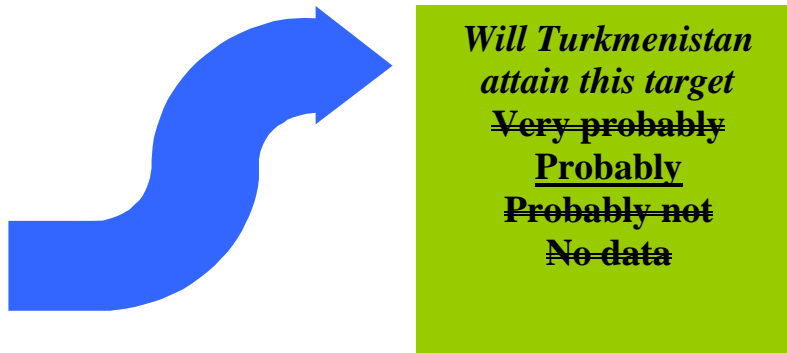
laboratories to match international standards. The rate of launch of new capacities in the school system will rise by 21 times in the period up to 2020, and the rate of creation of new kindergarten places will increase by 24 times.

“No individual and no nation must be denied the opportunity to benefit from development. The equal rights and opportunities of women and men must be assured.”

- UN Millenium Declaration

## ⇒ Goal III Promote gender equality and empower women

**Target 3:** *To eliminate gender disparity in primary and secondary education, preferably by 2005, and at all levels of education no later than 2015*

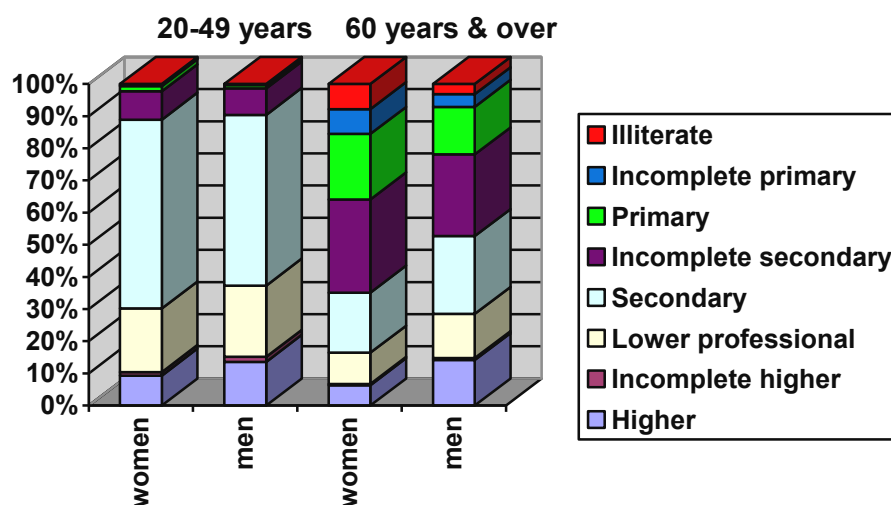


### 3.1. Main difficulties and efforts by the state to attain the target

Special orientation to education of women is a strength of educational policy in Turkmenistan. The country's laws contain no discrimination against women and girls as regards education, choice of profession and equality of entry to educational institutions.

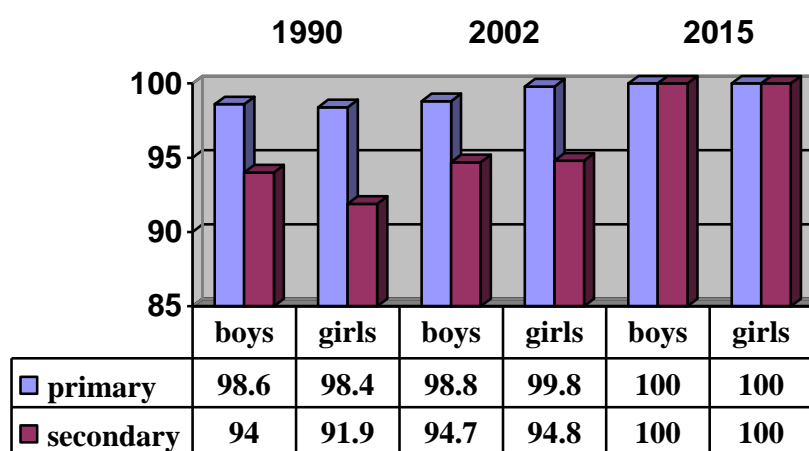
Unrestricted, free-of-charge access to educational services ensures high levels of literacy and education in Turkmen society. According to results of the 1995 population census, literacy levels of those aged 15 years and over was 98.3% for women and 99.3% for men, while the literacy level for the 15-24 age group was 99.8%. Literacy levels of men and women in Turkmenistan are thus equally high. Different literacy levels between the sexes from 15 years of age is due to longer life expectancy among women, which entails a larger share of females among the elderly.

**Figure 3.1. Levels of education of different age groups (data from 1995 census)**



The number of schoolchildren of all ages is growing rapidly. Coverage levels of primary and secondary education are relatively high and are almost the same for boys and girls.

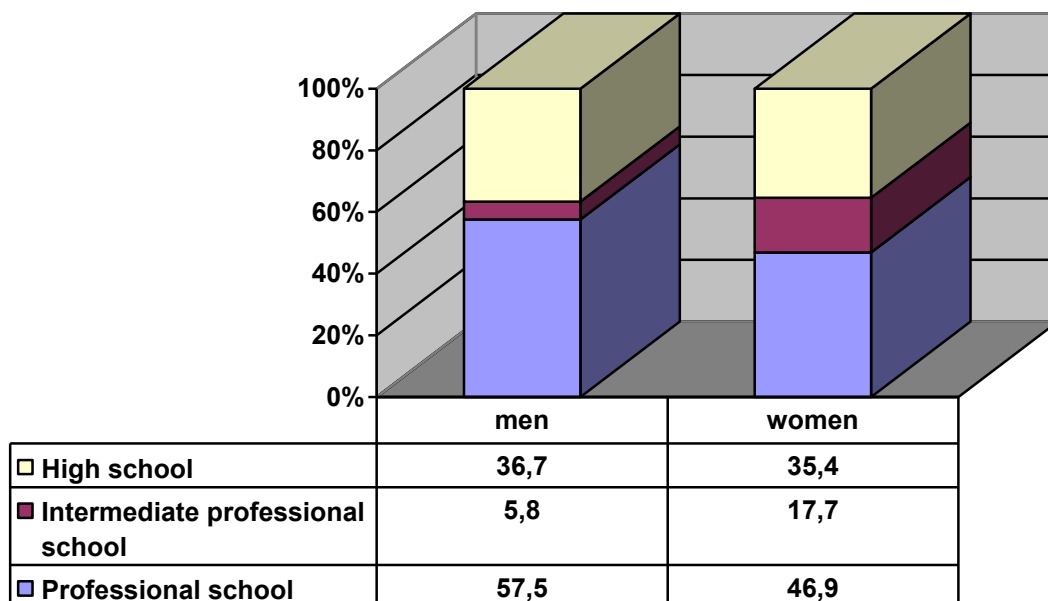
**Figure 3.1. Coverage levels of primary and secondary education (boys and girls shown separately, 1990-2015), %**



Girls were 49.3% of all primary school pupils in 2002, and boys were 50.7%. The slight preponderance of boys is due to their overall preponderance in the relevant age group: there are 103.7 boys to every 100 girls. The picture in secondary education is similar: girls are 49% of pupils at secondary schools and boys are 51%. There are 104 boys of secondary school age to every 100 girls of that age.

There is significant gender disparity at the third level of education (professional schools, intermediate professional schools, and high schools), where women were only 35.2% of students in 2002 compared with 64.9% who were men, so that male students outnumbered female students by 1.8 times. This cannot be explained by any demographic factors, since men outnumber women in this age group by only 3%.

**Figure 3.3. Distribution of male and female students in third level education in 2002/2003**

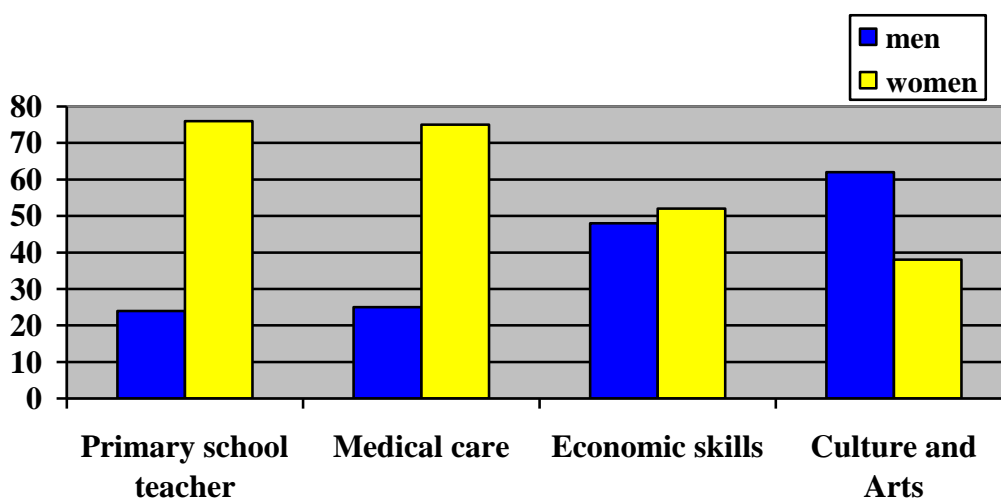


Most male and female students in higher education follow courses at professional schools (offering training in a manual profession) and high schools (universities and the like).

Professional schools are subject to relevant ministries, which determine how many specialists should be trained in accordance with needs of enterprises under the control of each ministry. Enterprises and organizations carry out training of specialists themselves, as well as receiving specialists from such schools. Men are 69.4% of all those studying at professional schools.

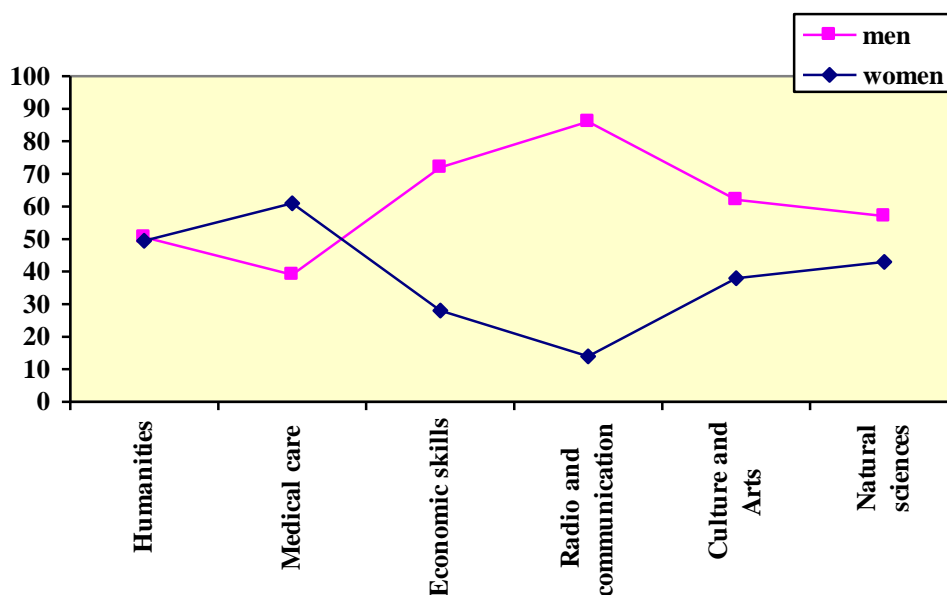
However, women outnumber men at intermediate professional schools (offering training in more advanced professions, and preparation for a high school), where they are 62.2% of all students. The gender disparity has declined from 2.2 times in 1995/1996 to 1.6 times in 2002/2003. Such intermediate schools offer training in a wide range of professions. Women students outnumber men in almost all subjects, except for culture and art, where they are 38% of students.

**Figure 3.4. Distribution of male and female students at intermediate professional schools in 2002/2003, %**



Gender disparity is also marked in high schools, where 34.2% of students are women and 65.8% are men. Men thus outnumber women by 1.9 times in high schools, up from 1.7 times in 1995/1996.

**Figure 3.5. Distribution of male and female students in high schools in 2002/2003, %**



Women outnumber men in health care training institutions, accounting for 61% of all students, but they are in the minority in institutions for radio and telecommunications training (14% of students), economics (28%), culture and art (38%), natural sciences (43%), and humanities (49.5%).

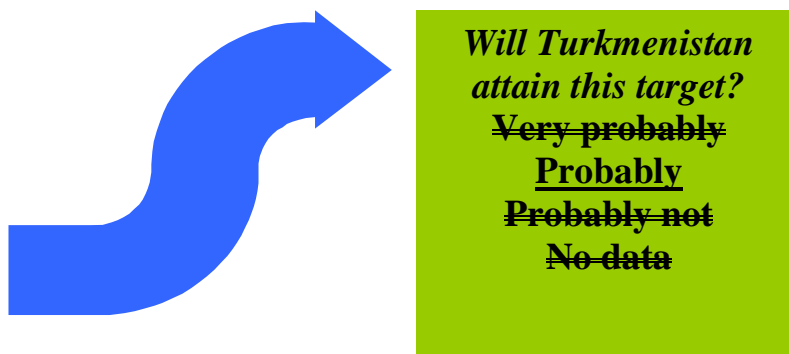
Gender disparities among high school students accentuate inequality between the sexes as regards income levels and the labor market. However, the disparities cannot be attributed to any discrimination against women, who have the same rights to education as men.

### **3.2. What reforms are needed for attainment of the Goal?**

The Program for economic, political and cultural development of Turkmenistan in the period until 2020 includes measures to ensure equal access to education for all sections of society.

Planned measures include introduction of new forms of teaching, using new information technologies and the internet. Computerization of the education system, use of distance learning, and communication via the internet will create a completely new technological base for renewing the content and methods of teaching, raising efficiency and accessibility of high-quality education, and enabling solution of pedagogical tasks, which could not be dealt with using traditional methods. There will be new stimuli and motivation for young people (particularly women) to pursue continuous improvement of their qualifications, going beyond the receipt of a certificate on completion of higher education. New, progressive methods for training and retraining of specialists will be applied.

**Target 4:** Reduce by 2015 gender inequality as regards incomes on the labor market



In most countries gender disparity on the labor market is due to differences in level of education and wages, unequal distribution of the sexes across economic sectors and professions, conflict between roles in the family and at work, and difficulties connected with households and unpaid work in the home. These factors impact on the ability of men and women to realize their potential in their professional career and choice of a path in life.

### 3.3 Main difficulties and action by the state to attain the target

*Employment.* According to Article 31 of the Constitution, all citizens of Turkmenistan have the right to work, and to choose their profession, type of activity and place of work. Hired workers have the right to payment in accordance with the quality and quantity of their work.

Favorable demographic trends in Turkmenistan will lead to increase of human resources. The active share of the population rose from 50% in 1991 to 56% 2002, and inflow of young people to the workforce has been a significant factor in this period of political, economic and social transformation. The number of people aged 16-24 in the workforce has risen by 30% since independence.

Major structural transformation of economic sectors enabled growth of employment by 40% from 1991 to 2002. Creation of conditions for a differentiated economy, and implementation of a privatization program have encouraged reallocation of workers from state enterprises and organizations to the non-state sector. The share of workers in the state sector fell from 56% to 32% from 1991 to 2002, and the number of people working in the non-state sector rose by 1.5 times in the same period.

Measures to stimulate private initiative led to growth in the number of citizens active in micro-business by six times since 1991.

Women are 49.9% of overall labor resources and 42.5% of all those actually working in the economy.

A survey of employment and the labor market carried out in Turkmenilikhasabat in 2001 with assistance from the UNDP showed that 85% of women of working age (16-57) are economically active, compared with 92% of men of working age (16-62). This represents a fairly high employment level.

The survey also showed that teenagers of 14-15 years are mainly in education, only 5.4% of pensioners have jobs, and more than half of the all those capable of working are in officially registered jobs. Most of those not working are women of child-bearing age, who are engaged in house work and bringing up children. These women represent 36.4% of the total population of working age and 48.9% of those under 24 years old. Employment is harder to find in rural areas than in urban areas.

Most people of working age are hired labor (84% of men and 81% of women), and the remainder are employers or self-employed (individuals in micro-business). Women are only 30%



of employers, but they are 62% of the self-employed. The self-employed activities of women are usually traditional in nature.

A large proportion of working women (40%) are employed at large and medium-sized enterprises, mainly in the state sector.

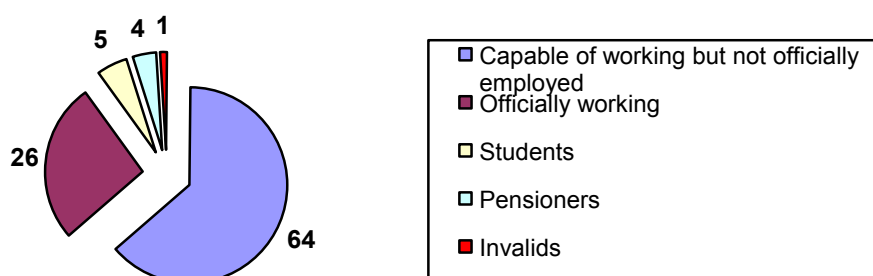
Distribution of women across sectors of the economy has several important features. Women represent more than half of the workforce in several major sectors. These are agriculture, health and social care, education, art and culture, and information and computer services. The main “female” sectors in industry are light industry and the food industry. Men dominate in construction, transport and telecommunications, and the extractive industries, where they are over 70% of the workforce.

Growth of employment in agriculture in recent years has been encouraged by land reform (transfer of land to private ownership and development of lease arrangements), and by privileges offered by the state to land workers. Lifting of restrictions on the number of cattle permitted on a private plot, and absence of taxation have assisted transformation of private plots into efficient sources of agricultural produce.

A survey of employment and the labor market showed that 62.1% of households produce food on their own plots (92.2% in rural areas), and 92.6% of these households own land. Production from private plots is used both for own consumption and for sale.

The informal economy gives employment to 14% of the population, mainly those of working age, who are not officially employed. Men are 43% of all those working in the informal economy and 57% are women.

**Figure 3.6. Structure of the informal economy  
(% of those employed in the informal sector)**



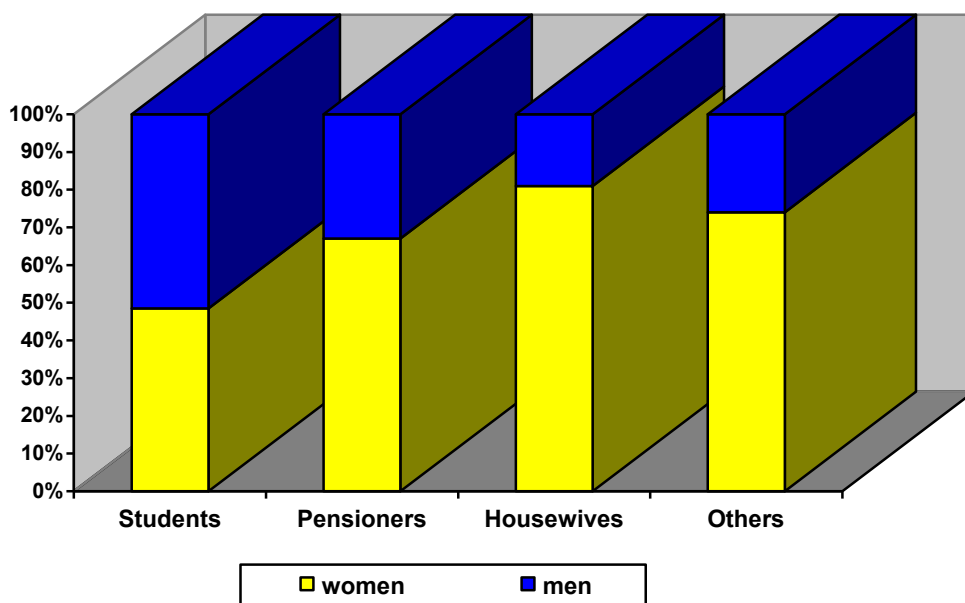
The part of the population, which is of working age but not economically active, consists mainly of those engaged in housework, students, schoolchildren, pensioners below retirement age, and some other categories. Women engaged in housework represent 75% of those who are not economically active. Children and the family have always been the highest priority for women in Turkmenistan, and the reproductive function (and the high birth rate) make it natural for them to manage the household and look after children. The significance of women’s social function allows them to determine their own employment status, deciding whether or not to work, and the state offers them social guarantees.

The law “On pensions” (1998) allows a woman to include care of a young child from birth to 3 years of age as part of the period, which is taken into consideration for calculation of her employment pension. The maximum amount of child-care time, which can count towards a pension, is 6 years. Women who have borne and brought up 3 children to the age of 8 years are entitled to a pension 1 year earlier than generally permitted by law (57 years of age), or 2 years for 4 children and 3 years for five and more children.

The high share of women among pensioners below retirement age is explained by this legal entitlement, although it is also due to higher life expectancy of women compared with men.

**Labor market.** A labor market has come into existence in Turkmenistan as a result of economic changes. The market consists of people who are actively seeking work. There were 57,000 such people officially registered on labor exchanges in 2002 (labor exchanges were set up in all regions of Turkmenistan in 1997), representing 2.5% of the economically active population (3% of men and 2.2% of women). Just over a third (36.2%) of those registered are women. The labor market has been created from various sources, and most (69%) of those seeking work quit their previous jobs by choice.

**Figure. 3.7. Gender make up of the non-working population in Turkmenistan (%)**



There are more men looking for work (36,300) than women (20,600), and most of those registered on the labor exchange are in the 25-46 age group (60.2% of men and 57.7% of women) and have secondary education (44.9% and 46.8%). The share of people aged 15-24, who are unemployed, is very small (0.9% for men and 0.7% for women, compared with 14.9% of this age group in the EU).

**Figure 3.8. Social portrait of those seeking work on labor exchanges, numbers in 2002**



In 2002 63.2% of men registered on labor exchanges were successful in finding work (43.6% of women), including 44.1% (41.3% of women) who have only secondary education. This is because enterprises apply to labor exchanges mainly for unskilled workers. Data from labor organizations show that more than 80% of the unemployed find work at enterprises in the state sector, which have close ties to labor exchanges.

Those who find work in the private sector through labor exchanges are mainly women. These are usually people who have been laid off from state enterprises, have a level of professional training, and do not insist on high wages. For such women the main criterion in choosing a job is a flexible schedule, proximity to the home, and availability of pension insurance so they can contribute to a future pension.

Joint ventures and foreign companies, which set high criteria in selection of personnel and offer high salary levels, are less likely to take women.

Some people prefer to seek work independently instead of registering on labor exchanges. According to a 2002 labor market survey, 7.2% of the population were seeking work although only 2.6% were registered on labor exchanges. Women were 49% of those seeking work and men were 51%. There are no significant gender differences in methods of seeking work. Most men and women use personal contacts (75% and 74%), apply directly to the employer (25% and 22%), or go to the labor exchange (25% and 30%). Placing a small advertisement in a newspaper is a method for 5% of women and 2% of men. Only 3% of men and 1% of women tried to set up their own business.

**Incomes.** Existing statistics do not permit an estimate of disparity in incomes, including work incomes, between the genders. Official statistics do not contain data on ratios between men's wages and women's wages. The average-weighted figure for all countries, which have the relevant statistics, points to a 75% ratio of women's to men's wages.

Employment in the official sector of the economy in Turkmenistan offers equal wages for men and women. Gender disparity in income distribution in Turkmenistan is not due to discrimination against women, but is mainly due to traditional division of labor. The sectors, in which women

are traditionally employed, have lower wage levels, and women also tend to be employed in the informal sector of the economy, which does not always offer a guaranteed wage.

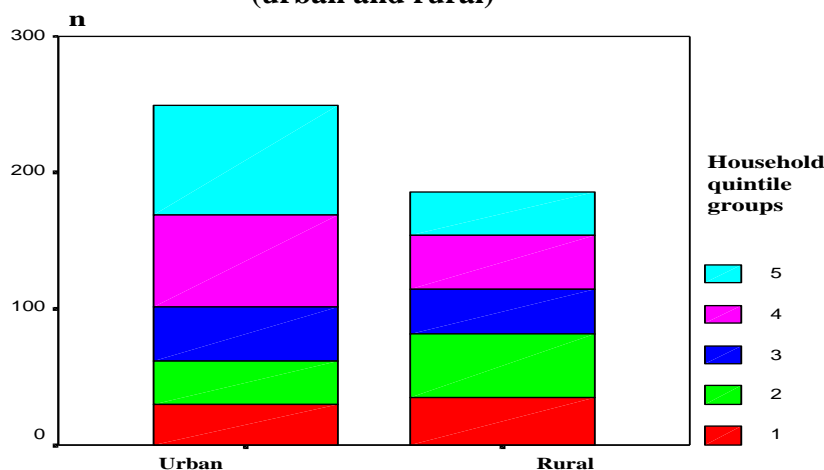
Disparity in the incomes of men and women can be tracked using the findings of various selective studies. In particular, a study by the World Bank and statistical agencies in 1998 found that the average wage level of women outside the agricultural sector was equal to 72% of men's average wage level.

Thanks to annual wage rises in budget-funded sectors, wage levels in such sectors as health care and education (which mainly employs women) are higher than the average level in the economy.

The share of women in paid work outside the agricultural sector has been growing in recent years and stood at 42.1% in 2002 compared with 39.9% in 1995.

International experience suggests that households, where the main figure is a woman, tend to be poor. However, the findings of a 1998 study on living standards in Turkmenistan showed that the share of households with a woman as the chief figure in the first (lowest-income) quintile was a little over 42% in urban areas and around 54% in rural areas, and the share of such households in the top (highest-income) quintile was over 71% in urban areas and less than 29% in rural areas.

**Figure 3.9. Distribution of households, headed by a woman, by income quintile groups (urban and rural)**



Most rural households, in which a woman is the chief figure, are in the second and fourth quintile groups by cash incomes.

This is mostly due to the fact that women are more often head of the household in towns and cities (57% of urban households), where average per capita incomes are higher than in the countryside. Also, the presence of several generations in a single household is not uncommon in Turkmenistan, where older parents may live together with a young family. Women's life expectancy is longer than that of men, and mothers thus become heads of the household after the death of their husbands.

Turkmenistan has a system of social security for women and particularly for mothers. On July 17, 1998, the Parliament of Turkmenistan (the Mejlis) approved the law "On state allowances", which includes social security measures for women. This law, together with the law "On vacations" (Article 15), ensures allowances to pregnant women for the period of pregnancy and childbirth, and low-income families receive a child-care allowance until the child is 3 years-old. All people, who are not entitled to a pension, receive a social allowance, including women who have reached the age of 62. Dependents, particularly wife, mother, children, sisters, grandchildren and others receive an allowance if the breadwinner in the household dies.

Women in Turkmenistan have broad opportunities for participation in the country's social and political life. Women now account for 26% of members of Parliament (up from 18% in the first years of independence), putting Turkmenistan in the top 20 out of 189 UN member states by

this measure. Women mainly occupy middle-ranking positions in the state administration and have 30% of all jobs in the administration. However, there has been a negative tendency towards a lower share of women in administrative structures (down from 42.2% in 1991)

### 3.4. Human Development Index with gender factor

The UN uses the Human Development Index (HDI) taking account of the gender factor for certain comparisons between countries. The HDI taking account of the gender factor, like the standard HDI, is calculated on the basis of 3 indexes, of health, education and income.

Analysis of the 3 components of the HDI taking account of the gender factor for Turkmenistan gives the following picture (Table 3.1)

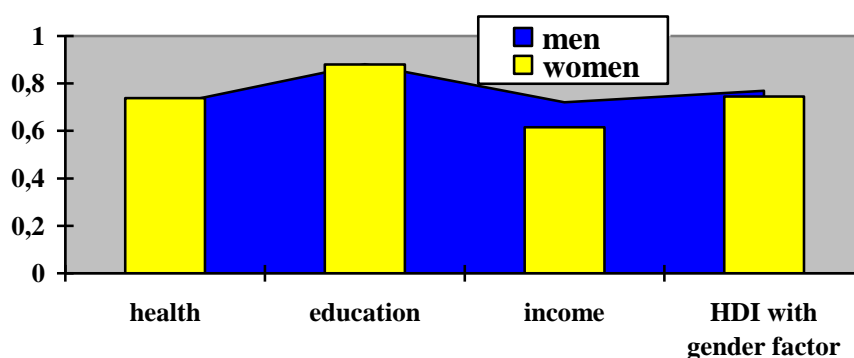
- ◆ life expectancy is longer for women than for men (by 4.4%);
- ◆ women have practically the same literacy level and access to education as men (only 0.2% less);
- ◆ income distribution shows some gender disparity (women’s incomes are 14.5% lower).

Table 3.1

**Human Development Index taking account of the gender factor applied to Turkmenistan in 2002**

Indexes	Men	Women	Women/Men (as %)
Health index	0.7068	0.7377	104.4
Education index	0.8810	0.8797	99.8
Income index	0.7200	0.6156	85.5
HDI taking account of the gender factor	0.7693	0.7443	96.8

**Figure 3.10. Human Development Index taking account of the gender factor, 3 components**



The HDI taking account of the gender factor applied to Turkmenistan shows little difference between men and women: the reading for women is only 3.2% lower than for men.

### 3.5. What reforms of the state can contribute to attainment of the Goal?

The Program for economic, political and cultural development of Turkmenistan in the period until 2020 aims to double employment levels compared with 2000. More than 1.55

million new jobs will be created in 2000-2010, and a further 1.3 new jobs will be created in 2010-2020.

There will be structural changes in demand for labor across branches and sectors of the economy. Labor intensive branches of the textile industry will be developed, as will branches processing agricultural produce and the services sector, which will increase demand for female workers.

Transition to a market economy will entail annual increase of the number of employees in the private sector. There will be a reduction of employment in the informal sector, in which many women work, leading to increase of their incomes and reduction of gender disparities.

Development of economic sectors and introduction of new technologies will be supported by intensive training of qualified personnel. For this purpose the number of students aged over 16 years of age at all educational establishments should rise by 2.2 times in 2010 compared with 2000 and by a further 1.9 times from 2010 to 2020. People laid off from certain sectors will be trained and retrained, mainly free of charge. Non-state educational establishments will be developed for the middle and upper sections of society.

“...child mortality has been significantly reduced in Turkmenistan since independence...”

Saparmurat Turkmenbashi. Rukhnama, page 282

## ⇒ Goal IV Reduce child mortality

### 4.1 The current situation

Child mortality is among the most critical issues in the modern world. The mortality rate of children up to 5 years-old varies from 3 per 1000 live births in economically developed countries to 300 per 1000 in countries with a low level of development. Millions of children die every year from malnutrition, and due to lack of medical care, medicines, clean water and proper sanitation (Table 4.1)

Table 4.1

#### Infant Mortality (per 1000 live births)

	Continents and countries	1990	2000
1	Worldwide	64	57
2	Europe	14	10
3	Developed countries	12	8
4	Developing countries	70	63
5	Asia	64	54
6	Turkmenistan	47*	21.3

Source: Report of the UN General Secretary on Implementation of the Millenium Declaration, document a/57/27

Ministry of Health and the Medical Industry of Turkmenistan

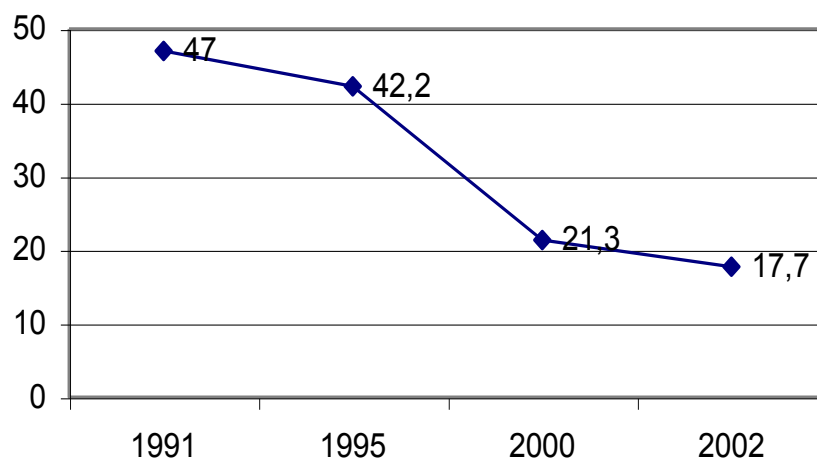
\*Data for 1991

Children are a country’s future. Assuring their survival at the start of life is not only a social and economic, but primarily a humanitarian goal. Hence the importance of Goal IV of the Millenium Declaration, which is to “Reduce child mortality” and includes a target to “Reduce by two thirds, between 1990 and 2015, the under-five mortality rate”.

A healthy mother is the prime condition for healthy children, and likelihood of mortality among unwanted children is higher than among wanted children. Access to reproductive health services will make it possible to avoid unwanted pregnancies.

Turkmenistan has made great progress since independence in reduction of child mortality. But the problem remains of serious concern, despite steady lowering of infant mortality indicators. Infant mortality in Turkmenistan peaked in 1991 (47 deaths per 1000 live births). However, a series of special measures, particularly implementation of the Program of Saparmurat Turkmenbashi, “Health”, enabled lowering of the indicator by 2.2 times to a level of 21.3 deaths per 1000 live births in 2000. By 2002 the indicator had fallen to 17.7, so that the target for Goal IV was essentially attained. The Millenium Declaration for the period until 2015 is being successfully implemented in Turkmenistan.

**Figure 4.1. Infant mortality coefficient in Turkmenistan**  
(per 1000 live births)



Source: Ministry of Health and the Medical Industry of Turkmenistan

#### **4.2. Essence of Goal IV, target 5 for Turkmenistan**

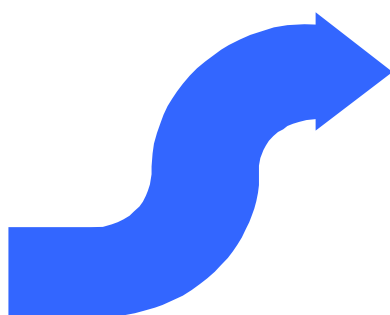
	<b>In the period 2000-2015</b>	<b>2000</b>	<b>2002</b>	<b>2015</b>
<b>Target 5</b>	<i>To reduce infant mortality by 2.1 times in the period 2000-2015</i>	21.3	17.7	10.0

There has been consistent reduction of infant mortality in Turkmenistan, reflecting concerted attention to all aspects of health and development in early childhood.

The current objective in Turkmenistan is faster reduction of the infant mortality ratio, based on high rates of economic development and the target set by the President of Turkmenistan, Saparmurat Turkmenbashi, of drawing level with economically developed countries by 2015. Adequate standards of living will make it possible to achieve a more balanced diet, and to apply better methods of medical and sanitary provision. This will ensure further lowering of infant mortality.

Reduction of infant mortality by 2.1 times is therefore a realistic target for Turkmenistan in the period 2000-2015.





**Will Turkmenistan  
attain this target?**

~~Very probably~~

Probably

~~Probably not~~

~~No data~~

### 4.3. Realization of Goal IV, target 5 in Turkmenistan

Infant mortality in Turkmenistan today has 3 main causes (Table 4.2).

Table 4.2

#### Causes of infant mortality in Turkmenistan

Causes of infant mortality	Weight, %
Respiratory illnesses	48.8
Natal and post-natal complications	25.2
Infectious diseases and parasites	15.1
Other illnesses	10.9
Total	100.0

Source: Ministry of Health and the Medical Industry of Turkmenistan

A series of measures is planned for prophylaxis and reduction of the incidence of diseases, which currently affect children and lead to infant mortality (Table 4.3).

Table 4.3

#### Measures for lowering infant mortality

Causes of infant mortality	Planned measures to eradicate causes
Anaemia due to gland deficiencies, and iodine deficiency disorders	Simple and accessible measures of a general nature: - increase in the percentage of breast-fed children to 95.5% of the total number; - integrated tracking of «natural» childhood illnesses; - protection of reproductive health; - more efficient peri-natal care;
Respiratory disorders	Immunization and a campaign to combat respiratory illness
Natal and post-natal complications	- High-quality pre-natal pathology diagnostics and embryo care. - A qualitatively new level of neonatal care, and care for new-born children, children up to one year old, and up to six years old, with provision of health care and treatment to all members of their families.

	<ul style="list-style-type: none"> <li>- More stringent requirements for qualifications and professional qualities of midwives, gynaecologists, and neonatal specialists.</li> <li>- Development and application of new, improved methods for diagnosis and treatment of principal child disorders.</li> </ul>
Infectious diseases and diseases caused by parasites	<ul style="list-style-type: none"> <li>- Improved neonatal care and introduction of new medical technologies in neonatal care, particularly for children with abnormally low birth weight.</li> <li>- Universal application of basic health care rules: proper diet, sanitary and hygiene standards, and a healthy life style.</li> <li>- Improvement of diagnostic and treatment methods.</li> </ul>
Other illnesses	<ul style="list-style-type: none"> <li>- Social mobilization at all levels with particular emphasis on a complex approach to child health and hygiene training.</li> <li>- Increasing medical knowledge of the general public concerning child care, diet and development.</li> <li>- Improved medical care and introduction of new medical technologies for neonatal care.</li> <li>- Expansion of monitoring by family doctors of children in the first year of life.</li> <li>- Improvement of access to qualified medical assistance for children.</li> </ul>

Realization of Goal IV, target 5, of the Millenium Declaration will be based on national programs for reduction of child mortality, namely: “Immuno-prophylaxis for 10 years of Prosperity in Turkmenistan”, “Protection and Support for Breast Feeding in Turkmenistan”, “Integrated Management of Natural Child Illnesses”, programs to address diarrhoeaic disorders, and “Safe Immunization Practice”.

The Government of Turkmenistan together with UNICEF is providing all necessary vaccines for these programs, and hepatitis B inoculation was recently included in the national vaccine calendar.

*“If there is one work with magic power, it must be the word ‘mother’. Turkmen people have always credited that word with a magic power, derived from the power of God”.*

Saparmurat Turkmenbashi, Rukhnama, page 324

## ⇒ Goal V Improve maternal health

### 5.1. The current situation

Maternal mortality ranks with infant mortality as a key international concern. The worldwide coefficient of maternal mortality (deaths per 100,000 live births) is around 400, rising to 1000 in the least developed countries and 1300 in East Africa (Table 5.1).

Table 5.1

#### Maternal mortality per 100,000 live births

Countries and regions	1990	2000
Worldwide	430	400
Developing countries	480	440
Africa	870	1000
East Africa	1060	1300
Asia	390	280
Turkmenistan	106.9*	52

Source: Report of the UN General Secretary on Implementation of the Millenium Declaration, document a/57/27

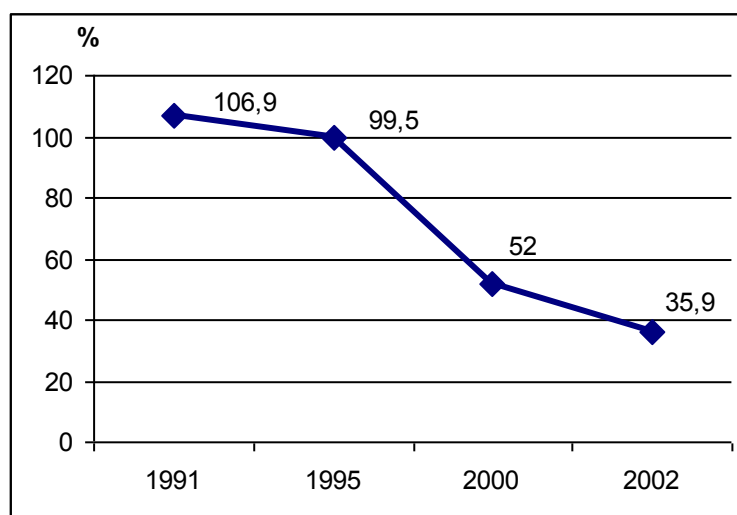
Ministry of Health and the Medical Industry of Turkmenistan

\*Data for 1991

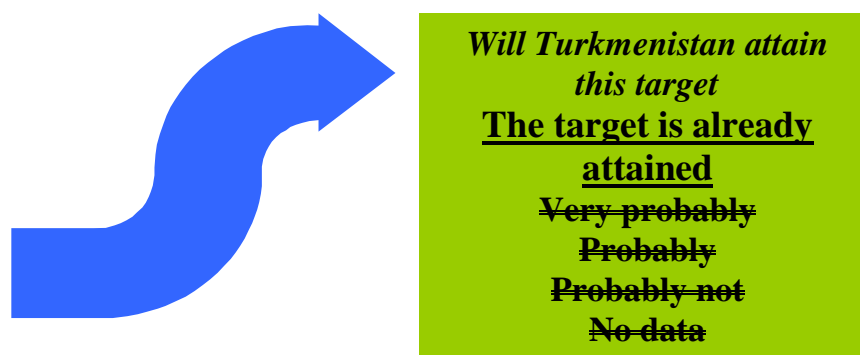
Goal V of the Millenium Declaration includes the target “to reduce by three quarters, between 1990 and 2015, the maternal mortality ratio”.

The problem of maternal mortality is as topical for Turkmenistan as for every other country. However, the problem has specific aspects for Turkmenistan, which does not have such high coefficients of maternal mortality as are found in the Asian and African continents. Turkmenistan has achieved significant results in maternal care in the years since independence. The coefficient of maternal mortality more than halved in 1991-2000, and fell by three times from 1991 to 2002. At the start of 2003 Turkmenistan had effectively reduced maternal mortality by three quarters, meeting the Millenium Declaration target for 2015. However, the aim of Turkmenistan is to approach European indicators and successes to date do not mean that measures will not be taken to reduce maternal mortality even further.

**Figure 5.1. Maternal mortality coefficient in Turkmenistan**  
(per 100,000 live births)



Source: Ministry of Health and the Medical Industry of Turkmenistan



Lowering of the maternal mortality rate in Turkmenistan is due to overall development of the country (improvement of the social and economic conditions in society, and efforts to enhance the rights and social status of women).

Factors, which have had a direct impact on the maternal mortality coefficient include: progress in health care, full medical care at work and in the post-natal period, easy access to care in the pre-natal period, and analysis by experts of every case of maternal mortality. In 2002 nearly all women were registered for observation at medical centers during pregnancy, and 97.4% had qualified medical help when they were giving birth. The percentage of deliveries by qualified medical personnel was 97.2% in 2002.

The quality of medical services to families has increased significantly due to organizational measures in the field of reproductive health. Families have now become proficient in controlling the reproductive process and using contraceptives to avoid unwanted pregnancies, and there is understanding of the harmful effect of abortion on the female body, the importance of intervals between consecutive children, and the necessity for women to seek medical advice in the early stages of pregnancy (Table 5.2).

Table 5.2

**Women using contraceptive methods, %**

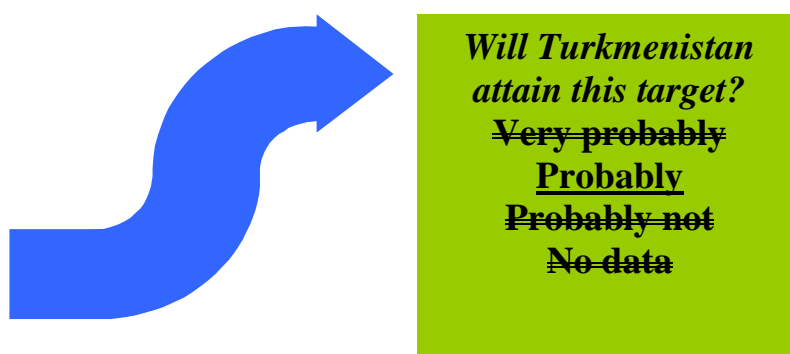
Method of contraception	2000	2002
-------------------------	------	------

Total % of women using artificial contraception	21.8	21.0
Intra-uterine coil	19.4	19.1
Hormonal contraception	2.4	2.0
Regulation of the menstrual cycle (mini-abortions)	0.6	0.5
Abortion	1.0	0.8

## 5.2 Essence of Goal V, target 6, for Turkmenistan

		2000	2002	2015
<b>Target 6</b>	<i>To halve maternal mortality in the period 2000-2015</i>	52	35.9	25.1

Turkmenistan has already reduced maternal mortality to the extent called for by the Millennium Declaration, and work is now continuing at a higher-quality level in the field of health care and maternity care. The target, which has been set, envisages significant reduction of maternal mortality and lethal outcomes of pregnancy and birth, to ensure that the birth of a child brings joy and happiness to families, and to guarantee the right of women to secure motherhood.



## 5.3. Realization of Goal V and target 6 in Turkmenistan

Cases of maternal mortality in Turkmenistan are due to complications during pregnancy and birth. Such complications were the cause of 74.2% of all cases of maternal mortality in 2002 (Table 5.3).

Table 5.3

Causes of maternal mortality	%
Total maternal mortality	100
Complications during pregnancy and birth (hemorrhage during birth, late toxic reaction, extra-genital diseases, septic complications)	74.2%
Other illnesses	25.8
Total	100.0

Ministry of Health and the Medical Industry of Turkmenistan

The highest incidence of maternal mortality (nearly a quarter of the total) is registered among young women of 17-25, mostly giving birth for the first time.

Therefore measures to combat maternal mortality will be focused on reduction and elimination of the problem in that age group.

Table 5.1

### Measures for reduction of maternal mortality

<b>Causes and problems</b>	<b>Planned measures</b>
Complications during pregnancy	<p>Raising awareness of women on issues of family planning:</p> <ul style="list-style-type: none"> <li>-responsibility for regulating the number of children born in the family;</li> <li>-reduction of frequency and overall numbers of births by women at an advanced age;</li> <li>-increase of the interval between births;</li> <li>-reduction of the number of abortions;</li> <li>-regular visits to a doctor</li> </ul> <p>- Raising awareness of and access to methods of birth control.</p> <p>All women should be registered for observation in medical institutions during pregnancy.</p> <p>The health index for women of reproductive age should be raised.</p> <p>Risks of pathology should be detected at early stages of pregnancy.</p> <p>All women should be offered early pre-natal care.</p> <p>Organization of service in medical institutions should be improved (constant supervision by a doctor, availability of operating rooms, laboratories and a blood bank for emergency assistance).</p>
Complications during child birth	<p>Improve the qualifications of midwives and the quality of services provided in natal clinics.</p> <p>Ensure special observation for women giving birth for the first time and those aged 17-25.</p> <p>Implement special program for optimizing health of teenage girls and girls at puberty.</p> <p>Create a data base of women giving birth for the first time, and regularly measure their blood pressure, hemoglobin levels, weight and height.</p> <p>Offer special training and psychological support to women giving birth for the first time</p>
Female reproductive health, first stage	<p>Implement a series of measures for protection of women's reproductive health up to 2005.</p> <p>In accordance with the Cairo Convention, the Ministry of Health and the Medical Industry of Turkmenistan jointly with the UNFPA has adopted a plan for measures to protect reproductive health in the period up to 2005.</p> <p>The following facilities have been opened in</p>

	<p>Ashgabat and the welayats with support from the UNFPA: National Center for Reproductive Health, National Center for Teenage Reproductive Health, 12 centers for reproductive health, 6 centers for teenage reproductive health, 92 reproductive health clinics.</p> <p>The centers are fully equipped and can provide means of contraception.</p> <p>The centers have provided training to 34 trainer-supervisors, who pass on their knowledge to local specialists, and have also trained 61 specialists in reproductive and maternal health, 33 specialists in teenage reproductive health, 350 midwife-gynecologists, 762 family doctors and family nurses.</p>
Female reproductive health, second stage	<p>To develop and implement a series of measures for protection of female reproductive health up to 2015.</p> <p>To carry out studies to gather information about the state of reproductive health.</p> <p>To expand the national medico-demographic research program via 5 projects, which are being implemented by the Gurbansoltan Edje Clinical and scientific Center for Mother and Child under supervision of the Ministry of Health and the Medical Industry of Turkmenistan with support from the UNFPA.</p> <p>To prepare a data base of widely used medico-demographic studies in the field of reproductive health, birth rates, and mother and child health for the Ministry of Health and the Medical Industry of Turkmenistan</p> <p>To use the data base to determine factors, which have impact on reproductive health, health of newborn and young children, and on planning and development of long-term programs and organizational measures in health care.</p>

Realization of target 6 under Goal V of the Millenium Declaration will be carried out on the basis of Turkmenistan's national programs for reduction of maternal mortality and further economic development, as well as improvement of the social and economic well-being of society, and raising of the legal and social status of women.

*“Turkmenistan has proclaimed people as its highest value: their life, health, security, and physical and moral development...”*

Saparmurat Turkmenbashi (Rukhnama, page 283)

## ⇒ **Goal VI Combat HIV/AIDS, malaria and other diseases**

### **6.1. The HIV/AIDS epidemic worldwide**

The HIV/AIDS problem has attained terrifying dimensions, and the disease is spreading at an ever greater speed. At the beginning of 2002 there were 40 million people worldwide who were HIV positive, and 20 million had died of AIDS. In 2001 alone 5 million people were infected and 3 million died of the disease. The worst affected countries are in sub-Saharan Africa, where there are 28 million people with HIV, or 70% of all those infected worldwide. The disease is also progressing at disturbing rates in Eastern Europe and Central Asia.

It is natural therefore that the Millennium Declaration, which was approved by 189 countries, targets halting and start of the reverse of the spread of HIV by 2015.

Ukraine and Belarus were the first CIS countries to be affected by accelerating rates of HIV infection in 1995-96. The problem appeared in Moldova in 1997, and soon arose in Russia, Latvia, Estonia and Kazakhstan. The worse indicator of HIV incidence was in Estonia in 2001, when the infection level reached 107.8 per 100,000 people, or 20 times higher than the European average and 50% higher than Russia. HIV is now spreading quickly in Kazakhstan, and is also spreading in Kyrgyzstan, Uzbekistan and Tadjikistan.

HIV is a particularly tragic condition, since it affects young people most of all. In Central and Eastern Europe in 1997-2000 people aged under 29 accounted for 63% of all those infected, and the same figure for the CIS was 78%. Worse, HIV is spreading to even younger population groups: the under-13 age group now represents 26% of all HIV/AIDS cases in Central and Eastern Europe.

### **6.2. Essence of Goal VI for Turkmenistan**

No cases of HIV/AIDS have been recorded in Turkmenistan. However, that should not justify complacency and the threat must not be underestimated, since no country is insured against HIV. It is important to study the experience of other countries in prophylaxis and prevention of the spread of HIV in order to resist the threat of infection.

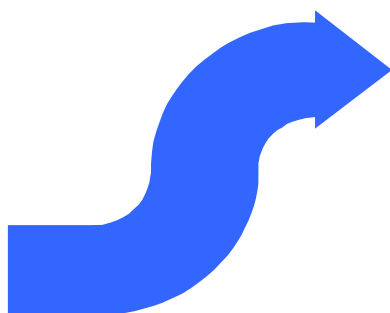
The experience of other countries shows that HIV/AIDS infection spreads by three main routes:

- use by several people of the same infected needle for injection of intra-venal drugs;
- infection of children by their mothers, who are HIV-positive;
- through sexual contact.

Infection by sexual contact represents the biggest threat for spread of the disease.

To summarize, the task for Turkmenistan is clearly to prevent any cases of the disease whatsoever. This is a very difficult task and requires considerable efforts by society.





**Will Turkmenistan  
attain this task?**  
~~Very probably~~  
Probably  
~~Probably not~~  
~~No data~~

Infectious diseases currently occurring in Turkmenistan include viral hepatitis, tuberculosis and bowel infections. Much work is being done in Turkmenistan to combat these diseases. As a result cases of infection with viral hepatitis were halved in the period from 1991 to 2000, and reduced by 4.5 times from 1991 to 2002. Incidence of bowel infections was reduced over the same two periods by 1.9 and 2.2 times respectively. However, a fall in incidences of tuberculosis by 40% from 1991 to 1995 was unfortunately not maintained, and incidence of tuberculosis rose by 35% in total from 1991 to 2000, although the disease was in decline again from 2000 to 2002 (Table 6.1)

Table 6.1

**Incidence of infectious diseases in Turkmenistan  
(per 100,000 people)**

Disease	1991	1995	2000	2002	2002-1991, %
Viral hepatitis	568.8	413.5	281.8	127.8	22.5
Tuberculosis	60.7	43.3	82.3	73.5	121.1
Bowel infections	531.5	377.9	278.5	239.5	45.1

Source: Ministry of Health and the Medical Industry of Turkmenistan

Turkmenistan, like other CIS countries, is concerned by the epidemic situation with tuberculosis. The current tuberculosis epidemic in Turkmenistan is due to natural-climatic and ecological factors, but also to inadequacy of measures being taken to counter the disease. Infection, illness and mortality as a result of tuberculosis have risen as a result.

Indicators of tuberculosis infection in Turkmenistan have been declining steadily in recent years, although levels remain high. Mortality due to tuberculosis is also declining. This tendency is largely due to consistent implementation of immuno-prophylaxis, prevention and early diagnosis, and improvement of sanitary and hygiene standards.

The programs “Immuno-prophylaxis for 10 years of Prosperity” and “Safe Immunization Practice” have been successful, as confirmed by reduction of incidence of those infectious diseases, which vaccination combats. There has been a reduction of incidence of typhoid, measles, chickenpox, German measles, diphtheria, whooping cough, mumps, serious bowel diseases, scarlatina, and viral hepatitis

In view of the nature and incidence of infectious diseases in Turkmenistan, the country has set itself the following tasks for combating such diseases under Goal V in the period until 2015.

**Table 6.3. Realization of Goal VI, targets 7 and 8 in Turkmenistan**

		2000	2002	2015

<b>Task 7</b>	<b><i>Prevent HIV/AIDS infection in the country</i></b>	0	0	0
<b>Task 8</b>	<b><i>Reduce tuberculosis infection by one third in the period 2000-2015</i></b>	82.3	73.5	51.5

The goal for combating infectious diseases in Turkmenistan thus consists of two parts: first, preventing any cases of HIV/AIDS; and, second, dealing with existing infectious diseases, mainly viral hepatitis, tuberculosis, and bowel infections.

As made clear by the state program, “Health”, main efforts by the medical system will be focused on prophylaxis.

#### ***Target 7. Preventing incidence of HIV/AIDS in Turkmenistan***

The problem of HIV./AIDS and sexually transmitted diseases has top priority in the Presidential program “Health”. Implementation of the program should have the following results: awareness of and ability to carry out measures for prophylaxis of HIV/AIDS and sexually transmitted diseases among 95% of the total population (including high risk groups). For this purpose, a program of prophylaxis for HIV/AIDS and sexually-transmitted diseases was approved in 1999, to be implemented in 1999-2003.

Main aims of the program are:

- prevention of HIV/AIDS;
- reduction of sexually-transmitted diseases.

The following 5 strategies have been identified to ensure success of the program:

1. Definition of a national policy on HIV/AIDS and sexually transmitted diseases.
2. Prevention of spread of HIV/AIDS and sexually transmitted diseases via blood.
3. Prevention of spread of HIV/AIDS and sexually transmitted diseases via sexual contact.
4. Prevention of pre- and peri-natal infection with HIV/AIDS and sexually transmitted diseases.
5. Assurance of all necessary forms of care and support for HIV carriers, AIDS sufferers and their families if cases of the illness appear in Turkmenistan.

The Government of Turkmenistan is co-operating with the UN on implementation of various aspects of this program.

Turkmenistan has chosen its own path for prophylactic measures, based on development of a healthy way of life and moral and ethical education, particularly for young people. All measures take account of national specifics and traditions.

The main aim is to shape correct understanding at all levels of society of the various aspects of HIV/AIDS and sexually transmitted diseases, to encourage optimal moral and sanitary awareness, and to encourage practices, which prevents infection, in medical institutions and social services.

#### ***Target 8. To reduce Tuberculosis infection by one third***

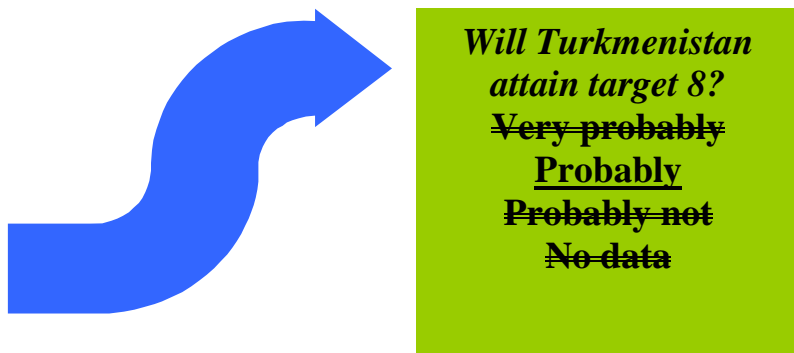
The Ministry of Health and the Medical Industry of Turkmenistan, in association with the WHO and other international organizations, has defined experimental regions for application of

the DOTS strategy in parts of the country most affected by Tuberculosis: the city of Ashgabat, and the Balkan and Dashhowuz welayats. This action is being taken as part of the state program “Health”, and by way of urgent measures to combat spread of tuberculosis.

The new strategy for combating tuberculosis in Turkmenistan is improving diagnosis of infectious tuberculosis cases and improving treatment. Results of the DOTS strategy in experimental regions supports its application in the whole of the country. However, successful implementation of the program requires continuity in joint work by tuberculosis specialists and the first link of the national health system.

DOTS uses a standard six-month treatment applying four medicines. Medical workers using the DOTS method always supervise each administration of medicine to ensure that the course of treatment is strictly observed. When it is properly applied DOTS cures tuberculosis, reduces rates of recidivism and prevents spread of tuberculosis. If DOTS fails to have an effect, the patient is probably suffering from a form of tuberculosis, which does not respond to most antibiotics. Treating such a condition is much more difficult and more expensive, and the condition appears if a course of treatment is interrupted.

Prevention of spread of tuberculosis is as important as diagnosis and cure of the disease in its latent form for reducing overall incidence. Sanitary measures are also important in combating epidemic manifestations of tuberculosis.



“We resolve therefore to adopt in all our environmental actions a new ethic of conservation and stewardship.”

Millennium Declaration

## ⇒ Goal VII Ensure environmental sustainability

Main targets	Means	Schedule		
		2000	2015	2020
<i>Target 9. Halt exhaustion of natural resources</i>	<i>Increase financing of nature-conservancy measures</i>	<i>100</i>	<i>150</i>	<i>180</i>

The theme of sustainable development is increasingly topical, since it encompasses a range of economic, environmental, social and moral issues. The theme is becoming a basic goal of both economic and political strategy.

Sustainable development with conservation of a balance in the limited resources of the environment is one of the key problems for the world community.

To keep the earth habitable and to protect its diversity and beauty are sacred duties for everyone on the planet.

### 7.1. What is the situation today?

Intensive development of industry, agriculture and social infrastructure cannot fail to increase the impact of man on the environment. Some climatic factors are also having negative impact on elements of the natural world.

The multiple sectors of Turkmenistan’s industry are the main “polluters” in the country. The main sectors are petrochemicals, oil and gas, fuel and power energy, construction, the food and textile industry, fertilizer production, and agro-industry.

Research material, gathered in the process of work on the National Plan of Action for Protection of the Environment (NPAPE), enables the following summary of Turkmenistan’s environmental problems:

- Shortage and pollution of water resources.
- Pollution, salification, waterlogging and deflation of land.
- Degradation of environmental components in Turkmenistan’s sector of the Aral Basin.
- Air pollution and other impact in areas close to oil, gas and power energy installations.
- Reduction of biological diversity.
- Monuments and outstanding natural landmarks.

The problem of water resources in Turkmenistan is due to the increasing impact of economic activity on the country’s principal river basins: the AmyDarya, Murgab and Tedjen.

The main problems are shortage of water and its pollution. Shortage of water for cultivation has become a problem in Turkmenistan since 1980s. Water use per capita has declined each year since that time. The indicator in 2000 was 3246 cubic meters, which is 20% less than in 1996.

Lack of water for irrigation is mainly due to low water levels in rivers and failure of Central Asian countries to solve the problem of use of water from the Amu Darya, which has led to a crisis in the Aral Sea basin.

All regions of Turkmenistan suffer from a shortage of water, except for a narrow strip of irrigated land along the middle reaches of the Amu Darya.

The Caspian coast is the driest region in Turkmenistan. Before 1983 towns on Turkmenistan's Caspian coast were supplied with water from the Yaskhanskaya and Chilmamedkumskaya underground water tables, the Dzhabelsky and Kazandzhiksky (Bereketsky) fields, and also by barge from Baku.

After 1983 a part of water needs in this part of Turkmenistan was supplied by a pipeline connection from the Karakum River to Balkan welayat.

The quality of underground fresh water mainly meets state requirements for drinking water, although some tests have shown pollution by phenols and nitrates. Increased mineralization has been observed in some water tables along canals due to failure to observe rules for water use (excessive water take-off). There has been no mass pollution of underground water resources, but there is a threat of this in the Dashhowuz, Lebap and Mary welayats, where the risk is increased by location of water near to the surface, lack of screen layers in the aeration zone, etc.

High-quality fresh-water resources are distributed unevenly across the country, and there is a serious lack of satisfactory drinking water in several etraps of the Balkan and Dashhowuz welayats.

Lack of drinking water in Turkmenistan's sector of the Aral Basin is due to high levels of pollution of surface water and low capacity of underground fresh water sources.

### **7.3. Pollution, salification, waterlogging and deflation of land**

Turkmenistan has 49.1 million hectares of land, of which 40.2 hectares are agricultural, according to data from 2000. Most of the agricultural land (95.6%) is pasture, 4.1% is used for annual crops and 0.24% is under perennial cultures.

The main cause of degradation of irrigated land is secondary salification, which occurs due to inadequate drainage from certain areas of irrigated land and rising levels of ground water with high mineral content. About 38% of irrigated land has 1-2 meters of standing ground water. The problem is most acute in the Dashhowuz and Lebap welayats due to insufficient drainage from irrigated land.

Deflation and erosion of soil is also a serious problem in Turkmenistan. Vegetation in some of the country's semi-desert pastures has been reduced by natural factors and irrational use of the land, and variety of plant life on this land is under threat.

The Turkmen Lake, which is being created in the Karakum region by order of the President of Turkmenistan, Saparmurat Turkmenbashi, should help to solve the problems of soil salification, pollution of water resources, rise of ground water levels and inundation of irrigated land, and loss of pasture land.

Development and implementation of this large-scale project is a response to local and regional specifics of the country's environment and the necessity for solution of urgent environmental problems.

Calculations show that full operation of the inflow system to the main collector will allow diversion of 23-28 million tons of salts, which are now emptied from irrigated land into the Amu Darya and Karakum desert regions, into the Turkmen Lake. Diversion of drainage water from the Amu Darya along the main collector will reduce pollution of the Amu Darya in Turkmenistan and reduce salification pressure on the River from the territory of Lebap welayat by 4-5 million tons. This will considerably reduce the burden of salification on irrigated land. Improvement of the state of irrigated land by regulation of the salt balance will also reduce necessity for cleansing the land of salt, thus cutting non-productive losses of irrigation water and

lowering the standing water level. This will lead to considerable increase in the harvest. Inundation of wells and pastures will be avoided and the overall ecological situation in the country will improve.

The Turkmen Lake, which will have an areas of 3460 square kilometers, will also provide food and a hospitable environment for migratory birds in a region, which currently has limited water supplies.

#### **7.4. Degradation of components of the natural environment in Turkmenistan's sector of the Aral Basin**

The Aral crisis, which has culminated in destruction of the ecosystem of the Basin of the Aral Sea, is an example of how all regional ecological problems arise and inter-connect, with impact on socio-economic development.

The level of the Sea has dropped by 19 meters since 1961, reducing the area of the Sea by 50% (30,000 square kilometers).

Desertification is progressing rapidly in the Aral Basin. The former sea floor is now essentially a desert.

In the last 10 years 43 million tons of salts have been carried from the Aral Basin each year and deposited over an area of 1.74 million square kilometers, with serious damage to agricultural regions.

Salt and dust aerosols from the former Aral sea floor are causing soil salification, water pollution and damage to the health of local inhabitants.

Shrinkage of the Aral Sea has caused serious ecological problems in Turkmenistan's Dashhowuz welayat and the Darganatinsky etrap in Lebap welayat. The affected areas, which include major cotton growing regions, cover a total 90,000 square kilometers.

The shrinkage of the Aral Sea is a man-made disaster with increasingly serious consequences. The Aral problem has combined with problems created by emptying of drainage water into the Amu Darya River, upsetting the ecological balance and creating an environmental disaster zone.

All components of the natural environment have suffered as a result. Up to 90-95% of land in the irrigated zone of Turkmenistan's Aral region is affected by salification to some extent.

#### **7.5. Air pollution and environmental impact of the oil, gas and energy industries**

Air pollution is a combination of natural and man-made factors, and climatic conditions play a large role in such pollution in Turkmenistan.

Turkmenistan is a large and thinly populated country. Large stationary sources of air pollution (big industrial enterprises) are located in big cities, which are hundreds of kilometers apart.

The main industries, which contribute to air pollution in Turkmenistan, are oil and gas, petrochemicals, chemicals, power energy, the construction materials industry, and machine building.

Increase of air pollution is mainly due to increase of oil and gas production. Emissions from oil and gas facilities account for 75-95% of all polluting emissions in the country in various years. Hydrocarbons are the main cause of emissions of greenhouse gases, which play a significant role in climate change. Operations of oil and gas facilities have an impact on the environment at all stages of the production cycle, from geological exploration to processing and storage of hydrocarbons, as well as use of hydrocarbon end-products.

Oil and gas enterprises engaged in production at hydrocarbon fields in 1995-2000 emitted about one billion cubic meters of natural gas and secondary oil gas per year. However, atmospheric emissions have reduced significantly in recent years due to harnessing for gas

supplies, production of technical carbon at the Hazar chemical plant, and pumping of gas into geological strata to increase crude oil yield.

There is a problem connected with emissions of highly toxic sulfur compounds at sulfur-bearing gas fields in the east of Turkmenistan, which have been developed since the mid-1960s.

The Caspian Sea is also affected by pollution from the oil, gas and energy sectors. Waste from the Turkmenbashi refinery complex flows into the Sea via the Soimonov Gulf. The Caspian is also affected by leakage from the oil and gas loading terminals in the city of Turkmenbashi and the settlement of Prichal, and from flooded wells in the Cheleken peninsular, as well as other sources of pollution.

## **7.6. Reduction of biological diversity**

Sustainable development and protection of the environment is dependent on maintenance of biological diversity.

Increasing exploitation of natural resources entails a series of problems connected with biodiversity, and makes it necessary to devise a strategy for its preservation.

Turkmenistan currently has 8 nature reserves and 13 protected areas with total area of 1.975 million hectares, covering 4% of the entire country

Pressure on flora and fauna due to human activity has increased in the last 20-30 years, forcing urgent measures to protect biodiversity.

The second edition of the Red Book for Turkmenistan contains 152 species of animals (including 107 vertebrates), representing 15.9% of all animal species in the country, as well as 109 species of plants. These figures emphasize the urgent need for conservation measures.

The genotype of each species has been created in a long process of evolution and, once lost, it cannot be replaced.

Turkmenistan works mainly with the UNDP in efforts to protect biodiversity.

By subscribing to the Convention on Biodiversity, Turkmenistan has shown its concern and willingness to help in preserving biodiversity both nationally and globally. Implementation of the Strategy and Plan of Action for Maintenance of Biodiversity was the first step in realization of the targets of the Convention.

## **7.7. Monuments and outstanding natural landmarks**

Turkmenistan is rich in cultural monuments and outstanding natural landmarks, with 1299 officially registered in the country. However, many monuments in Turkmenistan are in urgent need of repair, due to adverse affect of natural and man-made factors.

There has been damage to monuments and landscapes along major rivers due to rising ground water levels, and secondary soil salification in ancient oases. The shrinkage of the Aral Sea, which has created ecological problems in the north of the country, has also had negative impact on many monuments and landscapes, which have been damaged by dusts from the salt-beds on the former floor of the Aral Sea.

## **7.8. What are the main difficulties?**

The main problems in assuring sustainable development are:

- Analysis of the ecological situation in the country, systematic listing of ecological problems and identification of the most pressing among them.
- Identification of regional (at welayat level) and national ecological priorities (problems, and measures or actions for their solution) both for individual components of the environment and for the environment as a whole, using transparent criteria and the results of analysis.

- Development of an economically efficient and financially feasible program, setting achievable targets, indicative goals, and a complex of institutional and investment measures and actions.

To achieve these goals and solve the most urgent problems, the National Plan of Action for Protection of the Environment has set the following targets:

- To improve the ecological situation in Turkmenistan, preventing any worsening of the situation and assuring sustainable functioning of the natural environment.
- To reduce negative impact of environmental factors on health of the population.
- To improve management of nature conservation and rational use of natural resources.
- To assure active participation by Turkmenistan in international co-operation for solution of national and global ecological problems.

### **7.9 Steps by Turkmenistan to prevent irrational use of natural resources**

Hundreds of normative acts have been adopted since independence, which are more or less connected with protection of the environment, natural resources, biodiversity, and the health of the population.

One of the first laws passed after independence was the law “On natural conservation” (1991), and this law was fundamental in regulation of legal norms in Turkmenistan in the socio-economic and ecological spheres.

A series of laws on protection of the environment and natural resources was subsequently passed. These laws included “On natural regions under special protection of the state” (1991), “On sub-soil resources” (1992), “On hydrocarbon resources” (1996), “On conservation and rational use of animal resources” (1997), and others.

Joining the international community as an independent, neutral and sovereign state, Turkmenistan declared its commitment to international agreements on protection of the environment.

Our country has been among the first to subscribe to UN nature conservancy conventions, which offer a guarantee of nature conservancy and avoidance of ecological disasters worldwide. These include: the Framework Convention and Montreal Protocol on Preservation of the Ozone Layer, the Convention on Resisting Desertification, the Basel Convention on Control of Cross-border Transport of Dangerous Waste and its Disposal, the Aarhus Convention on Access to Information, and resolutions on social participation in the decision-taking process and access to courts regarding environmental issues. Turkmenistan supports these conventions and measures and is making every effort to carry out decisions and responsibilities pertaining to them.

Nature conservation and improvement of the quality of the environment will be priorities for the state and for society in the period until 2020.

Work will be continued on improving management of water resources, including completion of work on a new version of the Water Code of Turkmenistan.

Work on introduction of a Land Cadaster in Turkmenistan will be revived as part of efforts to resist land degradation. Development and adoption of a resolution “On land re-cultivation” is planned in order to give legal status to the relevant efforts and to aid restoration of spoilt land.

On the initiative of the President of Turkmenistan, Ukrainian specialists are building a multifunctional underground collector to solve the problem of rising ground-water levels, and to renovate main water supply pipes and drains in the city of Ashgabat. Electric cables and telephone cables are also being installed in the new tunnel, in order to raise the standard of electricity and telecom service provision in the capital city.

According to plans, disposal of irrigation and drain water will use natural flow from technological chambers inside the tunnel, along reinforced concrete pipes and then along open channels to the lower reaches of the Karakum rivers. The main flow of drainage water will be



channeled to the Turkmen Lake, which is being built in the desert. The length of each disposal collector will be 9-11 kilometers.

Measures will be taken to reduce atmospheric pollution from mobile sources, and collection and utilization of solid household and food waste. Railway rolling stock and aircraft fleets will be further updated, and railways will be electrified. Use of new, ecologically clean technologies and fuel types will be extended in transport and industry (compressed gas, LNG, lead-free gasoline, etc.)

Measures to reduce pollution of the environment by oil, gas and power energy facilities are bound up with development programs for these sectors until 2020. Oil and gas fields will be reorganized, oil refineries and power stations will be modernized and rebuilt, new pipelines and compressor stations will be constructed, and the country will carry out installation of new gas processing facilities, as well as tank farms for oil and oil product storage.

Nature conservation plans include organization of national parks and creation of a network of carefully protected natural territories. The latter will enable study, conservation and renewal of the Great Balkan, West Kopet Dag, and Pamir-Alai mountain ecosystems, conservation and restoration of the southern population of Bukhara deer, and breeding and new cultivation of rare and threatened species of animals and plants. These efforts will improve conditions for social recreation, expand tourism, and allow development of new tours and excursion routes.

There are plans to invest resources in preservation of fossilized remains of ancient life forms (dinosaurs, camels and other animals) in Lebap and Balkan welayats, the Garylsky Caves and the Gainarbab themal springs.

The grave sanitary-epidemic threat presented by the situation in the Aral Basin will be addressed by improvement and complex reconstruction of irrigated land. There will be a reassessment of some previously confirmed underground water sources. Construction of water desalination installations, purification facilities and water conduits will be continued in order to assure supplies of drinking water to the local population.

### 7.10 Access to clean drinking water

Tasks	Nature of action	Schedule		
		2000	2015	2020
<b>Task 10 . Reduce the proportion of people without access to safe drinking water</b>	<b>Increase the percentage of the population with access to a centralized water supply system</b>			
	Urban	80	94	100
	Rural	28	80	100

In Turkmenistan water supply has a special place among natural resources, which define socio-economic development, and it is also one of the most vulnerable components of the natural environment, subject to sudden change as a result of the economic and day-to-day activities of people.

Insufficient access to safe drinking water (particularly in rural areas), inadequate coverage and low efficiency of treatment systems in drainage (complete absence of such systems in some cases, when water is allowed to drain into sand without any cleansing), have had a negative impact on the environment and led to increase of illnesses caused by unsatisfactory water supply and drainage arrangements.

Since independence, the issue of water supplies to the population has been made into a key element of state policy, and a key factor for improving health levels throughout society.

### 7.11 What is the situation today?

Per capita use of fresh water is one of the key indicators of human development levels. Water supply involves large capital investments and major operating costs, which increase in conditions of water shortage.

Turkmenistan is now implementing the strategic program “Maksatnama”, which targets fundamental reform of the water supply and drainage system in the country.

A drinking water plant with daily capacity of 200,000 cubic meters, using equipment supplied by the company Calligan, has already been commissioned to supply the needs of the western part of the city of Ashghabat. Work has started on a drinking water plant with daily capacity of 150 cubic meters for the city of Turkmenabat, and a project for water supply in Balkan welayat is currently being prepared.

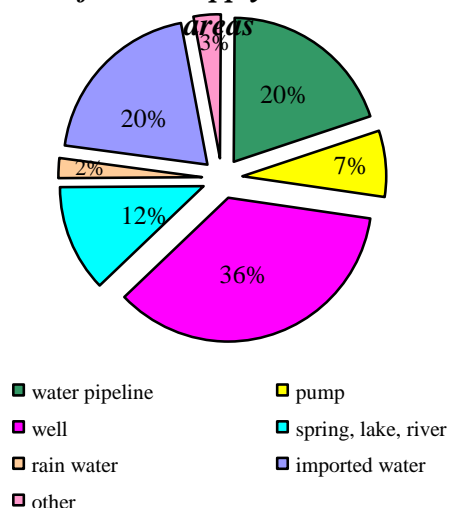
Despite the serious deficit of water for household purposes and drinking, around 30% of available high quality drinking water is currently used for irrigation.

Average daily per capita water use in Turkmenistan in 2000 was 185 liters. Water leakage and its unaccounted use had grown by 50% since 1991, creating a serious problem in view of the overall water shortage.

Implementation of the national plan “Development of Municipal Services in Turkmenistan’s Cities” has included detailed analysis of existing problems in the municipal service sector, using specific apartment blocks as examples. The studies showed that there is a serious problem with supply of drinking water to the upper storeys of apartment blocks, due to leakages at all stages of supply from the water purification facility to the actual apartment, and that there is significant wastage of water by its end-users in the apartment. The level of water losses and unaccounted loss in Turkmenistan as a whole is 19.4%. Daily water supply per capita in Ashghabat is 450 liters per person, exceeding the average level in Western Europe by 300 liters

Despite excessive daily supplies of household and drinking water per capita, the share of the urban population with centralized water supply was 80% in 2000 and only 28% among the rural population (Figure 7.1).

*Sources of water supply sources in rural*



Source: Survey of living standards. 1998. World Bank

Further, only 67% of the water, which is supplied for household and drinking needs, conforms to sanitary and hygiene requirements.

The rural population uses non-centralized sources of water for household needs and drinking (small rivers, irrigation canals, wells, rain water). This water is not properly treated,

fails to meet a number of sanitary and hygiene standards, and does not meet the international drinking-water standard TDS 2874-82.

Water quality standards are governed by sanitary and hygiene requirements, and one of the most important stages of water preparation is removal of sources of infection. At the present time not all of the water supplied to end-users in Turkmenistan undergoes such removal, which requires use of sodium hypochlorite (produced locally). This contradicts the resolution of the President of Turkmenistan (No. 3293, dated August 11, 1997) "On use of sodium hypochlorite for purification and disinfecting of drinking water".

### **7.12. What are the main difficulties?**

Underground reservoirs with usable capacities have been located near to population centers in some welayats and etraps, but they are distributed unevenly across the country so their use by consumers is uneven. The level of water take in most of Turkmenistan is low and the overall level across the country is 32%.

Existing capacities are insufficient to supply water needs of all sections of the population. More than half of supply networks (channels, main pipes, distribution pipes, local supply pipes, and pipes inside apartment blocks) need to be replaced or to undergo major repair work due to corrosion and long periods of use.

The equipment used for centralized water supplies is under pressure due to non-observance of rules for its proper use. Hydraulic features and other parameters of the water purification process are not respected, poor quality reagents and high-molecular floccules are used in cleansing and removal of infections, there is almost no back-up equipment, and electricity supplies to operate the equipment are inadequate. The quality of water supplied to end-users suffers as a result and the system is forced to operate non-stop at the limits of its technical capacity.

Pollution of water sources by drainage has become an acute problem in recent years. Nearly all the water from drains is channeled into the desert, rivers and irrigation canals without any treatment, lowering the overall quality of water. Of the overall volume of drain water, more than 3.6 cubic kilometers (54%) is emptied into the Sara Kamysh Lake, and the Amur Darya and Kurgap rivers, lowering quality of their water.

The quality of underground water is also deteriorating due to low efficiency of cleansing equipment, or its complete absence, in which case foul water is drained straight into the sand with no treatment or disinfecting.

The most serious problem is the need for urgent replacement or major repair of over half of water mains. The state needs to provide investment for this purpose in the next few years.

### **7.13. What is Turkmenistan doing to increase supplies of drinking water?**

In order to provide the population with drinking water of sufficient quality, it is planned to reassess already explored water sources and increase reserves of underground water by 1.024 million cubic meters per day in the period up to 2010. This will make it possible to supply safe drinking water to an extra 37% of the population (1.7 million people).

The joint project of the Turkmenistan government and the UNDP, "Development of Municipal Services in Turkmenistan's Cities", aims to develop municipal services in Ashgabat and 9 other cities. The project is unique, since it has a number of levels and a wide range of targets. The main targets are:

- Improvement of the water supply system to apartment blocks.
- Computerization of municipal services and introduction of up-to-date information technologies.
- Better organization of collection and disposal of solid household waste.

- Involvement of the population in upgrading of apartment blocks, and more economical use of drinking water.

The regional project “Management of Water Resources and the Environment in the Aral Basin” is being implemented jointly with the World Bank in Dashhowuz welayat. The project includes repair and upgrading of water supplies and development of the supply system in 7 etrap centers and 9 farming communities in Dashhowuz welayat. Water supply channels with total length of 235 kilometers are being repaired, assuring reliable water supplies to 108,000 people. The project also includes purchase of equipment for bacteriological and chemical analysis of water.

Desalination facilities will be built using up-to-date technology to provide drinking water for the coastal cities of Turkmenbashi and Khaza. Daily capacities will be 10,000 and 5000 cubic meters of water respectively. A desalination facility with capacity of 1000 cubic meters per day is already functioning in the settlement of Esengula.

Spending of 11,560.1 billion manats is planned as part of the strategic program “Maksatnama”, which aims at fundamental reform and reconstruction of the system of water supply and disposal. Pipes for centralized distribution of water in towns and rural settlements, to be installed as part of this program, will have overall length of 5800 kilometers. The program will also install 307 kilometers of centralized drains, water cleansing facilities, wells with daily water take of 665,600 cubic meters (242.9 million cubic meters per year), and 5 drain water treatment facilities. Finally, the program will include repair and reconstruction of 505.1 kilometers of water distribution networks.

#### 7.14 Improvement of housing conditions

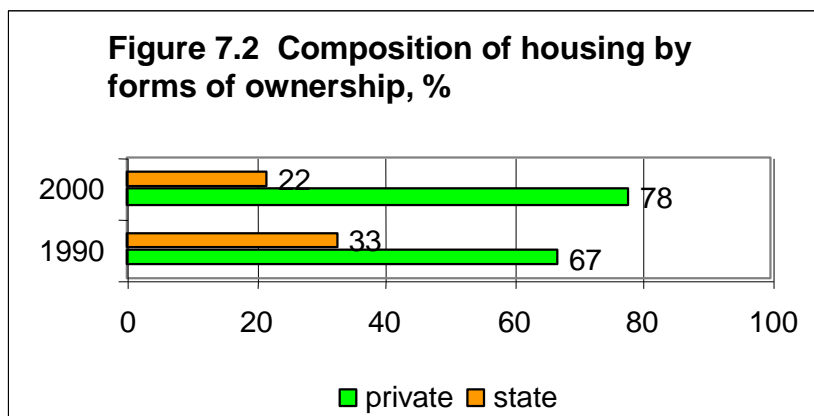
Main tasks	Nature of action	Schedule		
		2000	2015	2020
<i>Task 11. By 2020 to have achieved significant improvement in housing conditions</i>	<i>To increase average square-meter provision of housing per capita</i>	17.8	30.6	35.0
	<i>To increase the share of private housing in the total amount of housing in Turkmenistan</i>	78	92	97

Improvement of housing conditions and the quality of municipal services is one of the main indicators of advances in the level of material well-being in Turkmenistan. The Government and President Saparmurat Turkmenbashi are carrying out significant work in this direction. A number of laws were adopted in 1991-2000 targeting improvement of housing conditions, including heat supplies to apartment blocks and other buildings. There is also a targeted program for the period to 2010 concerning water supplies. Tariffs for municipal services are very low, and water, gas and electricity are supplied free of charge. This undoubtedly contributes to the level of social security in Turkmenistan.

#### 7.15 What is the situation today?

Housing is a prime social good and has significant impact on the state of a society. In the last 10 years Turkmenistan has built 120,000 new, well-equipped apartments with total area of 11.6 million square meters. There has been a change in the source of financing for housing construction. In 1991 the share of state investment in housing construction was 45% and the share of individuals was 55%, whereas the respective shares had altered to 27% and 73% by 2000. The total amount of housing in Turkmenistan increased by nearly 80% over the same

period (by 47% in urban areas and by 2.1 times in rural areas). Most of the growth was due to building by individuals.

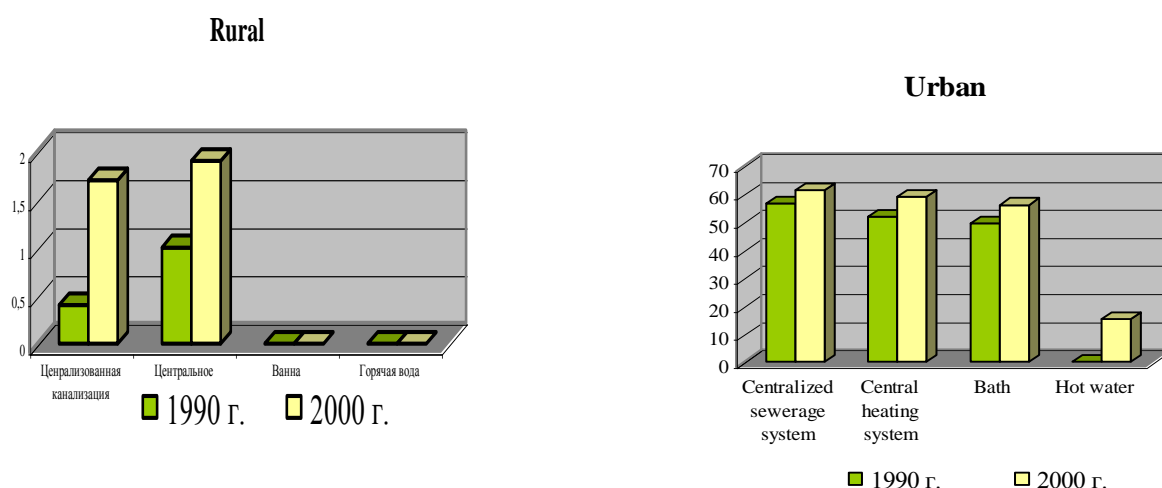


Source: National Institute of State Statistics and Information of Turkmenistan

Growth of real personal incomes and rise of living standards have enabled more construction of housing by individuals out of their own pockets. Real average per capita incomes grew by 2.6 times from 1996 to 2000 giving an impulse to housing construction. Average living space per capita in 2000 was 17.8 square meters, which is 59% higher than in 1991. In the period from 1996, when privatization of housing became possible, until 2000, a 17% share of apartments were privatized and 32% of these were transferred to private ownership free of charge.

Broad access to municipal services is assured by unpaid provision of gas, water, and electricity. The level of provision of municipal services to households depends on the type of housing. Nearly all (99%) of flats and houses have gas supplies and 55% have a centralized water supply. Availability of drainage, central heating and bathroom and shower facilities are less common (33%, 32% and 31% respectively). Provision of other municipal services also varies depending on location.

**Figure 7.2 Housing amenities (% of total housing with various amenities)**



In accordance with the Resolution of the President of Turkmenistan “On construction in Ashgabat of individual high-rise apartment blocks with improved levels of comfort and planning” (No. 4170, dated April 30, 1999), and as part of the general plan for construction in Ashgabat, ministries and government departments are permitted to make contracts with foreign firms for construction of individual apartment blocks with improved levels of comfort and planning.

In order to assist people in purchasing and building comfortable housing, all banks in Turkmenistan are allowed to offer citizens special credits for payment of a part of the costs of such housing. Such credits are repayable over a period up to 15 years.

Employers have an important role to play in improving the housing conditions of their employees. A 50% discount on the price of apartments is offered to employees of institutions, enterprises, ministries, government departments, sectors and other organizations, which finance construction of apartment blocks with improved levels of comfort and planning. Investing organizations are freed from payment of all types of tax on sums received from sale of apartments. These new buildings can be categorized as elite housing, and they meet requirements for housing in the 21<sup>st</sup> century – the Golden Age of the Turkmen People.

#### **7.16. What are the main difficulties?**

Much work has been done in the last decade for improvement of housing and housing infrastructure. However, much remains to be done. In particular, there is a need to address difficulties with profitability and inadequate investment levels in the municipal and housing sector, as well as low efficiency in use of available material and financial resources.

The housing and municipal system, which Turkmenistan inherited from the plan economy, is very costly and inefficient. There is a need for review of the legal basis of the sector and conduct of sector reform.

Improvement of mechanisms for financing the various parts of the municipal and housing sector is badly needed. This is particularly important in the conditions of transition to market-based methods of management, privatization and expansion of the housing market, increased attention by the state to issues of construction and architecture, and the task of providing people with safe drinking water.

There is a need to review mechanisms of budget financing of works and services provided to the population at state prices, taking account of the need to cover both operating costs and the cost of building housing and municipal facilities.

A legal and normative basis is needed for combating irrational use of resources, assuring economical use of resources and energy in the housing and municipal sector, and raising efficiency in the sector. It is also important to find ways of structurally transforming housing and municipal sub-sectors to take account of the needs of a market economy.

#### **7.17 What is being done in Turkmenistan to improve people’s living standards?**

Privatization of “old” state housing will be completed in the process of reform up to 2011, and work will continue to create new housing for sale to the population. Average per capita living space should increase from 22.6 square meters in 2010 to 35 square meters in 2020, when the private ownership of housing will be 97%. This will require significant increase in construction of new housing and cardinal reforms of the housing and service sector. Investments in the sector will grow by 4.3 times from 2010 to 2020.

Improvement of the legal basis of the sector will target increase of investments and use of the latest technologies in the sector. There will also be improvements in building standards and rules, and studies of demand for housing will be carried out.

The new housing policy will be developed in new state programs and legal acts. New laws will be passed “On privatization of state and social housing”, “On the basis of state housing policy”, a “Housing Code of Turkmenistan” and others.

A housing market will be established and construction of new housing will be developed in order to provide affordable living space to the population.

Privatization and sale of housing will allow people to exercise their right to choose where they live, and to select the quality, which they require, as well as developing a housing market.

Provision of state credits for construction of housing will be extended in the medium term, as will opportunities to acquire housing with payment of an advance equal to 30-50% of the full price.

Significant investments will be directed to construction of municipal service facilities, and to their repair and replacement, in order to improve people’s housing and living conditions and support a satisfactory ecological balance in the country. Construction of municipal service networks and facilities will remain subject to state management and control. But funds of enterprises, organizations, and institutions in all forms of ownership, which are located in the relevant regions, will also be used to finance the sector.

## ⇒ Goal VIII Develop a global partnership for development

### **Target 12. Address the special needs of landlocked countries**

#### **8.1. Essence of the problem**

Goal VIII of the Millennium Declaration is to develop a global partnership for development. This implies that rich countries should assist poor countries to develop, by creating favorable conditions for debt write-offs and offering favorable terms for exports by poor countries. Commodities from countries, which are striving to reduce poverty, should be given easier access to international markets.

Although great significance attaches to the initiative of each individual country in achieving goals and targets under the Millennium Declaration, it is also very important to note that, for many countries, achievement of the goals and targets does not depend solely on their own efforts. Success will be the result of development of a global partnership and combined efforts by the world community to solve each particular problem.

Despite generality of the tasks, addressed by the global partnership, each country has its own specific conditions of socio-economic development and its own national mentality, which entail a unique list of tasks for that country with respect to the global partnership. This is particularly true for landlocked countries.

#### **8.2. International co-operation**

Turkmenistan is the only country in Asia with status of permanent neutrality. The country's external policy, and its trade and financial systems are based on peaceful co-operation, mutual respect, stability, good neighborliness and friendship, and Turkmenistan's legislation on trade and the economy are instruments, moving the country towards a market-oriented economy. Turkmenistan has already established equal trading relations with many other countries (85 countries in 2000).

Turkmenistan's main partners in foreign trade (export-import) are Russia, Ukraine, Turkey, Iran, Italy, and the UAE, which account for about 80% of the country's exports and about 50% of its imports (Table 8.1).

Table 8.1

**Turkmenistan's main trading partners**

2000				2002			
Export		Import		Export		Import	
Countries	%	Countries	%	Countries	%	Countries	%
Russia	41	Russia	14	Ukraine	47	Russia	17
Italy	16	Turkey	14	Italy	17	Turkey	11
Iran	10	Ukraine	12	Iran	12	Ukraine	10
Turkey	7	UAE	8	Turkey	6	UAE	9
Ukraine	7	Japan	8	Russia	3	USA	6
Switzerland	4	Iran	5	USA	2	China	5



UK	2	France	4	Tadjikistan	1	Germany	5
Other countries	13	Other countries	35	Other countries	12	Other countries	37

Source: National State Institute of Statistics and Information of Turkmenistan

Turkmenistan organizes international measures for aid to economically underdeveloped countries, including Afghanistan, under the aegis of the UN. Afghanistan receives electric energy from Turkmenistan at favorable tariffs, and Turkmenistan is helping its neighbor in construction of housing, schools and hospitals. Assistance is also provided in restoring the economy in Afghanistan and training qualified specialists to work in that country.

Turkmenistan played an important role in solution of the civil conflict in Tadjikistan, demonstrating good will and offering a venue for talks. Turkmenistan exports goods to Tadjikistan on favorable terms.

Turkmenistan has proclaimed a policy of “open doors” in international economic and trade co-operation. In accordance with this policy, Turkmenistan offers equal conditions and equal opportunities to its partners and guarantees protection of their invested capital.

This policy has earned Turkmenistan considerable international authority, and political stability and consensus in Turkmen society have attracted significant foreign investments, borrowings and credits to the country’s economy. These resources have been used for purchase of equipment, modern technologies, agricultural machinery and vehicles.

The model for Turkmenistan, as a developing country, in organization of its international trade is the UN Convention on International Trade, adopted in 1980. Many countries already subscribe to this Convention as a basis for efficient legal norms, allowing freedom to make trade agreements regulating trade relations. Turkmenistan will also adopt laws on trade agreements and supplies, and conduct its international trade in accordance with the Convention.

### 8.3. Main directions of co-operation for landlocked countries

A large part of Turkmenistan’s GDP consists of import-export, which had total value of USD 5 billion in 2002. The value of these operations and their share in GDP could be higher if customs tariffs and tariffs for various types of transport were lower. Natural gas, which is Turkmenistan’s main export item is sold at the country’s border for USD 40 per thousand cubic meters, which is three times lower than the price on international markets. This reflects high dependence on transit countries as regards oil and gas pipelines to potential markets.

Since most of the transport infrastructure is located beyond the country’s borders, there is urgent need for general agreements between countries on provision of unlimited transit across the territory of Turkmenistan’s neighbors using all types of transport.

The infrastructure of transit corridors for landlocked countries tends to be highly depreciated, and its maintenance requires significant resources, which are not available to the transit countries. The high level of depreciation significantly increases spending on maintenance and modernization of the transit corridors. Transit countries characteristically rely on transit goods payments for a large part of income to their budgets, so that it is unrealistic to expect disinterested assistance for landlocked countries or cancellation or lowering of tariffs.

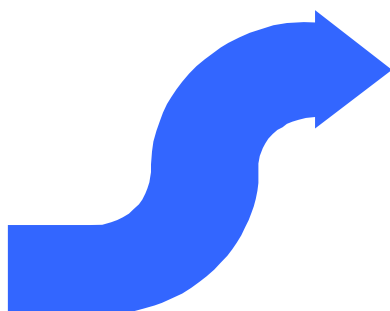
Therefore the international community could assist development of landlocked countries, and attain the target of addressing the needs of such countries, by assuming responsibility for two functions:

1. To compensate transit countries for loss of income due to lowering of transit transport tariffs for goods of neighboring landlocked countries via all forms of transport. General lowering of tariffs by 50% and compensation of transit countries’ losses by the economically developed countries of the world would allow all countries in landlocked regions to enhance their development rates.

2. To provide help and activate technical cooperation in modernization of the infrastructure of transit corridors, and application of new information technologies. International assistance would consist of increase in levels of official aid, provision of credits on favorable terms and private investments.

Main targets	Nature of action	Schedule	
		2000	2015

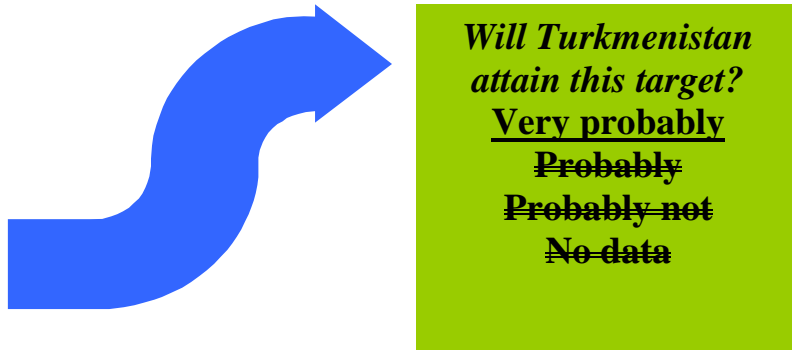
<b>Target 12</b> . Address the special needs of landlocked countries	<i>Compensate transit countries for loss of income due to lowering of transit tariffs for goods of neighboring landlocked countries via all forms of transport</i>	X	50%
	<i>International support and assistance via technical co-operation and modernization of infrastructure of transit corridors</i>	X	100%



**Will Turkmenistan attain this target**  
~~Very probably~~  
Probably  
~~Probably not~~  
~~No data~~

Formation of a global partnership of landlocked countries should be based on inter-regional agreements, allowing improvement of institutional functions, and simplification and unification of the procedure and documentation for border crossings by all types of transport.

**Target 13.** *Continue to combat terrorism and preparation of terrorist acts.*



#### 8.4 Essence of the problem

The threat of international terrorism, which has arisen for humanity at the start of the third millennium, seems at first sight to be an unexpected problem. However, such a view is superficial. International terrorism has not appeared suddenly and from nowhere. It developed unnoticed, developing gradually and gaining strength at the heart of the national separatist movement. Its major manifestation and culmination was seen in the events of September 11, 2001 in the USA. The thousands of lost lives consolidated the civilized world against the new threat and forced a new look at the problem of international terrorism.

However, despite the huge problems and threats presented to the world by international terrorism, the international community is not ready to combat it effectively. There is a lack of unity in the definition of terrorism. A terrorist act, which claims the lives of innocent people in one country, may not be considered as a terrorist act in another country, and is not therefore unanimously condemned. For example, Irish separatists have been funded by various organizations, which exist perfectly legally in the USA.

Separatism with use of terrorist methods has a local character, but it is not uncommon in a number of countries of Europe, America, Asia and Africa.

International terrorism is the most organized and virulent form of terror. It has become a profession for a significant number of people. International terrorism not only threatens the country where it appears and develops, but also becomes a threat for other countries. It began to appear at the end of the 1980s and start of the 1990s in a number of countries, including the Philippines, India (Kashmir), Afghanistan, Iraq, the Palestinian territories, Chechnya, and Yugoslavia (Kosovo). International terrorism quickly establishes ties with terrorist organizations in other countries and moves from local to international terrorist acts. With considerable sources of financing and open assistance from sponsors, international terrorism has developed rapidly over a wide area in the last decade.

Anti-constitutional, illegal acts aiming at seizure of power by force, with physical elimination of those popularly elected to exercise power and representatives of state administrative organs are the third manifestation of terrorism. There are many examples of such terrorism, but the international community has sometimes lacked resolution in the face of anti-government terrorist acts, treating them as an internal matter of the affected state.

Terrorist acts by individuals, involving hostage taking are a frequently occurring form of terrorism, occurring in many countries and often claiming lives, as well as subjecting the victims of hostage-taking to immense psychological stress.

Despite their differences, all the above-mentioned forms of terrorism are united by a single inhuman essence, namely the murder, bloodshed and grief, which they bring to people, and their potential for spreading fear in society. No country is immune to terrorism in some form or other. Therefore the struggle against terrorism must not be regarded as the problem of any single country, but as a worldwide problem, affecting each and every person.

## **8.5. The situation in Turkmenistan**

The security situation in Turkmenistan is good. Unlike many CIS countries, Turkmenistan has carried out the transition to national independence calmly and without loss of life, and is now building a market-oriented economy at rapid rates based on its own doctrines. Turkmenistan has proclaimed a policy of “open doors” since its first days of independence, maintaining friendly relations with many countries, and increasing the number of such countries year by year. Economic development makes yearly advances in Turkmenistan, accompanied by advances in living standards and levels of social security. The people of Turkmenistan are united in their support for and confidence in the national leader, the President of Turkmenistan, S.A. Niyazov, upon whom the country’s Council of Elders has decided to confer the name Saparmurat Turkmenbashi – the Leader of all Turkmen. This unity of the people and President, and the high level of confidence in him has been remarked by many foreign politicians. The former Israeli ambassador to Russia, Arve Levin, who visited Turkmenistan in 1997, said “I have been in many countries and have met or been personally acquainted with many heads of state in Europe, Asia and Africa, but in no country have I seen such a relationship between the people and the leader as in Turkmenistan... People genuinely believe in Niyazov, and believe in Turkmenistan, and are ready to follow him with their eyes open. That, truly, is a rare phenomenon.”<sup>1</sup>

In view of the country’s peaceful character, the events, which occurred in Turkmenistan on November 25, 2002, came as a shock.

## **8.6. Main efforts in the struggle against terrorism**

It is well-known that the people of Turkmenistan condemned the assassination attempt on the President of Turkmenistan, Saparmurat Niyazov, which took place on November 25, 2002, and was part of a plan to seize power in Turkmenistan. However, the events of November 25, 2002, were not only an object of condemnation, but also served as a lesson in how to avoid any repetition of such events.

It is well-known that the terrorist act, committed in the USA on September 11, 2001, was condemned by the President of Turkmenistan, Saparmurat Turkmenbashi, and by the country’s Government and people. Moreover, a few days after the terrorist act the Ministry of Foreign Affairs of Turkmenistan was instructed by the President and Government of Turkmenistan to make a constructive proposal on support for creation of an international anti-terrorist coalition, which would operate on a permanent basis attached to the UN. The statement by the Ministry of Foreign Affairs of Turkmenistan contained the following: “The existence of such a coalition within the UN in close co-ordination with all countries and international organizations will favor creation of a system, where no manifestation of terrorism in any part of the world will go unpunished and will allow adoption of effective measures to deal with terrorism.”<sup>2</sup>

---

<sup>1</sup> Neutral Turkmenistan, 1997, September 19

<sup>2</sup> Neutral Turkmenistan, 2001, September 15

The major and priority task for the international community in combating terrorism is creation of a unified position, such that a terrorist will be treated as a criminal in all countries and parts of the world, and, as stated in the proposal by the Ministry of Foreign Affairs of Turkmenistan, any terrorist act, wherever it is committed, will not only be condemned on all sides, but will be met with effective counter measures.

It is quite possible that, if Turkmenistan's proposal for creation of an international anti-terrorist coalition had been adopted, the terrorist act of November 25, 2002, would not have occurred. Organized resistance to terrorism will lead to reduction in the number of terrorist acts, which are committed. Conversely, the longer the international community fails to present a united front against terrorism, the more often terrorists will raise their head, carrying out acts of vandalism and sowing terror.

Combating terrorism is not a matter for any single country, but it can be carried out successfully if a special anti-terrorist center is set up at the UN on a coalition basis, where single recommendations will be developed for all countries on how to organize their campaign against terrorism (Table 8.2).

Table 8.2

**Main measures for realization of Goal VIII, Target 13 “Continue to combat terrorism and preparation of terrorist acts”.**

<b>Level and measures</b>	<b>Most urgent tasks</b>	<b>Priorities</b>	<b>Schedule</b>
<i>International level</i>	Create a unified anti-terrorist center at the UN on a coalition basis	Develop single concepts and definitions of terrorism	2003
		Recommend a list of laws and rules to assist countries in combating terrorism	2004
		Hear reports of countries on their efforts to deal with terrorism	2005
		Draw up a list and offer recommendations on prohibition and dispersal of organizations, whose program includes terrorist activity	2005
		Recommend countries and international financial structures to cease financing of terrorist operations and to close all accounts of terrorist organizations in accordance with the list approved as a UN resolution	2005
<i>Turkmenistan</i>	Support UN initiatives on combating terrorism	Adopt a law “On combating terrorism” in Turkmenistan	2003
		Adopt urgent measures to track down and arrest terrorists	Permanent
		Prevent any terrorist organizations from using the territory of Turkmenistan for training camps or other facilities	Permanent
		Prevent raising and use of funds by terrorist organizations on the territory of Turkmenistan	Permanent
		Prevent financing and sponsoring of terrorists and terrorist organizations by organizations and individuals. Cut off financing of terrorism	Permanent
		Enforce more thorough identify checks and baggage checks at points of exit and entry to the country in order to prevent terrorist acts	2003 and after
		Carry out educational work among the young generation concerning the inhuman nature of terrorism	Permanent
		Create a unified center for combating terrorism	2005
		Compile reports on measures against terrorism for submission to the UN	Permanent

## GLOSSARY

**Abortion** – artificial curtailing of pregnancy during its early stages.

**Biodiversity** – diversity of living organisms in all ecosystems (land, sea and other water ecosystems and ecological complexes).

**Coefficient of maternal mortality** – annual number of fatalities of women due to factors connected with pregnancy or birth per 100,000 live births.

**Coefficient of infant mortality** – indicator of the mortality level among children aged less than one year. Calculated as the ratio of such fatalities to the total number of live births.

**Coefficient of child mortality up to 5 years** – indicator of the probability of mortality in the period from birth to 5 years of age. Reflects the number of deaths of children aged up to 5 years per 1000 live births.

**Cultural monument** – an item of architectural, archaeological, religious, etc., value, whose significance is recognized by law.

**Deflation (erosion) of land** – destruction of top soil and sub-surface layers by ice melt and rain water.

**Ecological problem** – negative state of the environment. Reflects existing and potential harm due to non-correspondence of the actual situation to the system of values in a society or country, and is addressed by development of a plan of action to protect the environment.

**Export** – transport of goods from one country for sale in another country.

**External trade** – the overall sum of export and import.

**Floccule** – union of colloid particles in flaky aggregates.

**Gender disparities** – differences between economic and social development levels of men and women.

**Gini Coefficient** – indicator of inequality levels in distribution of wages and incomes.

**Gross domestic product** – total value of final production and services, produced in a country. Serves as a general indicator of economic activity in a country.

**High schools** – educational establishments, offering higher professional education. High schools include universities, institutes, conservatories, academies, etc.

**Informal economic activity** – production of goods and services by households and other economic agents, which is not taken into account by regular statistical observation. Estimates of informal economic activity use the results of selective surveys of households budgets, questionnaire surveys, and also administrative sources, such as tax organs.

**Import** – Totality of goods brought into a country from other countries.

**Intermediate professional schools** – places of education, which offer craft and semi-skilled training to students at a level above that of professional schools, and which prepare them for entry to high schools.

**Life expectancy at birth** – the average number of years, which people born at a specified time can expect to live.

**Live births** – according to standards of the World Health Organization, all births except still births, regardless of weight, gestation period, survival capacity of the new-born child, and regardless of mortality soon after birth or before the rate of registration of the birth.

**Outstanding natural landmark** - natural landmark or landscape having scientific, historical, cultural, aesthetic significance (water falls, rock formations, caves, unique trees, etc.), and protected by the state or deserving special protection.

**Professional schools** – places of education, offering training in crafts and semi-skilled professions.

**Reagent** – chemical preparations, intended for chemical analysis in scientific and laboratory work.

**Shadow economic activity** – volumes of production by enterprises, which are concealed for the purpose of tax evasion.

**State spending on education** – current and capital spending on education by the state administration (not including spending by households).

**Strategy** – general direction, development goals and plans for achievement of those goals.

## ABBREVIATIONS

UN	– United Nations
UNDP	– United Nations Development Program
UNICEF	– United Nations International Children’s Emergency Fund
UNFPA	– United Nations Fund for Population Activities
CIS	– Commonwealth of Independent States
USA	– United States of America
IMF	– International Monetary Fund
MDG	– Millenium Development Goals
GDP	– Gross Domestic Product
PPP	– Purchasing Power Parity
HDI	- Human Development Index
AIDS	– Acquired Immune Deficiency Syndrome
HIV	– Human Immune Deficiency
DOTS	– Directly Observed Treatment, Short-course
OECD	– Organization for Economic Co-operation and Development
WHO	– World Health Organization



## Bibliography

1. Women and Men of Turkmenistan. A Statistical Directory. Ashgabat, Turkmenmillikhasabat, 2001.
2. Women of Turkmenistan and Gender Disparities in Development. Ashgabat, Turkmenmillikhasabat, UNDP Women's Bureau in Turkmenistan, 1999.
3. The National Program of the President of Turkmenistan Saparmurat Turkmenbashi "Strategy for Socio-economic Transformation of Turkmenistan in the period to 2010". Ashgabat, 1999.
4. National Plan of Action of the President of Turkmenistan, Saparmurat Trukmenbashi, on Protection of the Environment. Ashgabat, 2002.
5. Socio-economic Factors in Gender Disparity in Turkmenistan. Ashghabat, Turkmenmillikhasabat, UNFPA, 2001.
6. Turkmenistan Reborn by the Genius of the Great Turkmenbashi. The Golden Age of Turkmenistan in Figures and Facts. Under the general editorship of V.M Khramov and Dzh. Bairamov. Ministry of Economics and Finance of Turkmenistan, National Institute of State Statistics and Information of Turkmenistan. Ashgabat, 2002.
7. Turkmenistan. Human Development Report, 1996. UNDP in Turkmenistan, Academy of Sciences in Turkmenistan. Ajans-Turk Matbacilik Sanayil A.S., Ankara: 1996. Page 19
8. The Commonwealth of Independent States in 2002. A Statistical Directory. CIS Interstate Statistics Committee. Moscow, 2003. Pages 204-364.
9. The Confident Path of Independence. Fourth edition. 1998. Main Archive Administration of the Cabinet of Ministers of Turkmenistan. Archive Fund of the President of Turkmenistan. Ashghabat, 1999. Page 219.
10. Word Bank (2002). Global Financial Indicators 2002, Word Bank: Washington DC, Table A 1.7. In "UNICEF (2002), Social Monitoring, 2002". The UNICEF research Center, "Innocenti" (Florence). Page 6.
11. Report of the UN Secretary General on Implementation of the Millenium declaration. Document A/57/27.
12. Neutral Turkmenistan, Ashgabat, September 19, 1997.
13. Neutral Turkmenistan, Ashgabat, September 15, 2001.

## INDEX

	Introduction	
<b>A.</b>	<b>THE MILLENIUM DECLARATION AND THE REGIONAL ASPECT</b>	
A.1	Development goals on the threshold of the millenium	
A.2	Millenium Goals and Turkmenistan's National Development Programs	
A.3	General Information about Turkmenistan	
A.4	Turkmenistan since Independence	
<b>Goal I</b>	<b>Eradication of extreme poverty and hunger</b>	
<i>Target 1</i>	What reforms of the state can contribute to achievement of the Goal?	
<b>Goal II</b>	<b>Achieve universal primary education</b>	
<i>Target 2</i>		
<b>Goal III</b>	<b>Promote gender equality and empower women</b>	
3.1	Main difficulties and efforts by the state to attain the target	
<i>Target 3</i>		
3.2	What reforms are needed for attainment of the Goal?	
3.3	Main difficulties and action by the state to attain the target	
<i>Target 4</i>		
3.4	Human Development Index with gender factor	
3.5	What reforms of the state can contribute to attainment of the Goal?	
<b>Goal IV</b>	<b>Reduce child mortality</b>	
4.1	The current situation	
<i>Target 5</i>		
4.2.	Essence of Goal IV, target 5 for Turkmenistan	
4.3	Realization of Goal IV, target 5 in Turkmenistan	
<b>Goal V</b>	<b>Improve maternal health</b>	
5.1	The current situation	
<i>Target 6</i>		
5.2.	Essence of Goal V, target 6, for Turkmenistan	
5.3.	Realization of Goal V and target 6 in Turkmenistan	
<b>Goal VI</b>	<b>Combat HIV/AIDS, malaria and other diseases</b>	
6.1	The HIV/AIDS epidemic worldwide	
<i>Targets 7,8</i>		
6.2	Essence of Goal VI for Turkmenistan	
6.3	Realization of Goal VI, targets 7 and 8 in Turkmenistan	
<b>Goal VII</b>	<b>Ensure environmental sustainability</b>	
7.1	What is the situation today?	
<i>Target 9</i>		
7.2	Shortage and pollution of water resources	
7.3	Pollution, salification, waterlogging and deflation of land	
7.4	Degradation of components of the natural environment in Turkmenistan's sector of the Aral Basin	
7.5	Air pollution and environmental impact of the oil, gas and energy industries	

7.6	Reduction of biological diversity	
7.7	Monuments and outstanding natural landmarks	
7.8	What are the main difficulties?	
7.9	Steps by Turkmenistan to prevent irrational use of natural resources	
7.10 <i>Target 10</i>	Access to clean drinking water	
7.11	What is the situation today?	
7.12	What are the main difficulties?	
7.13	What is Turkmenistan doing to increase supplies of drinking water?	
7.14 <i>Target 11</i>	Improvement of housing conditions	
7.15	What is the situation today?	
7.16	What are the main difficulties?	
7.17	What is being done in Turkmenistan to improve people's living standards?	
<b>Goal VIII</b>	<b>Develop a global partnership for development</b>	
8.1 <i>Target 12</i>	Essence of the problem	
8.2	International co-operation	
8.3	Main directions of co-operation for landlocked countries	
8.4 <i>Target 13</i>	Essence of the problem	
8.5	The situation in Turkmenistan	
8.6	Main efforts in the struggle against terrorism	
	GLOSSARY	
	ABBREVIATIONS	
	BIBLIOGRAPHY	
	INDEX	