



**Republic of Macedonia**  
**Government of the Republic of Macedonia**

**REPORT ON THE PROGRESS TOWARDS  
THE MILLENNIUM DEVELOPMENT GOALS**

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## FOREWORD

This is the second Report of the Republic of Macedonia on the Millennium Development Goals. The Report assesses progress achieved to date against the national targets which were adjusted and defined in the first Report of the Republic of Macedonia on the Millennium Development Goals published in 2005. Working on achieving these targets, Republic of Macedonia confirms its commitment and contribution towards reaching the global Millennium Development Goals.

The development and publishing of this document is a way to stir up and streamline public debate towards the specific development priorities on national and on regional levels.

The Millennium Development Goals offer a comprehensive approach in defining and monitoring the development agenda of the country. They enable a focus on the key areas and policies supporting achievement of the Government priorities for improving the citizen's living standards and development of the economy, for providing quality education and healthcare for all, for enabling equal opportunities of women and men, as well as for environmental protection. In brief, the achievement of the national targets ensures a comprehensive and sustainable approach for human development.

The second Millennium Development Goals Report shows that in the period covered in the Report, Republic of Macedonia achieved some progress in the social and economic areas. The economic parameters show growth of the GDP, inflow of foreign direct investments, as well as some reduction in unemployment. The parameters concerning maternal and child health demonstrate an upward trend and there has been some progress regarding the environmental protection. However, progress in reducing poverty and social disparities, as well as disparities between various vulnerable groups has been slow and further efforts are needed to reach the planned targets. This Report provides detailed analyses of all of the above and a variety of other aspects, with relevant conclusions and recommendations on measures that could contribute to meeting the Millennium Development Goals as set out at the national level.

In this context it is very important to strengthen the mechanisms intensifying economic and social reforms in Macedonia with the people at the focus of such reforms. In parallel, this approach will strengthen the confidence in the democratic governance. Promoting tighter economic and social bonds will increase the impression of security in people and thus contribute to reducing poverty and to implementation of the social inclusion strategies so as to ensure equal access of all citizens to jobs, health and education.

The Government of the Republic of Macedonia is confident that it is on the right path to effectuating the reforms and it is equally dedicated to achievement of the EU integration priorities. Considering that the relevant MDG indicators are largely concordant with the EU economic and social cohesion policies, I would like to underline that meeting the requirements for EU membership means, at the same time, a step forward to achieving the Millennium Goals.

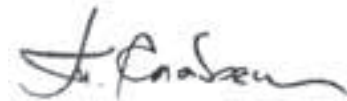
Finally, we remain committed to regular monitoring and to achieving progress in reaching the national targets for the Millennium Development Goals. In this respect, the cooperation with all UN Agencies and Programmes through projects being implemented in different areas is of special importance. The involvement and joint efforts of the relevant social actors in all three sectors – the government (on central and local levels), the private sector and the civil society are equally important.

The Millennium Development Goals represent results.

Let us all work towards achieving the Millennium Development Goals!

Trajko Slaveski, PhD

Minister of Finance

A handwritten signature in black ink, appearing to read 'T. Slaveski', written in a cursive style.

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## ACRONYMS

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<b>ART</b>	Antiretroviral therapy
<b>ASCI</b>	Areas of Special Conservation Interest
<b>CDM</b>	Clean Development Mechanism
<b>CEFTA</b>	Central European Free Trade Agreement
<b>CEHAPE</b>	Children's Environmental Health Action Plan for Europe
<b>CFC</b>	Chlorofluorocarbon
<b>CID</b>	Clinic for Infectious Diseases
<b>DOTS</b>	Directly Observed Treatment Short Course
<b>ECDC</b>	European Centre for Disease Prevention and Control
<b>EU</b>	European Union
<b>FDI</b>	Foreign Direct Investments
<b>GDP</b>	Gross Domestic Product
<b>GFATM</b>	Global Fund to fight AIDS, Tuberculosis and Malaria
<b>IDU</b>	Injecting Drug Use
<b>IMF</b>	International Monetary Fund
<b>JICA</b>	Japan International Cooperation Agency
<b>MDG</b>	Millennium Development Goal
<b>MP</b>	Member of Parliament
<b>MSM</b>	Men who have sex with men
<b>NPAA</b>	National Programme for Adoption of the Acquis
<b>ODS</b>	Ozone Depleting Substance
<b>OECD</b>	Organisation for Economic Co-operation and Development
<b>PISA</b>	Programme for International Student Assessment Tests
<b>RIHP</b>	Republic Institute for Health Protection
<b>SEE</b>	South-East Europe
<b>SME</b>	Small and Medium size Enterprises
<b>SSO</b>	State Statistical Office
<b>SW</b>	Sex workers
<b>UN</b>	United Nations
<b>UNAIDS</b>	United Nations Programme on HIV/AIDS
<b>UNDP</b>	United Nations Development Programme
<b>UNFPA</b>	United Nations Population Fund
<b>UNGASS</b>	United Nations General Assembly Special Session
<b>UNICEF</b>	United Nations Children's Fund
<b>UNIDO</b>	United Nations Industrial Development Organization
<b>VCT</b>	Voluntary Counselling and Testing for HIV/AIDS
<b>WHO</b>	World Health Organisation
<b>WTO</b>	World Trade Organisation

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## INTRODUCTION

The world entered the twenty-first century deeply immersed in the globalisation process. Thus, the problems and the progress of all the world's countries alike are now becoming increasingly common and resulting in shared failures or successes. On the other hand, in terms of the degree of well-being and a variety of other aspects that are seen as constituting the basic rights and needs in the life of every human being today, the world has become more polarised than ever before. Hence, we have been witnessing corresponding changes in the way the problems of today's world are addressed. "*Think globally – approach regionally – act locally*" is a motto that best exemplifies today's reality, while notions such as *sustainable economic development* and *poverty eradication* have become the universal goals of humanity.

At the Millennium Summit of the United Nations in 2000, aiming to find a way to intercept and realistically (i.e. measurably) address the numerous critical problems towering before many states worldwide in the new Millennium, 189 UN member states adopted a special Millennium Declaration. It is unique in terms of its content but even more so in terms of its significance and the influence it is expected to have on the changes it expected to bring about. Among other things, the Declaration is unique because it offers a framework for measuring the progress towards the eight Millennium Development Goals through eighteen targets and forty-eight indicators.

### Box 1: Millennium Development Goals

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

Now we are more than halfway towards the target date – 2015 – by which the Millennium Development Goals are to be achieved. In September 2008, the world's leaders gathered in New York to review the progress made thus far towards the MDGs on a global scale. In the 2008 global Report on the Millennium Development Goals, the Secretary General of the United Nations, Mr. Ban Ki-moon, noted:

*"Looking ahead to 2015 and beyond, there is no question that we can achieve the overarching goal: we can put an end to poverty. In almost all instances, experience has demonstrated the validity of earlier agreements on the way forward; in other words, we know what to do. But it requires an unswerving, collective, long-term effort."*<sup>1</sup>

In its first Millennium Development Goals Report of 2005, Macedonia identified its national priorities and targets in achieving the MDGs. In doing so, it took account of the overall national goals regarding its socio-economic development expressed through such priorities as: accelerating economic growth, reducing unemployment, reducing poverty and integrating with the European Union. In the Report, the global goals were adjusted taking account of the national priorities and the local circumstances in each of the areas covered by the respective eight millennium goals. Consequently, the policies and activities have focused on:

- overcoming *poverty* that deepened during the transition period, a process that has been accompanied by impoverishment and/or social exclusion of a relatively large portion of the population, which, in turn, arises directly from the increasingly high unemployment and indirectly from low and irregular income; moreover, Macedonia exhibits considerable differences in the depth of poverty between the various vulnerable population groups;

<sup>1</sup> The Millennium Development Goals Report , 2008, [www.undp.org/mdg/basics\\_ontrack.shtml](http://www.undp.org/mdg/basics_ontrack.shtml)

- creating a *high quality human capital*, as it is the most important factor for achieving sustainable economic growth, as well as the safest and most efficient way of ensuring a sustainable solution to the problem of poverty;
- achieving *gender equality and promoting women's representation in government*; although gender equality in Macedonia is guaranteed under a number of regulations, there are still disparities between the various vulnerable groups in several socio-economic spheres;
- reducing *child mortality and improving maternal health*, as well as *preventing and reversing the spreading of HIV/AIDS* and other serious diseases and, in the light of this, bringing the values of the indicators of the population's health at a level comparable to the EU average;
- ensuring *environmental sustainability* and establishing sound grounds for a dynamic socio-economic development of the future generations; and
- *integrating the Macedonian economy with the global economy*, which is especially important if there are to be good prospects for economic growth, particularly of such small economies as the Macedonian.

Taking into account the strategic priority of the country to join the EU, the 2005 MDG Report emphasised the convergence of the MDG platforms and the EU social cohesion policies. Similarities can be identified between the MDGs and the EU social cohesion policies, more so because both set similar priorities and require joint efforts of many social actors in the three sectors – the government (both central and local), the private sector and the civic society. However, there are also differences, particularly in terms of the fact that the EU targets have a narrower focus. In any case, the 2005 MDG Report underlines that *“the EU accession as well as the commitment to achieving the MDGs are both priority objectives for Macedonia. However, these two processes should and could be harmonized. The adjustment of MDGs global targets and indicators to national priorities undoubtedly eases the task by making the MDG and the EU indicators complementary rather than incompatible.”*<sup>2</sup>

Data from various sources indicates that progress has been made in the economic parameters, showing growth of the gross domestic product, inflow of foreign direct investments, as well as a mild reduction in unemployment. The parameters concerning maternal and child health demonstrate an upward trend and there has been some progress regarding environmental protection. However, progress in reducing poverty and social disparities or disparities between various vulnerable groups has not been at the desired level. Similarly, the planned levels have not been reached in terms of inclusion of all children in the education or in the quality of education, as well as in eliminating gender disparities. This Report provides detailed analyses of all of the above and a variety of other aspects, with relevant conclusions and recommendations on measures that could contribute to meeting the Millennium Development Goals as set out at the national level.

Considering this challenge, the structure of the Report has been appropriately adapted - the Report first deals with the methodological aspects and the sources of data used; this is followed by the presentation of the key findings in the analyses of each of the eight MDGs, leading to the conclusions and recommendations offered in the last Chapter.

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<sup>2</sup> Report of the Republic of Macedonia on the Millennium Development Goals, Government of the Republic of Macedonia, June, 2005, pg. 12;

## METHODOLOGY AND DATA

Although it has been developed under the auspices of the United Nations Development Programme (UNDP), this Report of the Government of the Republic of Macedonia on the Progress towards the Millennium Development Goals, as with the previous Report, is an official document of the Government of the Republic of Macedonia. The development of the Report has been technically supported by task teams comprising experts in the respective areas, representatives of the line ministries and other state administration bodies, as well as representatives of the State Statistical Office and the UN agencies and programmes working in the country. The key preliminary findings were reviewed at the Workshop held at the beginning of November 2008. This approach ensured consultation and cooperation between the independent experts and the representatives of the relevant state institutions and due validation of the findings and recommendations.

The analysis of the progress towards the Millennium Development Goals identified the methodological aspects, along with the problem of the availability of the data and their scope, as issues of primary concern. In this sense, from a methodological point of view, the analysis of the progress towards the MDGs until 2008 focused on the following:

- Trend analysis of all MDGs covering the period since the first Report, issued in 2005; however, primarily due to the need to determine the long-term trends and changes of the phenomena examined, the analysis covered a longer period and, where data were available, the analysis covered the ten year period from 1998 to 2008;
- Progress towards each of the nationally identified targets was measured against a group of quantitative indicators defined with the 2005 MDG Report. The analysis revealed that some indicators had not been adequately defined and therefore were not suitable for measuring the changes related to specific phenomena or the progress towards the specific targets. As it was not the task of the working groups to revise or re-formulate the indicators or the national targets, the indicators and targets as defined in the first MDG Report were used as baseline parameters for the present analysis. Still, wherever it was obvious that the indicator was entirely inapplicable, it was adapted and the phenomena were analysed by means of other indicators whose application was considered and endorsed within the working groups. These cases have been noted in the Report and recommendations for revision have been offered;
- Official statistics were used wherever such data existed. Data published by the State Statistical Office or other state administration bodies were considered official; otherwise, official data, even if not officially published, were obtained directly from the task teams members appointed by the responsible state administration bodies;
- In cases when, for whatever reason, there were no official data available, other (secondary) sources of data were used, such as analyses or reports produced by both national and international institutions and organisations;
- In addition to the official data, the findings have been supported by other data and findings presented in various relevant documents analysing or defining the Government policies; this particularly concerns the references to planned reforms and policies expected to contribute to the achievement of the MDGs;
- In addition to progress analysis, the Report also contains assumptions on the likelihood for achievement of the individual MDGs by 2015; it should be noted that it was not possible to make comprehensive quantified forecasts for all of the MDGs.

Finally, it is worth noting that data for monitoring and analysis of the progress towards the MDGs is incomplete. Namely, the State Statistical Office systematically collects and processes some of the data needed for monitoring progress and presents it on its web-site. However, this database does not offer a

comprehensive insight into the progress towards the MDGs. In May of 2006, in cooperation with UNDP and UNICEF, the State Statistical Office launched the implementation of the project “DevInfo and MDG Monitoring in Macedonia”. The objective of this project was to help the government, at both central and local levels, to develop capacities for evidence-based policy making, as well as to introduce the reporting function by introducing an analytical tool for storage and presentation of data related to human development and the Millennium Development Goals. Considering that the implementation of the reforms aimed at Macedonia’s accession to EU is of utmost priority, activities have been undertaken to extend the use of the existing MakInfo database that, in addition to monitoring progress towards the MDGs, will also offer useful statistics related to social inclusion. However, as suggested in the analysis<sup>3</sup> on functioning of the MaInfo data base, there is a need to develop a functional mechanism between the ministries and the State Statistical Office that would ensure regular data collection as well as sufficient data collection and analysis capacities in the line ministries and other institutions. Overcoming these shortcomings will greatly contribute to ensuring regular monitoring of the progress towards the Millennium Development Goals in Macedonia.

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<sup>3</sup> UNDP, Social Statistics Conference, “MakInfo – Challenges, Opportunities, Next Steps, Draft consultant’s Report, October 2007.



## MDG 1

REDUCING POVERTY AND  
SOCIAL EXCLUSION





## ANALYSIS OF PROGRESS

### MILLENNIUM DEVELOPMENT GOAL 1: REDUCING POVERTY AND SOCIAL EXCLUSION

Targets	Indicators
Reduce the proportion of the population living below the poverty line to 9.5% by 2015.	<ul style="list-style-type: none"> <li>• Poverty incidence.</li> <li>• Poverty depth and rates of poverty depth.</li> <li>• Regional disparities.</li> <li>• Long-term unemployment rate, more than 12 months as a % of the active population (EU).</li> <li>• Long-term unemployment rate, more than 12 months as a % of the unemployed (EU).</li> <li>• Very long-term unemployment, over 24 months (EU).</li> <li>• Gini coefficient/index (EU).</li> <li>• Persons living in jobless households (EU).</li> <li>• Rates of poverty levels for poor households facing highest risks.</li> <li>• Number of social assistance beneficiaries.</li> <li>• Life expectancy at birth.</li> </ul>

#### 1.1 Poverty and Poverty Profiles

The first experimental assessments of poverty date back to 1996, while the first policy documents – such as the Poverty Reduction Strategy – were published in 2001. Measuring social exclusion and policies addressing this problem are of a more recent date. Although statistical data on socially excluded categories remains imprecise and indirect, the number of policies relating to this phenomenon has increased over the years. Thus, in 2004 the Ministry of Labour and Social Policy adopted the *Programme Addressing the Problems of Socially Excluded People*, identifying four groups of socially excluded people: drug users and members of their families; children on streets/street children and their parents; victims of domestic violence; and homeless people. Activities have intensified since recently, particularly within the preparations for development of the *Joint Inclusion Memorandum*.

Still, the indicators used to assess poverty and social exclusion in Macedonia are not based on standardised, harmonised or comparative statistical databases. Measuring poverty has been one of the key challenges. Since 1996, Macedonia has been using the relative method of poverty measurement, which is based on establishing a relative standard determined as the necessary level of subsistence. The relative poverty line has been set at 70% of the median equivalent consumption. On the other hand, the relative poverty line within the EU has been set at 60% of the median household income. Although measuring poverty on the basis of consumption rather than income seems justifiable in Macedonia, primarily because of the large informal sector, undeclared private foreign remittances, etc., still, there are no strong arguments to support the decision of setting the line at 70% rather than 60% of the median equivalent consumption. The need to have a comparative statistical basis inevitably requires a change in the method of measuring poverty as well. An additional limitation is the fact that poverty profiles have not been sufficiently disaggregated - that is broken down according to individual features such as: gender, ethnic background, (statistical) region of residence etc.

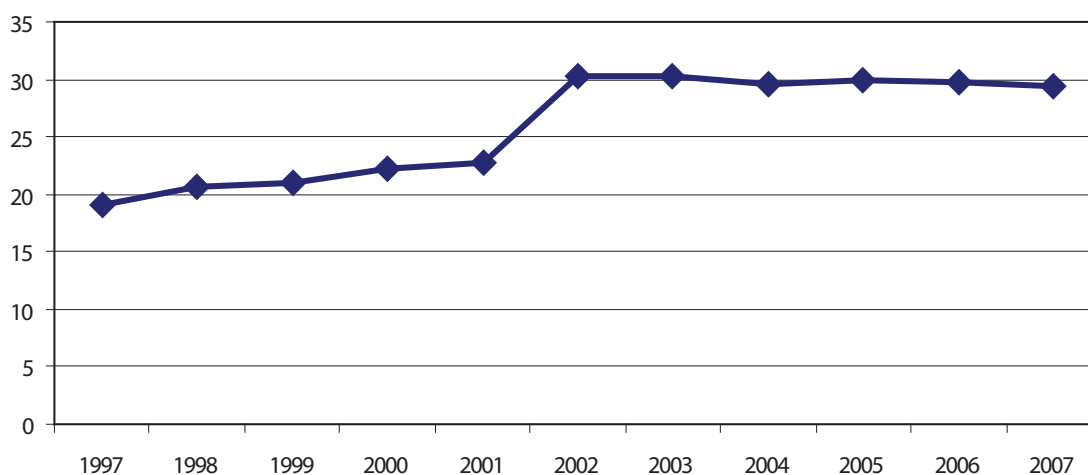
As far as methodological differences are concerned, equally important is the difference between the national standard for measuring poverty and the poverty measurement defined as absolute poverty measurement method or “living on less than a dollar a day”, which is being used by some international organisations (World Bank, International Monetary Fund, United Nations) and which has been taken as an official indicator for measuring progress in achieving the first Millennium Development Goal. It is important to emphasise that this indicator is more suitable for measuring poverty in less developed countries and that in Macedonia it would not yield a truly reliable picture. Therefore, studies and trends that analyse poverty in

Macedonia based on this indicator alone should be commented upon with caution.

The target defined for the first Millennium Development Goal is to reduce poverty in Macedonia to 9.5% by 2015. It seems that this target was set by simply halving the official poverty rate of 19% measured in 1997. Although the first Millennium Development Goal seeks to halve poverty on a global level, still, when setting the national targets the key parameters should be first analysed in the context of the actual specificities and capacities of the country in order to ensure that their achievement would be feasible.

In this context, progress in poverty reduction has been very slow in Macedonia. Namely, between 1997 and 2005 (based on the national method) the poverty rate in Macedonia has been on a steady rise, starting from 19% in 1997 and reaching 30% in 2005 (Figure 1.1). Yet, it must be noted that the poverty rate between 2001 and 2002 increased significantly (from 22.7% in 2001 to 30.2% in 2002). This can be explained primarily with the change of the data collection method - from quarterly by way of questionnaires to annually by 15 day diaries. Also, the number of households covered in the Household Budget Survey conducted by the State Statistical Office was increased (from 1,000 to 5,040 households). In addition, the increased poverty rate in this period can probably be attributed to the consequences of the 2001 conflict in Macedonia.

**Figure 1.1.: Poverty Rate in Macedonia (Relative Poverty Method in %)**



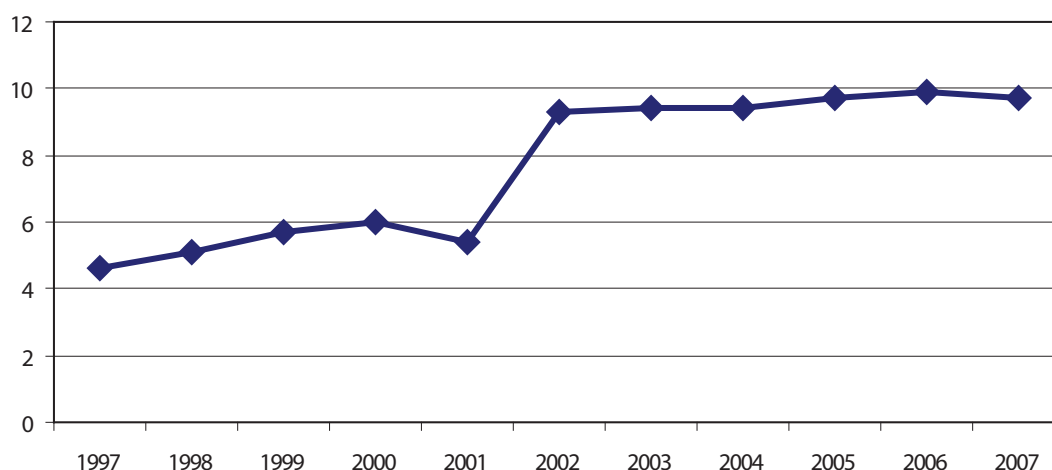
Source: State Statistical Office, 2008

Since 2006, there has been some reduction in the poverty rate in general and among certain vulnerable groups. Thus, in June of 2007 the poverty rate in Macedonia was 29.4%, which, compared to 2006, represents a decrease by 0.4%. However, the depth of poverty between 1997 and 2007 was on a steady rise, suggesting that the poor were increasingly drifting away from the living and social standards of the rest of the population (Figure 1.2).

The persistent high poverty rates in Macedonia, among other issues, has contributed to increased debates related to alternative measuring methods, that is applying the absolute rather than the relative poverty measurement method. However, the experimental calculations of the State Statistical Office between 1994 and 1996 based on the relative and the absolute poverty methods indicate that there were no significant changes in the poverty rates measured according to the different methods. According to Novkovska<sup>4</sup> (2002) there have been no significant disparities in prices among the different regions in Macedonia and the costs for food have been below the level of the poverty line defined according to the relative method which indicates that, still, the relative method as a wider concept is more appropriate for a country such as Macedonia.

<sup>4</sup> Novkovska, B. (2002) 'Measurement of the welfare in transition countries: Conditions and perspectives in the Republic of Macedonia', paper presented at the International Association for Research in Income and Wealth 27th General Conference - Djurhamn, Sweden - 18 to 24 August 2002

**Figure 1.2.: Poverty Depth Index in Macedonia (1997 – 2007)**



Source: State Statistical Office, 2007, 2008

Compared to the 2005 MDG Report, there have been no significant changes in the poverty profiles. According to the State Statistical Office, the most vulnerable groups are still people living in large households. In 2007, 60.4% of the poor lived in households of five or more members and the poverty rate in this group has been on a steady rise from 31.11% in 1997 to 37.5% in 2007 (Table 1.1). These families are at a higher risk, particularly now when living costs (food, fuel) have been rising, along with the costs of utility services (electricity, heating etc.).

**Table 1.1.: Relative Poverty in Large Households (1997 – 2007)**

	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007
Total	19.0	20.7	21.0	22.3	22.7	30.2	30.2	29.6	30.0	29.8	29.4
1 member	6.3	11.1	16.5	14.5	5.6	30.4	25.2	20.2	19.6	24.3	26.9
2 members	17.0	16.4	15.6	16.6	18.0	25.4	20.6	16.5	20.8	23.9	24.2
3 members	15.8	12.9	16.6	13.5	9.2	20.2	22.9	22.5	21.6	17.4	18.8
4 members	18.0	20.4	20.6	20.9	14.4	27.3	28.6	23.5	22.1	21.4	25.6
5 members	17.4	29.5	23.8	33.6	19.6	33.8	35.5	29.5	31.0	29.9	30.6
6 members and more	31.1	30.0	29.0	27.5	29.5	38.6	43.6	42.5	37.5	38.8	37.5

Source: State Statistical Office, 1997-2007

**Box 1.1 Salaries and the Consumer's Basket for Food and Drinks<sup>5</sup>**

The State Statistical Office reported that between April and June 2008, a family of four was able to fill the consumer basket for food and drinks spending less than an average monthly salary.

The average monthly net salary in April 2008 amounted to 15,605 denars, while the expenditures for food and drinks were lower than the average net salary by 3,201 denars or 20.5%.

The average monthly net salary in June 2008 amounted to 15,759 denars. The total expenditures for food and drinks amounted to 12,333 denars and they were lower by 3,426 denars compared to the average monthly net salary that is by 21.7%.

Purchasing power has increased for the following products: transport tickets by 17.2%, TV set (TV-56) by 14.4% and cigarettes "Rodeo Super Light" by 10.7%. The purchasing power has decreased for the following products: cooking oil by 34.7%, milk by 16.8%, car "Fiat Punto" by 13.9%, bread type 500 by 5.9% and gas "MB-96" (premium) by 4.8%.

<sup>5</sup> Source: State Statistical Office, Announcement no. 4.1.8.61 of 9.09.2008

Poverty correlates directly to the problem of unemployment. The poverty rate among the unemployed in 2007 was 39.1%, i.e. 45.9% of all the poor were unemployed. The poverty rate among the unemployed was on a steady rise from 1997 (26%) until 2005 when it reached 45.1%. There has been slight decrease over the past two years (Table 1.2).

**Table 1.2: Relative Poverty According to the Economic Status of Household Members (1997 – 2007)**

	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007
Unemployed	26.0	29.0	31.2	32.6	35.5	37.5	36.1	39.0	41.5	40.9	39.1
1 unemployed	19.2	22.1	21.2	22.2	21.0	28.0	29.3	27.8	28.2	28.1	30.7
2 and more unemployed	9.8	7.3	7.3	6.8	9.9	18.7	18.9	18.1	16.8	18.5	17.2

Source: State Statistical Office

The level of education of the household head also seems to affect the poverty status of the households. In 2007, 64.3% of the poor lived in households where the household head had no education or had completed only primary education. Over the past ten years, poverty has been rising among persons without any education (from 34.4% in 1997 to 53.7% in 2007) (Table 1.3). The poverty rate of people with high education has risen by almost 8 times.

**Table 1.3.: Relative Poverty According to Educational Level of the Household Head**

	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007
No education	34.4	38.9	37.5	42.6	45.8	41.4	51.4	57.9	46.8	53.9	53.7
Incomplete primary education	26.6	28.8	30.3	34.2	35.0	35.7	32.8	32.8	39.9	37.6	37.7
Primary education	28.0	21.8	30.6	30.4	25.7	37.7	37.6	38.4	38.2	39.8	37.4
Secondary education	11.2	16.9	13.6	14.0	12.1	24.3	24.4	22.9	23.4	22.8	23.6
Two-year college education	8.2	1.9	6.2	9.4	13.5	14.2	19.0	17.4	17.6	17.4	17.4
High education	1.4	5.3	0.0	3.7	3.6	10.1	12.1	9.1	7.3	8.9	11.0

Source: State Statistical Office, 1997 - 2007

Households with children are more exposed to poverty risks compared to childless households. The poverty rate in households with children was on a steady rise from 1997 to 2005, when it began to decline and in 2007 it reached 27.15% in married couples with children and 33.4% in other households with children. The poverty rate in these households is higher than in both childless households and elderly households. It should be noted, however, that the official statistics in Macedonia do not measure child poverty directly, but indirectly through measuring poverty in households with children. Poverty among children (which, according to UNICEF<sup>6</sup>, reached 32.4% in 2005) is particularly marked among some ethnic groups, such as the Roma, who are particularly afflicted by poverty and social exclusion, primarily due to poor inclusion in education (at all levels).

The poverty in rural areas is higher than in the urban areas and the City of Skopje. In 2007, the poverty rate in rural areas reached 31.0% compared to 28.7% in urban areas and 28.4% in the City of Skopje. The limited economic capacities and employment opportunities in the rural areas leads to frequent migration of the active population living in rural and smaller urban areas to the capital Skopje, as a city offering more economic opportunities. According to age, 30.1% of the people between 40 and 59 were poor in 2007, representing 57% in the overall structure of the poor in Macedonia.

The unequal distribution of income also affects the upward trend of poverty rates. According to the *Poverty Reduction Strategy*, the inequality of income distribution has an upward trend (Table 1.4). It must be noted, however, that the State Statistical Office does not officially measure the distribution of incomes mostly due to problems with the disclosure of income both by the employers who declare

<sup>6</sup> UNICEF (2007), *Child Poverty Study*, Skopje: UNICEF Country Office, [www.unicef.org/tfyr-macedonia/index.html](http://www.unicef.org/tfyr-macedonia/index.html)

only minimum salaries for their employees (in order to pay smaller social contributions) and by those with the highest income (who do not disclose their income fully). Also, revenues from rents, farming and transfers are not disclosed realistically.

**Table 1.4.: Gini Coefficient by Type of Household (1997-2000)**

	1997	1998	1999	2000
Total	31.55	33.08	32.47	34.74
Farming	31.81	36.39	27.74	25.93
Non-farming	29.93	31.62	36.32	35.96
Combined	32.89	32.10	25.21	30.84

Source: Government of the RM, *Poverty Reduction Strategy*

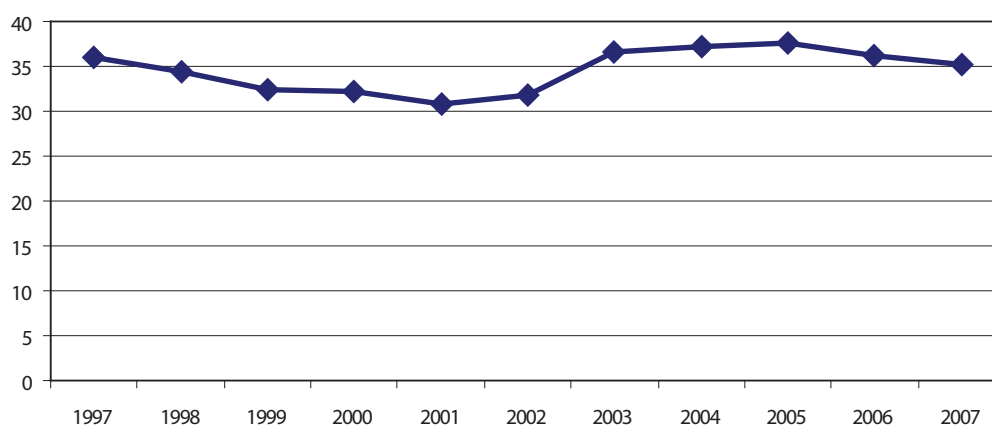
The assessments of the World Bank show that, compared to the pre-transition period when the Gini index was 22%, by 2001 the inequality had soared to 29.93% and continued to rise in both 2002 and 2003, when the Gini coefficient was 36.8% and 37.3% respectively. The last available data<sup>7</sup> show that the Gini index in 2006 was 39.3%. The increase in the Gini index, i.e. the uneven distribution of incomes, is mostly due to the growth of the private sector, where income is more dispersed than in the public sector.

## 1.2 Unemployment and Unemployment Profiles

The unemployment rates in Macedonia have been persistently high and this is one of the key factors contributing to the rising levels of poverty. The high (registered) unemployment had been noted in the years following independence when it amounted to 24.5% in 1991. The number of unemployed, with some small fluctuations has been persistently rising, but the unemployment rate has been declining. The Labour Force Survey showed that in 2007 the unemployment rate had reached 35.2% (Figure 1.3).

Still, establishing the true number of unemployed persons in Macedonia is rather difficult due to a number of factors, including: the large number of unregistered employees (in the informal economy), a large number of people who register as unemployed but do not actively seek employment, as well as due to some imprecisely defined categories in the Labour Force Survey (for instance the self-employed, unpaid family workers, women on maternity leave and retired persons - when employed, unemployed or inactive). A research paper (World Bank, 2003)<sup>8</sup> suggests that the real unemployment rate in Macedonia is about 23%, which indicates that despite scarce job opportunities on the labour market, people have, nevertheless, been engaged in informal business activities.

**Figure 1.3.: Unemployment Rates (age 15 – 64) (1997 – 2007)**



Source: Labour Force Survey, SSO (1997 – 2007)

<sup>7</sup> UNDP, People Centered Analyses, March 2008, [www.undp.org.mk](http://www.undp.org.mk)

<sup>8</sup> World Bank (2003), FYR Macedonia: Tackling Unemployment

Notwithstanding these shortcomings, indicators show that unemployment is mostly long term which contributes to both poverty and dependence on social assistance services. Thus, according to the Employment Agency, at the end of 2007, there were 294,724 unemployed people who have been looking for employment more than 12 months, which represents 82.5% of all the registered unemployed people (357,166). According to the Labour Force Survey, the long-term unemployment rate in 2007 was 29.7%, which compared to 2005 was somewhat lower but the proportion of people seeking employment for more than 12 months is still high.

The situation concerning very long-term unemployment (over 24 months) raises serious concerns, as the proportion of people waiting for 2 or more years was 26.1% in 2007. Very long-term unemployment potentially leads to social exclusion of this group from the labour market which indicates that the measures of both the active employment policies and the social protection network should be targeted at this category of the unemployed. According to the State Statistical Office, the proportion of people living in jobless households reached 26.8% in 2007 (Laeken indicator).

The number of households - beneficiaries of social assistance is also indicative - in 2007, 12.4% of all households were beneficiaries of monetary social assistance (Table 1.5).

**Table 1.5.: Number and Proportion of Households – Beneficiaries of Social Assistance (1998 – 2007)**

	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007
Estimated total no. of households <sup>9</sup>	520,471	518,071	525,394	409,368 <sup>10</sup>	499,568	502,607	506,656	507,490	510,369	515,420
Households beneficiaries of social assistance <sup>11</sup>	50,425 <sup>12</sup>	64,275	73,074	74,981	79,457	61,813	64,804	67,113	64,970	63,882
Proportion of households beneficiaries of social assistance in %	9.7	12.4	13.9	18.3	15.9	12.3	12.8	13.2	12.7	12.4

Source: Records of the Ministry of Labour and Social Policy

The vital demographic indicators are also important in understanding poverty trends. According to data from the SSO, life expectancy has increased between 2002 and 2006 - from 73.2 to 73.8 years on a general level – that is, from 70.8 to 71.7 for men and from 75.7 to 75.9 for women. Such demographic data suggest the need to strengthen the support for the elderly people, both through policies for their active inclusion in the labour market and through maintaining social transfers (pensions, healthcare and other social transfers) at an appropriate level. The measures supporting the economic activity of the population in general are also important. The research commissioned by the European Commission (2007)<sup>13</sup> already raises the alarm about the number of elderly people who have not been covered by the social protection system. This study underlines that over 31.1% or over 70,000 people older than 65 are not recipients of pensions. Unless these people are covered by some of the social protection measures, employed or supported by their families, then they might be at significant poverty risk and social exclusion.

<sup>9</sup> Estimated total number of households according to the Household Consumption Survey, the State Statistical Office

<sup>10</sup> The number of households was significantly decreased because of the conflict in 2001. During that year some of the households merged, so the sample in the Household Consumption Survey was decreased for 50, especially in Western Macedonia.

<sup>11</sup> According to the records of the Ministry of Labour and Social Policy

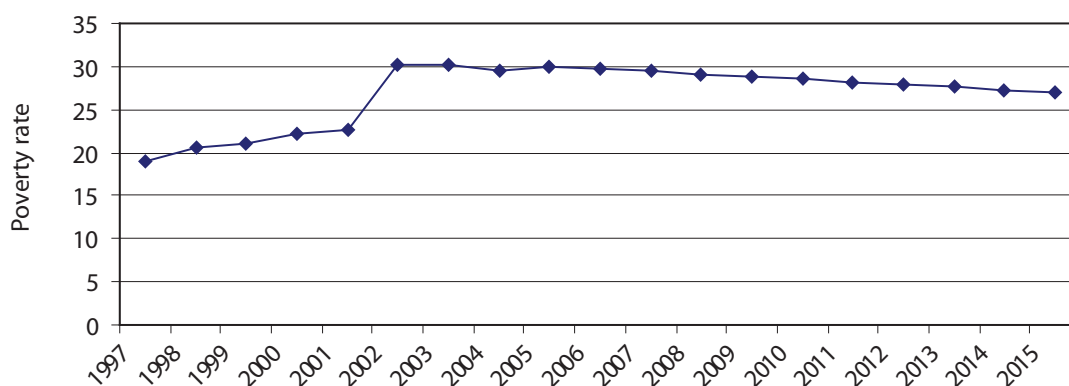
<sup>12</sup> Data from the Regional Office in Tetovo missing

<sup>13</sup> European Commission (2007) "Social Protection and Social Inclusion in the former Yugoslav Republic of Macedonia", [http://ec.europa.eu/employment\\_social/spsi/docs/social\\_inclusion/2007/fyrom\\_final\\_en.pdf](http://ec.europa.eu/employment_social/spsi/docs/social_inclusion/2007/fyrom_final_en.pdf)

### 1.3 Conclusions

Reducing the proportion of the population living below the poverty line to 9.5% by 2015 in the Republic of Macedonia is not feasible (Figure 1.4). If we take the parameters of the past two years as the standard, according to the best case scenario it would be realistic to expect that the current poverty rate of 29.4% could drop to 27% by 2015 (measured according to the national method). Should the EU standard for measuring poverty be applied (60% of the median equivalent income), the poverty rate in 2015 could be additionally reduced but still not to the level of 9.5% defined as the target in the 2005 MDG Report.

**Figure 1.4.: Projections of the Poverty Rate to 2015 (Relative Method, measured as 70% of the Median Equivalent Consumption)**



It seems that it would be advisable to redefine the target in order to come to a realistically achievable target i.e. to reduce the expected threshold of poverty keeping the actual capacities in mind. In doing so, the analysis should take account of the priorities and policies that will be defined within the current process of developing the Joint Inclusion Memorandum.

Reducing poverty and social exclusion depends on a number of factors – besides the continuous economic growth it is particularly important to focus on policies addressing social protection, social inclusion, education, healthcare and regional development. Any new social policies must be supported by sound analyses, based not only on short or medium-term economic benefits but also on the long-term social impacts and costs. In light of this, the recent decision on the gradual reduction of social contributions should be carefully analysed in order to avoid limited services and revenues that could affect the quality of services in the public healthcare and pension systems, as well as the public services for the unemployed. Considering that the poor cannot afford services offered by the private sector, it seems that this decision may potentially be detrimental for the socially vulnerable groups and their access to public social services and, additionally, erode the quality of the services.

The objectives within the EU Open Method of Coordination concerning social protection and social inclusion advocate for: *“adequate, accessible, financially sustainable social protection systems and social inclusion policies... as well as an adequate pension income to all, which will enable people to maintain their living standard following retirement at a reasonable level, in the spirit of solidarity and fairness between generations”* (European Commission, 2006). As a country committed to becoming a member of the EU, it is important to identify the key challenges, policies and measures contributing to combating poverty and social exclusion, as well as to jointly identify priorities and objectives so as to incorporate the common EU objectives in the national policies.

The new policy on conditional money transfers, to be launched as of September 2009, will introduce new pecuniary benefits intended mostly for the beneficiaries of social money transfers who will be eligible if they comply with the requirements defined by the law. These changes should contribute to

reducing poverty of the most socially vulnerable groups by supporting children (special social benefits) of the most vulnerable families to enrol in school and continue their education, as well as to improve their health protection.

Policies targeted at alleviating poverty and social exclusion in Macedonia must be balanced between the economic and social costs and objectives. In parallel, social policies and measures should be based on accurately identified social needs and capacities in order to ensure that they have been adequately targeted and used by the population that needs them the most.

#### 1.4. Recommendations

In terms of policies, it is recommended to:

- Redefine the target at an ambitious but realistically achievable level;
- Promote measures to stimulate accelerated and sustained economic growth coupled with active employment policies; they are key to poverty reduction, especially in the long run;
- Focus measures of the social inclusion policies on: large households, jobless households, households where the head of the family has no education (or has incomplete primary education), households with children, as well as households living in rural and smaller urban areas (excluding Skopje);
- Improve the targeting of social transfers to the target groups and applying a policy of appropriate social transfers that will enable the beneficiaries to have better living standard.
- Implement measures encouraging sustained social inclusion of the vulnerable groups.

In terms of the methodology and collection of data, it is recommended to:

- Adapt the poverty measurement method to EU standards and have an analytical approach to monitoring poverty from different aspects;
- Introduce new variables in the Labour Force Survey to cover ethnic groups and to precisely define the status of the self-employed, unpaid family workers, women on maternity leave and pensioners (when they are employed, unemployed or inactive); Detailed processing, analysis and dissemination of the Labour Force Survey results;
- Detailed processing and dissemination of the Household Consumption Survey according to types of households – large and jobless households and households with children, etc.;
- As of 2010, the Ministry of Labour and Social Policy (MLSP) will be actively involved in the official statistical system, especially in the part related to the social protection system. With the introduction of the unified software system for recording beneficiaries and social services it would be best if the MLSP reports on the data in a consistent and unified way and thus avoid disparities of data between the State Statistical Office and the MLSP;
- Intensify preparatory activities for introduction of the ESSPROS<sup>14</sup> methodology for monitoring social protection expenditures by the MLSP as of 2009;
- Establish a single (official) statistical data base to monitor the developments regarding poverty and social exclusion in line with EU standards, which will be transparent and publicly available;
- Synchronize data from public institutions (in the social sphere) by introducing a unified software system for registering beneficiaries and monitoring their status.

<sup>14</sup> European System of Integrated Social Protection Statistics





1  
REDUCING POVERTY  
AND SOCIAL EXCLUSION

2  
ACHIEVE UNIVERSAL  
PRIMARY EDUCATION

3  
PROMOTE GENDER  
EQUALITY AND EMPOWER  
WOMEN

4  
REDUCE CHILD MORTALITY

5  
IMPROVE  
MATERNAL HEALTH

6  
COMBAT HIV/AIDS  
AND TUBERCULOSIS

7  
ENSURE ENVIRONMENTAL  
SUSTAINABILITY

8  
PARTNERSHIP  
FOR DEVELOPMENT

# MDG 2

ACHIEVE UNIVERSAL PRIMARY  
EDUCATION



## MILLENNIUM DEVELOPMENT GOAL 2: ACHIEVE UNIVERSAL PRIMARY EDUCATION

Targets	Indicators
1. Ensure that, by 2015, all children will be able to complete a full course of primary and secondary education.	<ul style="list-style-type: none"> <li>• Inclusion in the primary education.</li> <li>• Proportion of pupils starting grade 1 who reach grade 5.</li> <li>• Literacy rate of 15+ year-olds.</li> <li>• Inclusion in the secondary education.</li> <li>• Persons with low educational attainment (EU).</li> <li>• Completion rate in primary education.</li> <li>• Enrolment ratio in primary education.</li> <li>• Completion rate in secondary education.</li> <li>• Proportion of ethnic groups in the completion of primary and secondary education.</li> <li>• Proportion of the budget allocated to education, as a share in GDP.</li> </ul>
2. Eliminate gender disparities in primary and secondary education if possible by 2005, and in all levels of education by 2015.	<ul style="list-style-type: none"> <li>• Proportion of boys and girls in primary, secondary and higher education.</li> <li>• Ratio between literate women and men at the age of 15+ by ethnicity.</li> <li>• Proportion of girls and boys completing primary education, by ethnic background.</li> <li>• Proportion of girls and boys completing secondary education, by ethnic background.</li> <li>• Proportion of boys and girls completing higher education, by ethnic background.</li> </ul>

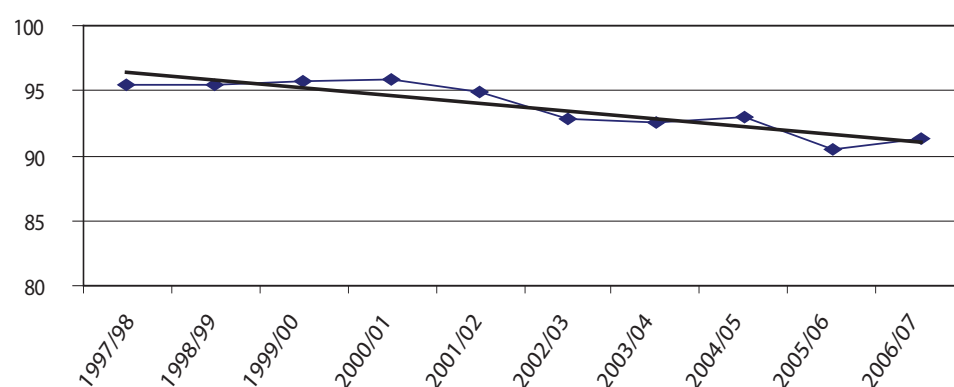
### 2.1 Inclusion of Children in Primary and Secondary Education – Enrolment, Transfer and Completion Rate

Children affected by exclusion from education most often belong to the vulnerable and marginalised population groups. The most vulnerable groups in Macedonia are:

- *Children from socially disadvantaged families* – as elsewhere in the world, poverty in Macedonia is both the cause and effect of low education levels. In fact, poverty leads to a lower education level, which, in turn, generates a new cycle of poverty;
- *Children with special needs* – there are special primary schools for children with special needs and special classes have been established in regular primary schools. In addition, inclusion of children with special needs in regular classes has also been encouraged. Nevertheless, there is still no system to establish the proportion of such children in the population and to ensure their inclusion in education, particularly having in mind the strong prejudice among the population (and educators) towards the members of these groups;
- *Children in rural areas, particularly in remote mountain settlements* – it is widely believed that there are disparities between enrolment rates in urban and rural areas; however, there is no systematic collection of data to support such claims.
- *Children belonging to some of the ethnic communities* – the ethnic background of most of the Roma children coincides with their social vulnerability; therefore, their exclusion from school may result from poverty. Traditional constraints and fear from education, particularly related to girls from the Roma, Turkish and Albanian communities, also lead to exclusion from education of these children (especially after primary education).

The data analysis<sup>15</sup> on the enrolment of pupils in primary education (Figure 2.1) over the ten-year period shows that not all children who are supposed to be included in education actually are, but also that there is a downward trend in the enrolment rates. Although this may be attributed to the insufficient coverage of children belonging to vulnerable groups, the low inclusion rates could also result from the changes introduced by the Law on Primary Education. Until the school year 2004-05, primary education in Macedonia involved two four-year cycles leading to eight years of primary education which was mandatory for all children aged 7 to 14. As various indicators demonstrate, the inclusion of the preparatory grade (so-called “0” grade) in the mandatory primary education system (as of school year 2005-06)<sup>16</sup> did not stop the downward trend in the enrolment rates, but rather contributed to an even larger drop. Although the introduction of grade “0” has increased the number of children enrolled in primary education, the data demonstrate that the percentage of inclusion has dropped even more. This may be attributed to the fact that primary and pre-school education institutions have a shared responsibility in providing adequate conditions for including six-years-old children in the mandatory education. An actual increase in the inclusion of children in primary education may be expected following the introduction of the new nine-year primary education system (three 3-year cycles) starting with the school year 2007-08<sup>17</sup>. Regrettably, data on the enrolment in the latter academic year is not available yet.

**Figure 2.1: Enrolment Trend in Primary Education**



Source: State Statistical Office

The data on the inclusion of children in primary education can be directly correlated with the transfer and drop-out rates. Over the past several years, about 4% of the pupils belonging to the respective age groups fail to complete grade 4, while 8-9% fail to complete grade 8 (Table 2.1). This indicates that drop-out begins at the completion of grade 4 and it doubles by the end of primary education.

**Table 2.1.: Primary Education Completion Rate<sup>18</sup> (in %)**

	2000/2001	2001/2002	2002/2003	2003/2004	2004/2005	2005/2006	2006/2007
Grade IV	97.5	97.3	96.5	95.9	96.7	96.3	96.1
Grade VIII	92.2	93.4	92.6	91.6	90.3	91.6	91.1

Source: State Statistical Office

<sup>15</sup> In most of the cases, the statistical data shown in the Tables in this Chapter differ from the relevant data used in the 2005 MDG Report. The difference results from the change in the methodology for calculation and presentation of data. Such changes have been introduced in order to harmonise the approach and enable comparability of data on international level.

<sup>16</sup> Amendments to the Law on Primary Education (Official Gazette of the RM No. 63/04 of 20.09.2004)

<sup>17</sup> Amendments to the Law on Primary Education (Official Gazette of the RM No. 51 of 24.05.2007)

<sup>18</sup> Ratio of the students successfully completing the respective grades to the total population aged 10, i.e. aged 14 (status on 30 June).

In terms of transfer rate of a given generation of pupils in the next 4-year cycle (grades 5 to 8) (Table 2.2) the data of the last two years analysed show that there is some improvement. However, even in the best case scenario, 3% of the pupils who enrolled in grade 1 failed to reach grade 5.

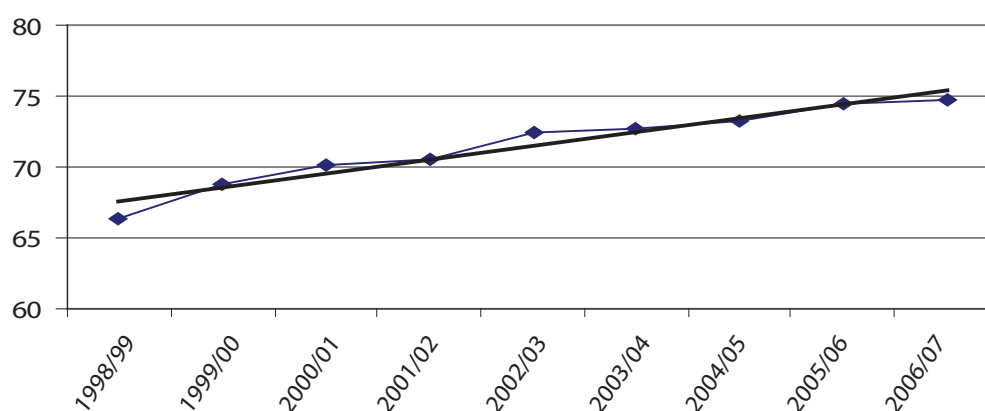
**Table 2.2.: Percentage of Pupils Who Have Reached Grade 5<sup>19</sup>**

2000/2001	2001/2002	2002/2003	2003/2004	2004/2005	2005/2006
96.9	96.5	95.0	95.5	97.0	97.2

Source: State Statistical Office

The enrolment rate of pupils in secondary education (Figure 2.2) has been steadily rising, but, still the enrolment rate remains low (only three-quarters of the population at the respective age). Furthermore, more pupils opt for schools offering vocational education (particularly the four-year programmes) rather than for general education (high schools). If poverty was identified as the main reason for low enrolment in primary education, in the secondary education it has an even greater effect. Although, according to the Law, secondary education is free in public schools, still it entails significant expenses arising from the limited network of schools and the relatively high costs for textbooks and other study materials.

**Figure 2.2.: Gross Enrolment Rate in Secondary Education<sup>20</sup>**



Source: State Statistical Office

The inclusion of pupils in secondary education is rising (Table 2.3). Further improvement in the enrolment rate could be expected in this school year (2008-09) due to the amendments in the legislation making secondary education mandatory<sup>21</sup>. Official data suggests that by the middle of October 2008, 95% of pupils who completed primary education enrolled in secondary education even without any legal enforcement measures. Still, it is much too soon to speculate as to how many of them will actually succeed in completing secondary education. Nevertheless, even with secondary education being voluntary, there has been constant rise in the completion rate which resulted in steady closure of the gap between the completion and the enrolment rate in secondary education - from 7% in 2000/01 to 4.1% in the last analysed school year (2006/07).

<sup>19</sup> Ratio of pupils who have enrolled in grade 5 in the given year to the total number of pupils that had been enrolled in grade 1 four years earlier (the data refers to the beginning of the respective academic year)

<sup>20</sup> Proportion of pupils enrolled in the regular, special and religious secondary education schools of the total population aged 15 – 18.

<sup>21</sup> Amendments to the Law on Secondary Education (Official Gazette of RM No. 49 of 18.04.2007)

**Table 2.3.: Pupils Who Enrolled in Secondary Education as a Percentage of Those Who Completed Primary Education<sup>22</sup>**

2000/2001	2001/2002	2002/2003	2003/2004	2004/2005	2005/2006	2006/2007
83.7	85.7	86.6	87.1	88.4	88.3	89.9

Source: State Statistical Office

The vertical progress of a generation of pupils from their enrolment in grade 1 in primary education to completion of secondary education (Table 2.4) indicates that over 30% of pupils are lost along the way: 11% drop-out by the end of primary education, an additional 11% at the enrolment in secondary education and a further 9% by the end of secondary education. Some drop-outs in primary education can be attributed to demographic changes (migration of young families abroad) and some of the drop-outs in secondary education may result from the opportunities of completing secondary education abroad. Still, a significant number of pupils fail to complete primary education and yet more fail to complete secondary education. The fact that the highest drop-out rate in primary education takes place at the transition in the second cycle (following the enrolment in grade 5), validates the assumption that the reason for dropping-out is most often as a consequence of the unsatisfactory level of knowledge and skills acquired during grades 1-4 (pupils are enrolled in the next grade despite their inadequate performance), which then affects their ability to become competently involved in the next round of courses.

**Table 2.4.: Vertical Progression of a Generation**

	Enrolled in grade 1	Enrolled in grade 5	Primary education completed	Enrolled in year 1 of secondary	Secondary completed
	<b>1991/1992</b>	<b>1995/1996</b>	<b>1998/1999</b>	<b>1999/2000</b>	<b>2002-2003</b>
Number	34,406	32,866	30,389	26,614	23,851
%	100	95.5	88.3	77.4	69.0
	<b>1995/1996</b>	<b>1999/2000</b>	<b>2002/2003</b>	<b>2003/2004</b>	<b>2006-2007</b>
Number	34,017	32,944	30,095	26,057	22,913
%	100	96.8	88.5	76.6	67.4

Source: State Statistical Office

## 2.2 Completion of Education and Ethnic Background of Students

Data on the ethnic background of pupils completing primary education (Table 2.5) show that the number of ethnic Macedonians who complete primary education has been gradually decreasing, whereas the number of ethnic Albanian and Roma pupils has been rising. As far as the pupils with ethnic Macedonian and Albanian background are concerned, this situation can be attributed to the demographic changes in the population.

**Table 2.5.: Proportion of Ethnic Communities in the Completion of Primary Education<sup>24</sup>**

	1997/1998		2002/2003		2006/2007	
	Total	%	Total	%	Total	%
Total	30,741	100.0	30,095	100.0	27,747	100.0
Macedonians	20,308	66.1	18,380	61.1	15,672	56.5
Albanians	7,908	25.7	8,869	29.5	9,253	33.3
Turks	1,011	3.3	1,147	3.8	1,092	3.9
Roma	385	1.3	627	2.1	707	2.5
Serbs	372	1.2	348	1.2	301	1.1
Vlachs	60	0.2	63	0.2	65	0.2
Others	697	2.3	661	2.2	655	2.3

Source: State Statistical Office

<sup>22</sup> Percentage of students enrolled in secondary education of the total number of pupils who completed primary education in the previous year.

<sup>23</sup> Students who successfully completed three- and four-year schools

<sup>24</sup> Percent of ethnic communities in the total number of pupils who have completed primary school.

An upward trend in the completion of secondary education (Table 2.6) is evident among the ethnic Albanian and ethnic Turkish students (their number has more than doubled), as well as the Roma students (a rise of almost 4.5 times). However, the proportion of these students who actually complete secondary education has not yet reached the proportion of their ethnic groups in the total population.

**Table 2.6.: Proportion of Ethnic Communities in the Completion of Secondary Education<sup>25</sup>**

	1997/1998		2002/2003		2006/2007	
	Total	%	Total	%	Total	%
Total	19,790	100.0	23,851	100.0	25,629	100.0
Macedonians	16,427	83.0	18,261	76.6	17,890	69.8
Albanians	2,321	11.7	4,222	17.7	5,848	22.8
Turks	316	1.6	396	1.7	654	2.6
Roma	72	0.4	140	0.6	315	1.2
Serbs	316	1.6	339	1.4	306	1.2
Vlachs	72	0.4	70	0.3	103	0.4
Others	266	1.3	423	1.7	513	2.0

Source: State Statistical Office

### 2.3 Gender Disparities in Enrolment and Completion of Education

On a national level, the disparities in the ratio of boys to girls is the lowest in the primary education – in the past decade the percentage of girls has not changed and remains a little below 50% (Table 2.7). There are some disparities in favour of boys in secondary education. Still, the disparities are most evident in higher education, but, in favour of female students – although the difference has been diminishing during the past few academic years, over half of the students are women.

**Table 2.7.: The Share of Female Pupils/Students at All Levels of Education (Proportion of Girls and the Ratio Between Girls and Boys)<sup>26</sup>**

	1997/ 1998	1998/ 1999	1999/ 2000	2000/ 2001	2001/ 2002	2002/ 2003	2003/ 2004	2004/ 2005	2005/ 2006	2006/ 2007	2007/ 2008
Primary	48.2 (93.0)	48.2 (93.3)	48.2 (93.0)	48.3 (93.5)	48.4 (94.0)	48.4 (93.9)	48.4 (93.9)	48.5 (94.4)	48.5 (94.4)	48.3 (93.5)	48.5
Secondary	48.2 (93.0)	48.2 (92.9)	48.1 (92.8)	48.1 (92.6)	48.2 (93.1)	48.1 (92.5)	47.7 (91.1)	47.4 (90.1)	47.0 (88.8)	47.4 (90.3)	46.9
High	54.6 (120.3)	55.2 (123.2)	55.1 (122.8)	55.8 (126.5)	55.2 (123.4)	56.2 (128.3)	57.0 (132.7)	56.7 (131.2)	56.6 (130.6)	54.7 (120.7)	53.5

Source: State Statistical Office

Gender disparities in the completion of primary education, which are not obvious at a national level, become evident when the ethnic background of pupils is factored in. The disparities between boys and girls in the ethnic Turkish community remain most prominent, despite the fact that there has been much improvement over the past ten years. Still, the changes are most evident among the students from the Roma community – there is significant progress in the elimination of gender disparities, owing to the fact that the number of Roma girls who complete primary school has more than doubled. Gender disparities among pupils of different ethnic background are more prominent in the completion of secondary education. Despite the fact that the disparities between girls and boys of the Albanian and

<sup>25</sup> Percent of ethnic communities in the total number of students who have completed secondary education (full-time and part-time).

<sup>26</sup> The first figure shows the percentage of female pupils/students in the total number of pupils/students at all three levels of education. The figures in parentheses represent the ratio of female to male pupils/students. The calculations are based on the data obtained at the beginning of the academic year. The data concerning higher education refer to students who are Macedonian citizens enrolled in the state universities and some of the private ones.

Turkish communities who complete secondary education have diminished (most likely because the number of girls from these communities who completed secondary education has tripled over the ten-year period), gender disparities have not been eliminated yet. The most striking disproportion can be noted in the number of Roma boys and girls who complete secondary education, despite the fact that the number of Roma girls who complete secondary education has tripled. Perhaps the most likely explanation is that traditional norms of the Roma community have a negative effect on the attitudes of teenage girls.

Over the last ten years, the number of students who graduated increased significantly in all ethnic communities, which can be largely attributed to the increased opportunities offered at the private universities and the universities teaching in Albanian language. Still, the number of female students who have graduated is higher than the number of male students. This situation may reflect the limited employment opportunities of women, whereby men are more likely to find employment even with secondary education, while women are forced to make their way by acquiring higher levels of education.

## 2.4 Literacy

According to the last Census of 2002, the literacy rate in Macedonia was 96.4%<sup>27</sup>. This indicates that 3.6% of the population aged 15 and above is illiterate and compared to the data of the 1994 Census this represents an improvement of 2.6%. The illiteracy rate among the Macedonians was the lowest (2.3%), while the highest was observed among the Roma population (20.6%). In 2002, 33% of the Roma population had failed to complete primary education and of the remaining 67%, 93% completed only primary education. If the formal completion of primary education can be considered as a guarantee for literacy, it may be expected that the literacy rate among the Roma population will improve considering the increased percentage of Roma children completing primary education.

According to the 2002 Census, the literacy rate of the population aged 15 – 24 was higher reaching 98.7%. The disparities in the literacy rate between men and women in the same age group were insignificant (99% for men and 98.5% for women).

It should be noted that the literacy rate was calculated on the basis of the respondent's statements in the Census and they represent their subjective views of their literacy level. However, the indicator for genuine literacy is the degree to which students aged 15 can read and comprehend, which has been measured through the Programme for International Student Assessment Tests (PISA) of the OECD. The PISA test results in 2000, measured in forty-one countries throughout the world, ranked Macedonia in 38<sup>th</sup> position. The results indicated that 34.5% of the pupils who had completed or were about to complete primary education had not even achieved the first level of proficiency (out of five levels), while an additional 28.1% had only reached the first proficiency level<sup>28</sup>. These results should be taken as a serious indicator of the (poor) quality of teaching and illustrate the need for systemic changes in order to raise the level of the population's actual literacy.

## 2.5 Funding of Education

The budget for education as a share in GDP has varied from year to year and between 2000 and 2007, ranging between 3.4 and 3.9 percent. In the past few years the entire budget planned for education was implemented.

**Table 2.8.: The Share of the Education Budget in GDP<sup>29</sup> (in %)**

2000	2001	2002	2003	2004	2005	2006	2007
3.6	3.6	3.9	3.7	3.6	3.4	3.4	3.8

Source: Ministry of Finance of the Republic of Macedonia

<sup>27</sup> A more detailed analysis of the Census results related to literacy is available in the 2005 MDG Report. Considering that no recent data on literacy is available, this report provides a brief summary of the results presented in the previous Report, accompanied by additional explanations.

<sup>28</sup> PISA 2000: The Achievements of the students in the Republic of Macedonia, Education Development Bureau – Assessment Unit, Skopje, 2004.

<sup>29</sup> Amounts of implemented budget funds (functional area budgets)





The planned share of the 2008 education budget in the GDP is 4.6% which constitutes a significant increase compared to the previous years. If this budget supports programmes focused on increasing the enrolment of pupils and students in primary and secondary education, it could significantly contribute to the attainment of the first target – ensuring that, by 2015, all children will be able to complete a full course of primary and secondary schooling.

## 2.6 Conclusions

Two important changes in the education system have been introduced in the period September 2007 – September 2008: (1) the primary education has been transformed into a nine-year education programme with children being enrolled at the age of 6 instead of 7; (2) secondary education has become mandatory. These measures are expected to improve the enrolment rates, particularly in secondary education, but no official data to support such expectations are available at the moment.

The enrolment rate in the mandatory primary education was higher than the enrolment rate in the non-mandatory secondary education, which could indicate that the requirement for mandatory education may be a prerequisite for increasing enrolment rates. However, in spite of the fact that primary education has been mandatory, not all pupils actually manage to complete it just as equally not all students actually succeeded in completing non-compulsory secondary education.

Experience suggests that the risk of drop-outs in primary education is the greatest at the transition from grade 4 to grade 5. Most often this results from the pupils' unsatisfactory achievements in grades 1 – 4. This, in turn, affects their ability to achieve satisfactory attainments and competently continue in the subsequent grades. The inability of teachers to fully address the needs of their pupils/students, as well as the quality of the teaching contribute to this situation.

Enrolment and completion rates in secondary education are still unsatisfactory amongst the Roma, Turkish and Albanian ethnic communities. Although there has been evident improvement in this regard, still the results are under the desired level.

Considering that the last census was in 2002, no new data is available on literacy and, consequently, no facts can be presented to support any conclusions on developments. In addition, it is impossible to establish the proportion of persons with low educational attainments (persons aged between 25 and 64 who have completed only primary education).

Gender disparities at the primary education level are almost insignificant, while at the higher education level they are in favour of the female population. Disparities are still evident at the secondary education level, mainly among students of the Roma, Turkish and Albanian communities. The introduction of compulsory secondary education may contribute to balancing the existing disparities. However, if the activities to remove the traditional barriers do not continue, there is no guarantee that the gender disparities will be eliminated.

## 2.7 Recommendations

The human capital that every country needs in order to ensure economic development and a stable national economy is developed by competitive, good quality education. It is the responsibility of the education system to enable all of its citizens to be useful both to themselves and to their country. The first and most fundamental prerequisite for this is to support the inclusion of all children in the education process and to enable them to successfully complete it.

To that end, the most obvious is the need to create, implement and sustain incentives and reward mechanisms to stimulate schools and the community to enrol all children of the relevant age into the primary and secondary education. This can be achieved if the community becomes more actively involved in the work of the primary and secondary schools. This would contribute to strengthening the community and to sharing the responsibility for improving enrolment and reducing the drop-out rate

particularly of children with special education needs and children belonging to vulnerable groups. It is also important to extend the network of kindergartens because of their role in the early development of children and in supporting inclusion in the primary education. This could also lead to increased economic activity of women.

The NGO sector can have a key role in increasing the enrolment rate and reducing the drop-out rate among children from vulnerable groups. Therefore, it is essential to ensure sustainable programmes of NGOs implementing activities to raise parents' awareness about the need to have their children educated, as well as activities to support the children in achieving better academic results.

The existing structure of secondary education does not fully meet the students' needs or the requirements of the labour market. The vocational secondary education does not offer enough opportunities to efficiently equip students with the necessary skills. Additionally, the existing network of secondary education schools does not correspond to the needs of the local communities. Therefore, it is necessary not only to reform the programmes but also to extend and restructure the network of schools in order to meet the needs of the students at the local level.

Improving the learning environment may help to attract and retain children in school. This requires improving the infrastructure and technical equipment in the schools and, more importantly, raising the quality of teaching and extracurricular activities. Additional classes for students who have problems in achieving satisfactory results should be a priority for all the teachers rather than been viewed as something that could be easily avoided.

In order to improve the low level of literacy among the population that formally completed primary education, it would be advisable to introduce national standardised tests at the end of each cycle in primary education. Thus, pupils, teachers and schools will be able to monitor to what extent the teaching targets have been achieved. Moreover, it is important to use every opportunity for Macedonia to be included in the international standardised tests. This could offer valuable information on any weaknesses and identify priorities for improvement of the quality of teaching. Additionally, the test results could be used to compare the attainment levels of boys and girls, members of different ethnic communities and of children in rural and urban areas thus establishing a good basis for the development of strategies to overcome disparities related to vulnerable categories.

Training teachers to adapt to the needs of children of both genders and different social or cultural backgrounds (and especially of special education needs) is of paramount importance if the Millennium Development Goals in education are to be achieved. To this end, it is necessary to reform the curricula for basic studies for teachers in primary education, as well as the additional qualifications programmes for teachers of vocational courses. At the same time, standards must be introduced for the teachers' professional and career development to ensure and maintain a body of professional and motivated teachers.

In order to increase the enrolment of marginalised groups, it is particularly important to develop mechanisms that will stimulate teachers' performance in environments with children from vulnerable categories (e.g. children with special education needs, children from socially disadvantaged families or isolated rural areas). These mechanisms need to incorporate a system for monitoring teacher performance in order to ensure that children improve their performance and to prevent any manifestation of prejudice against children belonging to these groups.

Numerous projects are now underway and most of them have been approved by the Ministry of Education and Science, but funded by international donors. Some of them have produced positive effects but their scope has been limited. An evaluation system should be introduced in order to incorporate the benefits of such projects into the system.





1  
REDUCING POVERTY AND SOCIAL EXCLUSION

2  
ACHIEVE UNIVERSAL PRIMARY EDUCATION

3  
PROMOTE GENDER EQUALITY AND EMPOWER WOMEN

4  
REDUCE CHILD MORTALITY

5  
IMPROVE MATERNAL HEALTH

6  
COMBAT HIV/AIDS AND TUBERCULOSIS

7  
ENSURE ENVIRONMENTAL SUSTAINABILITY

8  
PARTNERSHIP FOR DEVELOPMENT

**MDG 3**  
**PROMOTE GENDER EQUALITY AND EMPOWER WOMEN**



## MILLENNIUM DEVELOPMENT GOAL 3: PROMOTE GENDER EQUALITY AND EMPOWER WOMEN

Targets	Indicators
1. Halving, by 2015, the proportion of women as unpaid family workers and reducing their inactivity rate by one-third.	<ul style="list-style-type: none"> <li>• Disparity in income.</li> <li>• Inactivity rate.</li> <li>• Activity rate.</li> <li>• Unemployment rate.</li> <li>• Employment rate.</li> <li>• Comparison of non-commercial activities sectors employing women and men.</li> </ul>
2. Doubling the proportion of women in governance.	<ul style="list-style-type: none"> <li>• Proportion of women in Parliament.</li> <li>• Proportion of women in Government.</li> <li>• Proportion of women in government at local level.</li> </ul>

### 3.1 Women and Their Position in the Labour Market

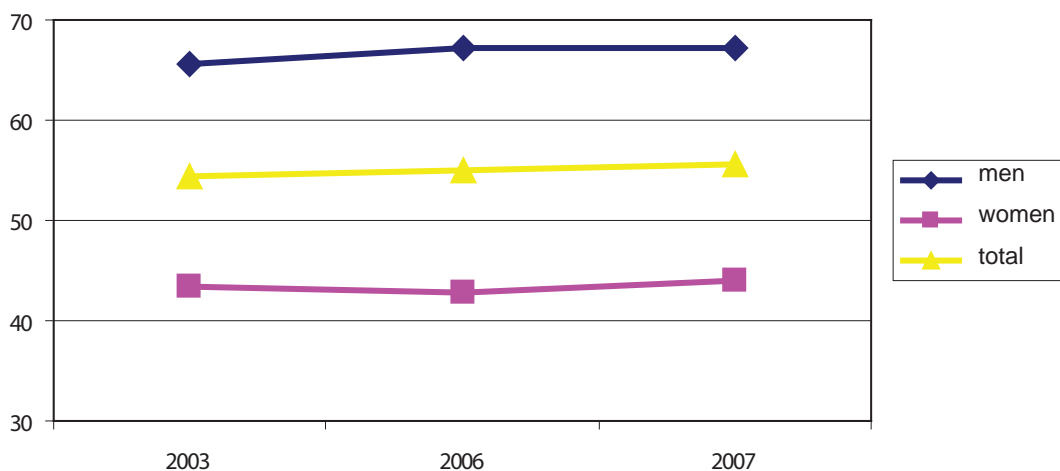
Since 2005, significant changes have been introduced to promote gender equality and support women: (1) the *Law on Equal Opportunities of Men and Women* was adopted in 2006; (2) the first *National Action Plan for Gender Equality* was revised in 2007 and it was followed by the adoption of the *second National Action Plan for Gender Equality 2007-2012*; (3) the process of establishing *Commissions for Equal Opportunities of Men and Women* in the municipal Councils in accordance with the *Law on Equal Opportunities of Men and Women* started in 2006; (4) a *Commission for Equal Opportunities of Men and Women* was established in the Parliament, and *coordinators on equal opportunities of men and women* were nominated in the state administration bodies; the process of nominating coordinators for equal opportunities of men and women in the units of local self-government is also under way. It is also important to note that there is an on-going process of streamlining gender equality issues in the relevant strategic documents. For instance, the *National Employment Action Plan* and the *Concept for Nine-year Primary Education* incorporate a gender balance dimension.

The consequences of the economic restructuring process have not equally affected all social groups. Recent relevant analyses<sup>30</sup> have shown that women and men differ in terms of their status in the labour market. In general, women are less economically active than men but they also face fewer employment opportunities. The segregation along gender lines persists and continues to offer women less paid jobs. Women also increasingly often decide to take up insecure jobs in the “informal economy”, where labour is often less paid. Finally, a far smaller proportion of women have independent sources of income and, on average, they have lower salaries than men.

The activity rates in Macedonia (Figure 3.1) show that the overall activity rates have been growing since 2003 and the activity rate among women slightly increased in the last year analysed. However, in the light of available data, there are only minor fluctuations rather than upward trends in the activity rate of women. Additionally, the growth in the activity rate in women is slower than that of men. Hence, the growth in the activity rate cannot be attributed to specific gender-sensitive intervention.

<sup>30</sup> (1) *The Situation Concerning Equal Opportunities for Women and Men*, 2006, Ministry of Labour and Social Policy of RM and (2) *People-Centred Analyses Report*, UNDP 2008.

**Figure 3.1.: Activity Rates for Men and Women**



Source: State Statistical Office

Additional information on the position of women in the labour market can be obtained through the data on economic inactivity. The population that is fit for work but does not seek employment is considered as economically inactive. This group includes students in secondary and higher education, persons on maternity/paternity leave, housewives and pensioners. The data on the proportion of both genders in the inactive population (Table 3.1) reveal that, compared to 2003, the ratio of economically inactive women compared to men increased in 2006. The situation changed again in 2007, but compared to 2003, the share of economically inactive women is still significant. The disparities between the genders are most prominent among women aged 30 to 49 (as much as 3 to 4 times higher economic inactivity). One possible explanation for this phenomenon may be that women at this age take maternity leave, but also that they give up looking for jobs should be taken into consideration. The total number of inactive women is also influenced by the eligibility criteria for retirement for women, as well as by the fact that many women embrace the traditional role of a “housewife”.<sup>31</sup>

**Table 3.1.: Economic Inactivity (Proportion According to Gender and Age Groups, in %)**

Age	2003		2006		2007	
	Men	Women	Men	Women	Men	Women
15 - 19	50.9	49.1	49.6	50.4	48.3	51.7
20 - 24	41.1	58.9	40.6	59.4	39.4	60.6
25 - 29	25.7	74.3	28.6	71.4	28.3	71.7
30 - 34	22.8	77.2	14.5	85.5	18.2	81.8
35 - 39	18.8	81.2	14.5	85.5	15.9	84.1
40 - 44	19.4	80.6	16.6	83.4	20.0	80.0
45 - 49	22.8	77.2	18.1	81.8	21.4	78.6
50 - 54	26.9	73.1	23.9	76.1	26.1	73.9
55 - 59	30.9	69.0	28.0	72.0	30.2	69.8
60 - 64	40.1	59.9	39.0	61.0	39.3	60.7
65 +	44.5	55.5	44.6	55.4	44.7	55.3
<b>Total</b>	<b>37.9</b>	<b>62.1</b>	<b>36.4</b>	<b>63.6</b>	<b>36.9</b>	<b>63.1</b>

Source: State Statistical Office

<sup>31</sup> According to the 2006 Labour Force Survey Report of the State Statistical Office, out of 280,000 persons in the *inactive population* category who declared themselves as “housewives”, 99.9% were women.

The rate of employment among women (Table 3.2) has been changing by less than one percent from year to year, without any clear downward or upward trend. The employment rate of men has shown continuous minimal growth and the difference between 2003 and 2007 is about three times higher than the difference in the employment rate of women.

**Table 3.2.: Employment Rate (According to Age and Gender)**

Age	2003		2006		2007	
	men	women	men	women	men	women
15 - 19	5.8	4.5	7.5	5.0	8.6	4.6
20 - 24	22.5	15.5	26.8	17.6	28.6	18.2
25 - 29	43.2	31.1	48.7	33.3	50.5	36.1
30 - 34	51.3	38.8	61.8	37.5	61.6	41.4
35 - 39	62.3	46.0	65.9	41.1	65.4	45.3
40 - 44	67.6	50.1	66.8	47.0	67.5	45.8
45 - 49	69.2	49.1	67.5	49.7	68.3	48.4
50 - 54	62.3	38.5	60.7	37.5	60.7	41.6
55 - 59	49.2	25.3	49.4	24.1	47.8	26.4
60 - 64	28.9	10.6	24.9	8.9	25.9	10.5
65 +	7.0	3.6	5.6	2.3	5.5	2.5
<b>Total</b>	<b>41.3</b>	<b>27.7</b>	<b>43.5</b>	<b>27.0</b>	<b>44.1</b>	<b>28.4</b>

Source: State Statistical Office

In 2003, the proportion of women with a higher education (46.8%) and two-year vocational college (46.7%) was the highest among the employed. This trend also remained in the consecutive years analysed. In 2006, the proportion of women with a higher education increased (47.8%) and the trend continued in 2007 (48.8%)<sup>32</sup>. In other words, the share of employed women with lower qualifications (secondary or primary education) in the labour market is lower than the share of employed men with the same qualifications. Thus, 42.1% of employed people having four-year secondary education in 2003 were women whereas this ratio dropped to 40.7% in 2006 and further to 39.1%<sup>33</sup> in 2007.

Gender distribution in various sectors is markedly stereotyped. Women make up the majority in healthcare, social affairs and education sectors. They are underrepresented in construction, mining, transport and communication sectors.

Compared to 2003, in 2007 the proportion of women in the category *unpaid family workers* decreased (Table 3.3). However, the data concerning this indicator can be regarded as illustrative rather than as grounds for drawing solid conclusions. This is because there are no records about what happens after they leave any of the categories. It is equally possible that the proportion of women in the *unpaid family workers* category has dropped due to a spill-over into the *inactive or unemployed population* or any other category of the employed population. It is particularly difficult to draw any conclusions about actual improvements because the proportion of men and women in the general employed population constantly changes<sup>34</sup>.

<sup>32</sup> Source: State Statistical Office

<sup>33</sup> On the other hand, women holding university degree do not find employment more often than men with the same qualifications. In 2003, 55% of the unemployed with university degree were women and the percentage remained almost the same in 2006 (54.7%), while in 2007 it even increased slightly (56.8%).

<sup>34</sup> If, instead of analysing the ratio according to gender, the ratio of both genders in each of the categories is analysed, it will be concluded that the ranking of the categories remained the same in 2007 as in 2003: women are the most numerous in the category of *employed population*, then in the category of *unpaid family workers*, and finally in the category of *employers*, which is not the case with men. They are the most numerous in the category of *employed population*, then in the *self-employed* category, while they are the least numerous in the category *unpaid family worker*.

**Table 3.3.: Economic Status of Men and Women – Proportion**

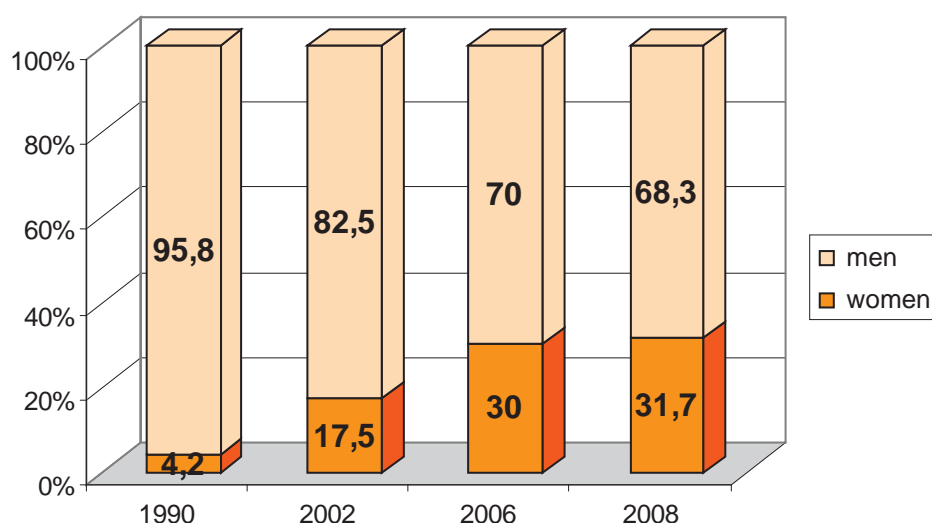
	2003		2006		2007	
	women	men	women	men	women	men
<b>Employed</b>	41	59	40	60	42	58
<b>Employer</b>	21	79	21	79	24	76
<b>Self-employed</b>	18	82	17	83	16	84
<b>Unpaid family worker</b>	63	37	60	40	58	42
<b>Total</b>	40	60	38	62	39	61

Source: State Statistical Office

### 3.2 Women in Governance

The proportion of women in the Parliament has risen from 4.2% in 1990 to 32.7% in 2008 (Figure 3.2). However, although there has been a significant increase in quantitative terms, the way in which women MPs participate in the legislature has been changing at a much slower rate. Namely, in the 18 permanent committees in the 2002-2006 parliamentary composition, only five women were appointed Chair Persons or Deputy Chair-Persons<sup>35</sup>. In the present composition of the Parliament, seven women act as chairpersons or deputy chairpersons in some of the twenty committees, demonstrating that the relative proportion has not changed significantly. At the moment, none of the nine delegations is headed by a woman, while only ten of the forty-three parliamentary groups for cooperation have a woman for president<sup>36</sup>.

**Figure 3.2.: Gender Distribution of Members of Parliament<sup>37</sup>**



Sources: Report of the Republic of Macedonia on the Millennium Development Goals, Government of the RM, 2005 and the official web-site of the Parliament of the RM (<http://www.sobranie.mk>)

Still, considering the indicator for measuring progress toward the achievement of this target it can be concluded that the increase is of such magnitude that it approaches the set threshold. The effective efforts to increase participation of women in the public and political life and, primarily, the legal provisions prescribing quotas for the proportion of women on the election candidate lists have seriously contributed to a considerable rise in the proportion of women in the Parliament.

<sup>35</sup> Source: Report of the Republic of Macedonia on the Millennium Development Goals, Government of the RM, 2005.

<sup>36</sup> Source: official web-site of the Parliament of the RM (<http://www.sobranie.mk>).

<sup>37</sup> According to the Statistical Yearbook of the Republic of Macedonia (2007), the number of women in Parliament is 34, two less than the figure published on the Parliament's official website.



The legal amendments requiring a 30% gender quota on the upper and lower election lists have obviously had an effect on the increased proportion of women in the decision-making bodies at the local level. The number of women in local self-government has increased by several times compared to the period when there were no legal provisions. However, although during the period of three consecutive local election cycles the percentage of women-councillors has more than quadrupled, the fact remains that the disparity between women and men is still large. In addition, partially due to the parties' indolence and partially due to women's traditionally-rooted political inactiveness, many of the municipalities have grossly failed in meeting the quota<sup>38</sup>. Despite the successful rise in the number of women-councillors, in 2000, out of the twenty-six female candidates for mayors (in 124 municipalities), only three were elected. At the last local elections (in 85 municipalities) the number of women-mayors remained the same<sup>39</sup>.

The participation of women in the executive branch is minimal. In the absence of measures that would guarantee the minimum proportion of both genders in the election process, the number of women appointed ministers is significantly smaller. In the Government Cabinet of 2002, women were appointed to only two of the seventeen ministerial positions. In the subsequent Government cabinet (2006-2008) three women were appointed ministers. At the moment, only two women ministers have been appointed in the eighteen ministries. This means that, since 2002, the representation of women in the Cabinet of Ministers has been only around 10%.

### 3.3 Conclusions

On the whole, it can be concluded that progress towards the first target within this MDG has been problematic. The employment rate among women has increased (less than among men) but far below the projected level. The economic inactivity of women is higher than that of men. Still, it is clear that the increased employment rate of women in 2007 cannot be attributed to any specific gender-sensitive measures aimed at increasing employment of women but rather to the increase in the overall employment rate (from 34.5% to 36.2%). On the other hand, it is commendable that the *National Action Plan for Employment (2006-2008)* specifically addresses the needs of women, envisaging a rise in their employment rate to 34% by 2008. Although no official data for 2008 is available, it can only be concluded that it will be almost impossible to achieve this objective.

In addition, the participation of women in the inactive population group has increased rather than decreased. Moreover, women's share in the category of employed people has also decreased by a small percentage. The stagnating incentives for economic activity of women jeopardise the achievement of the envisaged reduction of women's inactivity by a third. Of course, in this context, halving the number of women who work as unpaid family workers and reducing the income disparities will be even more unattainable.

The evident progress in terms of the number of women in governance suggests that the targets identified in the Millennium Declaration could be fully achieved in the forthcoming period. The significantly improved participation of women in political life is due primarily to the introduction of gender quotas in the election legislation. In addition, the legislation concerning this issue has been improved several times so far. Furthermore, Equal Opportunities Committees have been introduced in the municipal councils since 2005 and the *Law on Equal Opportunities of Women and Men* was adopted in 2006 requiring establishment of Equal Opportunities Commissions in the local self-government<sup>40</sup>. All these measures represent a solid basis for establishing a gender balance in the government institutions.

<sup>38</sup> OSCE-PARD Survey on the Implementation of the Process of Decentralization, July 2006, p.15.

<sup>39</sup> The Situation Regarding Equal Opportunities for Women and Men (2006), Ministry of Labour and Social Policy of the RM.

<sup>40</sup> The process of establishing Equal Opportunities Commissions started in 2002 despite the fact that, at the time, there were no legal provisions requiring the establishment of such commissions. 15 municipalities have established the Commissions and they operated successfully.

### 3.4 Recommendations

One of the prerequisites for improving the status of women in the labour market is to increase their economic activity. This requires raising the awareness about the importance of economic self-reliance, appropriate access to accessible and good quality child-care services and appropriate education to ensure their competitiveness in the market and adequate measures for achieving a balance between the family and professional life.

The projected employment rate of women will be achieved more easily if affirmative action or positive discrimination measures are introduced in recruitment, particularly for women with lower education level.

Furthermore, considering that previous research has identified an unequal distribution of inactivity along ethnic lines<sup>41</sup>, it would be desirable if further analyses include data on these variables, thus enabling culture-sensitive approaches and policies aimed at improving the economic activity of the most affected subgroups of women. In the light of this recommendation, it is worth underlining that disaggregating statistical data by gender should be further encouraged and promoted. The presentation and use of such data is, actually, required under the *Equal Opportunities Law*.

Empowering women in the public sphere is a long-term process that is unlikely to move forward without activities in the field of gender-sensibilization and without developing a positive social climate. In an environment dominated by traditional patriarchal values even the most appropriate solutions may prove inefficient. Thus, for example, a number of municipalities have not yet established equal opportunities commissions,<sup>42</sup> let alone taken any significant steps to introduce a gender perspective in their municipal decisions. Similar reasoning applies to the *Law on Equal Opportunities*: no by-laws have been amended to strengthen the implementation matrix and there have been no cases before the Government's commissions or the courts related to this law.

Therefore, while encouraging the political parties to intensify their activities in the field of gender equality, it is also necessary to undertake long-term measures in the field of education, i.e. the curricula and teaching methods<sup>43</sup> need to be radically reviewed in order to abandon the gender stereotypes already identified at all levels of education.

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<sup>41</sup> The same was concluded in the *Report of the Republic of Macedonia on the Millennium Development Goals*, Government of the RM, 2005 but no specific figures were offered.

<sup>42</sup> Source: official website of the Ministry of Labour and Social Policy ([www.mtsp.gov.mk](http://www.mtsp.gov.mk)).

<sup>43</sup> In this context it should be noted that the first steps have been taken: as of this year, the Ministry of Labour and Social Policy in cooperation with the Ministry of Education and Science started to implement the project Gender Sensitive Education. The objective of this project is to remove gender stereotypes and prejudices in the textbooks and other teaching materials.



**MDG 4**  
**REDUCE CHILD MORTALITY**



## MILLENNIUM DEVELOPMENT GOAL 4: REDUCE CHILD MORTALITY

Targets:	Indicators:
1. Further reduce the infant and under-five mortality rate.	<ul style="list-style-type: none"> <li>• Under-five mortality rate.</li> <li>• Infant mortality rate.</li> </ul>
2. Eliminate measles by 2015.	<ul style="list-style-type: none"> <li>• Proportion of 1 year old children immunised against measles.</li> <li>• Reported cases with measles.</li> </ul>

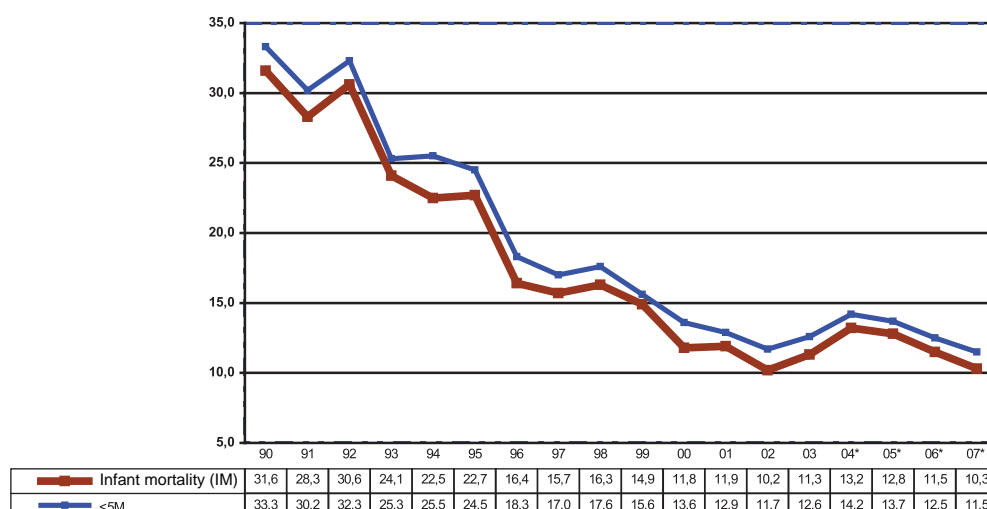
### 4.1 Infant and Under-five Mortality Rate

The basis for implementation of this Millennium Development Goal is the Convention on the Rights of Children ratified by the Government of the Republic of Macedonia in 1999. Some of the measures that the Government has committed to include: reducing child and infant mortality and providing healthcare to all children; fighting diseases and malnutrition; providing antenatal, perinatal and postnatal healthcare; promoting education on the health of children and their diet, the advantages of breastfeeding, hygienic and environmental sanitation, as well as prevention of accidents; developing preventive healthcare, guidance, education and family planning.

The proportion of children under-five in the total population in Macedonia is 6% and it is continuously declining. Most child health indicators show positive trends (Figure 4.1). The under-five mortality rate has dropped from 33,3 in 1990 to 12,6 in 2003, that is, 11,1 per 1,000 live births in 2007. Similar trends have been noted with the infant mortality rate which decreased from 31.6 in 1990, to 11.3 in 2003 and 10.3 per 1,000 live births in 2007. The implementation of the so called horizontal programmes has largely contributed to these results.

However, despite the achievements and the downward trends, these indicators remain far below the EU average of 4.66 per 1,000 live births in 2005 (Figure 4.2) and are higher than the rates in the wider European Region (8.25)<sup>44</sup>. Still, should this trend continue, the set target under this MDG will have been fully met by 2015.

**Figure 4.1.: Under-five Mortality Rate and Infant Mortality Rate in Macedonia (1990-2007)<sup>45</sup>**

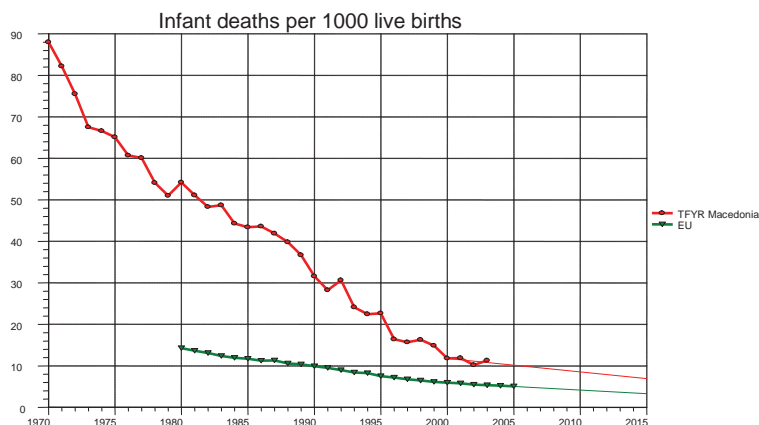


Source: State Statistical Office

<sup>44</sup> Tozija, F. and associates, The Health Condition of the Population in Macedonia, Skopje, Republic Health Protection Institute

<sup>45</sup> The mortality rates in 2004 have been calculated according to the new methodology of presenting vital statistics (with events in the country)

**Figure 4.2.: Infant Mortality Rate in the Republic of Macedonia and EU**



Source: WHO, HFA data base and data of the Republic Institute for Health Protection

Social and economic factors, as well as the environment in which children live, affect their health condition and healthcare. Those most affected by child poverty are children in large households (over 6 members), households without any income, households where the household head has no education or only primary education, and households where the rate of relative poverty is higher<sup>46</sup>.

The infant and under-five mortality rates differ in various geographic areas, regions and municipalities and there are differences between urban and rural areas, as well as among the various socio-economic groups. The infant mortality rate in 2007 is lowest in the Vardar region (5.6‰) and highest in the Pelagonija and Polog region (13.0‰).

Child mortality in rural and outlying settlements is higher than in the urban ones, mainly owing to the low socio-economic status. For example, Roma children are exposed to higher risks due to malnutrition, poor health and higher infant mortality rates<sup>47</sup>. The prevalence of anaemia is significantly higher among children in rural areas. Looking at the regions, Pelagonija and the south-east regions have the lowest level of access to sewage and safe drinking water. Overall, 11% of the rural population in 2006 drank potentially unsafe water<sup>48</sup>. The safety of housing also affects the health of children; particularly exposed to risk are the Roma children living in shantytowns without an adequate infrastructure and with high unemployment rates.

Children are exposed to various forms of domestic violence; for instance, as many as 70% of the children aged 2-14 had been subjected to at least one form of mental or physical punishment in their home, while 16% to serious bodily or mental abuse. The fact that 21% of the female interviewees at reproductive age believed that their husbands or partners were entitled to beating them raises concern; this percentage is higher among women with low education levels and low quintiles of affluence. Those families also showed a higher rate of child neglect<sup>49</sup>. Finally, infants and young children in certain ethnic groups were exposed to a much higher risk of malnutrition, poor health and higher mortality rate.

The nutritive status is an indicator of the children's health condition, the households' socio-economic status and to some degree the access to primary healthcare. Malnutrition is not a serious problem among children in Macedonia but 2% of children under five are moderately underweight and 0.5% are seriously underweight. Children whose mothers have no education are exposed to a higher risk of malnutrition. Among the Roma children this risk is two times higher. Regional variations suggest that in the north-east, south-east and south-west regions the proportion of underweight infants at birth is the highest (6.9%, 7.5% and 10.1% respectively) but there are also pockets of malnutrition of children elsewhere, which illustrates the need to improve the monitoring of the nutritive status of children at the local level

<sup>46</sup> UNICEF, Multi Indicator Cluster Survey, Skopje, UNICEF, 2007

<sup>47</sup> UNICEF, The Children in the FYR Macedonia, Situation Analysis, Skopje, UNICEF, 2008

<sup>48</sup> UNICEF, Multi Indicator Cluster Survey, Skopje, UNICEF, 2007

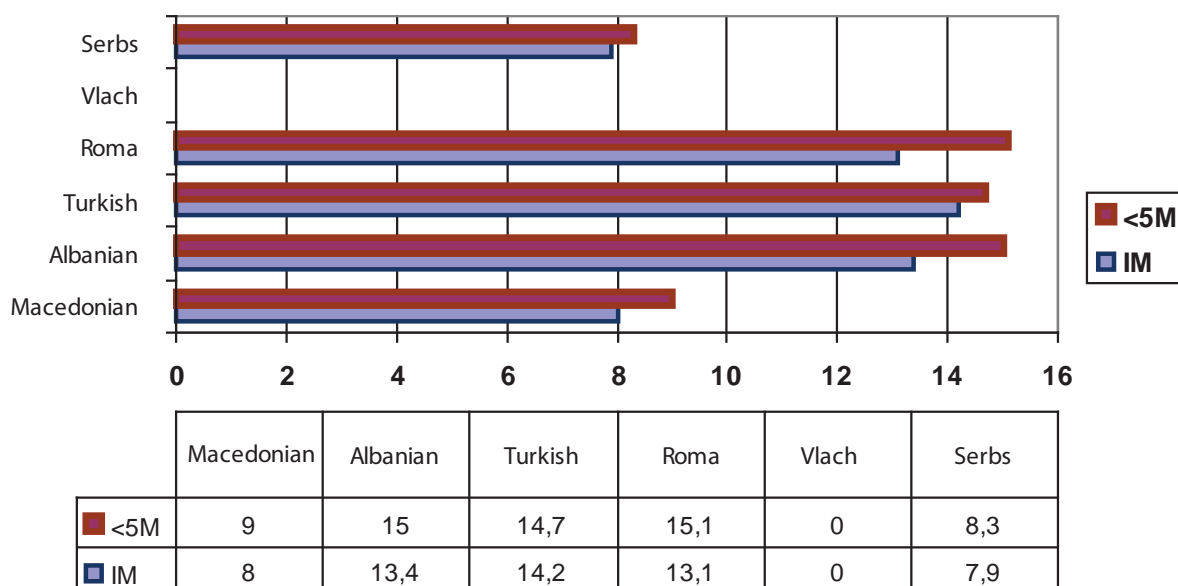
<sup>49</sup> UNICEF, Multi Indicator Cluster Survey, Skopje, UNICEF, 2007; The Health Condition, Health Protection and the Impacts on the Health Conditions of Roma in Macedonia, Association for emancipation, solidarity and equality of women in RM, ECE, 2008

as well. Although breastfeeding provides children with the best basis for cognitive development, being an ideal source of nutrition and protection against infections, only 17.5% of the infants are exclusively breastfed between the ages of 0 and 6 months, while a large portion of them are fed with milk formulae combined with breastfeeding<sup>50</sup>.

The mortality rate of children under five is usually higher among male children. Infant mortality is the highest among children of mothers with primary education or no education at all<sup>51</sup>. This correlation between the mothers' low education level and infant mortality, as well as the higher mortality in certain areas, indicates that there is a need to provide adequate health education to mothers.

The leading causes of death among infants in 2007 were perinatal complications, accounting for 61.5% of the deaths, followed by congenital malformations (accounting for 20.9%), and symptoms, signs or other abnormal clinical findings (10.3%). A positive trend has been observed in the group of infectious diseases, whose share in the causes of death among infants dropped from 16.4% in 1990 to 5.9% in 2003 and to 3.4% in 2007 (according to data from the SSO). The most common diseases among children under-five are respiratory infections, anaemia and acute diarrhoeal diseases, the prevalence of anaemia being higher among children in rural areas.

**Figure 4.3.: Infant Mortality Rate in Macedonia in 2007, According to Ethnic Background.**



Source: State Statistical Office

## 4.2 Eliminating Measles

There has been a significant drop in measles incidence in Macedonia from 64.2 in 1990 to 1.33 per 100,000 in 2001, that is, to a single reported case in 2007 (Figure 4.4), which is lower than the incidence rate in the EU. The main reason for this trend is the high level of immunisation against measles, which has mostly been above the recommended 95% throughout the entire analyzed period and reached 95.8% in 2007. The immunisation coverage in Macedonia is higher than the EU average.

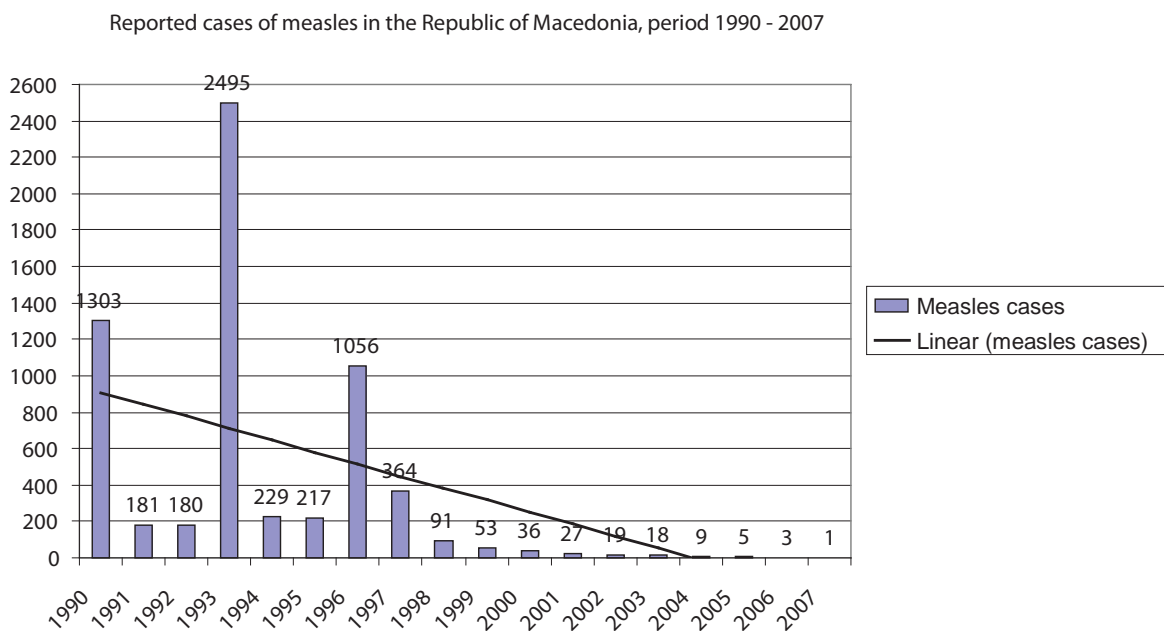
The low coverage of children in the Republic of Macedonia with immunisation against measles in 1992, amounting to a mere 52.9%, resulted in a rise in the measles incidence rate in 1993 to 135 per 100,000, which is a rate dramatically higher than the rates in 1992 and 1994 (10 per 100,000) (Figure 4.5).

Overall, the constant positive correlation between immunization and measles incidence, as well as the sustainable trends of high immunization coverage, indicate that the second target too will have been met by 2015.

<sup>50</sup> UNICEF, Multi Indicator Cluster Survey, Skopje, UNICEF, 2007

<sup>51</sup> Tozia, F., and associates, Strategic Assessment of Policies, Quality and Access to Contraception and Abortion in the RM, Skopje, Republic Health Protection Institute, 2008

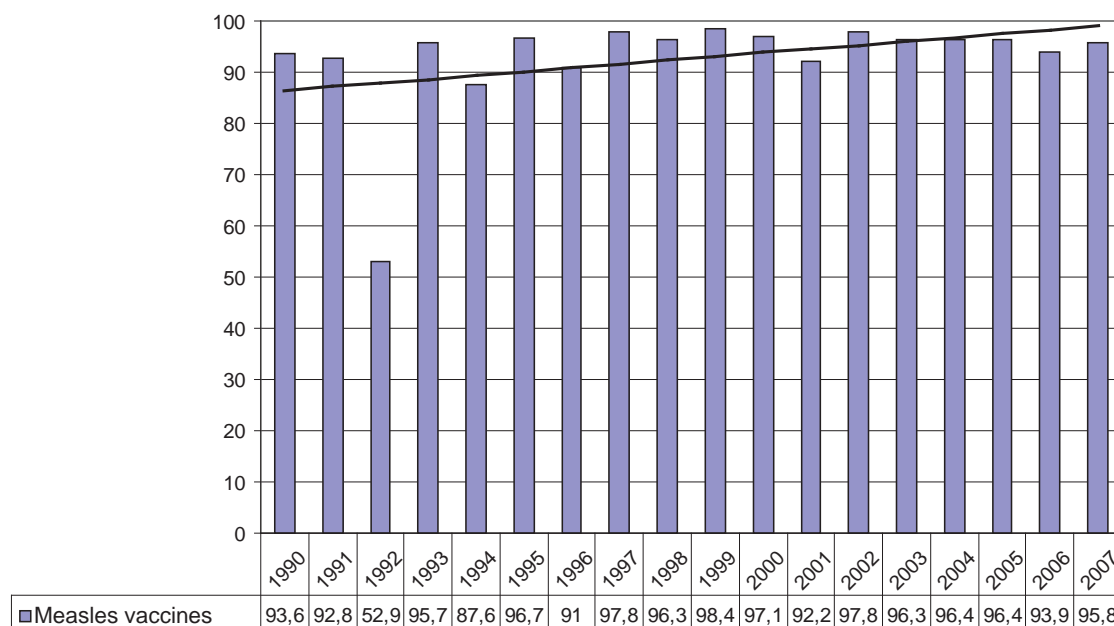
**Figure 4.4.: Measles Incidence in Macedonia (1990-2007)**



Source: Republic Institute for Health Protection (RIHP)

**Figure 4.5.: Immunisation Coverage – Percentage of One Year Old Infants, Vaccinated Against Measles (1990-2007)**

Percentage of infants aged under 1, vaccinated against measles



Source: RIHP

### 4.3 Conclusions

The assessment of progress towards MDG 4 shows that in Macedonia the target for the under-five mortality rate has already been achieved with 11.5‰, which is lower than the projected rate of 13‰. The success may be attributed to the well-organised healthcare, as well as to the adequate healthcare policy, the strategic documents adopted and the implementation of vertical programmes and projects.



Child healthcare is provided through a system of healthcare institutions almost equally distributed over the entire territory, particularly in primary healthcare. Over 95% of the preventive examinations of infants are conducted in the public primary healthcare institutions, while the rest are conducted in private healthcare institutions, whereby the coverage of newborn children is over 98%. Also, the community nursing services are an efficient mechanism and their operation has been improved owing to the implementation of the project for the rehabilitation of the community nursing system. In 2006, according to the number of realized “first visits”, 86.2% of the infants were covered with community nursing visitations.

Numerous strategic documents have been adopted so far and the Ministry of Health is planning additional programmes and projects. The implementation of the measures included in these documents will ensure complete achievement of the MDG 4.

Although a well developed healthcare statistics system is in place, particularly on morbidity and mortality, there are, however, problems that compromise the possibility for comprehensive and timely data provision: the outdated *Law on Healthcare Records*, along with the outdated medical documentation and records, prevent the collection of data and their desegregation (by ethnic background, quintile of affluence, education level).

#### 4.4 Recommendations

The progress towards MDG 4 can be maintained through continuous and full implementation of: the strategies, vertical programmes and the Programmatic Action Plan for 2005-2009 of the Macedonian Government and UNICEF; the two-year agreements between the Ministry of Health and the World Health Organisation; the Children’s Environmental Health Action Plan for Europe (CEHAPE); the grants from the HIV/AIDS, tuberculosis and malaria Global Funds; and the cooperation with the United Nations Population Fund (UNPFA), the World Bank and other international organisations. Furthermore, cooperation within the healthcare sector must be improved, particularly the cooperation between the various institutions at all levels, as well as with the other relevant sectors, both nationally and locally. A coordinated multi-sector approach needs to be adopted in order to further promote access to quality healthcare services and fair treatment regardless of gender, ethnic background, sexual orientation and social status, and the protection of human rights. In the light of this, education and social protection play an important role. Special attention should be paid to the most vulnerable groups, such as the Roma population, the poor and uninsured people<sup>52</sup>.

In order to further improve the health of all children in Macedonia, it is necessary to improve the accessibility, quality and efficiency of the healthcare services, particularly in public healthcare institutions where the accountability mechanisms are inappropriate, despite the existing laws. By strengthening the technical and management capacities of the Health Insurance Fund, it will be possible to ensure a fair provision of services to all, particularly to socially excluded children who are more exposed to risks and poor health, especially in the poorest families with many children, members of ethnic communities with little or no education and the lowest quintile of affluence.

Evidence based medicine<sup>53</sup>, continuous medical training and professional development of medical staff, as well as licensing and accreditation, along with a permanent improvement of the healthcare services are important factors supporting the achievement of the set targets in the healthcare sector, and particularly within this MDG.

Public healthcare measures need to be undertaken along with recommendations on diet, timely breastfeeding, early use of liquids and complementary diet, in-line with the WHO Global Strategy for Infant and Young Child Feeding. These activities will have an impact on the problem of undernourished children which, although not

<sup>52</sup> UNICEF, Strategic Directions in Health and Nutrition Aiming at Accelerating Achievement of MDG 4 and related objectives in the Countries of Central and Eastern Europe and the Commonwealth of Independent States, 2008

<sup>53</sup> WHO, Technical Updates of the Guidelines on Integrated management of Childhood Illness (IMCI), 2005

serious in Macedonia, may only be overcome by modifying the diet. The 2004-2008 National Action Plan on Diet needs to be updated in-line with the EU standards and recommendations on infant and young child feeding.

The data collection and analysis systems related to the status of children on both national and local levels, with a special emphasis on the use of the social inclusion indicators and the Leaken indicators, must be strengthened in order to provide a sound basis for effective policy making.

However, serious problems and possible obstacles to the achievement of the millennium development goals may arise from the lack of continuity in the activities after the life of the projects. Further activities should be focused on setting up adequate institutional frameworks, strengthening the institutional and human capacities and ensuring earmarked funds, as well as ensuring sustainability of activities.

Although a well developed healthcare statistics system is in place, there are, however, problems that compromise comprehensive and timely data collection. Therefore, in order to improve the quality of data, there is a need to:

- improve the registration and record keeping in order to ensure regular and complete records in healthcare institutions, particularly in the private ones;
- develop an integrated healthcare information system;
- strengthen the cooperation and coordination among healthcare institutions, on central and local level; and
- introduce sharing of individual primary information between the State Statistical Office and the Republic Institute for Health Protection.

Finally, it is necessary to remove the barriers to orderly and comprehensive recordkeeping in relation to all the MDG 4 indicators especially for the vulnerable groups, such as the Roma community.



1  
REDUCING POVERTY AND SOCIAL EXCLUSION

2  
ACHIEVE UNIVERSAL PRIMARY EDUCATION

3  
PROMOTE GENDER EQUALITY AND EMPOWER WOMEN

4  
REDUCE CHILD MORTALITY

5  
IMPROVE MATERNAL HEALTH

6  
COMBAT HIV/AIDS AND TUBERCULOSIS

7  
ENSURE ENVIRONMENTAL SUSTAINABILITY

8  
PARTNERSHIP FOR DEVELOPMENT

**MDG 5**  
IMPROVE MATERNAL HEALTH



## MILLENNIUM DEVELOPMENT GOAL 5: IMPROVE MATERNAL HEALTH

Target	Indicators
Reduce by three-quarters between 1990 and 2015 the maternal mortality ratio.	<ul style="list-style-type: none"> <li>• Maternal mortality ratio.</li> <li>• Proportion of births attended by skilled health personnel (doctors, nurses or midwives).</li> </ul>

### 5.1 Improving Maternal Health

Measuring maternal mortality is a complex process and still involves a high risk of under-registration on global, regional and national levels. Therefore, research and standardised methods have been developed to accurately assess the maternal mortality rate, rather than rely solely on the registration of maternal deaths from causes related to pregnancy and childbirth. According to the assessment of WHO, only 11-17% of the deaths of women attributed to maternal reasons occur at childbirth, whereas 50-70% of the deaths result from complications in the postpartum period. In order to obtain an objective picture of the situation concerning maternal mortality, both groups of causes of death need to be presented: (1) direct "obstetric causes" of death: obstetric complications during pregnancy, illegal and/or unsafe abortions, childbirth and the period covering the first 60 days after childbirth, interventions, negligence or inappropriate treatment; and (2) indirect obstetric causes of death: previous disease or disease developed during pregnancy, i.e. diseases not arising directly from obstetric reasons but deteriorating due to the physiological effects of pregnancy.

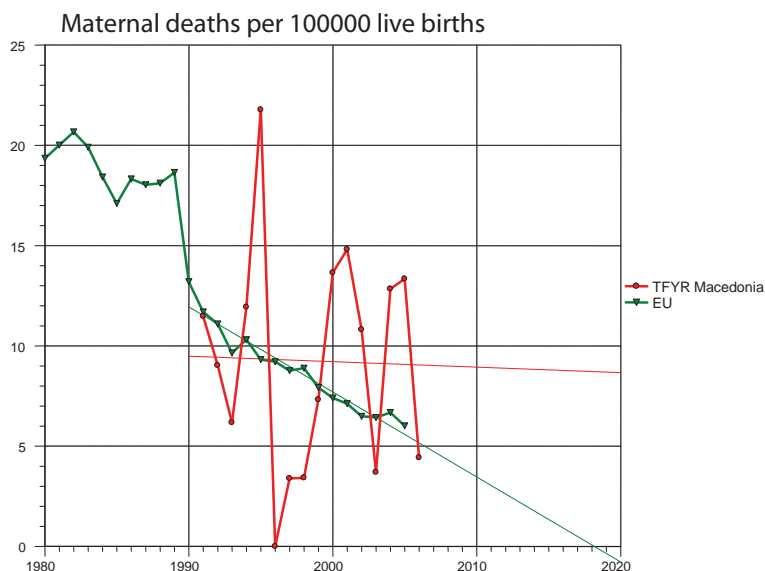
Both indicators suggest that there has been an improvement in maternal health owing to the appropriate healthcare and the implementation of the vertical preventive programmes.

The maternal death rate in Macedonia has been decreasing, from 11.5 per 100,000 live births in 1991 to 3.7 in 2003, and 4.4 in 2006, whereas in 2007 there were no cases reported. The maternal death rate in Macedonia in 2001 was higher than the EU average (which is 5.4) but similar to that in the other SEE countries (11-15 cases per 100,000 live births). In 2006, the maternal death rate in Macedonia was similar to that in the EU (Figure 5.1).

The downward trend of the maternal mortality rate between 1990 and 2007 is positively correlated with the upward trend of the ratio of births attended by skilled personnel (doctors, nurses or midwives). However, the annual fluctuations and the relatively small number of maternal deaths may result from incomprehensive and inappropriate reporting: citing other causes of death unrelated to childbirth; incomprehensive monitoring and reporting of maternal deaths occurring between seven and forty-two days after discharge from hospital, uninsured women who are unable to use the healthcare services/capacities, as well as from the outdated data on women delivering outside the health institutions or without professional assistance by skilled healthcare personnel.

Maternal mortality is directly correlated with the health condition and the quality of healthcare of women in the reproductive period. Additional factors could include the sexual and reproductive health conditions, the development of the healthcare systems, as well as the accessibility of healthcare services during pregnancy and childbirth.

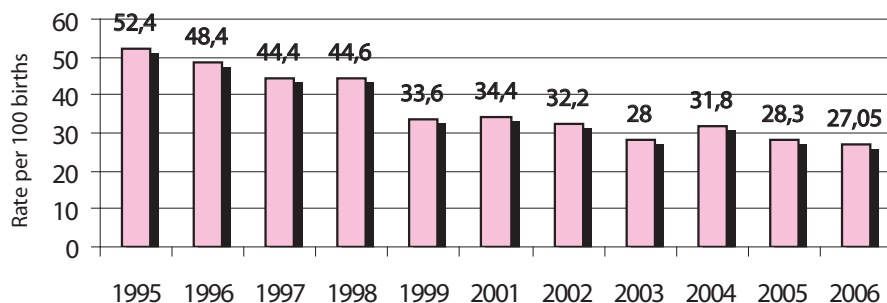
**Figure 5.1.: The Trend in the Maternal Death Rate in Macedonia and EU**



Source: WHO HFA database; Republic Institute for Health Protection

A complementary indicator pointing to maternal deaths from direct “obstetric causes” is the number of abortions. Abortion, as the least favourable family planning measure both from a medical and a social viewpoint, continues to have a prominent place in the regulation of fertility in Macedonia. The number of registered abortions has been decreasing steadily (Figure 5.2) from 52 per 100 births in 1995 to 27.05 in 2006, which unfortunately is mostly resulting from under-registration of abortions. Despite the suspected under-registration of abortions, the rate is considerably higher than the rates in the EU countries.

**Figure 5.2.: Abortion Rate per 100 Births Between 1995 and 2006**



Source: Republic Institute for Health Protection - Skopje

The proportion of births attended by skilled medical personnel is generally high, having increased from 89.9% in 1990 to 99% in 2004 and 99.6% in 2007 (Figure 5.3), which is particularly important for keeping maternal mortality rates low. The healthcare services related to pregnancy and childbirth cover the majority of the population. Only women residing in isolated villages may not have access to these services, particularly in winter<sup>54</sup>.

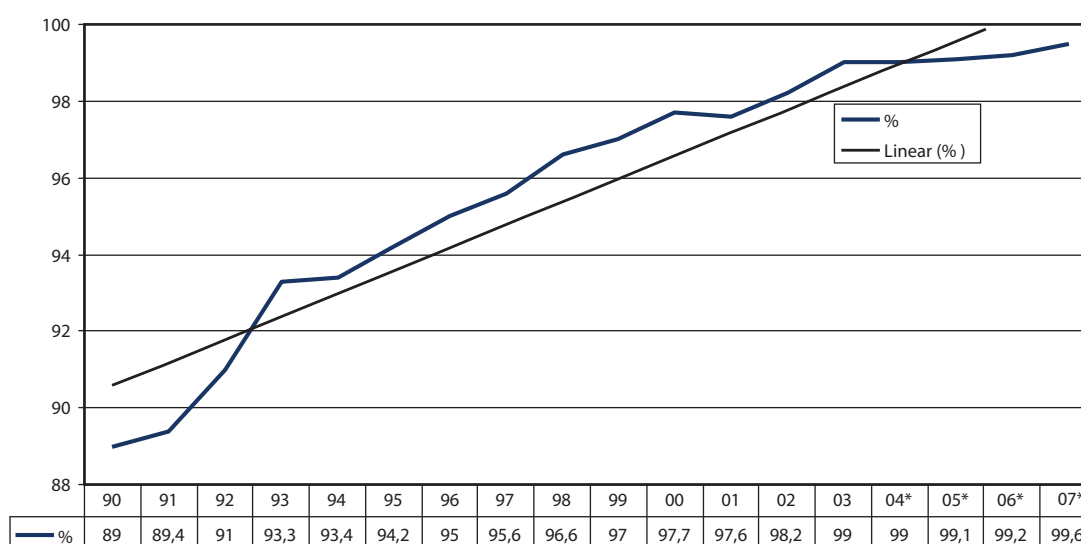
The quality of the services in neonatal healthcare has improved as a result of the joint activities of the Perinatal Healthcare Project (The Ministry of Health and the World Bank) and the Baby-friendly Hospitals Initiative (UNICEF). However, the quality of services in the antenatal care and at childbirth has been poor. The women’s right to privacy, respect and social support should be respected.

<sup>54</sup> On the way to Europe: The contribution of the non-governmental sector in development of social inclusion policies in Macedonia, Ministry of Labour and Social Policy, Skopje, 2008

There is insufficient awareness among mothers about the need to use healthcare services. This indicates that there is a need to inform and launch promotional healthcare services to pregnant women and mothers, particularly in rural and poor urban environments. These communities struggle with other obstacles, such as unsatisfactory sanitary conditions, widespread poverty, low education levels of the population and conservative attitudes, which need to be addressed in order to further reduce maternal mortality<sup>55</sup>.

In terms of ethnic background, mothers from the Roma community are often not covered by health insurance and cannot afford to co-fund or pay for the informal costs of regular antenatal examinations, childbirth or postnatal visits even in the healthcare services that are free and subsidised under the vertical preventive programmes<sup>56</sup>.

**Figure 5.3.: Percentage of Births Attended by Qualified Medical Personnel (1990-2007)**



Source: State Statistical Office

## 5.2 Conclusions

The maternal death rate has been decreasing and in 2007 there were no cases of maternal death reported. The annual fluctuations and the relatively small number of maternal deaths may arise from incomprehensive and inappropriate reporting.

Promoting the health of women, mothers and children is a high strategic priority of the Government of the Republic of Macedonia as a signatory to many international instruments: the Universal Declaration of Human Rights, the Convention on the Elimination of All Forms of Discrimination Against Women, the European Social Charter, the European Charter of Patient's Rights, the Convention on the Rights of the Child, etc.

An additional factor contributing to promotion of sexual and reproductive health in Macedonia are the vertical preventive programmes adopted in accordance with the *Law on Health Care*. Each year the Government funds about fifteen preventive programmes and the increase in the volume of funds to support these programmes suggests that there is awareness about the need to promote reproductive health.

<sup>55</sup> Health Condition, health Protection and Impacts on Health in Roma People in Macedonia, Association for Emancipation, Solidarity and Equality of Women in RM, ESE, 2008

<sup>56</sup> On the way to Europe: The contribution of the non-governmental sector in development of social inclusion policies in Macedonia, Ministry of Labour and Social Policy, Skopje, 2008

The Health Sector Management Project, financially supported by the World Bank with a 10 million US dollars loan was launched in 2005. The objective of the project is to improve the basic healthcare services, primarily those related to health care for children and women.

A number of inter-sectoral and multidisciplinary strategies and action plans have been developed, as well as other documents of the Government of relevance to sexual and reproductive health.

Finally, the National Healthcare Action Plan which was designed to support the implementation of the Millennium Development Goals and the Decade of Roma Inclusion 2005-2015, was adjusted to the local healthcare needs of the Roma population. The following measures have been planned: positive discrimination measures for Roma, vertical preventive programmes, special preventive programmes for the Roma (healthy lifestyle, reproductive health, safe pregnancy, and immunization), health promotion, improving primary healthcare for the Roma, inclusion of the Roma in the healthcare policy. All these will help to improve the health of the Roma population, particularly the children, youth and women and to increase the quality and quantity of the healthcare services, and bring more benefits from health insurance.

### 5.3 Recommendations

A precondition for achieving MDG 5 is to adopt a *Strategy on Sexual and Reproductive Health* in order to supplement the existing policies, vertical programmes and strategies. This Strategy should be based on an interdisciplinary and inter-sectoral approach in implementation of the activities, particularly in the public healthcare activities aimed at promoting sexual and healthcare rights and raising public awareness, especially in the poverty-stricken strata and vulnerable groups. Moreover, it should include programmes for protection of women against all kinds of violence.

Safe motherhood and perinatal healthcare are Government priorities. In order to ensure implementation, a National Committee on Safe Motherhood has been established. The set of services for safe motherhood should cover the following elements: antenatal healthcare and counselling throughout pregnancy, access for all women to high quality obstetric care at childbirth, high quality postpartum care, family planning, promoting adolescent reproductive health, social mobilisation of the local community to promote women's reproductive health.





**MDG 6**  
COMBAT HIV/AIDS AND  
TUBERCULOSIS



## MILLENNIUM DEVELOPMENT GOAL 6: COMBAT HIV/AIDS AND TUBERCULOSIS

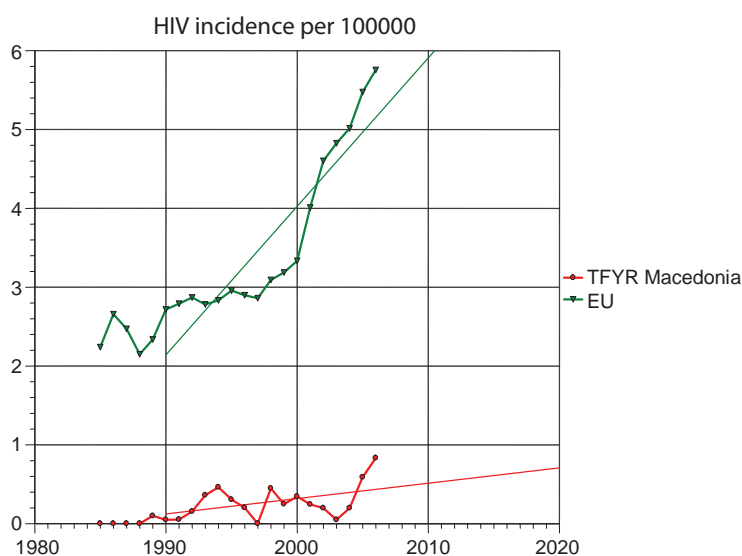
Targets	Indicators
1. Have halted by 2015 and begun to reverse the spread of HIV/AIDS.	<ul style="list-style-type: none"> <li>HIV/AIDS incidence rate.</li> <li>Number of voluntary confidential consulting and testing for HIV/AIDS.</li> <li>Proportion of population aged 15-24 years with comprehensive correct knowledge of HIV/AIDS.</li> </ul>
2. Achieve, by 2010, universal access to treatment for HIV/AIDS for all those who need it.	<ul style="list-style-type: none"> <li>Proportion of population with advanced HIV infection with access to antiretroviral drugs.</li> </ul>
3. Have halved by 2015 and begun reverse the incidence of tuberculosis and other major diseases.	<ul style="list-style-type: none"> <li>Prevalence and death rates associated with tuberculosis.</li> <li>Proportion of TB cases detected and cured under DOTS (Directly Observed Treatment Short Course).</li> <li>Number of cases with multi-resistant forms of TB.</li> </ul>
4. Maintain the status of malaria eradication.	<ul style="list-style-type: none"> <li>Prevalence and death rates associated with imported cases of malaria.</li> <li>Proportion of groups exposed to the risk of contracting malaria using preventive means and treatment.</li> </ul>

### 6.1. Status and Trends on HIV/AIDS

By 2005, the surveillance system for HIV/AIDS incidence and prevalence, was based on the HIV case reporting from regular clinical blood analyses and mandatory testing of donated blood units, tissue and organs<sup>57</sup>, as well as upon epidemiologic indications and voluntary and confidential HIV testing. This system demonstrated certain weaknesses in terms of reaching the most-at-risk populations and a lack of routine and systematic testing for HIV/AIDS. However, within the second-generation surveillance on HIV, for the first time in 2005 behavioural and biological studies have been initiated among the most-at-risk populations (including injecting drug users, men who have sex with men, sex workers and prisoners) and then again in 2006 and 2007.

Compared to other states in the region and Europe, Macedonia is still amongst the countries with the lowest incidence rate of AIDS – with 0.29 registered cases per 100,000 compared to the EU average of 1.37 in 2006. There is an increasing trend of HIV incidence ranging from 0.05 in 2003 to 0.83 in 2006, i.e. an oscillating positive development tendency between 1987 and 2007 with peaks in 1994, 1998 and 2006.

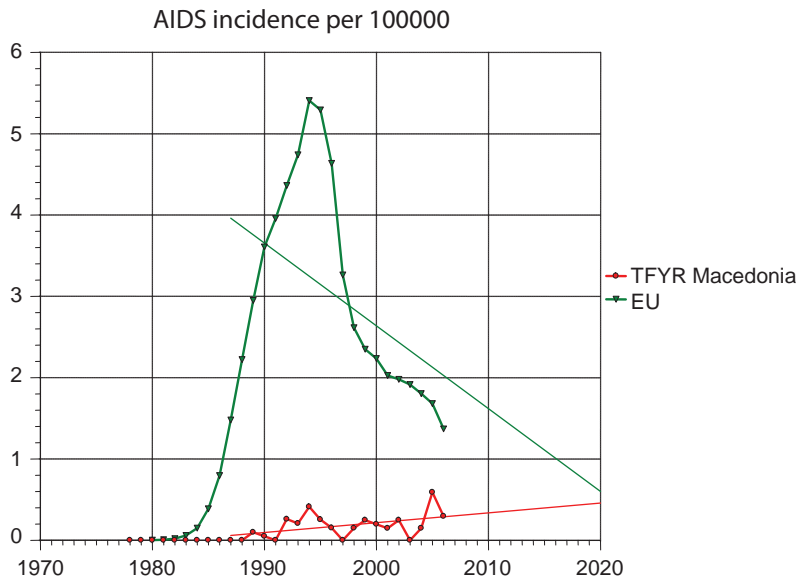
**Figure 6.1.: HIV Incidence Rate in Macedonia and Europe (1980 – 2020) – Trend and Projection**



Source: WHO HFA data base; Republic Institute for Health Protection

<sup>57</sup> Kuzmanovska, G., Kendrovski, V., Tozija, G., Report on the Bio-Behavioral Study in Youth and Most at Risk Populations from HIV Infections in Macedonia in 2006., Skopje, Ministry of Health, 2008

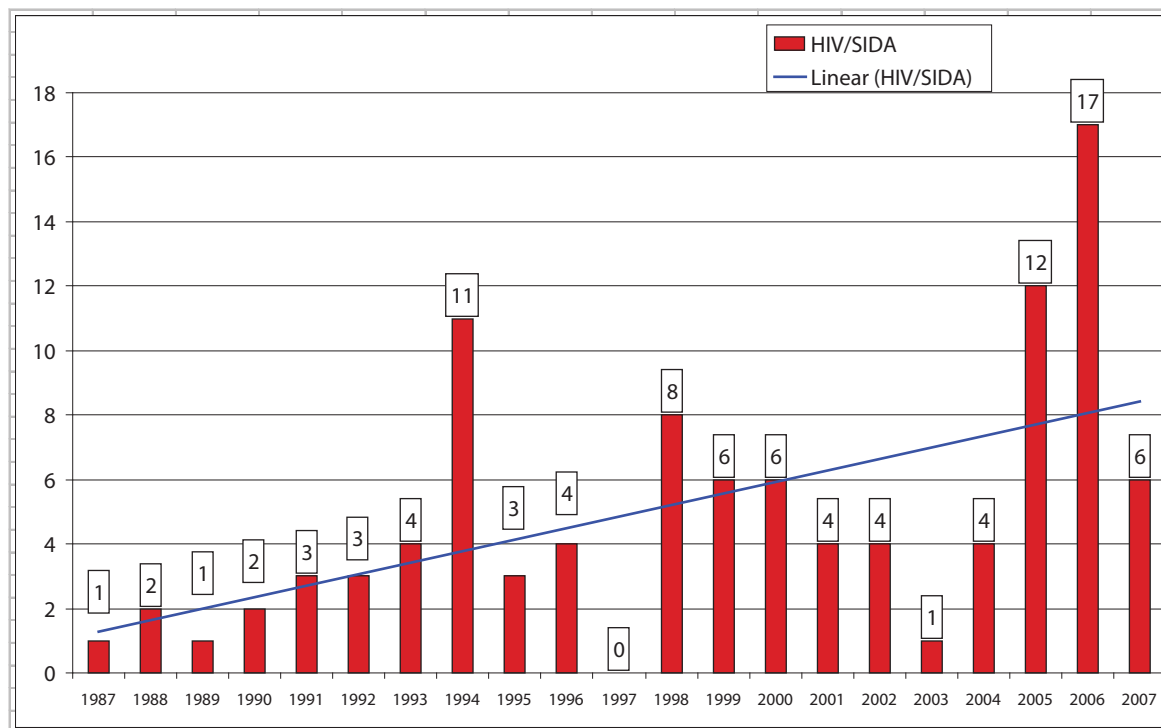
**Figure 6.2.: AIDS Incidence Rate in Macedonia and EU (1980-2020) – Trend and Projection**



Source: WHO HFA data base; Republic Institute for Health Protection

According to official data, by December 2008 the total number of registered HIV/AIDS cases in Macedonia was 112 (93 AIDS cases and 10 HIV cases). Most of these cases were reported in the late phase of the HIV infection or when the patient had already developed AIDS. Out of 93 AIDS patients, 60 died.

**Figure 6.3.: Total Registered Number of HIV/AIDS (102) in Macedonia (1987 – 2007)**

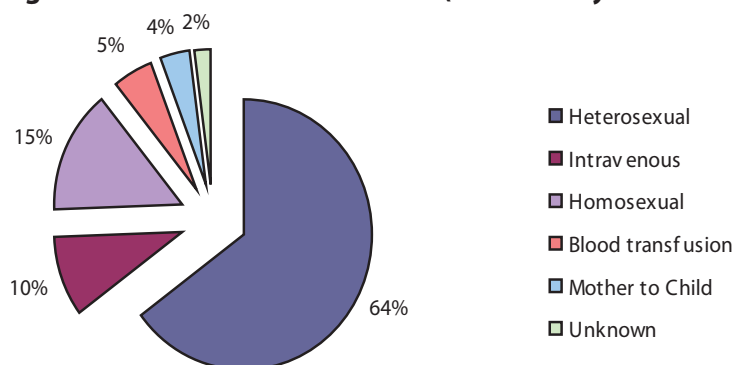


Source: Republic Institute for Health Protection

The predominant mode of transmission is heterosexual with 64%, then homosexual with 15%, intravenous drug use with 10%, through blood transfusion 5% mother-to-child 4% and 2% unknown. The ratio of men to women infected with HIV is 2 to 1 and the predominant age group is 30-39, followed by the group aged 20-29. In terms of ethnic structure, HIV/AIDS cases are predominantly Macedonians, Albanians and Roma<sup>58</sup>.

<sup>58</sup> Tozija, F., and associates, The Health Condition of the Population in Macedonia, Skopje, Republic Health Protection Institute, 2008

**Figure 6.4.: Mode of Transmission (total 102 by end of 2007)**



Source: Republic Institute for Health Protection

Irrespective of their ethnic background, due to various reasons, including culture, religious or social traditions, people are still reluctant to speak openly about their sexual behaviour. For this reason and having mind the ratio of 2:1 men to women, it seems that in some cases the homosexual mode of transmission was actually reported as heterosexual. Two-thirds of registered cases are from urban areas, while one-third is from rural areas.

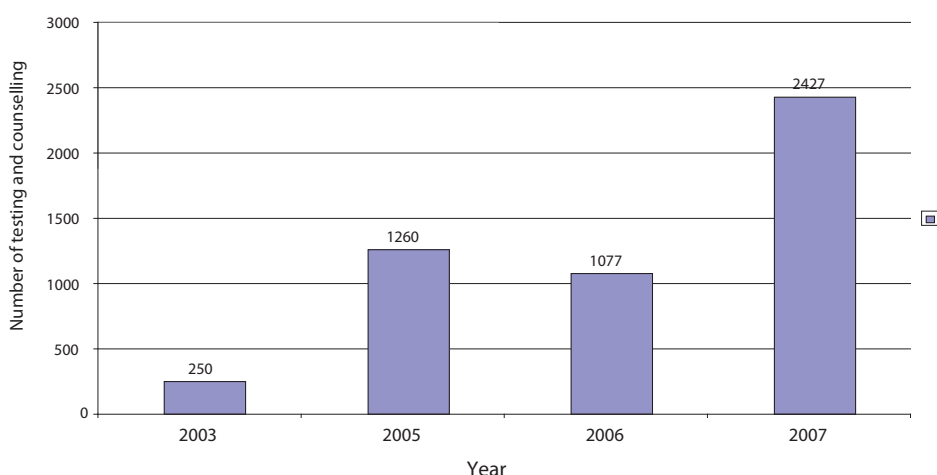
Antiretroviral treatment following the National protocol on ARV treatment and care was initiated for the first time in 2005. The cumulative number of patients receiving antiretroviral therapy (ART) by the end of 2007 was twenty. All patients with advanced HIV infection had access to ARV treatment. The treatment is provided centrally at the Clinic for Infectious Diseases (CID) in the capital city.

## 6.2. Voluntary Counselling and Testing (VCT) for HIV/AIDS

The number of all HIV tests (passive HIV case reporting) performed in the health institutions has increased from 146 in 1986 to 10,574 in 2007, with a peak of 12,514 tests in 1999.

Until 2003, there were only three services in the capital city offering Voluntary Counselling and Testing for HIV/AIDS. Since 2005, new VCT services have been established in all ten regional Public Health Institutes. In 2007, an outreach VCT mobile unit was established, offering services to most-at-risk and hard to reach populations. For this reason, the number of VCT services has increased from only 250 in 2003 to 1,260 in 2005 and 2,427 in 2007. Thus, the increased number of HIV reported cases could be partially due to greater availability of the VCT services in the country.

**Figure 6.5: Number of Voluntary Counselling and Testing for HIV/AIDS**



Source: Republic Institute for Health Protection and HIV Programme supported by Global Fund for AIDS, tuberculosis and malaria

### 6.3. HIV/AIDS and the Youth

Within the second generation surveillance of HIV/AIDS behavioural studies were carried out in 2005, 2006 and 2007. The overall results from these studies showed the need to focus interventions on the groups of population that practice multiple high-risk behaviour and have a poor knowledge on HIV/AIDS. Those are injecting drug users (IDU), men who have sex with men (MSM), sex workers (SW), and prisoners irrespective of their age, gender, religious or ethnic background<sup>59</sup>. In line with the UNAIDS recommendations IDUs, MSM, SW and prisoners deserve special attention due to the associated degree of stigmatisation and discrimination, which is a specific challenge in the provision of healthcare and social services.

The results from the studies conducted among young people both in 2005 and 2007 showed that only 22% of young people aged 15-24 correctly identified ways of HIV transmission and were able to correctly reject three misconceptions on HIV transmission<sup>60</sup>. These data indicate that the scope and the quality of the peer education activities in and out of schools have not been sufficient to influence the improvement of knowledge among the youth. In addition, it could be expected that the period of less than 2 years between the two studies is not sufficient to contribute to a major increase of knowledge among the general youth population.

With regards to positive behaviour change, there has been a very slight decrease from 5.76% in 2005 to 4.91% in 2007 among young people age 15-24 that have had sexual intercourse before the age of 15<sup>61</sup>. There is a significant difference in the percentage between the sexes with high proportion among male (8.29%) then female (1.35%) who have had sexual intercourse before the age of 15. The global survey of adolescent health revealed that 8.9% of the adolescents aged 13-15 had had sexual intercourse, and that 80% were using condoms<sup>62</sup>.

The use of condoms is much less widespread among adolescents and young people from the poorest strata. HIV/AIDS awareness is the lowest among young women from the poorest families, with direct correlations between the level and nature of their awareness and their affluence and education level. The multi-indicator survey suggests that 56% of the Roma and Albanians surveyed had heard about AIDS, a percentage much smaller than that of the Macedonians (94%).

### 6.4. Tuberculosis - Status and Trends

There has been a positive development towards the achievement of this goal by 2015. The prevalence of tuberculosis in Macedonia has been halved from 81/100,000 in 1990 to 45/100,000, while the incidence rate from 35.4/100,000 in 1990 to 27.5/100,000 in 2007 (Figure 6.6). The incidence rate has been oscillating between 27 and 40 per 100,000 in the period 1990 – 2007. In comparative perspective, the incidence rate in Macedonia has been higher than the EU average but lower than that in the countries from the Central and East Europe and similar to that in the neighbouring countries<sup>63</sup>.

Prevalence of tuberculosis in Macedonia had a mild downward trend between 2003 and 2007 from 48.7 to 45.1, with a higher rate in the western part of the country (Gostivar, Tetovo, Ohrid and Skopje). The mortality rate decreased gradually from 4.9/100,000 in 1990 to 3.8 in 2003 and 2.7 in 2007 but it remains twice as high as the EU rate of 1.2 in 2005.

<sup>59</sup> Report on the Monitoring of HIV Prevalence and at Risk Behavior among Special Interest Groups in Macedonia, Skopje, Ministry of Health, 2007; Kuzmanovska, G., Kendrovski, V., Tozija, G., Report on the Bio-Behavioral Study in Youth and Most at Risk Populations from HIV Infections in Macedonia in 2006., Skopje, Ministry of Health, 2007; Kuzmanovska, G., Kendrovski, V., Tozija, G., Report on the Bio-Behavioral Study in Youth and Most at Risk Populations from HIV Infections in Macedonia in 2007., Skopje, Ministry of Health, 2008

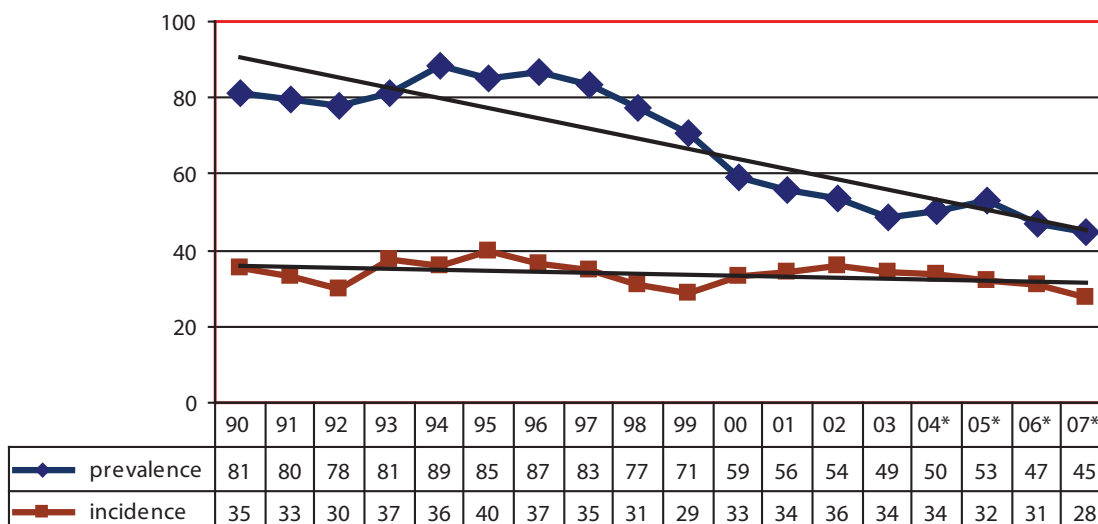
<sup>60</sup> 2008 UNGASS Report on Declaration on Commitments to HIV/AIDS- UNGASS indicator number 13

<sup>61</sup> 2008 UNGASS Report on Declaration on Commitments to HIV/AIDS- UNGASS indicator number 15

<sup>62</sup> Tozija F., Gjorgjev D. Kosevska E. Kendrovski, V., Kasapinov B. Global Health School Based Survey., Republic Institute for Health Protection.2008

<sup>63</sup> Tozija, F., and associates, The Health Condition of the Population in Macedonia, Skopje, Republic Health Protection Institute, 2008

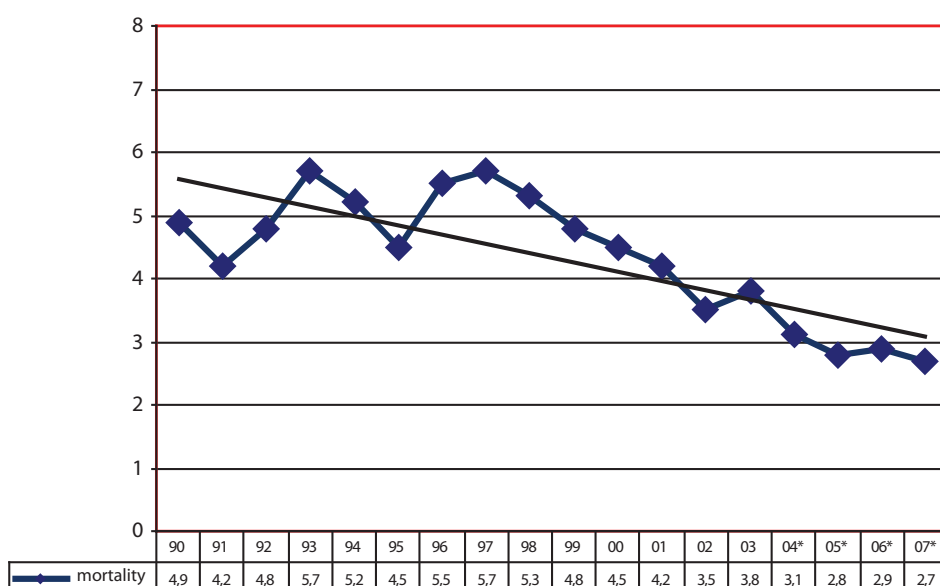
**Figure 6.6.: Tuberculosis Incidence and Prevalence Trends in Macedonia (1990 - 2007)**



Source: Republic Institute for Health Protection

Respiratory tuberculosis is still dominant, with the mortality rate being higher among men 3.6/100,000, than in women 1.6/100,000 and is most frequent in persons aged over 65. Tuberculosis mortality rate is decreasing (Figure 6.7). Still, tuberculosis is the leading cause of death from infectious diseases among women. Women contract tuberculosis mainly in their economically and reproductively active years, whereby the disease has a strong effect on their children and families. Further research is necessary regarding the socio-economic and cultural factors related to gender inequality and ethnic background.

**Figure 6.7.: Tuberculosis Mortality Trend in Macedonia (1990 - 2007)**



The DOTS programme is implemented on the entire territory while the Directly observed treatment – percentage of cases detected and treated under the DOTS programme, according to the Lung Diseases and Tuberculosis Institute, has been as follows: 50.1% in 2005, 56.6 in 2006 and 56.4 in 2007. The number of cases with multi-drug-resistant forms of tuberculosis increased from four in 2005, six in 2006 to nine in 2007.

The progress in reducing the incidence, prevalence and mortality rates owes to the implementation of the national Preventive Programme for Tuberculosis, the vertical immunisation programmes, programmes for addressing brucellosis and healthcare for uninsured people, as well as in the national

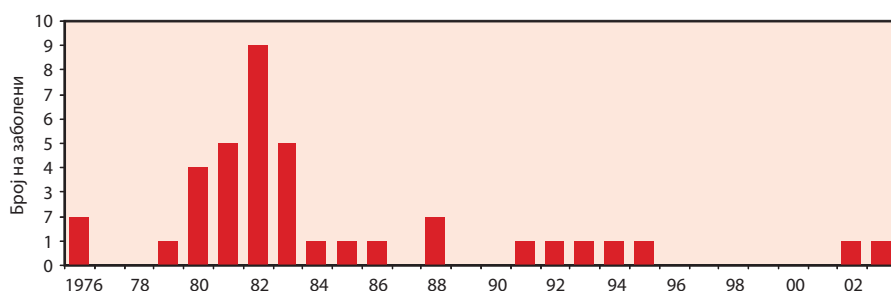
Strategy for Tuberculosis Control and Prevention - DOTS and the Strategy for Tuberculosis Control in the Republic of Macedonia 2008-2012. A Programme for Protection against Stigmatisation, Discrimination and Violation of the Human Rights of people living with Tuberculosis 2008-2012 is being developed.

The Ministry of Health and the Republic Institute for Health Protection, with the support of the WHO, have established a system for early reporting, warning and response to infectious diseases, which has significantly improved reporting on infectious diseases including tuberculosis and has contributed to their eradication.

### 6.5 Malaria - Status and Trends

Malaria was declared eradicated in Macedonia in 1972. The last case of malaria in Macedonia was reported in 1963. Since 1973, only imported cases of malaria have been reported totalling to 38 cases by the end of 2003, three of which were lethal (Figure 6.8).

**Figure 6.8.: Number of Malaria Cases (Imported) in Macedonia (1976 – 2003)**



Source: Republic Institute for Health Protection

Most of the reported cases of malaria have been imported from African countries. For each case an epidemiological survey is carried out which includes country of origin, clinical picture and examination material for parasitological diagnosis. Persons travelling to countries with endemic malaria are protected with appropriate drugs before their departure, during their residence and after their return.

The microbiology laboratory in the Republic Institute for Health Protection is permanently prepared to diagnose malaria. Between five and ten cases of Laishmania (skin form) are reported in Macedonia annually and all have been confirmed in laboratory analyses. No cases of haemorrhagic fever have been reported in recent years; tularaemia was last reported of, and in epidemic form, in 1996, with a total of thirty-seven cases.

The policy of Macedonia concerning this goal is to undertake all preventive measures to maintain the status of malaria eradication, particularly in the light of global climate change and global warming.

### 6.6 Conclusions

Although Macedonia is among the countries with the lowest incidence rate of HIV/AIDS, by signing the UNGASS Declaration of Commitment on HIV/AIDS in 2001, the Government has committed to a multi-sectorial national response to fight HIV/AIDS.

Significant progress has been achieved in the implementation of this MDG through successful implementation of the *National HIV/AIDS Strategy 2003-2006*, financially supported by the first HIV Global Fund Grant to fight AIDS, TB and Malaria (GFATM). The key achievements of the *National Strategy 2003-2006* were: (i) scaling up and establishing new Harm Reduction programmes for needle exchange, drug substitution treatment, voluntary counselling and testing services, taking special account of the accessibility of these services and their quality; (ii) behavioural and biological surveys of most-at-risk vulnerable populations (iii) introduction of antiretroviral therapy for persons living with HIV etc.



Since 2003 considerable progress has been made in implementation of the UNAIDS *Three Ones* principle, including establishment of *one* national HIV/AIDS Action Framework, *one* National HIV/AIDS Coordinating body and *one* Nationally agreed Monitoring and Evaluation system.

The Joint United Nations program on HIV/AIDS has greatly contributed to the strengthening of the national HIV/AIDS capacities as well as to building the partnership between the government and the civil society, academic institutions, media and other stakeholders.

There has been a positive development towards combating tuberculosis with significant drop between 1990 and 2007. The prevalence rate of tuberculosis has mildly decreased between 2003 and 2007, whereas the mortality rate is slowly declining. Still, the incidence rate in Macedonia is twice as high as the EU average (1:2 in 2005).

There are certain problems concerning the presentation of the tuberculosis mortality rate owing to the differing methodology used by the two referential institutions: the State Statistical Office (based on medical reports on the causes of death – LIPS) and the Lung Diseases and Tuberculosis Institute, in line with its obligation to report tuberculosis related deaths to EURO TB and ECDC (deaths as TB treatment outcome within 12-15 months after the beginning of treatment), i.e. reporting deceased patients treated for TBC by the end of the relevant year. The number of deaths from tuberculosis presented according to the LIPS data of the State Statistical Office is higher than the number of deaths reported by the Lung Diseases and Tuberculosis Institute because it comprises all deaths from this disease rather than only the deceased patients treated and registered in the healthcare organisations, suggesting that the number is not insignificant.

Malaria was declared eradicated in Macedonia in 1972. The last case of malaria in Macedonia was reported in 1963. Since 1973, only imported cases of malaria have been reported.

## 6.7 Recommendations

Achievement of the MDG 6 related to combating HIV/AIDS will depend on the successful implementation of the new *National AIDS Strategy 2007-2012*, with the objective to maintain the low prevalence of the HIV infection in Macedonia by ensuring long-term sustainability of the activities focusing on five areas of strategic action: 1) Prevention among most-at-risk population; 2) Other preventive strategies/activities; 3) Provision of treatment, care and support for people living with HIV; 4) Improve collection and use of strategic information; and 5) Coordination and capacity building.

An important component in the overall national response to the HIV/AIDS epidemic is the functioning of the National Multisectoral HIV/AIDS Committee (established in 2003) that brings the government sectors and the civil society closer. However, additional efforts and work is needed to ensure stronger involvement of people living with HIV/AIDS in the decision making, planning and overall implementation of the national response.

The following challenges and recommendations have been identified:

- To strengthen the institutional capacity for continuous and multi-sectoral coordination at the national level;
- To strengthen the capacity and encourage participation of local authorities in planning, implementing and monitoring of the response to the HIV infection;
- To establish sustainable Governmental instruments for financing of the national HIV response in the future;
- To improve the utilization of protocols and manuals in the HIV/AIDS programmes.

Promoting the prevention of tuberculosis and its treatment require a comprehensive implementation of the *National Preventive Programme for Tuberculosis Control* and the *National Strategy for Tuberculosis Control 2007-*

2011, in line with the recommendations of WHO. Emphasis needs to be placed on the strengthening of the network of national healthcare institutions for tuberculosis monitoring and treatment throughout the country by applying the recommendations of the WHO in all the local communities, based on the DOTS strategy. This also requires a well organised primary healthcare; microscopic detection by examination of sputum smears in suspected TB cases identified in the healthcare institutions; standardised short-term chemotherapy in all cases tested positive for TB following sputum smear examination and conditions for therapy administration; regular uninterrupted supply of all the basic tuberculostatics; system for monitoring the surveillance and evaluation of the programme; specialised services to reach emigrants and displaced persons, poor persons, people with HIV infection and other high risk groups.



**MDG 7**  
ENSURE ENVIRONMENTAL  
SUSTAINABILITY



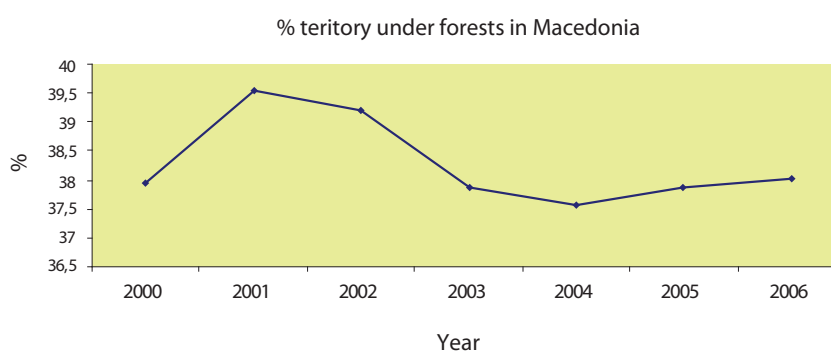
## MILLENNIUM DEVELOPMENT GOAL 7: ENSURE ENVIRONMENTAL SUSTAINABILITY

Targets	Indicators
1. Integrate the principles of sustainable development into national policies and programmes and reverse the losses of environmental resources.	<ul style="list-style-type: none"> <li>• Percentage of territory under forests.</li> <li>• Percentage of protected territory for maintaining biodiversity.</li> <li>• Final energy consumption per \$GDP (PPP).</li> <li>• Emissions of CO<sub>2</sub> ton/per capita and consumption of substances damaging the ozone layer - ODS (ODP tons).</li> <li>• Percentage of population using solid fuels.</li> </ul>
2. Halve by 2015 the proportion of people without sustainable access to safe drinking water and basic sanitation.	<ul style="list-style-type: none"> <li>• Percentage of population (urban and rural) with sustainable access to sanitary improved water sources.</li> <li>• Percentage of population (urban and rural) with access to improved sanitation.</li> </ul>
3. Have achieved by the year 2020 significant improvements in the lives of people in terms of safety of their dwellings.	<ul style="list-style-type: none"> <li>• Percentage of population with access to secure tenure.</li> </ul>

### 7.1 Resources in the Environment

Forests in the Republic of Macedonia are characterised by rich biodiversity. About 38% of the territory in Macedonia is under forests (959,259 ha in 2006), about 910,000 ha of which have been classified as productive, while the rest of the forests are in protected areas, such as national parks, which further reinforces the importance of forests (Figure 7.1).

**Figure 7.1.: Changes in the Proportion of Territory Under Forests in Macedonia (2000-2006)**



Most of the total territory under forests belongs to deciduous plantations with 58.1% (no change observed between 2000 and 2005), while the territory under coniferous plantations has been increasing, amounting to 8.8% in 2005. Macedonia is poor in quality forests, illustrated by the fact that about 70% of its productive forests are low-stemmed (90% oak and beech tree), while forests with tall-stemmed trees account for the remaining 30%, of which 90% are broadleaf, while the remaining are evergreen and mixed plantations.

Forestry in Macedonia is an economic branch participating with 0.3-0.5% in the GDP. However, if its general utility functions are valorised, its contribution becomes much higher. Firewood accounts for 80-85% of the wood consumed for forest products.

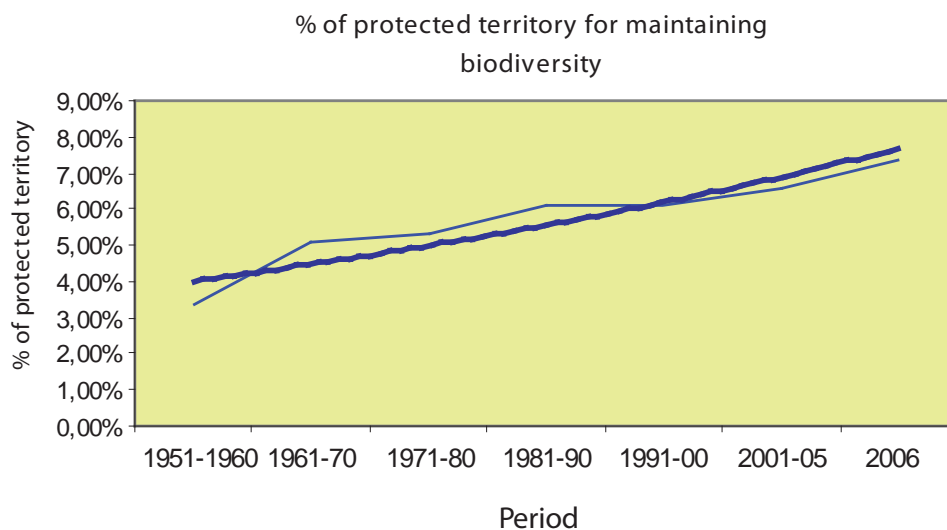
The main threats and problems in forest management are: extensive illegal logging; other illegal activities, forest fires that have consumed approximately 100,000 ha over the past ten years; climate change resulting in a forest drying process; as well as pests and diseases. All this leads to vast economic and environmental losses in the sector.

With a view to ensuring the extension of territories under forests, improving the quality and protection of the forestry fund based on management according to the sustainability principles, the Ministry of Agriculture, Forestry and Water Economy developed an Action Plan in 2006, and the Government adopted a Sustainable Development Strategy for a period of twenty years, harmonised with the Spatial Plan of Macedonia. It is anticipated that the implementation of the measures proposed in the Strategy will provide a modest upward trend in increasing the territory under forests during the forthcoming period.

According to the biodiversity analyses (heterogeneous and high degree of relictness and endemism) in Europe, Macedonia ranks at the very top of the list. This arises from its specific geographic position, climate, geo-morphological and pedological characteristics. The wealth of biodiversity can be illustrated with the exceptionally numerous plant and animal species (over 16,000) and fungi species 850 of which are endemic, while the varied ecosystems are home to more than 260 plant communities.

Starting from 1948, with the designation of the first National Park "Pelister", the total territory of various categories of protected areas has been increasing steadily and in 2006 it reached 1887.34 km<sup>2</sup>. Figure 7.2 shows the change in the proportion of the cumulative territory of protected areas.

**Figure 7.2.: Change in the Proportion of Cumulative Territory of Protected Areas**



The total number of protected areas in 2007 was seventy-four (and still rising), three of which are national parks, with a share of 58% in the cumulative territory of protected area, four have been declared strict natural reservations, three are areas with special natural characteristics, fourteen are areas outside natural reservations accommodating specific plant and animal life and fifty are natural monuments with a share of 33% in the cumulative area.

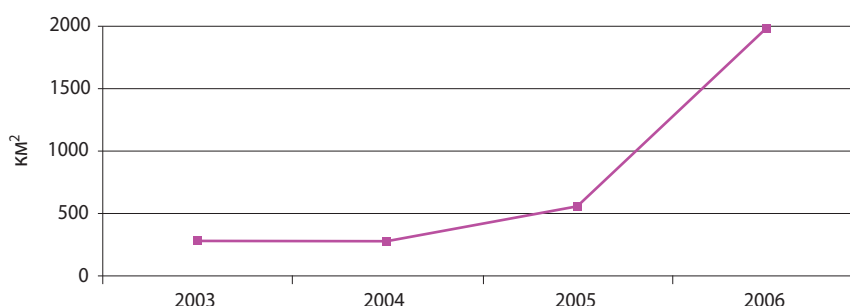
In 2002, Macedonia started the process of establishing the Emerald Network of Areas of Special Conservation Interest (ASCI) (according to the Berne Convention). Between 2002 and 2003 three ASCI areas were identified and proposed, which constituted 10% of the total national Emerald network. The number rose to sixteen in 2006 and amounted to 80% of the total Emerald Network (Table 7.1).

**Table 7.1.: Change of the Number and Area of Protected Territories of Special Conservation Interest**

	2003	2004	2005	2006
No. of territories	3	3	6	16
Area (km <sup>2</sup> )	275.83	275.83	559.38	1,981.45

The area of protected territories of special conservation interest has increased in recent years from about 300km<sup>2</sup> to 2000 km<sup>2</sup> in 2006 (Figure 7.3).

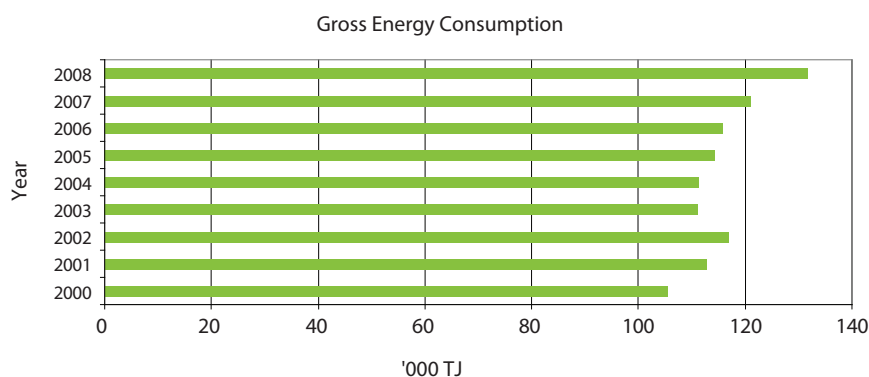
**Figure 7.3: Change of the Cumulative Territory of the National Emerald Network**



Ensuring growth of the protected areas will only be possible if the existing protected territories are re-assessed and categorised by accurately defining their boundaries and area, as well as through drawing digital boundaries, valorising and declaring new protected areas and designating new areas in the national Emerald Network. The *Biodiversity Study* recommends incorporating additional thirty-nine natural areas in the system of protected territories, in particular: two national parks, nine strict natural reservations, fourteen scientific research reservations and fourteen locations of special natural character. Additionally, it is very important to promote the management of the existing systems of protected areas.

The gross energy consumption has shown a steady growth over the recent years (ranging from 106,000 TJ in 2000 to 121,070 TJ in 2007) as a result of the fact that a number of mines and heavy industry production plants have resumed operations and of the increased consumption of households (Figure 7.4). Macedonia accommodates about 60% of these energy needs using its own resources and about 40% through imports.

**Figure 7.4: Gross Energy Consumption (2000-2007)**



The total final energy consumption includes end-users energy consumption (industry, agriculture, transport, households and other sector) excluding the amount of energy needed to transform the primary energy sources. The country's sustainable development requires more than merely analysing the final energy consumption throughout the years; rather, it requires analysing the share of each sector in the distribution of the final consumption, as well as the share of each energy product in the final energy consumption. The overall final consumption between 2000 and 2004 ranges from 1,423 ktoe to 1,606 ktoe. The share of the industry sector is the largest and ranges from 33.3% in 2000 to 29% in 2004 due to problems in the economy. However, consumption is expected to grow once the heavy alloy industry and a number of mines resume their operations, as these are energy-intensive industries. Households have had a steady share of about 30.3%, whereas agriculture has mildly increased its share from 3.5% to 3.9%. The largest share in final energy consumption belongs to oil (42%) and electricity (31%), while natural gas has the smallest share of about 2%.

The total energy intensiveness and the energy consumption in relation to GDP have been calculated by the State Statistical Office (Tables 7.2 and 7.3).

**Table 7.2.: Total Energy Intensiveness**

	1995	2000	2002
<b>GDP (in 000 MEuro '00)</b>	2.901	3.249	3.052
<b>Industry (added value)</b>	0.942	1.095	0.921
<b>Transport (GDP)</b>	0.205	0.350	0.317
<b>Households</b>	0.000	0.000	0.000
<b>Agriculture</b>	1.754	1.804	1.814

**Table 7.3.: Energy Intensiveness Indicators (1995=100)**

	1995	2000	2002
<b>Industry (energy per added value)</b>	100.0	84.8	82.6
<b>Transport (Energy per GDP)</b>	100.0	56.1	63.2
<b>Households</b>	100.0	0.0	0.0
<b>Agriculture + services (energy per added value)</b>	100.0	101.2	237.8

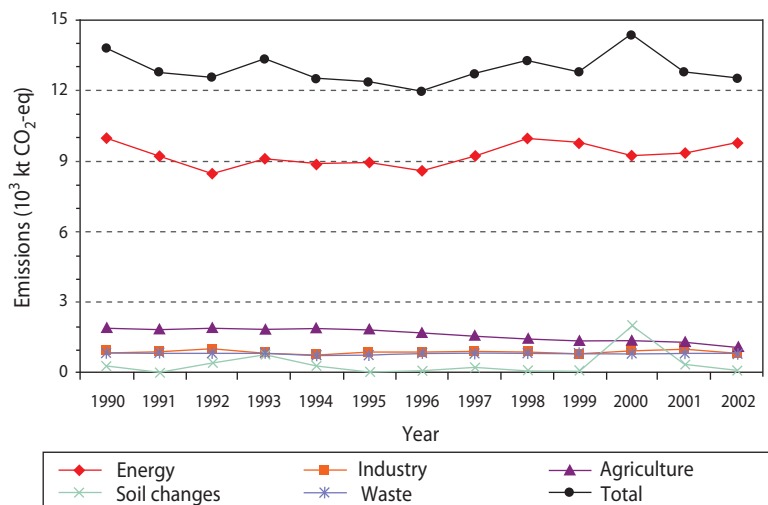
Source: State Statistical Office

A *National Strategy for Energy* is expected to be developed in 2009, which will address environmental sustainability, energy efficiency and use of renewable energy sources. The implementation of the *Energy Efficiency Strategy* of 2003 has been very slow; it envisages a partnership between the private and the public sector, establishing an Energy Efficiency Agency and initiating technical programmes for energy efficiency in all sectors. Energy intensity could be potentially improved by involving the companies in the Clean Development Mechanism (CDM) within the Kyoto Protocol. Introducing the concept of Cleaner Production will be important as it could ensure efficient use of energy, materials and water in the production of products or services (the UNIDO National Centre for Cleaner Production in Macedonia was established in 2007).

The overall CO<sub>2</sub>-eq emissions in Macedonia in 2002 were 14,318 kt CO<sub>2</sub>-eq and originated mostly from the energy sector (70%) during combustion of fossil fuels, 15% from the agriculture sector, the industrial processes and waste sectors contributed with 10% each, and 14% were from the forestry sector due to extensive fires. CO<sub>2</sub> accounted for most of the greenhouse gas emissions (75-80%), CH<sub>4</sub> for 12-14%, N<sub>2</sub>O for 5-9% and CO for 2%. Figure 7.5 shows the changes in the overall emissions of certain CO<sub>2</sub>-eq, as well as the changes in the greenhouse gas emissions in all sectors between 1990 and 2002.

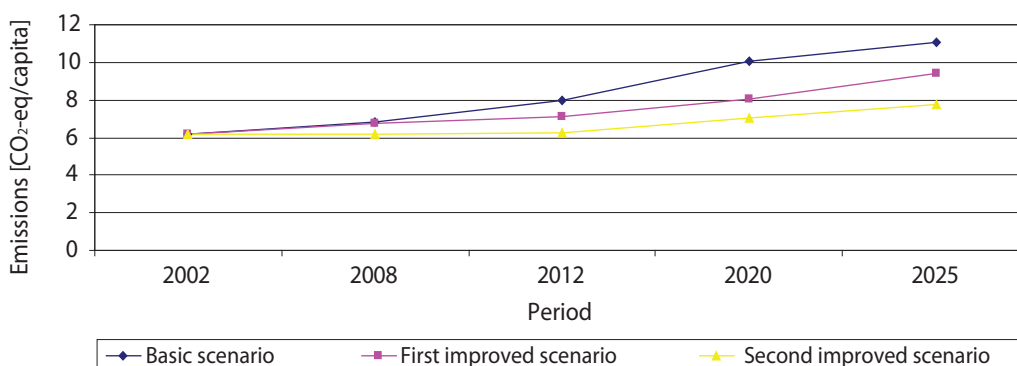


**Figure 7.5.: Total CO<sub>2</sub>-eq Emissions and Emissions by Sectors**



The *Second National Report* to the UN Framework Convention on Climate Change included an analysis of the potentials for alleviating climate change in all sectors by looking at the projected development courses of the national economy, with three proposed scenarios. This primarily involves measures in the development of the energy sector, which is currently based on electricity production in the Bitola and Oslomej lignite thermoelectric plants (about 60% of the total needs), hydro potential (15%) and on the import of electricity (25%). The following have been identified as possible energy options: providing domestic lignite for the power plants operation until 2025, import of high quality coal, introducing gas of 800 million m<sup>3</sup> annually, building small hydroelectric power plants and small windmills and using solar and geothermal energy. In the transport sector, the measures mainly focus on improving the efficiency of the transport sector and the public city and inter-city transport. The improved scenarios in the waste sector include technology for collecting and burning methane at dumping grounds. The environmentally improved scenario for the agriculture sector includes introducing systems for collecting and burning biogas at several pig farms in Macedonia. The trend of change in the total CO<sub>2</sub> emissions-eq per capita with the three proposed scenarios between 2008 and 2024 is shown on Figure 7.6.

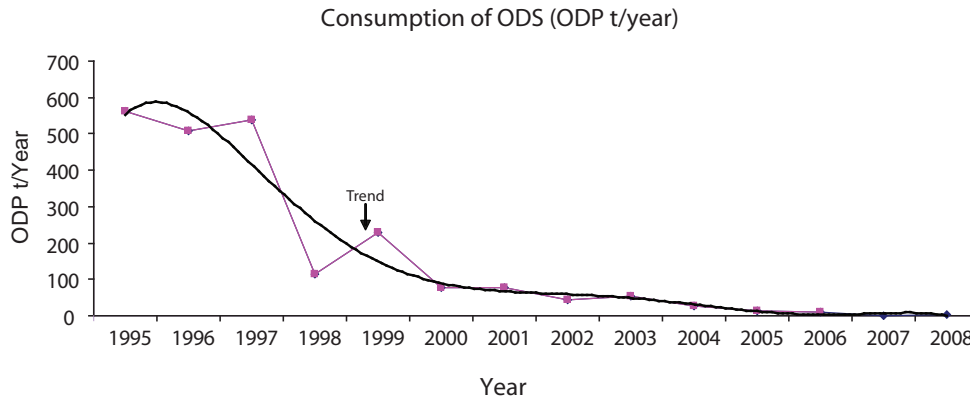
**Figure 7.6.: Projections on Total CO<sub>2</sub> Emissions-eq per Capita (2008-2025)**



In 1994, Macedonia ratified the Vienna Convention and the Montreal Protocol, and later the amendments to the Protocol. A number of measures were introduced to reduce and eliminate ozone depleting substances (ODS) by prohibiting and restricting the production, import and export of such substances. An Ozone Protection Office was established in the Ministry of Environment and Spatial Planning that continuously monitors the import, export and consumption ODS. By implementing projects for eliminating ODS, funded by the Multilateral Fund of the Montreal Protocol and coordinated by the Ozone Protection Office, between 1997 and 2007 over 97% of the total consumption of ODS in the country were eliminated. The use of ODS in the industry has been successfully eliminated (in the

production of refrigerators and soft or hard foams); methyl bromide in agriculture was replaced with an alternative substance and ODS were eliminated from the repair and maintenance of cooling devices. The trend of consumption of ODS (ODP t/year) is shown in Figure 7.7 and ranges from 589.54 t total consumption in 1995 to 1.25 t total consumption in 2007.

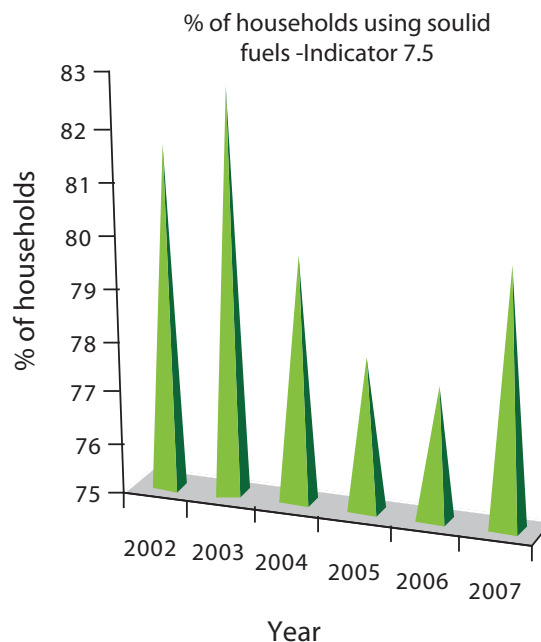
**Figure 7.7: Trend in the Change of Consumption of ODS (ODP t/year)**



The project "A Plan for Complete Elimination of CFCs in the Republic of Macedonia" is underway in order to finalise the activities for a complete elimination of CFCs and thus meet the obligations arising from the Montreal Protocol, i.e. reducing CFCs by 100% by 1 January 2010.

The percentage of households in Macedonia using solid fuels is directly related to the index of affluence and the type of the dwellings, as 55.1% of the rural population and 78% of the poorest households use firewood for cooking. Rural households use 44.4% of the total electrical energy and a very small percentage (0.5%) of the total natural gas consumed for cooking purposes. The use of solid fuel stoves is the most widespread mode of heating, followed by electrical heating, while the number of households using central heating is the smallest. Trying to keep up with the changing prices of energy, households frequently change the types of fuels for heating and cooking purposes, which is yet another indication of the correlation between this indicator and the social aspect. Figure 7.8 shows the data on the households' use of solid fuels for cooking and heating purposes.

**Figure 7.8: Use of Solid Fuels for Cooking and Heating Purposes (2002-2007)**



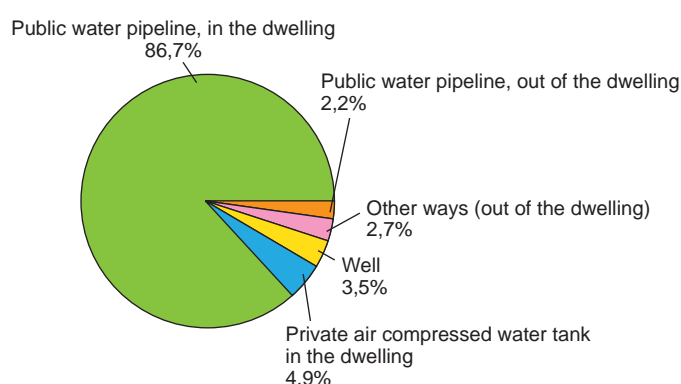
The proportion of population/households using solid fuels ranges from 77.6% to 82.8%, with a mild downward tendency over the past three years. However, the data from 2007 raise concern since the already high proportion of households using solid fuels (79.9%) showed a new upward trend owing to the households' inability to afford safer and cheaper energy sources. It is expected that about 78% of households will be using solid fuel over the next period, which is a very high percentage compared to the world average of 52%.

## 7.2 Sustainable Access to Safe Drinking Water

Providing a regular supply of safe drinking water is a priority of the Republic of Macedonia and the data from the 2002 Census shows that a high percentage (88.9%) of the total number of individual households is supplied with drinking water from public water supply systems. In particular, 86.7% of the population have public water supply to their homes, 2.2% have water supply outside their homes, 3.5% obtain drinking water from private wells, and 4.9% use their own boost-pumps, while the rest of the population uses other kinds of water supply (Figure 7.9).

The water supplied by public water supply companies is subjected to daily/periodic quality analyses. However, the water supplied from private wells or springs is potentially unsafe. The quality of water from public water supply systems between 2002 and 2005 was high (91.5%-93.6%). In order to provide quality and safe drinking water, 13.5% of the rural population uses various purification methods (boiling, filtering, chlorination, sedimentation).

**Figure 7.9: Method of Drinking Water Supply to Household, 2002**



Public water supply systems are used by 95.3% of the urban population and 79.7% of the rural population. Only 62% of the poorest families use the public water supply.

The Ministry of Environment and Spatial Planning, the Ministry of Transport and Communications and the local self-government are making efforts to extend the water supply network over the next 15 years. The use of the EU pre-accession funds (IPA) will play a major role in this process, as well as the financial assistance from donors and financial institutions.

According to the 2002 Census, the proportion of the population (urban and rural) with sustainable access to sanitation was 59.9% as a result of the coverage of the population with public sewage. On the other hand, 20.6% of the population uses septic tanks, 12.2% use free outflow, while 7.4% of the households have no installation at all.

In terms of environmental sustainability, a very important factor is whether collector systems are in place to transport urban wastewater to water treatment plants. Available data reveals that out of the 108 million m<sup>3</sup> of wastewater in 2000 only 6% were treated, while the remaining quantity was released without any treatment whatsoever. There are six urban wastewater treatment facilities for a total of 250,000 household units (in Ohrid and Struga, Resen, Sveti Nikole, Dojran, Makedonski Brod and

Kumanovo). A study has been developed for a wastewater treatment facility in Prilep, while another study for a wastewater treatment facility in Skopje is being developed with support from JICA.

Following the approximation with the EU Directive on Urban Wastewater, it is expected that by 2025, 90% of the population will have been connected to the sewage network that will conduct wastewater to treatment facilities. In addition, public-private partnerships are also expected to develop with support from the national budget and from bilateral and multilateral technical and development cooperation programmes.

### 7.3 Safety of Dwellings

The number of homes in Macedonia between 1981 and 2002 has grown by approximately 53%. The total number of individual households in 2002 amounted to 564,237, which means that Macedonia has a surplus of housing units, whereby 113,975 remain unoccupied. This figure suggests that there are households with more than one housing unit, as well as that there are numerous rural housing units that have been abandoned due to migration to larger cities. However, there is also a large group of housing units used as weekend cottages. Also, there are about 100 illegal settlements around the cities throughout Macedonia, accounting for 15-25% of the population.

The degree to which the households have been equipped with water supply, sanitation systems, electricity and cooking installations is shown in Table 7.4.

**Table 7.4.: Degree of Equipment of the Housing Stock (2002 Census)**

Total number of housing units in Macedonia		Change (growth) %	Share (%) of households whose housing units have installations for:			Share (%) of households whose housing units are equipped with:	
1994	2002		Water supply, sewage, electricity, central heating	Water supply, sewage, electricity	Electricity only	Kitchen, bathroom and toilet	Kitchen
1994	2002	2002/1994	2002	2002	2002	2002	2002
<b>584,456</b>	<b>697,529</b>	<b>19.36</b>	<b>8.05</b>	<b>92.52</b>	<b>99.03</b>	<b>70.21</b>	<b>97.94</b>

The main objective of the *Housing Strategy* is to ensure long-term and standardised housing development in line with the modern standards for quality life, taking into account the internationally recognised definitions of adequate (appropriate) housing. In order to provide better utility and traffic infrastructure in the sub-standard settlements, the following measures have been proposed in the Strategy: adopting a planned documentation for legalising illegally built buildings, regulating traffic accessibility and building water supply and sewage infrastructure, as well as ensuring legal security of tenure as the basic and minimal precondition for humane living.

### 7.4 Conclusions

Achieving the Millennium Development Goals, which at the same time ensure sustainable development of the Republic of Macedonia and meeting the criteria for EU accession, is a long-term and financially intensive process. Being a candidate country for EU accession since 2005, and in order to meet the criteria for full-fledged membership, numerous strategic documents have been adopted to support the process including: an annual National Programme for Adoption of the *Acquis* (NPAA); National Strategy for Adoption of the *Acquis* in the environmental area (2008); National Strategy for Sustainable Development (2008), based on the country's EU accession as a key prerequisite for sustainable development; Strategy for Investment in the Environment (2008); National Waste Management Strategy (2008 – 2020); National Strategy on the Clean Development Mechanism (CDM) for 2008-2012 within the Kyoto Protocol; the second National Report to the UN Framework Convention on Climate Change (developed in 2008) and many other documents.

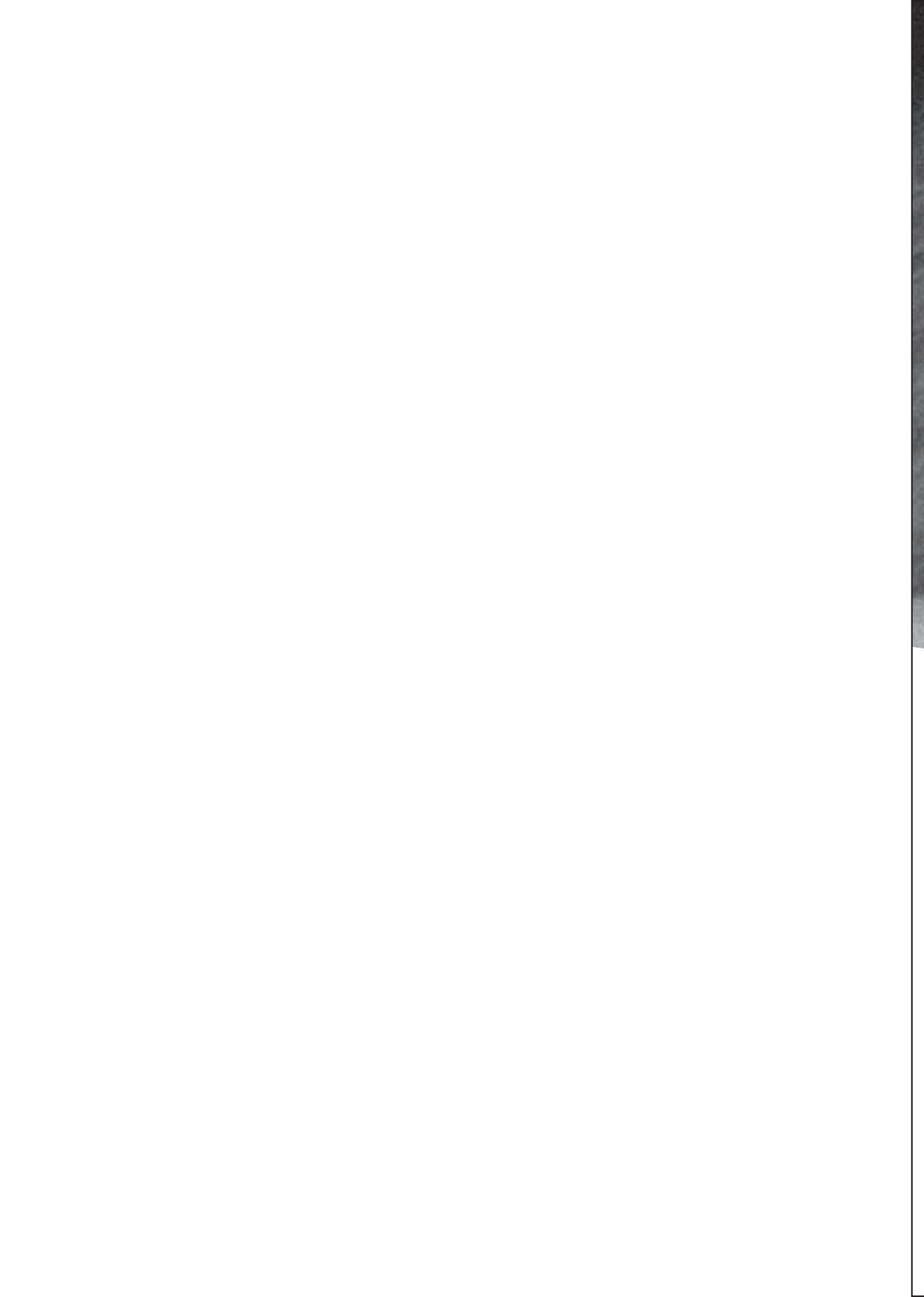
The implementation of these and other strategic measures will ensure a comprehensive approach in developing sustainable environment and achievement of the targets in the MDGs. The following activities have been identified as being of the highest priority in the short term (2007-2010): activities related to the institutional structure, appointing responsible bodies, recruiting additional staff, strengthening the institutions, developing plans/methodologies/guidelines and initiating the development of the technical documentation for investments in the capital infrastructure. In the medium term (2011-2015), the focus will be on initiating and implementing the proposed technical assistance projects relating to the development of the technical documentation for capital infrastructural projects, feasibility studies, IPA and other international assistance. In the long run (beyond 2015), the focus should be primarily on the implementation of capital infrastructural projects aimed at promoting waste management, water supply, wastewater management and environmental protection.

According to the 2002 Census high percentage (88.9%) of the total number of individual households is supplied with drinking water from public water supply systems. The water supplied by public water supply companies is subjected to daily/periodic quality analyses and 13.5% of the rural population uses various purification methods (boiling, filtering, chlorination, sedimentation). However, only 62% of the poorest families use public water supply. Around 60% of the population (urban and rural) has sustainable access to sanitation. In terms of environmental sustainability, a very important factor is whether collector systems are in place to transport urban wastewater to water treatment plants.

## 7.5 Recommendations

The challenges in achieving MDG 7 – ensuring sustainable environment – can be summarized as follows:

- Efficient implementation and monitoring of the implementation of the national legislation related to environment which has been harmonized with the EU legislation and other international conventions and protocols ratified by Macedonia. This depends on extensive technical and financial resources and its implementation could be expected in the long-run (2012-2022). The most important challenges will be linked with the waste management and solving the so called “hot spots” in terms of pollution, management of water quality and waste waters, as well as control of industrial pollution, risk management which, at the moment, cause the most serious environmental problems;
- Strengthening of the capacities and promoting management of the protected areas;
- Building motivated, professional and committed administration at local and central levels;
- Strengthening coordination among relevant institutions particularly in terms of keeping of statistical data, defining indicators and monitoring of such indicators in the environment;
- Harmonizing the List of Key Indicators for Sustainable Indicators (included in the National Sustainable Development Strategy, draft of 2008) and the indicators defined in the MDG 7, as well as with other indicators;
- Upon adoption of the National Sustainable Development Strategy, initiating monitoring of all indicators and developing a Monitoring Plan in order to assess progress;
- Establishing and implementation of a clearly defined procedure for environmental impact assessment of laws, strategies and programmes in order to assess their possible impacts on the environment;
- Coordinated and efficient use of funds needed to support implementation of the activities and measures proposed in the strategic documents (coordination among activities, measures and human resources);
- Efficient use of EU funds targeted at improving competitiveness and profitability and preventing pollution;
- Decentralisation of the responsibilities related to environment on the local level, supported by adequate funds, capacity building and inter-municipal cooperation.





REDUCING POVERTY AND SOCIAL EXCLUSION

ACHIEVE UNIVERSAL PRIMARY EDUCATION 2

PROMOTE GENDER EQUALITY AND EMPOWER WOMEN 3

REDUCE CHILD MORTALITY 4

IMPROVE MATERNAL HEALTH 5

COMBAT HIV/AIDS AND TUBERCULOSIS 6

ENSURE ENVIRONMENTAL SUSTAINABILITY 7

PARTNERSHIP FOR DEVELOPMENT 8

**MDG 8**  
PARTNERSHIP FOR  
DEVELOPMENT





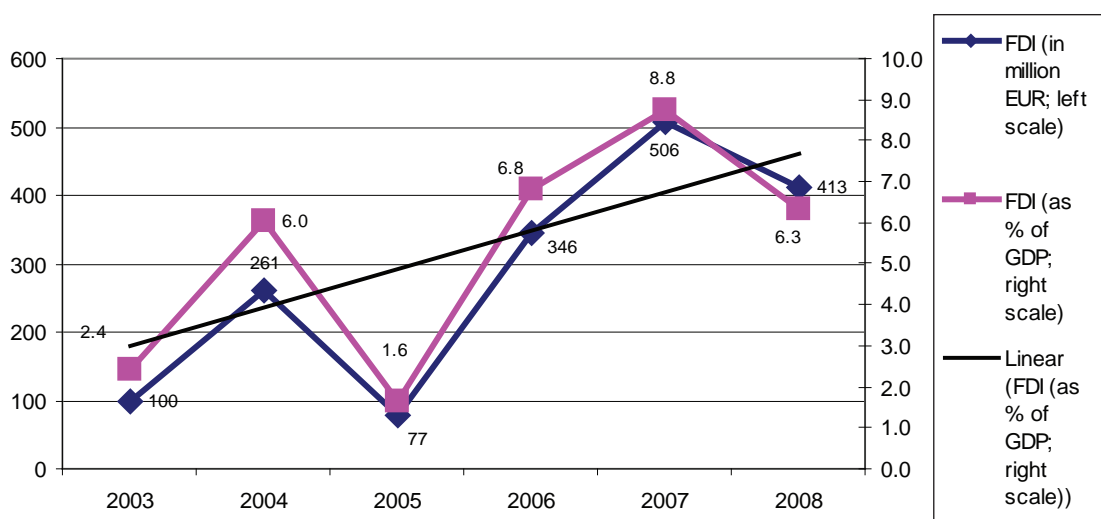
## MILLENNIUM DEVELOPMENT GOAL 8: PARTNERSHIP FOR DEVELOPMENT

Target	Indicators
1. Create an environment conducive to increase the inflow of FDI up to 7% of GDP by 2015.	<ul style="list-style-type: none"> <li>• FDI inflows as percentage of the GDP.</li> <li>• Cumulative FDI inflow per capita.</li> </ul>
2. Increase the share of foreign trade on the world markets up to 60% of the GDP and reduce the trade deficit to 12% of the GDP by 2015.	<ul style="list-style-type: none"> <li>• Share of foreign trade in the global trade.</li> <li>• Share of foreign trade in GDP.</li> </ul>

### 8.1 Foreign Direct Investments Inflow

The calculations on the relative indicators offering overview of foreign direct investments (FDI) in the Macedonian economy between 2003 and 2008<sup>64</sup> are shown in Figures 8.1 and 8.2. The original data have been provided by the Ministry of Finance in May 2009. When analyzing the data, it is very important to note that in 2008 the National Bank revised the data on penetrated FDI in Macedonia since 1997. Hence, there is discontinuity in the sequence of FDI data in regard to those presented in the 2005 Report on MDGs.

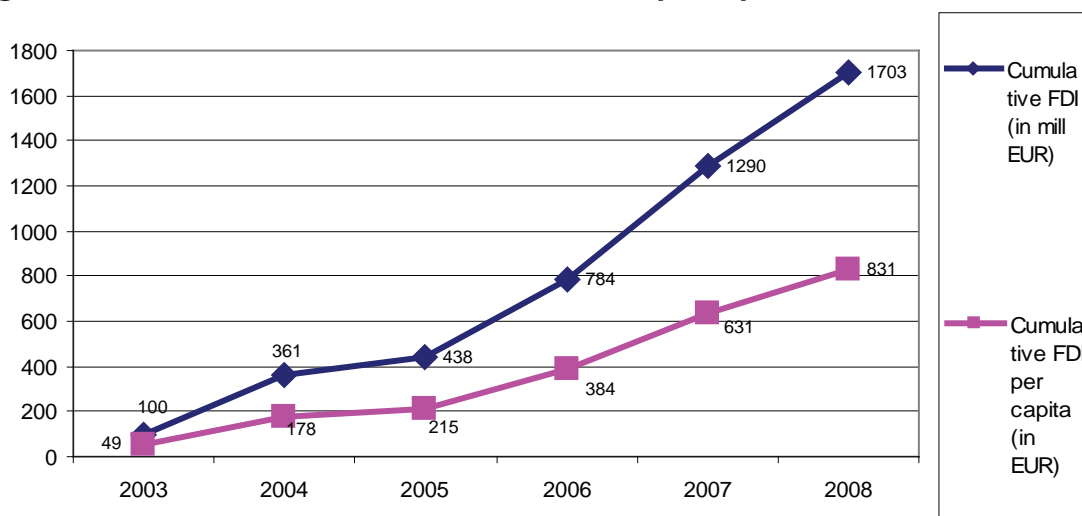
**Figure 8.1.: FDI Inflows in Macedonia 2003-2008**



Source: Calculations based on data provided by the Ministry of Finance

<sup>64</sup> The analysis in this section of the Report covers the period between 2003 and 2008 since the data on the categories relating to FDI, GDP, exports and imports expressed in Euros exist only for the period after 2003; it should be noted that for consistency reasons, the data have been expressed in Euros (instead of US Dollars) as the Government projections until 2013 have been presented in Euros.

**Figure 8.2.: Cumulative Amount of FDI in Macedonia per Capita 2003-2008**



Source: Calculations based on data provided by the Ministry of Finance

A variety of measures and activities to encourage the inflow FDI have been undertaken since Macedonia's independence. Thus, the rights to free repatriation of investments and profits have been guaranteed to foreign investors; Macedonia is a member of the Multilateral Investment Guarantee Agency and the International Private Investments Corporation; numerous bilateral and multilateral free trade agreements have been signed; -the Stabilisation and Association Agreement has been concluded with the EU; numerous agreements for mutual protection of investments have been signed, as well as various agreements to avoid double taxation; in line with the IMF Charter, the tax on repatriation of profits has been abolished and the profit tax rate was set at a competitively low level (15%) etc. In addition, a number of analyses were conducted to identify the weaknesses of Macedonia's economy and the reasons for low capacities to attract FDI, followed by programmes and action plans to render the local environment more conducive to FDI. Thus, in 2003, the Government adopted a special Programme for Encouraging FDI (supported by UNDP) which included a reduction of the barriers to investment, establishing a Foreign Investments Agency and creating further tax concessions to foreign investors.

Following the 2006 parliamentary elections, having identified the attraction of FDI as one of the most fundamental parameters of its economic programme, the Government undertook a number of additional measures and activities. The tax system was reformed, whereby the profit tax and personal income tax rates were aligned and reduced to 10% since the beginning of 2008. An Agency for Foreign Investments has been established and in 2007 the Government adopted a new Programme for Encouraging Investments (2007 – 2010). The activities for attracting FDI were entrusted to one of the Ministers in the Government. Furthermore, a number of activities were undertaken in early 2007 to promote the Macedonian economy as a favourable investment destination.

All this produced some immediate positive effects and the inflow of FDI in 2007 increased even above the highest level reached in 2006 thus exceeding the threshold of 7% FDI of the GDP set as a target within this MDG. However, in 2008, the FDI inflow dropped again to a slightly lower level than that reached in 2006. This largely accounts for the global financial and economic crisis which hit the developed market economies in the course of 2008. According to the Government projections, in 2009, the FDI level will continue to fall even below the level of 2008.

The analysis of the foreign investors according to their origin shows that the largest investors between 2003 and 2008 were Austria, the Netherlands, Hungary and Slovenia, while the most attractive business sectors for investment were some production sectors and the services (transport and communications and financial brokerage).

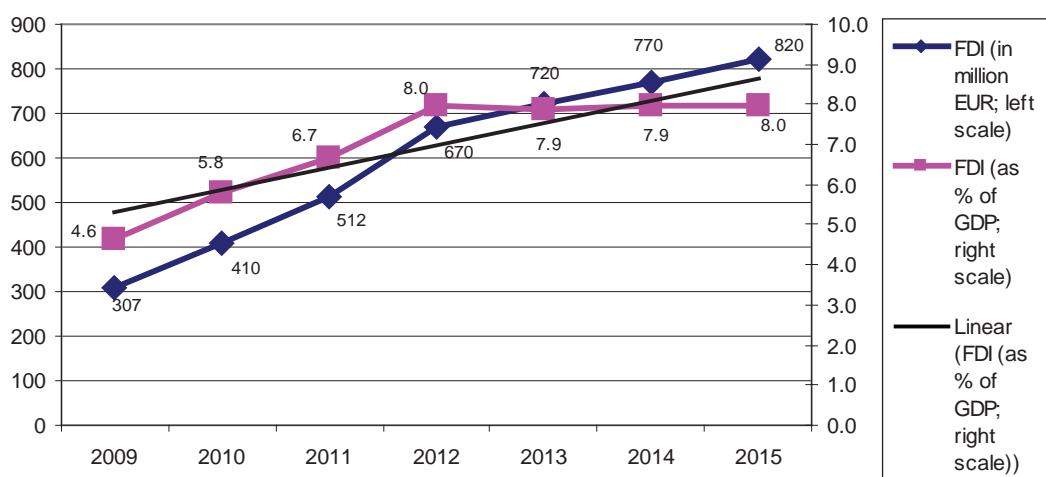
In a regional context, the inflow of FDI in Macedonia is lower when compared to most of the other transition economies in South-East Europe. The reasons for this long-term tendency include: the still present perception of non-commercial (political and security) risks (considering that the EU and NATO accession processes have been blocked by one Member State); the insufficient capacity of the public administration and the judiciary; and the relatively non-competitive labour in terms of skills and cost.

The projections on FDI inflow in Macedonia by 2015 have been developed having in mind the presented data

and indicators, the analysis of the achievements and weaknesses related to inflow of FDI, as well as the trends in the global economy which is still in a state of crisis. The data up to 2013, presented in Figures 8.3 and 8.4 have been quoted from the Ministry of Finance whereas the projects for 2014 and 2015 have been developed by extrapolation of the data for the period 2011 to 2013.

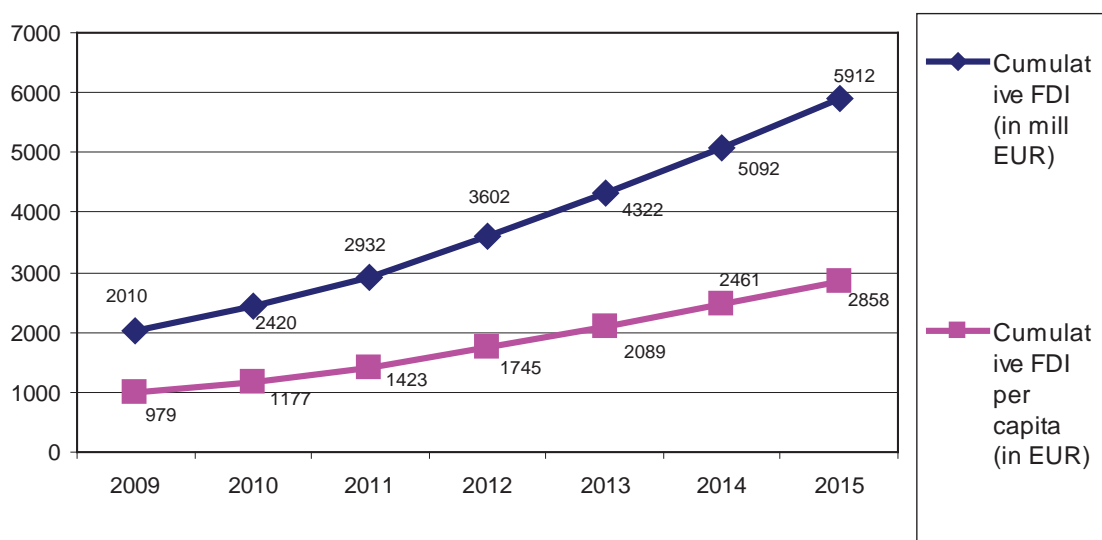
Starting from these projections, as shown in the Figures 8.3 and 8.4, it is expected that the inflow of FDI will continue to fall in 2009 and to be lower in 2010 (in absolute and relative amount) than the level reached in 2008. The 2007 level (in absolute amount) would be reached in 2011 and by the end of the period covered in the projections, the level of FDI inflowing into the Macedonian economy would be over the threshold of 7% of GDP target set for the MDG 8. Thus, at the end of the period for achievement of the Millennium Development Goals (2015) it could be expected that the cumulative amount of FDI will reach somewhat below 6 billion EUR, i.e. around 2.800 EUR per capita. This will represent an increase of almost 2.5 times compared to the total amount of FDI entered over the last 6 years (2003 – 2008). Additionally, based on these projections, the amount of FDI between 2012 and 2015 will fluctuate in relation to the GDP between 7% and 8% which will indicate that the target of 7% FDI of GDP will be reached. However, such projections on the inflow of FDI in Macedonia developed by the Government will have to be fully realized.

**Figure 8.3.: Projected FDI Inflow in Macedonia by 2015**



Source: Calculations based on data provided by the Ministry of Finance

**Figure 8.4.: Projected Cumulative Amount of FDI in Macedonia by 2015**



Source: Calculations based on data provided by the Ministry of Finance

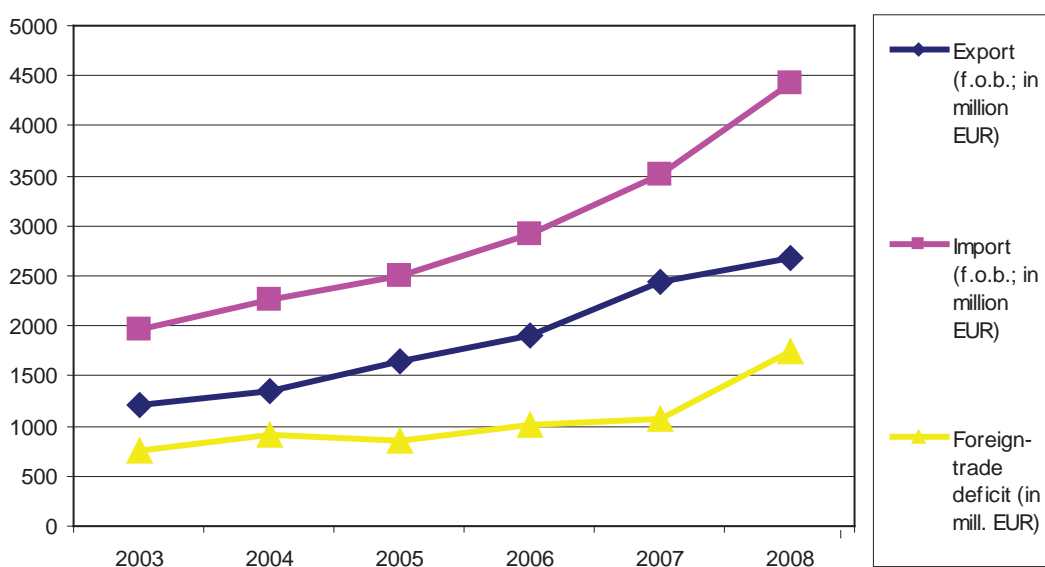
## 8.2 Foreign Trade

The two most fundamental reasons for the permanently high trade deficit are: (1) Macedonia's heavy dependency on energy imports; and (2) the relatively low competitive capacity of exports. Moreover, Macedonia's dependency on energy imports is "traditional", i.e. it arises primarily from the lack of oil and gas sources, as well as from the insufficient local capacities to generate electricity that would satisfy the ever growing demand which has been evident over the past few years. Hence, the rise of oil and gas prices worldwide, as well as the increase of the electricity prices in the region, had a significant impact on Macedonia's foreign trade balance. An additional generator of the trade deficit is the dependency of the export oriented production on imports especially machines, modern equipment and other types of technology coupled with a high demand for imported consumer goods and services.

On the other hand, the growing demand for imports is not countered with an appropriate export capacity. The 2008 Report on Macedonia's Foreign Trade<sup>65</sup> indicates: "the structure of exports in 2007 by groups of products... indicates that the groups 'steel and iron', 'clothing', 'food', 'other products' and 'fuel' account for the majority of the exported value". Like the previous years, this year too confirms the assumptions that the Macedonian economy is concentrated in several sectors. The above groups of products account for 80.5% of the total exports of the Republic of Macedonia, which validates the above assumption. The remaining groups of products, which account for 19.5% of the total exports of the Republic of Macedonia, are products generating high added value."

The calculations of the relative indicators on foreign trade between 2003 and 2008 are shown in Figures 8.5 and 8.6.

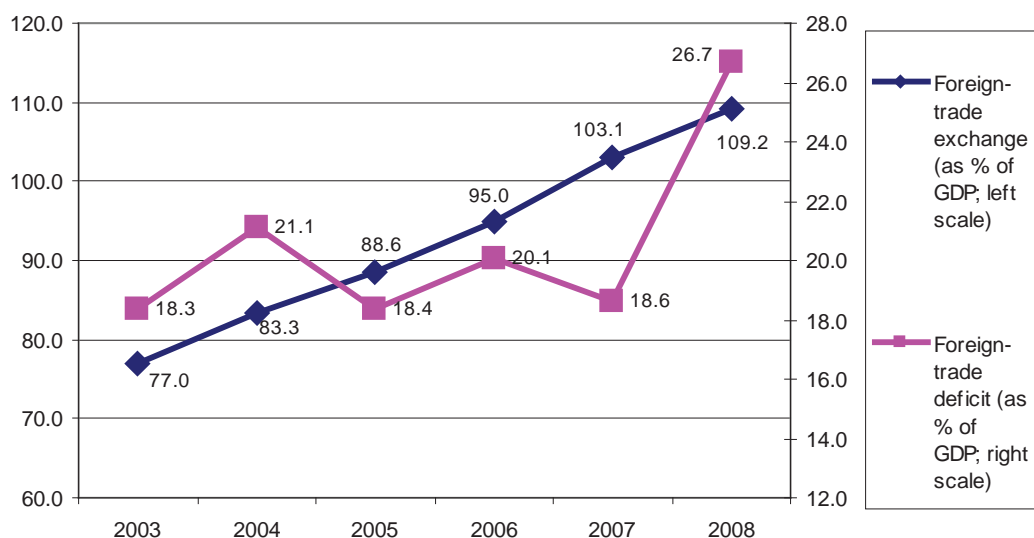
**Figure 8.5.: Foreign Trade Indicators for Macedonia**



Source: Calculations based on data obtained by the Ministry of Finance

<sup>65</sup> "2008 Report on the Foreign Trade of Macedonia", USAID Business Environment Project and the Government of the Republic of Macedonia, Ministry of Economy, 2008, pg. 16.

**Figure 8.6.: Foreign Trade Indicators for Macedonia**



Source: Calculations based on data obtained by the Ministry of Finance

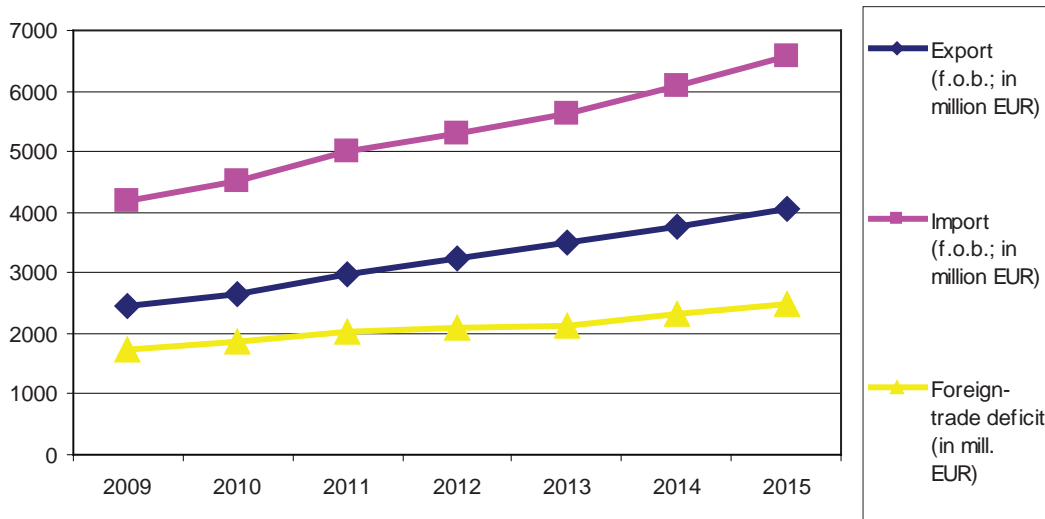
In general, the main feature of Macedonia's export production is the limited added value in the export products, which generates relatively low revenues from export. Hence, it could be concluded that the foreign trade deficit results from the country's poor export capacity rather than from the unrealistically large imports.

The negative patterns in the foreign trade with slight changes have been persisting since the beginning of the transition period nearly two decades ago. This, in turn, means that the transition in Macedonia did not result in adequate (or sufficient) structural changes that would generate an increase primarily in the country's export potential. Therefore, the structural reforms will have to focus on increasing the share of goods and services with a higher added value.

Unlike these negative developments, the legal and institutional framework supporting foreign trade has undergone significant reforms since the very outset of the transition. Since the initial years of its independence, following the lifting of the sanctions and the embargo, Macedonia has concluded numerous bilateral and multilateral free trade agreements. Since 2003 it has been a member of WTO, and in 2006 it joined CEFTA. Many of the foreign trade requirements were defined with the signing of the Stabilisation and Association Agreement with the EU (the customs free access of Macedonian exports to the markets of the EU member states, as well as the gradual liberalisation of the import of goods from the EU member states to Macedonia). However, although the development of the legal and institutional framework has had a relevantly positive effect on Macedonia's foreign trade, it turns out that on its own it has not been sufficient to radically change the situation.

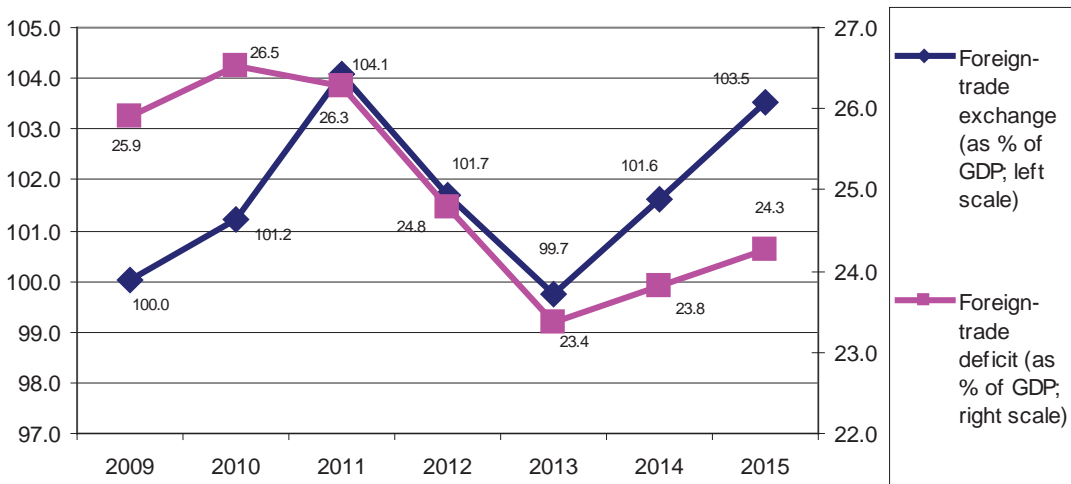
Having in mind the projected MDG target (increasing the share of foreign trade up to 60% of the GDP and reducing the trade deficit to 12% of the GDP), the assumptions on the developments until 2015 are shown in Figure 8.7 and 8.8. As for the FDI, the projections up to 2013 have been quoted from the Ministry of Finance and the data for 2014 and 2015 have been extrapolated based on the trends projected between 2011 and 2013.

**Figure 8.7.: Projected Foreign Trade Indicators for Macedonia until 2015**



Source: Calculations based on data obtained from the Ministry of Finance

**Figure 8.8.: Projected Foreign Trade Indicators for Macedonia Until 2015**



Source: Calculations based on data obtained from the Ministry of Finance

Based on these projections, it can be concluded that by 2015 Macedonia will have managed to exceed the first benchmark by many times, as the share in foreign trade will be above 60% of the GDP. However, the situation in relation to the second benchmark will be entirely different, as the share of the foreign trade deficit will be above 12 % of the GDP during the entire period until 2015.

### 8.3 Conclusions

The exhibited trends in the FDI inflow in Macedonia point to the following conclusions:

- during the 6 year reporting period, i.e. from 2003 to 2008, the total amount of FDI invested in Macedonia was approximately 1.7 billion Euros, which amounts to approximately 830 Euros per capita;
- During the exhibited period, there was no steady rise of FDI from year to year but rather a variability arising from the considerably higher FDI inflow in 2006, when the privatization of the Electrical Distribution Company (ESM) occurred, and the higher level of FDI in 2007, which was then followed by a relative decrease in 2008 due to the global economic crisis.

- For the first time the targeted 7% of GDP under this MDG was reached in 2007, but in 2008 it fell again below the targeted level

The calculations on the relative indicators on foreign trade support the following conclusions:

- the volume of foreign trade has continuously been over 60% in relation to its GDP, which is the ceiling projected under this MDG target; however, that should neither be surprising nor grounds for assuming that Macedonia has had above-average results in this context. Macedonia's economy is extremely small and therefore its foreign trade is a significant segment (or factor) in the creation of its GDP, in contrast to the larger economies; in fact, it could be concluded that this indicator has been defined unrealistically;
- since Macedonia is a small economy, the share of its foreign trade (import + export) in the global foreign trade is minute, i.e. it does not exceed 0.05% (this data is not shown in the diagrams);
- Macedonia's export and import have both shown an upward tendency throughout the reporting period, particularly after 2002; in addition, the growth of import has continuously been higher than that of export, which has generated a relatively high foreign trade deficit (over 18% of GDP) up until 2007 which was followed by a steep increase of over 26% in 2008; this is due to the fact that the export production is heavily dependent on imports; therefore, its growth inevitably entails increased imports as well, which, in turn, increases the foreign trade deficit.

#### 8.4 Recommendations

The analysis and the above discussion on the attainment of the two targets identified under this Millennium Development Goal by the end of 2008, lead to the following conclusions:

*In relation to attracting foreign direct investment:*

- Continuing and intensifying the reforms with a view to improving the business environment (regulatory guillotine, regulatory impact assessment (RIA), etc.).
- Consistently and fully implementing the public administration reform and the judiciary, thus increasing their capacities.
- Improving the labour qualification structure.

*Concerning the foreign trade (increasing export):*

- Undertaking measures to reduce the need for energy imports – by stimulating energy saving technologies; setting realistic prices of domestically produced electrical energy.
- Undertaking all the measures required for improving the competitive capacity of Macedonian economy – by stimulating the transfer of modern technology, supporting research and development, establishing competitive industry clusters, stimulating the networking of production capacities with the public and private research centres etc.

## CONCLUSIONS AND RECOMMENDATIONS

### MDG 1: Reduce Poverty and Social Exclusion

*Target: Reduce the proportion of the population living below the poverty line to 9.5% by 2015.*

- Reducing the proportion of the population living below the poverty line to 9.5% by 2015 in the Republic of Macedonia will not be feasible;
- If we take the trends over the past two years as the standard, according to the best case scenario it would be realistic to expect that by 2015 the current poverty rate (29.4%) would drop to 27% (measured according to the national method);
- Should the EU standard for measuring poverty be applied (60% of the median equivalent income), the poverty rate in 2015 could be additionally reduced;
- Reducing poverty and social exclusion in Macedonia depends upon a number of factors, among which, in addition to having a continuous economic growth, particularly important are the policies on social protection, social inclusion, education, healthcare and regional development;
- Any new policies in the field of social policy must be informed by profound analyses, based not only on the short-term or medium-term economic benefits but also on the long-term social impacts and costs;
- With a view to alleviating poverty and social exclusion, the social policies undertaken in Macedonia must be well targeted and achieve a balance between the economic and social costs and objectives.

### MDG 2: Achieve Universal Primary Education

*Target*

1. *Ensure that, by 2015, all children will be able to complete a full course of primary and secondary schooling.*
  2. *Eliminate gender disparities in both primary and secondary education, if possible by 2005 and in all levels by 2015.*
- Enrolment in mandatory primary education is higher than the enrolment in non-mandatory secondary education. However, in spite of the fact that primary education is mandatory, not all pupils actually complete it, just as not all voluntarily enrolled students in the secondary education actually succeed to compete it;
  - The risk of drop-outs in primary education is the highest at the transition from grade 4 in grade 5. Most often this is due to the pupils' unsatisfactory achievements in grades 1 - 4, which, in turn, affects their ability to become competently involved in the subsequent programmes;
  - Over 30% of the pupils/students are lost between the enrolment in primary school and graduation from high school, with 11% dropping out by the end of primary school (7-8% during grades 5 - 8), with an additional 11% at the enrolment in secondary education and a further 9% by the end of secondary education;
  - There has been a steady rise in the proportion of students completing secondary education; in parallel, the gap between the enrolment and completion rate in secondary education has been diminishing from 7% to 4.1%.



- In terms of enrolment and completion rates in secondary education, the Roma, Turkish and Albanian ethnic communities are the most exposed to risk. Although there has been a visible improvement, for the time being, enrolment and completion rates are still below the desired level;
- Gender disparities in primary education have been almost eliminated, while in the higher education they are in favour of the female population. Disparities are evident only in the secondary education, mainly among students of the Roma, Turkish and Albanian communities;
- Further programmes should focus on creating, implementing and sustaining incentives and reward mechanisms to stimulate schools and the community to register and include all children in the primary and secondary education. This can be achieved if the community is actively involved in the work of the primary and secondary schools;
- The NGO sector can play a key role in increasing the enrolment rate and reducing the dropout rate among children from vulnerable groups;
- Training teachers to adapt to the needs of children of both genders, children with different abilities (and particularly with special educational needs) and children from different social or cultural backgrounds, is of paramount importance if the Millennium Development Goals regarding education are to be achieved.

### **MDG 3: Promote Gender Equality and Empower Women**

*Target:*

1. *Halving, by 2015, the proportion of women as unpaid family workers and reducing their inactivity rate by one third.*
  2. *Doubling the proportion of women in governance.*
- Progress towards Target 1 of the MDG has been problematic;
  - The activity and employment rates among women have increased only slightly compared to the baseline situation. At the present development rate, the planned result cannot be achieved;
  - The proportion of women in the economically inactive population is growing. Similarly, the proportion of women in the category of employed persons is has slightly decreased;
  - Efforts to increase the proportion of women in governance were effective. This supports the assumption that it will be possible to achieve the target;
  - The number of women in Parliament and in the municipal councils has doubled or tripled compared to the period before 2005. However, the number of women in ministerial and mayor positions is still unsatisfactory.

### **MDG 4: Reduce Child Mortality**

*Targets:*

1. *Further reduce the infant and under-five mortality rate.*
  2. *Eliminate measles by 2015.*
- The infant mortality rate has been reduced from 31.6 in 1990 to 11.3 in 2003 and 10.3 per 1,000 live births in 2007;

- The under-five mortality rate in Macedonia is 11.5‰, which is lower than the projected rate of 13‰;
- The first target within MDG 4 has already been achieved;
- These results basically arise from the implementation of the vertical preventive programmes within the healthcare system in Macedonia;
- Infant mortality is the highest among children of mothers with primary education or no education at all. This correlation between the mothers' low education levels and infant mortality, as well as the higher mortality in certain areas, indicates that further programmes should focus on awareness raising;
- There has been a significant drop in measles incidence from 64.2 in 1990 to 1.33 per 100,000 in 2001, that is, to a single reported case in 2007, which is lower than the incidence rate in the EU; immunization rates against measles exceeded the recommended rates and reached over 95% throughout the entire analyzed period.

### **MDG 5: Improve Maternal Health**

*Targets:*

*Reduce by three-quarters between 1990 and 2015 the maternal mortality ratio.*

- The maternal death rate has been decreasing, from 11.5 per 100,000 live births in 1991 to 3.7 in 2003, and 4.4 in 2006, whereas no cases were reported in 2007;
- The downward maternal mortality rate between 1990 and 2007 is positively correlated with the upward trend of births attended by skilled healthcare personnel;
- Promoting the health of women, mothers and children is a strategic priority of the Government of the Republic of Macedonia.

### **MDG 6: Combat HIV/AIDS and Tuberculosis**

*Targets*

1. *Have halted by 2015 and begun to reverse the spread of HIV/AIDS.*
  2. *Have halted by 2015 and begun reverse the incidence of tuberculosis and other major diseases.*
- Macedonia is among the countries with the lowest incidence rate of clinically diagnosed AIDS in the region and Europe;
  - The HIV/AIDS cases have had an oscillating positive development tendency between 1987 and 2007 with peaks in 1994, 1998 and 2006;
  - The indicator of the awareness about HIV/AIDS was 22% in 2007, suggesting that the awareness raising programmes were inefficient;
  - Downward trends of tuberculosis incidence support the assumptions that the target will be reached by 2015; there was a significant drop of TB incidence between 1990 and 2007;

- Malaria was declared eradicated in Macedonia in 1972.
- The structural reforms resulting in an increased share of higher added value goods and services in the export production will have to be implemented in the forthcoming period;
- Provided that the Government's assumptions do materialise, by 2015 Macedonia will have largely managed to exceed the benchmark concerning the share of foreign trade in the GDP but the situation in relation to the second benchmark will be entirely different, as the share of the foreign trade deficit will be far above 12% of the GDP.
- The reforms aimed at improving the business environment need to continue and intensify;
- The public administration reform and the reform of the judiciary need to be consistently and fully implemented in order to increase their capacities;
- The qualification structure of the workforce needs to be improved;
- Measures need to be undertaken to reduce energy imports – by stimulating energy saving technologies; the price of domestically produced electrical energy needs to be set at a realistic level etc.
- Adequate measures for improving the competitive capacity of Macedonian economy supporting research and development, establishing competitive industry clusters, stimulating the networking of production capacities with the public and private research centres etc.

## **MDG 7: Ensuring Environmental Sustainability**

### *Targets*

1. *Integrate the principles of sustainable development into national policies and programmes and reverse the losses of environmental resources.*
  2. *Halve by 2015 the proportion of people without sustainable access to safe drinking water and basic sanitation.*
  3. *Have achieved by 2020 significant improvements in the lives of people in terms of safety of their dwellings.*
- Macedonia's territory under forests has been reducing between 2001 and 2004, with some stability of about 38% over the recent years.
  - A Strategy on Sustainable Development of Forestry has been adopted; it is assumed that the implementation of planned measures will lead to slight increase in the percentage of territory under forests in the forthcoming period.
  - The capacities for management of the protected areas need to be strengthened.
  - The gross energy consumption has been steadily rising;
  - A twenty-year National Strategy on Energy Development of Macedonia is being developed, addressing, among other things, environmental sustainability, energy efficiency and use of renewable energy sources.
  - CO<sub>2</sub> emissions per capita in Macedonia are lower than in other transition countries.

- Between 1997 and 2007, over 97% of the total ODS consumption were eliminated;
- The proportion of the population (households) using solid fuels was 79.9% in 2007 and has had an upward trend owing to the social circumstances in the country.
- The effective implementation of the national legislation supporting environmental sustainability will be a challenge; extensive technical and financial resources will be required.

## **MDG 8: Partnership for Development**

### *Targets*

1. *Create an environment conducive to increase the inflow of FDI up to 7% of GDP by 2015.*
  2. *Increase the share of foreign trade on the world markets up to 60% of the GDP and reduce the trade deficit to 12% of the GDP by 2015.*
- Despite all the activities that have been undertaken thus far in order to create a (business, legal and political) environment conducive to attracting FDIs, the effects only partially meet the expectations.
  - The prolonged trend of a relatively small inflow of FDI in Macedonia can be attributed to the following fundamental reasons: (1) existing perception of non-commercial (political and security) risks (as the EU and NATO accession processes have been blocked by one Member State); (2) insufficient capacities of the public administration and the judiciary; and the relatively non-competitive labour in terms of skills and cost.
  - Should the Government's assumptions materialise, Macedonia will have fully achieved the goal of increasing the FDI inflow to 7% of its GDP by 2015.
  - The activities supporting the increase in the foreign trade (export, in particular) only partially meet the expectations;
  - The structural reforms resulting in an increased share of higher added value goods and services in the export production will have to be implemented in the forthcoming period;
  - Provided that the Government's assumptions do materialise, by 2015 Macedonia will have largely managed to exceed the benchmark concerning the share of foreign trade in the GDP but the situation in relation to the second benchmark will be entirely different, as the share of the foreign trade deficit will be far above 12% of the GDP.
  - The reforms aimed at improving the business environment need to continue and intensify;
  - The qualification structure of the workforce needs to be improved;
  - Measures need to be undertaken to reduce energy imports – by stimulating energy saving technologies; the price of domestically produced electrical energy needs to be set at a realistic level etc.
  - Adequate measures for improving the competitive capacity of Macedonian economy supporting research and development, establishing competitive industry clusters, stimulating the networking of production capacities with the public and private research centres etc.