Disaggregated Millennium Development Goals Report for Lithuania

Table of Contents

Introduction

The objective of the Disaggregated Millennium Development Goals (MDG) Report for Lithuania is to provide an in-depth analysis of Lithuania vis-à-vis the MDGs in a disaggregated mode by county, urban/rural and gender breakdowns. The Report shall contribute to the Government's monitoring of its progress towards social inclusion and poverty reduction from the perspective of the Millennium Development Goals with the particular focus on mitigating regional disparities at the country level.

The Disaggregated MDG Report examines the national situation in relation to internationally agreed-upon goals set by action plans or programmes at the UN Global Conferences and at the Millennium Summit. The national situation is analyzed with the special focus on county level situation vis-à-vis MDGs, flagging the most disadvantaged counties lagging behind the country's average on few social indicators and particularly exposed to the development challenges addressed by MDGs. The data indicating regional disparities is analysed in a way to raise issues for discussions on the academic and political levels on the further policy implications towards the improvement of the quality of life of disadvantaged social groups from the perspective of MDGs.

This Report draws on the Common Country Assessment (CCA) for Lithuania, which was done in 2002, that provided a base line study examining national situation vis-à-vis the Millennium Development Goals.

Lithuania's socio-economic progress, built on past years' achievements, has intensified especially during 2003 and brought about a remarkable performance. Human Development Report 2003[1] showed, that the Human Development Index (HDI) for Lithuania progressed in one year with Lithuania ranking 45 as opposed to 49 last year (*statistical data from year 2001). Lithuania is established in the group of countries with a high HDI for the third consecutive year. Favorable economic performance with growth rate of 8,9 percent, very low inflation, decline in budget deficit to 1,2 percent of GDP, decreased average unemployment rate to 11,3 in the third quarter of 2003 and other socio-economic achievements placed the country among the three best prepared states for entry into the European Union (EU) as the European Commission (EC) reported in November 2003. After assessment of Lithuania's economy, IMF evaluated positively the efforts of Lithuanian Government in implementing policies for impressive economic development, low inflation and fast integration in the euro zone. Solid socio-economic progress and continued policy efforts should help Lithuania to address future challenges while undertaking new commitments and taking advantage of the opportunities of participation in the enlarged European Union.

The impressive political and socio-economical progress of Lithuania has created a sound basis for the country to evolve from a recipient country into an emerging donor. Successful participation of Lithuania in the international organizations and EU membership increasingly touch upon Lithuania's obligations to take an active role in the area of international development cooperation and support the achievement of Millennium Development Goals worldwide.

[1] Human Development Report. UNDP, 2003. Available from Internet: www.undp.org/hdr2003

Millennium Development Goals (MDGs)

On the Occasion of the beginning of the 3rd Millennium, the Secretary General of the United Nations, Mr. Kofi Annan, convened 147 heads of state and Government to the Millennium Summit, in 2000. The objective of the United Nations was to ask to the world leaders to reaffirm their determination to fight poverty and social exclusion, to combat HIV/AIDS, malaria and other diseases, to work for peace and to help the Least Developed Countries (LDC) to make progress towards development.

During the Millennium Summit, the Heads of state and Government endorsed the Millennium Declaration that includes the Millennium Development Goals (MDGs). In order to translate these shared values into actions, the world leaders identified key objectives to which they assigned special significance. The (MDGs) focuses on eight key areas.

Goals and Targets | Indicators

Goal 1: Eradicate extreme poverty and hunger

Target 1: Halve, between 1990 and 2015, the proportion of people whose income is less than one dollar a day

1. Proportion of population below $1 per day (PPP-values)
2. Poverty gap ratio [incidence x depth of poverty]
3. Share of poorest quintile in national consumption

Target 2: Halve, between 1990 and 2015, the proportion of people who suffer from hunger

4. Prevalence of underweight children (under-five years of age)
5. Proportion of population below minimum level of dietary energy consumption

Goal 2: Achieve universal primary education

Target 3: Ensure that, by 2015, children everywhere, boys and girls alike, will be able to complete a full course of primary schooling

6. Net enrolment ratio in primary education
7. Proportion of pupils starting grade 1 who reach grade 5
8. Literacy rate of 15-24 year olds

Goal 3: Promote gender equality and empower women

Target 4: Eliminate gender disparity in primary and secondary education preferably by 2005 and to all levels of education no later than 2015

9. Ratio of girls to boys in primary, secondary and tertiary education
10. Ratio of literate females to males of 15-24 year olds
11. Share of women in wage employment in the non-agricultural sector
12. Proportion of seats held by women in national parliament

Goal 4: Reduce child mortality

Target 5: Reduce by two-thirds, between 1990 and 2015, the under-five mortality rate

13. Under-five mortality rate
14. Infant mortality rate
15. Proportion of 1 year old children immunised against measles

Goal 5: Improve maternal health

Target 6: Reduce by three-quarters, between 1990 and 2015, the maternal mortality ratio

16. Maternal mortality ratio
17. Proportion of births attended by skilled health personnel

Goal 6: Combat HIV/AIDS, malaria and other diseases

Target 7: Have halted by 2015, and begun to reverse, the spread of HIV/AIDS

18. HIV prevalence among 15-24 year old pregnant women
19. Contraceptive prevalence rate
20. Number of children orphaned by HIV/AIDS

Target 8: Have halted by 2015, and begun to reverse, the incidence of malaria and other major diseases

21. Prevalence and death rates associated with malaria
22. Proportion of population in malaria risk areas using effective malaria prevention and treatment measures
23. Prevalence and death rates associated with tuberculosis
24. Proportion of TB cases detected and cured under DOTS (Directly Observed Treatment Short Course)

Goal 7: Ensure environmental sustainability

Target 9:	Integrate the principles of sustainable development into country policies and programmes and reverse the loss of environmental resources	25. Proportion of land area covered by forest 26. Land area protected to maintain biological diversity 27. GDP per unit of energy use (as proxy for energy efficiency) 28. Carbon dioxide emissions (per capita) [Plus two figures of global atmospheric pollution: ozone depletion and the accumulation of global warming gases]
Target 10:	Halve, by 2015, the proportion of people without sustainable access to safe drinking water	29. Proportion of population with sustainable access to an improved water source
Target 11:	By 2020, to have achieved a significant improvement in the lives of at least 100 million slum dwellers	30. Proportion of people with access to improved sanitation 31. Proportion of people with access to secure tenure [Urban/rural disaggregation of several of the above indicators may be relevant for monitoring improvement in the lives of slum dwellers]

Goal 8: Develop a Global Partnership for Development*

Target 12:	Develop further an open, rule-based, predictable, non-discriminatory trading and financial system Includes a commitment to good governance, development, and poverty reduction – both nationally and internationally	Some of the indicators listed below will be monitored separately for the Least Developed Countries (LDCs), Africa, landlocked countries and small island developing states. **Official Development Assistance** 32. Net ODA as percentage of DAC donors' GNI [targets of 0.7% in total and 0.15% for LDCs] 33. Proportion of ODA to basic social services (basic education, primary health care, nutrition, safe water and sanitation) 34. Proportion of ODA that is untied
Target 13:	Address the Special Needs of the Least Developed Countries Includes: tariff and quota free access for LDC exports; enhanced programme of debt relief for HIPC and cancellation of official bilateral debt; and more generous ODA for countries committed to poverty reduction	35. Proportion of ODA for environment in small island developing states 36. Proportion of ODA for transport sector in land-locked countries Market Access 37. Proportion of exports (by value and excluding arms) admitted free of duties and quotas 38. Average tariffs and quotas on agricultural products and textiles and clothing 39. Domestic and export agricultural subsidies in OECD countries 40. Proportion of ODA provided to help build trade capacity Debt Sustainability
Target 14:	Address the Special Needs of landlocked countries and small island developing states (through Barbados Programme and 22nd General Assembly provisions)	41. Proportion of official bilateral HIPC debt cancelled 42. Debt service as a percentage of exports of goods and services 43. Proportion of ODA provided as debt relief 44. Number of countries reaching HIPC decision and completion points
Target 15:	Deal comprehensively with the debt problems of developing countries through national and international measures in order to make debt sustainable in the long term	
Target 16:	In co-operation with developing countries, develop and implement strategies for decent and productive work for youth	45. Unemployment rate of 15-24 year olds
Target 17:	In co-operation with pharmaceutical companies, provide access to affordable, essential drugs in developing countries	46. Proportion of population with access to affordable essential drugs on a sustainable basis
Target 18:	In co-operation with the private sector, make available the benefits of new technologies, especially information and communications	47. Telephone lines per 1000 people 48. Personal computers per 1000 people Other Indicators to be determined

* The selection of indicators for Goals 7 and 8 is subject to further refinement

Methodology

The Human Development Report 2003 was devoted to the Millennium Development Goals, to assessing where the greatest problems are, analysing what needs to be done to overcome these setbacks and offering concrete proposals on how to accelerate the progress vis-à-vis the achievement of all the MDGs worldwide[1].

The MDG Report for Lithuania 2002 provided a baseline study to contribute to the Government's monitoring of its progress towards social inclusion and poverty reduction from the perspective of the Millennium Development Goals.

The Disaggregated MDG Report for Lithuania builds on the last year's baseline study and provides an explicit analysis by rural/urban, county, gender and other relevant breakdowns. The statistical data, in-depth analysis, mapping of the municipalities according to their performance on various indicators and recommendations vis-à-vis each MDG emphasize the need for continued efforts towards poverty reduction with a particular focus on regional disparities.

The United Nations country team in Lithuania is composed by:
Ms. Cihan Sultanoglu, United Nations Resident Coordinator, United Nations Development Programme Resident Representative and United Nations Population Fund Representative;
Ms. Zuzana Brixiova, IMF Resident Representative;
Mr. Mantas Nocius, Chief of the World Bank Lithuania Mission;
Dr. Robertas Petkevicius, WHO Liaison Officer;
Ms. Vladimiras Siniovas, UNHCR Liaison Officer;
Ms. Audra Sipaviciene, IOM Head of Vilnius Office;
Mr. Jaunius Pusvaskis, Director of the Lithuanian National Committee for UNICEF;
Ms. Asta Dirmaite, Secretary-General of the Lithuanian National Commission for UNESCO.

The Disaggregated MDG Report was prepared by:
Ms. Mariella C. Tefft, R.N., M.S, Biostatistician.
Statistical data and maps were provided by the Statistics Lithuania.
Contributions were provided by the national experts:
Dr. Virginija Poškutė;
Dr. Margarita Jankauskaitė;
Dr. Liubovė Murauskienė;
Dr. Albinas Kalvaitis;
Mr. Kęstutis Navickas.

The comments were provided by the practitioners from technical ministries and other national institutions.

---

[1] Human Development Report. UNDP, 2003. Available from Internet: www.undp.org/hdr2003

The contents of this report do not necessarily reflect the views of UNDP or the views of the Government of the Republic of Lithuania.

Demographic Trends and Snapshots

The Lithuanian Census: 2001

Before any presentation of data and discussion of Lithuania's progress toward the United Nation's **Millennium Development Goals,** one should be familiar with the demographic trends in Lithuania. The most significant event to shape our understanding of the demographics in Lithuania during the past 12 years was the population census of April 2001, the first census since the Soviet census of 1989 and the restoration of Lithuania's independence in 1990. Lithuania accepted the invitation of the United Nations to all countries to conduct a population and housing census at the beginning of the third millennium. The "census moment" for the data collected during the population and housing census was 12 p.m. of April 5th, 2001.

The most important result of this census was the realization that Lithuania had lost more than 200,000 people during the 12 years between the censuses than the Department of Statistics had estimated. Thus, there was a recalculation of all the annual population estimates between the censuses. This recalculation was necessary not only to give us more precise estimates of the annual population, but also to give us more precise estimates of all population-based rates (birth, mortality, etc.).

The Population of Lithuania

A. Population Trends: 1939-2003

Figure D1a displays the growth and contraction of the Lithuanian population from 1939 to 2003. The population reached its peak in 1992 with 3.7063 million people. Over the last 11 years the population has declined to 3.4626 million people, a loss of 6.6%. The figure shows that in 1939 the country was predominantly (77.1%) agrarian. From 1939 to 1992 there was a slow, but increasing urbanization of Lithuania. Parity between urban and rural areas was reached in 1970, and by 1992 urbanization had reached its peak of 68.3%. However, over the last 11 years there has been a slow shifting of the population to rural areas, from a low of 31.7% to 33.1% in 2003.

Figure D1a
Lithuanian Population: 1939-2003

RURAL POPULATION BY MUNICIPALITY
January 1, 2003

County	Rural population, in per cent
Lithuania	33,1
Vilnius	21,7
Kaunas	27,3
Klaipėda	26,8
Šiauliai	38,7
Panevėžys	40,3
Marijampolė	50,6
Alytus	40,7
Utena	45,7
Telšiai	48,8
Tauragė	59,2

Legend
In per cent:

< 45.0
45.0 - 55.0
55.1 - 65.0
65.1 - 75.0
75.1 <
City
County border

Sources: Statistics Lithuania   State Enterprise Centre of Registers
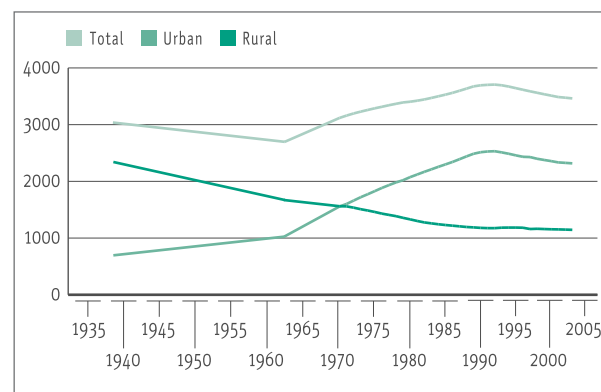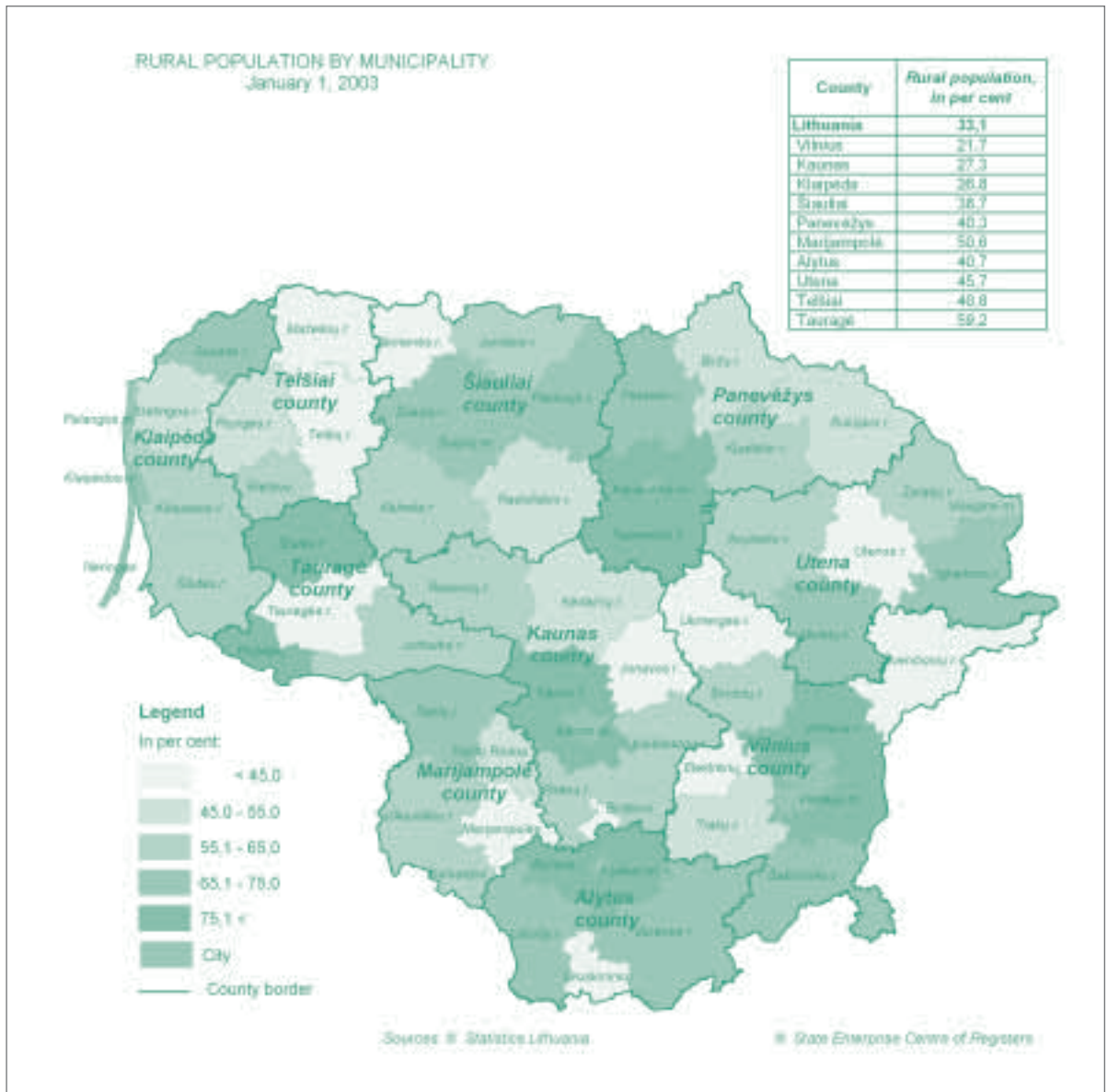
B. Population Snapshots

Figure D1b displays the percentage distribution of the urban and rural populations by age group and gender, as of January 1, 2003. The urban population has a higher percentage (69.5%) of its people who are of working age (15-64 years) than the rural population (61.8%). On the other hand, the rural population has higher percentages of its people who are children (0-14 years: 20.0%) and over working age (65+ years: 18.2%) than the urban population (17.4%

and 13.0%), respectively. This age disparity in the composition of the rural and urban populations is useful when considering the issue of poverty, which will be discussed in the next section.

As of the Census of 2001, the ethnic distribution of the population of Lithuania was as follows: Lithuanians-83.45%, Poles-6.74%, Russians-6.31%, Belarussians-1.23%, and Others-2.27% (Figure D1c).
Figure D1d shows the population (in thousands) of Lithuania and each of its counties by residential area, as of 01/01/

Figure D1b _____
Percentage Distribution of Urban and Rural
Populations by Age Group and Gender: 2003
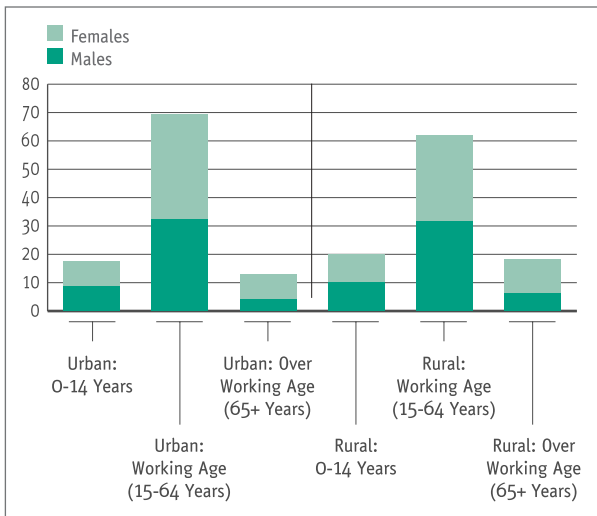
Figure D1c _____
The Ethnic Distribution of the Lithuanian
Population: Census of 2001
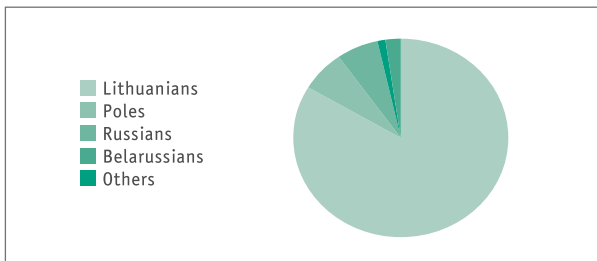
Figure D1d _____
Population of Lithuania and Its Counties by
Residential Area: 01/01/2003
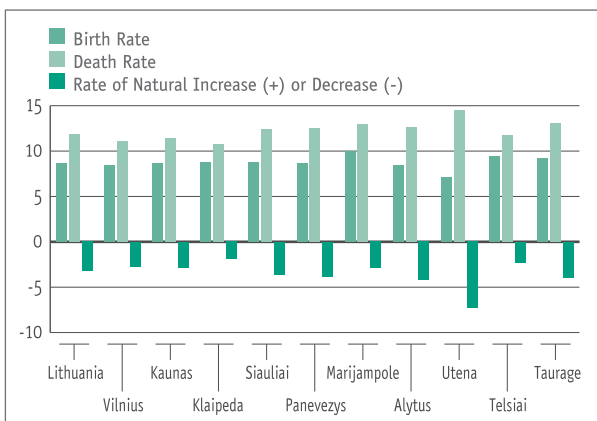
Figure D1e _____
Percentage of Population of Lithuania and Its
Counties by Residential Area: 01/01/2003
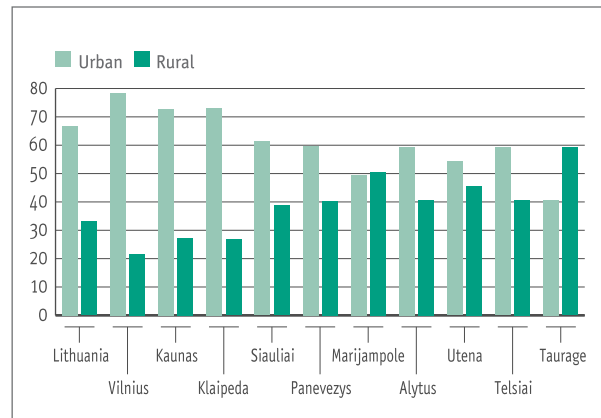
2003. The counties are rank ordered from the largest, Vilnius at 848 thousand people, to the smallest, Taurage at 133 thousand people.

Figure D1e displays the percentage distribution of the population of Lithuania and each of its counties by residential area. Eight of Lithuania's counties are predominantly urban (over 50% urban), ranging from Vilnius county with 78.3% to Utena county with 54.3%. Only two counties are predominantly rural, Taurage at 59.2% and Marijampole at 50.6%.

Vital Statistics of Lithuania

A. Trends in Vital Statistics: 1990-2002

The next figure, D2a, shows the trend in the vital statistics of Lithuania over the last 12 years. Overall, the birth rate (number of live births per 1,000 avg. pop.) has been steadily declining from a high of 15.4 in 1990 to a low of 8.7 in 2002, a decline of 43.5%. The mortality rate (number of deaths per 1,000 avg. pop.) rose from a low of 10.8 in 1990 to a high of 12.7 in 1994. In 2002, the mortality rate was 11.8, an increase of 9.3% since 1990. The year 1993 marked the last time the birth rate exceeded the mortality

Figure D2a
Vital Statistics of Lithuania: 1990-2002

Figure D2c
Vital Statistics of Rural Lithuania: 1990-2002

rate, so there has been a natural decrease in the population since then. Lithuania had a rate of natural decrease (birth rate minus death rate) of 3.2 in 2002.

The vital statistics of urban Lithuania (Figure D2b) show that the birth rates exceeded the mortality rates until 1999, which promoted a declining, but still a natural increase in the population. The year 2000 marked the first time the urban population experienced a natural decrease. The cities and towns had a rate of natural decrease of 1.9 in 2002.

The vital statistics of rural Lithuania (Figure D2c) show that despite the higher birth rates than urban areas over the last 12 years, there has been a natural decrease in the rural population since 1991 due to

Figure D2d
Vital Statistics of Lithuania and Its Counties, All Areas: 2002

Figure D2b
Vital Statistics of Urban Lithuania: 1990-2002
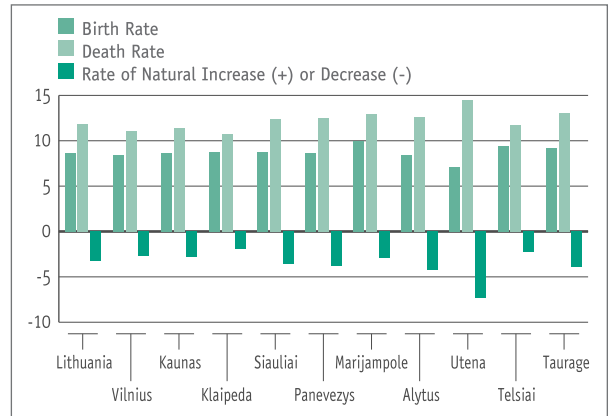
Figure D2e
Vital Statistics of Lithuania and Its Counties, Urban Areas: 2002

BIRTH BY MUNICIPALITY: 2002

County	Birth Rate
Lithuania	**8,65**
Vilnius	8,44
Kaunas	8,59
Klaipėda	8,75
Šiauliai	8,76
Panevėžys	8,67
Marijampolė	9,95
Alytus	8,42
Utena	7,14
Telšiai	9,43
Tauragė	9,25

Legend

Live births per 1000 population:

- < 8,0
- 8,0–9,0
- 9,1–10,0
- 10,1–11,0
- 11,1 <

— County border
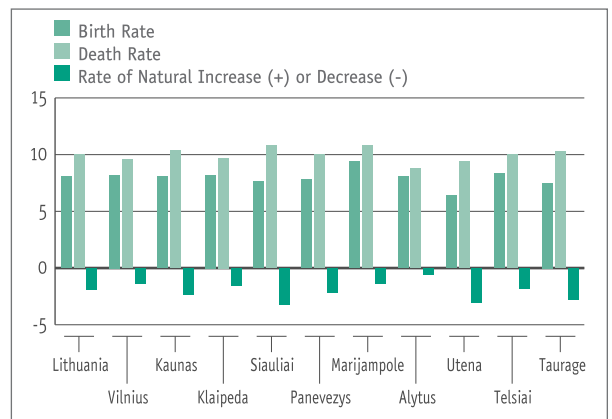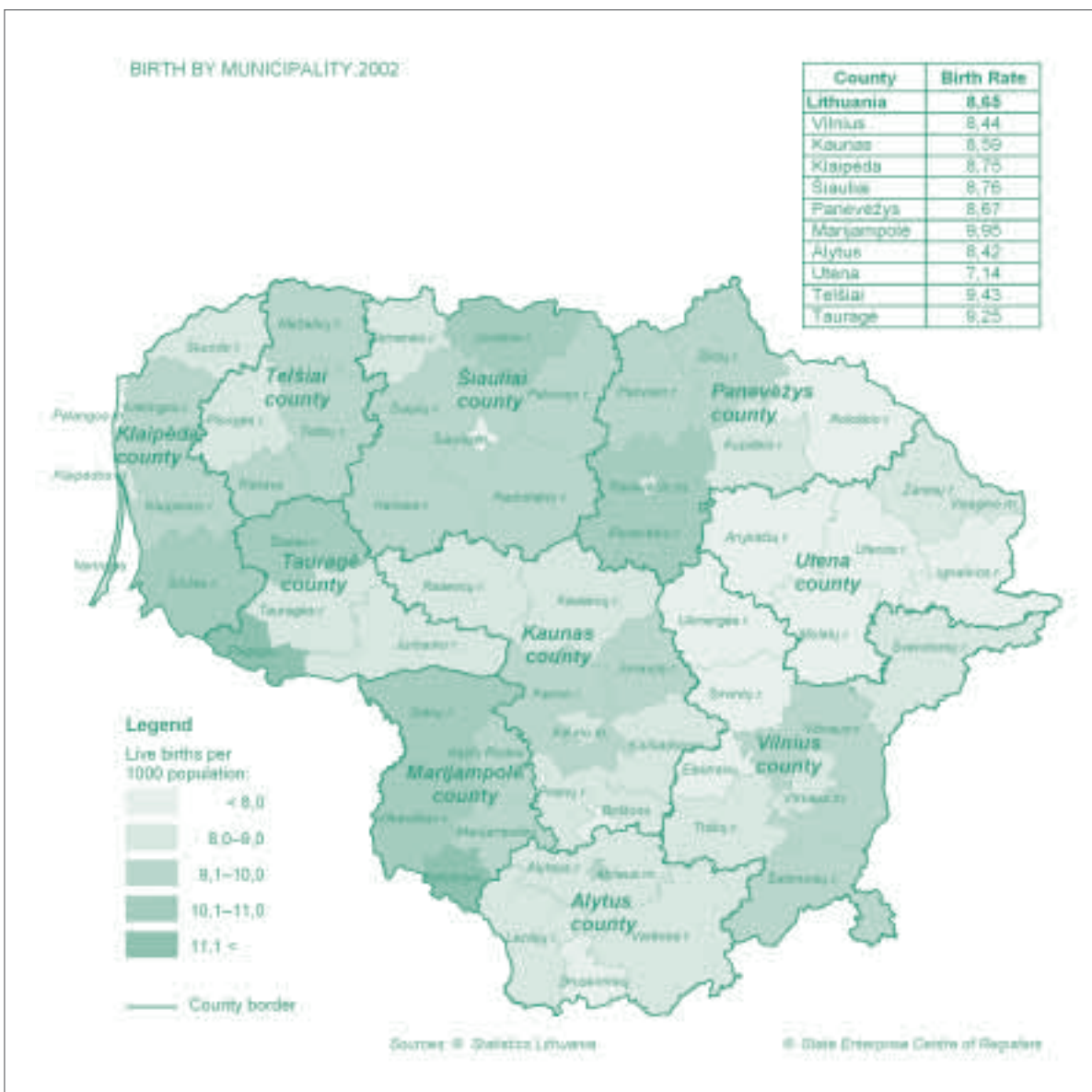
its much higher mortality rates than urban areas. In 2002, the rural areas had a rate of natural decrease of 5.7.

B. Snapshots of Vital Statistics: 2002

Figure D2d shows the vital statistics of Lithuania and its counties (all areas) for 2002. Of all the counties, Marijampole had the highest birth rate at 10.0, while Utena had the lowest birth rate at 7.1. With respect to mortality, Utena County had the highest

rate at 14.5 and Klaipeda County had the lowest rate at 10.7. After subtracting the mortality rate from the birth rate for each county, we see that Utena County had the largest rate of natural decrease at 7.3, while Klaipeda County had the smallest rate of natural decrease at 1.9.

Figure D2e shows the vital statistics of urban areas of Lithuania and its counties for 2002. Urban areas of Marijampole and Utena Counties had the highest and lowest birth rates, 9.4 and 6.4, respectively. Urban areas

Vital Statistics of Lithuania and Its Counties,
Rural Areas: 2002

Figure D2f — Birth Rate, Death Rate, Rate of Natural Increase (+) or Decrease (-) for Lithuania, Vilnius, Kaunas, Klaipeda, Siauliai, Panevezys, Marijampole, Alytus, Utena, Telsiai, Taurage.
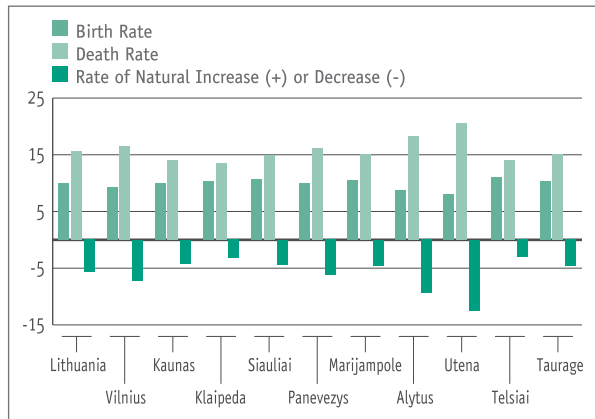
of Siauliai and Marijampole Counties shared the highest mortality rate at 10.8, while urban areas of Alytus County had the lowest mortality rate at 8.8. Urban areas of Siauliai County had the largest rate of natural decrease at 3.2, while urban areas of Alytus County had the smallest rate of natural decrease at 0.6.

Figure D2f shows the vital statistics of rural areas of Lithuania and its counties for 2002. Rural areas of Telsiai County had the highest birth rate at 11.1 and the second lowest mortality rate at 14.1, with the consequence that it had the smallest rate of natural decrease at 3.0. Rural areas of Klaipeda County had the lowest mortality rate at 13.5. Rural areas of Utena County had the lowest birth rate at 8.0 and the highest mortality rate at 20.5, with the consequence that it had the largest rate of natural decrease at 12.5 for all of rural Lithuania.

Lithuanian Migration

Migration, international as well as internal migration, is an important factor that affects the population of Lithuania. The Census of 2001 forced the recalculation of the annual population estimates for the intercensus period. Because of Lithuania's relative precision in keeping birth and death

International Migration To and
From Lithuania: 1990-2002

Figure D3a — Immigration Rate, Emigration Rate, Net Migration (Immigration-Emigration) Rate, 1990–2002.
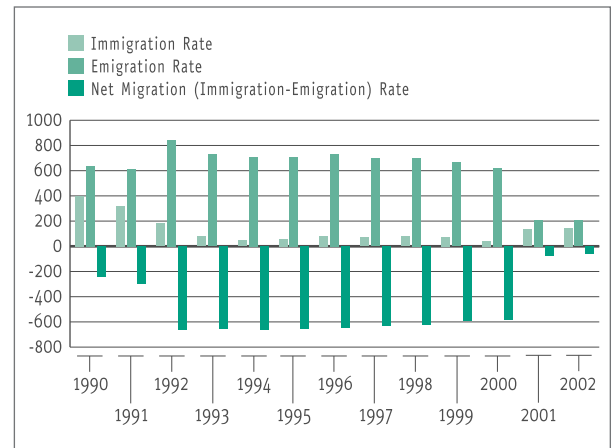
records, the only place left where the Dept. of Statistics could adjust for the loss of over 200,000 people was in the international migration numbers.

A. International Migration

1. Trends in International Migration: 1990-2002

Figure D3a shows the pattern of immigration, emigration, and net international migration rates from 1990 to 2002. The sustained dip in net international migration rates from 1992 to 2000 includes the recalculated numbers from the Dept. of Statistics; these include both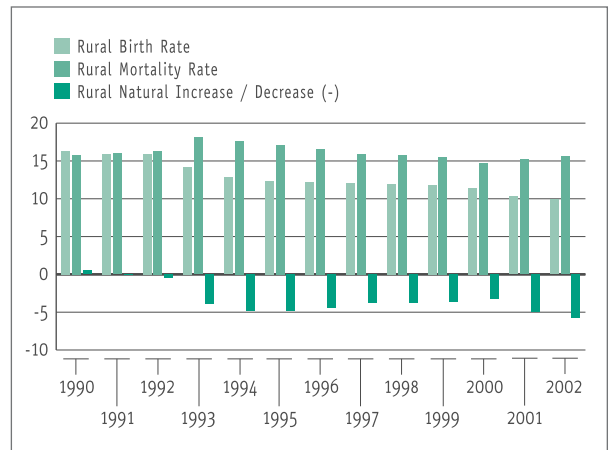 legal and illegal migration. The upward swing of net international migration rates in 2001 and 2002 does not necessarily indicate reductions in emigration, because they only include legal international migration. The illegal international migration for 2001 and 2002 will be known only after the next census.

2. International Migration Snapshot: 2002

European citizens made up the predominant share (79.2%) of the immigration pool (5,110 immigrants) in 2002, with 26.5% being Russian citizens, 15.8% being Lithuanian citizens, 12% being Ukrainian citizens, and 9.9% being Belarussian citizens. Asian citizens made up 13.6% of the immigration pool, with 2.4% being Chinese

Figure D3b _____
International Migration Statistics of Lithuania and Its Counties: 2002

Figure D3c _____
Internal Migration in Lithuania: 1990-2002
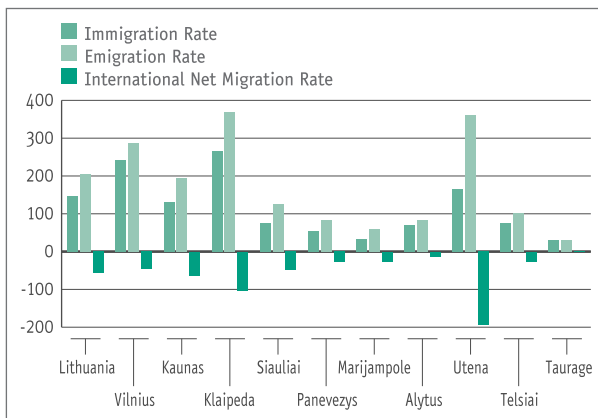
citizens. And, citizens of the Americas made up 4.6% of the immigration pool, with 3.9% being citizens of the U.S.A.

European citizens also made up the predominant share (87.3%) of the emigration pool (7,086 emigrants) in 2002, with 49% being Lithuanian citizens, 18.4% being Russian citizens, 6.2% being Ukrainian citizens, and 4.7% being Belarussian citizens. Asian citizens made up 7.1% of the emigration pool, with 1.3% being Chinese citizens. And citizens of the Americas made up 3% of the emigration pool, with 2.5% being citizens of the U.S.A.

Figure D3b shows the immigration, emigration, and net international migration rates for Lithuania and its counties in 2002. Although Utena County had a moderate immigration rate (number of people arriving from a foreign country to reside permanently in Lithuania per 100,000 average population) at 165.8, it had the second highest emigration rate (number of people departing Lithuania permanently to reside in a foreign country per 100,000 average population) at 360.3, which resulted in the largest net international migration rate (immigration rate minus emigration rate), in this case a net rate of loss of people, of all of Lithuania's counties at 194.6. Klaipeda County had the highest rates of both immigration and emigration, at 265.3 and 368.3, respectively. Consequently, Klaipeda County had the second largest net rate of loss of people at 103.0. Taurage

County had both the lowest immigration rate (29.9) and the lowest emigration rate (30.7) of any county, which resulted in the smallest net rate of loss of people at 0.7.

B. Internal Migration: Trends from 1990 to 2002

Figure D3c shows the pattern of internal migration rates within Lithuania during the last 12 years. Since 1992, there has been a net movement of people away from the cities to rural areas, which reached a peak in 1993 with the net rate of loss of 286.4 people per 100,000 avg. pop. from the cities. In 2002, the net rate of urban loss was reduced 74%, to 74.6 people per 100,000 avg. pop.

V. Total Fertility

A. Total Fertility Trends: 1990-2002

Behind the decline in the Lithuanian birth rate has been a decline in the total fertility rate (average number of children born per woman). Figure D4a displays the total fertility rate by residential area from 1990 to 2002. The overall total fertility rate has declined 38.9% during this 12-year period, from a high of 2.03 to a low of 1.24. From 1992 to 1994, the overall total fertility rate declined sharply (20.3%), from 1.97 to 1.57.

Figure D4a
Total Fertility Rate (TFR) by Residential Area:
1990-2002

B. Total Fertility Snapshot: 2002

Figure D4b displays the total fertility rates
for Lithuania and its counties in 2002.
Marijampole County had the highest total
fertility rate at 1.57, followed by Taurage
County at 1.50. Vilnius County had the
lowest total fertility rate at 1.09, followed
by Kaunas County at 1.16, Utena County at
1.21, and Klaipeda County at 1.22. These
were the four counties to have total fertility
rates below the national average of 1.24.

Marriage and Divorce

A. Marriage and Divorce Trends: 1990-2002

Factors that indirectly affect the birth rate
are marriage and divorce. Figure D5a displays
the marriage rate (number of marriages per
1,000 average population) and the divorce
rate (number of divorces per 1,000 average
population) by residential area from 1990 to
2002. The overall marriage rate had declined
54.1%, from a high of 9.8 in 1990 to a low
of 4.5 in 2001. But the overall marriage rate
climbed slightly in 2002, to 4.7. From 1990
to 2002, the overall divorce rate fluctuated
minimally, between a high of 4.1 and a low
of 2.8. In 2002, the overall divorce rate was
3.0. From 1990 to 2001, the trend in the
overall marriage and divorce rates had been
toward convergence.

From 1990 to 1999, the urban marriage
rate had been only minimally higher (less
than or equal to 10%) than the rural
marriage rate. Moderate divergence of the
urban and rural marriage rates began in
2000. By 2002, the urban marriage rate
of 5.0 was 28.2% higher than the rural
marriage rate of 3.9. Except for the years
1997-1998 when the divorce rates between
the two areas were similar, the urban divorce
rate has been considerably higher than
the rural divorce rate. In 2002, the urban
divorce rate of 3.6 was 89.5% higher than
the rural divorce rate of 1.9.

Figure D5b shows divorce from a different
perspective, i.e., as the number of divorces

Then during the next 5 years, 1994 to 1999,
its decline became very gradual (only 7.0%).
But since 1999, the decline in the overall
total fertility rate has accelerated, from 1.46
to 1.24, a decline of 15.1% in 3 years. The
2002 overall total fertility rate of 1.24 is
41.0% lower than the rate of 2.10 needed to
maintain population stability.

The urban total fertility rate fell 41.0%
during the last 12 years, from a high of 1.78
to a low of 1.05. While, the rural total fertility
rate declined 36.6%, from a high of 2.76 to a
low of 1.75. The urban total fertility rate has
been 31% to 43% lower than the rural total
fertility rate during this 12-year period.

Figure D4b
Total Fertility Rates (TFR) for Lithuania and Its
Counties: 2002

per 100 marriages by residential area from 1990-2002. The overall number of divorces per 100 marriages was at a low of 35.1 in 1990. From 1990 to 2001, the number of divorces per 100 marriages nearly doubled, reaching a high of 69.9. But the overall number of divorces per 100 marriages fell to 65.5 in 2002. One should not look at this figure without first looking at the previous figure (D6a), because one might be tempted to conclude that divorce was spiraling out of control. But in reality, the steep incline in Figure D6b is due to the near convergence of the marriage and divorce (population-based) rates displayed in Figure D6a.

B. Marriage and Divorce Snapshot: 2002

Figure D5c shows the marriage and divorce rates for Lithuania and its counties, all areas, in 2002. Vilnius County had the highest marriage rate at 5.2, followed by Kaunas County at 5.1. Telsiai County had the distinction of having the lowest marriage rate at 3.9 and the highest divorce rate at 3.5. Alytus and Taurage Counties shared the lowest divorce rate at 2.6.

Figure D5d shows the number of divorces per 100 marriages by residential area for Lithuania and its counties in 2002. As one would expect after viewing the previous

Figure D5b
Divorces Per 100 Marriages by Residential Area: 1990-2002
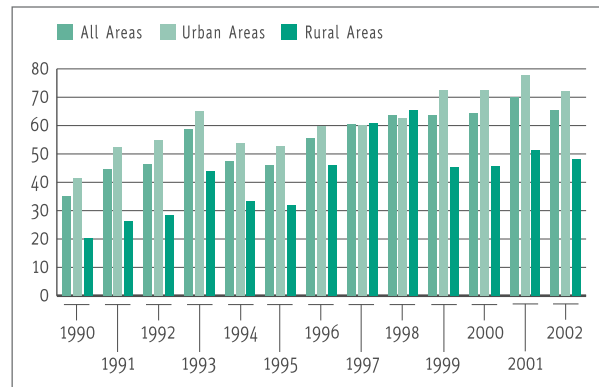
figure (D5c), Telsiai County had the highest number (87.9) of divorces per 100 marriages over all areas. Telsiai County also had the highest number (108.7) of divorces per 100 marriages among the urban areas of all the counties, making that urban area the only one in the country where the number of divorces exceeded the number of marriages. Panevezys County had the highest number (59.5) of divorces per 100 marriages among the rural areas of all the counties.

Over all areas, Vilnius County had the lowest number (54.9) of divorces per 100 marriages. Vilnius County also had the lowest number (58.2) of divorces per 100 marriages among the urban areas of all the counties. Alytus County had the lowest number (33.6)

Figure D5a
Marriage and Divorce Rates by Residential Area: 1990-2002

Figure D5c
Marriage and Divorce Rates for Lithuania and Its Counties, All Areas: 2002
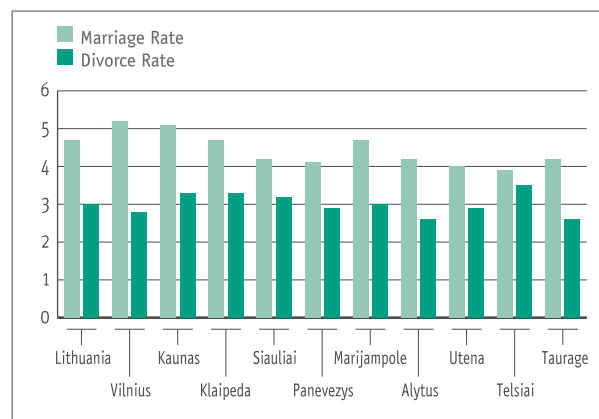
of divorces per 100 marriages among the
rural areas of all the counties.

Figure D5d
Divorces per 100 Marriages by Residential Area
for Lithuania and Its Counties: 2002
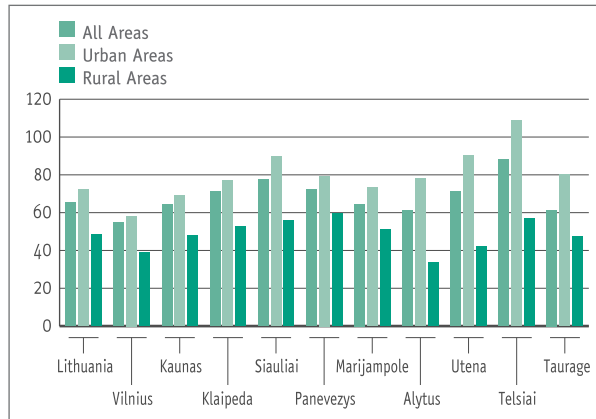
Goal 1: Eradicate Extreme Poverty and Hunger
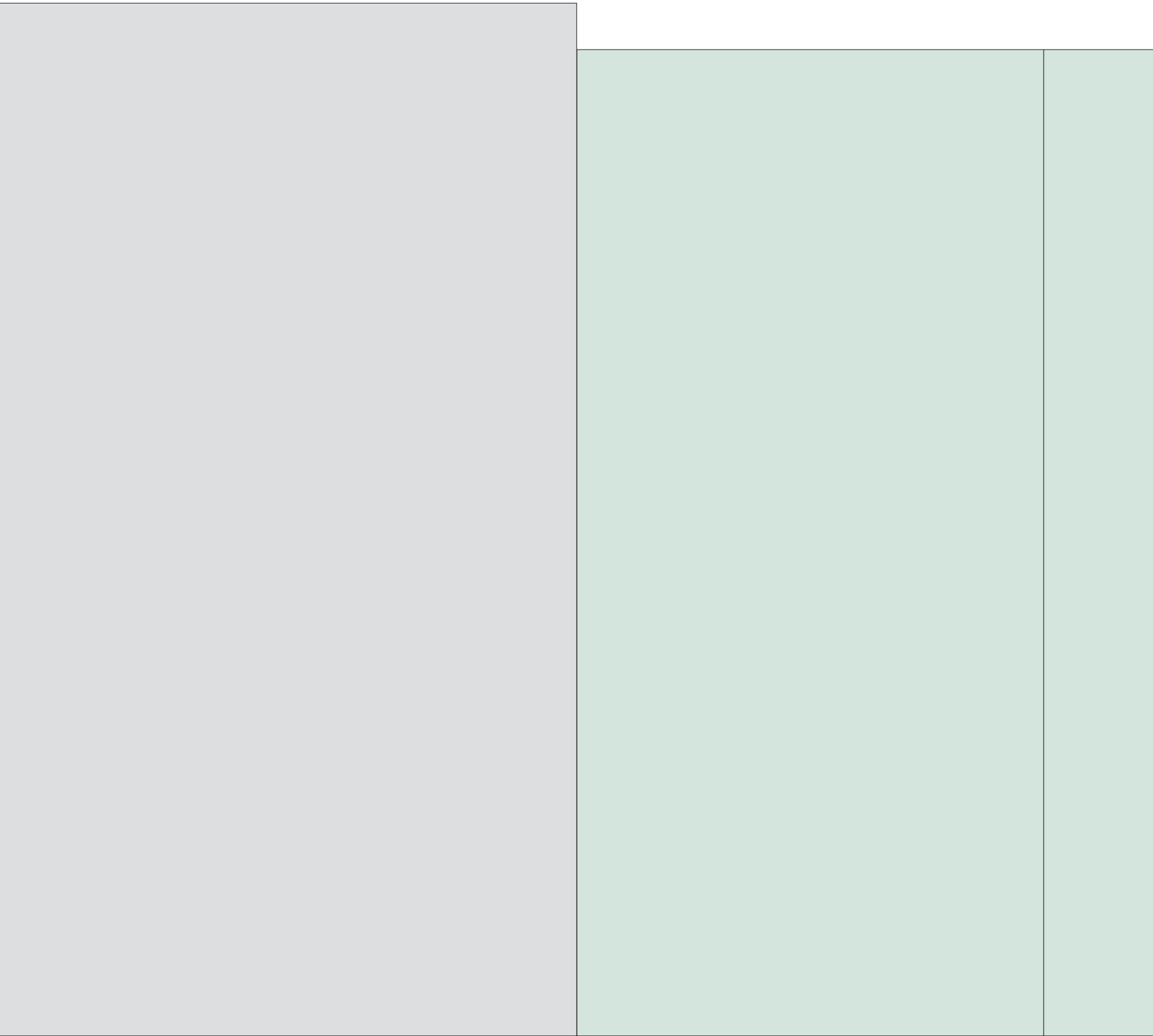
The **first Millennium Declaration Goal (MDG)** is to eradicate extreme poverty and hunger. Lithuania has three measures to assess poverty: the *relative poverty line (which equals 50% of the average monthly consumption expenditure per equivalent consumer in the appropriate year)*, the *extreme poverty line [which is defined applying the indicaor of the Applied Minimum Standard of Living (MSL)]*, and the *absolute poverty line [which corresponds to the minimum subsistence level (MSL) that is calculated annually by The Ministry of Social Security and Labour]*. The **Lithuanian Poverty Reduction Strategy of 2000**[1] considers the relative poverty line as an appropriate measure for the analysis of the extent and depth of poverty throughout the country and for designing effective policy measures. The extreme poverty line serves for undertaking urgent, concrete actions to eradicate extreme poverty, though it is not considered a good index for designing long-term policy measures or for international comparisons. The absolute poverty line is less commonly used in Lithuania and is not well known.

Choosing the first of the three poverty measures, Lithuania's target for this goal could be to halve, between 1990 and 2015, the proportion of people who live below the relative poverty line. Figure P1 displays the values of the relative poverty line and the average monthly consumption expenditure per capita on which it is based, as well as the value of the extreme poverty line, in Litas, from 1996-2002. There has been a 17.7% rise in the relative poverty line in the last 6 years, from 226.2 Lt in 1996 to 266.2 Lt in 2002. The relative poverty line in 2002 was 2 Lt higher than in 2001. Correspondingly, there has been a 37.7% rise in the extreme poverty line in the last 6 years, from 90.8 Lt in 1996 to 125.0 Lt in 2002, though the extreme poverty line has held steady at 125.0 Lt since 1999.

Policy makers at the national and international levels consider the twin tasks of reducing poverty and eradicating

[1] Lithuanian Poverty Reduction Strategy was signed by the President of The Republic of Lithuania in 2000. Available from Internet: http://www.undp.lt/en/?id=9

Figure P1
Average Monthly Consumption Expenditure Per Capita and Relative Poverty Line: 1996-2002

Legend:
- Average Household Consumption Expenditure Per Capita
- Relative Poverty Line
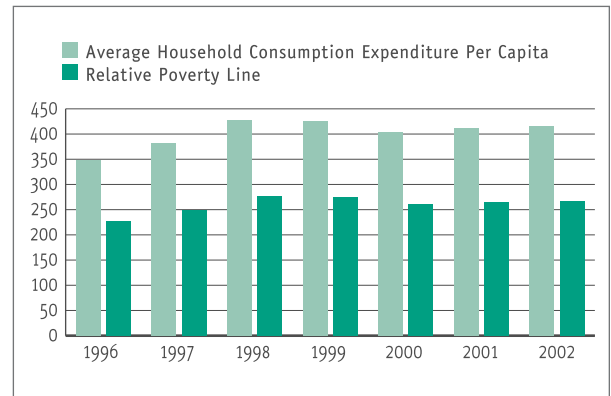
extreme poverty as essential parts of social integration and inclusion policies. As it will be illustrated later in this chapter, socio-economic factors, such as employment, education, place of residence, and size and composition of the family, are very important determinants of poverty for some population groups. Thus, efficient strategies targeted to high-risk population groups shall be well-coordinated with Lithuania's broader social protection, labor market, educational, regional development, and family support policies and implemented for the purpose of reducing poverty and eradicating extreme poverty.

Trends in Factors Affecting Poverty: 1996-2002

A. Residential Area

Figure P2a shows that the overall percentage of people living below the relative poverty line decreased from 18% in 1996 to 15.8% in 1999, a reduction of 12.2%[2] in 3 years. Unfortunately, the overall poverty level has risen 5.1% since 1999. The percentage of people living below the relative poverty line was 16.6% in 2002, up slightly from the

Figure P2a _____
Percentage Living Below the Relative
Poverty Line: 1996-2002

2001 figure of 16.5%. The percentage of
people living in extreme poverty fell 15.4%,
from 1.3% in 2001 to 1.1% in 2002.

Figure P2b shows the huge poverty gap
that exists between **rural and urban areas**,
which is even starker than the overall
poverty level. In rural areas, the percentage
of people living below the relative poverty
line has increased 9.6%, from 26.0% in
1996 to 28.5% in 2002, up from the 2001
figure of 27.6%. On the other hand, the
percentage of urban people living in poverty
was reduced 27.9%, from 14.7% in 1996 to
10.6% in 2002, down from the 2001 figure
of 11.1%. In 2002, the poverty level in rural
areas (28.5%) was over two and a half times
that in urban areas (10.6%).

B. Socio-Economic Group

The next several figures show how various
socio-economic factors affect the percentage
of people living below the relative poverty
line. Figure P3 displays the percentage of
people living below the relative poverty line
by socio-economic group.

People who are **self-employed** *(not in
agriculture)* **or employ others** were the least
vulnerable to poverty. In 2002, only 7.4%
of these people were poor, which is less
than half the national rate of 16.6% and
down from the 2001 figure of 8.5%. The
next group that experienced poverty at a
lesser rate than the national average was the
employees. The poverty rate of employees
has lessened 20.3%, from 13.8% in 1996 to
11.0% in 2002, down from the 2001 figure
of 11.6%.

Pensioners have experienced a consistently
higher poverty rate than the national
average. Their poverty rate fell 24.2%, from
25.2% in 1996 to a low of 19.1% in 1999.
But since then, the percentage of pensioners
living below the relative poverty line has
risen 12.6%, to 21.5% in 2002, up from the
2001 figure of 21.4%. The group that has
had the most dramatic rise in poverty is the
farmers *(self-employed in agriculture)*. Their
level of poverty rose 51.7%, from 26.3% in
1996 to a high of 39.9% in 1999. In 2000,
the farmers had a brief respite, when their
poverty rate fell 11.5%, to 35.3%. But since

Figure P2b _____
Percentage Living Below the Relative
Poverty Line by Residential Area: 1996-
2002
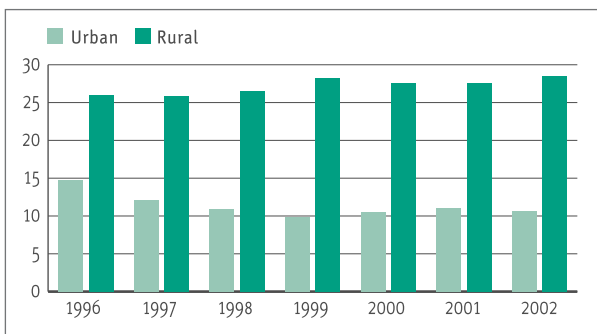
[2] All differences between percentage levels of relative poverty will be
calculated as a percentage increase or decrease.

Figure P3 _____
Percentage Living Below the Relative
Poverty Line by Socio-Economic Group:
1996-2002
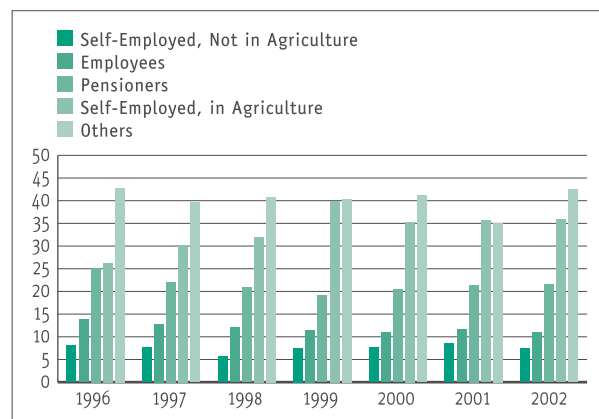
2000, the farmers' poverty rate has been on the rise, reaching 35.9% in 2002, up from the 2001 figure of 35.7%. The overall increase in the poverty rate of farmers in these 6 years was 36.5%. The most vulnerable group to poverty was the **others**, *which is comprised mostly of persons supported by social benefits, including the unemployed and students living on scholarships*. In 2002, the others' poverty rate was 42.4%, about the same as they had in 1996 (42.8%), but up 20.8% from the 2001 figure of 35.1%.

C. Education Level of Household Head

Figure P4 shows the percentage of people living below the relative poverty line by the education level of the household head. As expected, the households whose heads had achieved a **tertiary education** *(higher, graduate, or post-graduate)*, the highest education level, experienced the lowest poverty, 86.1% lower than the national average in 2002. Their poverty level decreased 59.6%, from 5.7% in 1996 to 2.3% in 2002, which is down from the 2001 figure of 2.5%. Those households whose heads had **post-secondary, vocational** *(professional college)* **education** also experienced a poverty level lower than the national average. From 1996 to 2001, their poverty rate decreased 25.9%, from 13.9% to

10.3%. Unfortunately, in 2002, their poverty rate rose 6.8%, to 11.0%.

The households whose heads had an **upper secondary education** *(Classes 11-12: 2 years beyond the mandatory basic education)* experienced poverty at a higher level than the national average. Their poverty level remained fairly steady, ranging from 20.4% to 20.1% during the past 6 years. The households whose heads had only a **lower secondary (basic) education** *(Classes 5-10)* experienced poverty at a considerably higher level than the national average. Their poverty rate rose 20.9%, from 23.9% in 1996 to 28.9% in 2002, up from the 2001 figure of 26.7%. The poverty rate of those households whose heads had completed **primary education** *(Classes 1-4)*, the lowest education level, varied moderately during the past 6 years. In 2002, their poverty level was 26.6%, which was 8% lower than those with basic education. Predictably, those with **no education** had the highest poverty rate of all. Their poverty level rose 32.7%, from 31.2% in 1996 to 41.4% in 2001. Fortunately, their poverty level decreased 9.2%, to 37.6% in 2002.

D. Household Type

Figure P5 shows the poverty rates by type of household from 1996 to 2002. Type of household

Figure P4

Percentage Living Below the Relative Poverty Line by Education Level of Household Head: 1996-2002

None
Primary: Classes 1-4
Lower Secondary: Classes 5-10 (Basic)
Upper Secondary: Classes 11-12
Post-Secondary: Vocational (Professional College)
Tertiary: Higher, Graduate, and Post-Graduate

Figure P5

Percentage Living Below the Relative Poverty Line by Household Type: 1996-2002

Couple without Children
Single Adult without Children
Other Household without Children
Couple with Children <18
Single Adult with Children <18
Other Household with Children <18
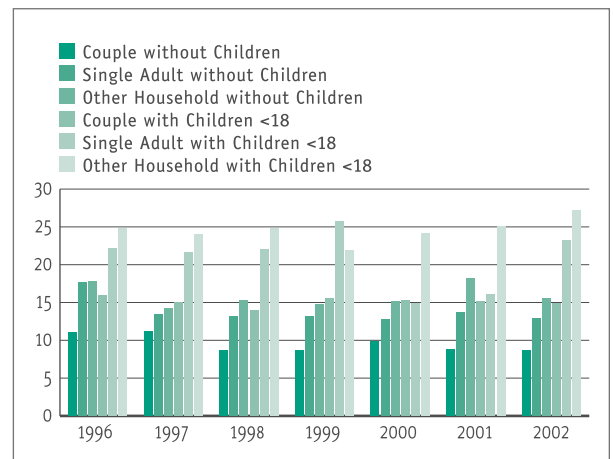
is really a combination of two factors: **household head** *(couple, single adult, or other)* and **child status** *(presence or absence of children less than 18 years old in the household)*. When analyzed separately, child status was a more important factor than household head in determining poverty level. As expected, **households with children** experienced a higher level of poverty than **households without children**. But within child status, household head was also important, just less so.

Households of couples without children experienced the lowest level of poverty, which decreased 22.5% in the last 6 years, from 11.1% in 1996 to 8.6% in 2002, down from the 2001 figure 8.8%. They tended to be better off than **households of single adults without children**, whose poverty rate decreased 26.7%, from 17.6% in 1996 to 12.9% in 2002, down from the 2001 figure of 13.7%.

This same tendency between couples and single adults existed for households with children, but at higher poverty levels from 1996-1999. During those 3 years, the poverty level of **households of single adults with children** ranged from 40% to 66% higher than **households of couples with children**. During 2000 and 2001, the poverty levels of these households were comparable. However, in 2002, the poverty level of households of single adults with children jumped to 23.2%, which was 55.7% higher than the poverty level of households of couples with children (14.9%). While the poverty rate of couples with children hovered slightly below the national poverty level from 1996 to 2002, the poverty rate for single adults with children were well above the national poverty level for all the years under observation, except for 2000 and 2001. Single parenthood appears to make one highly susceptible to living in poverty in Lithuania.

Other households without children tended to experience a higher poverty level than either couple or single adult households without children. Except for 1999, **other households with children** experienced a poverty level higher than any other household.

E. Number of Children less than 18 Years Old in Household

Figure P5 just showed us the effect of child status on poverty rates. Figure P6 shows us that **the number of children less than 18 years old in the household** *also* matters. There were small increases in poverty rates as households go from zero to two children. These poverty rates hovered around the national poverty level from 1996 to 2002. But there was a striking jump in the poverty rate of **households with 3 or more children**. Their rate of 34.5% in 2002 was over twice the national poverty rate of 16.6% and was up from the 2001 figure of 33.0%. Thus, households with three or more children are extremely vulnerable to living in poverty in Lithuania.

Figure P6
Percentage Living Below the Relative Poverty Line by Number of Children <18 in Household: 1996-2002
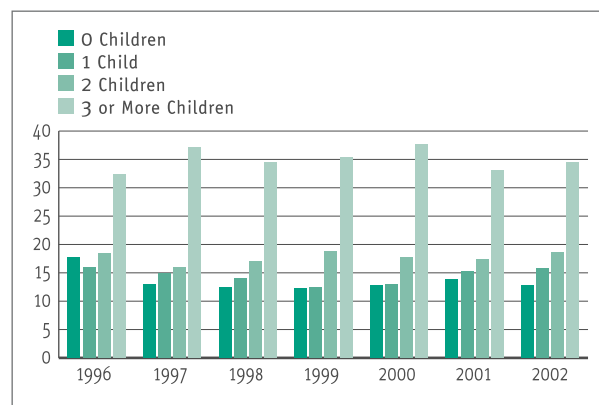
Income and Consumption Expenditure

A. Trends in Disposable Income by Residential Area: 1996-2002

Figures P2 and P3 have already showed us the disparity in poverty levels between rural and urban areas, and between farmers and other socio-economic groups (self-

employed in other businesses, employees, or pensioners). The following figures will examine other factors that can partly explain why rural people, and especially farmers, live under such difficult conditions.

Figure P7 displays the average monthly disposable income per capita by residential area from 1996 to 2002. During this 6-year period, overall disposable income increased 29.2%, from 326.7 Lt in 1996 to 422.0 Lt in 2002, though its peak came in 1999 with 428.0 Lt. Since 2001, overall disposable income has increased 3%, from 409.9 Lt to 422.0 Lt. Though both urban and rural areas experienced increases in disposable income during the period, the urban areas profited more than rural areas. The disposable income of urban areas increased 33.9%, while that of the rural areas increased only 19.2%. This disparity in increase has led to a widening of the gap between the disposable incomes of urban and rural areas. The disposable income gap widened from 23.8% in 1996 to 32.1% in 2002.

B. Snapshot of Sources of Disposable Income by Residential Area: 2002

The next figure, P8, displays the percentage distribution of disposable income by source and residential area in 2002. As was expected, rural people received 20.9% of their income from **self-employment in agriculture**, compared to 1.9% for urban people. But, they received almost a third (32.5%), and their largest share, of their

Percentage of Disposable Income by Source and Residential Area: 2002
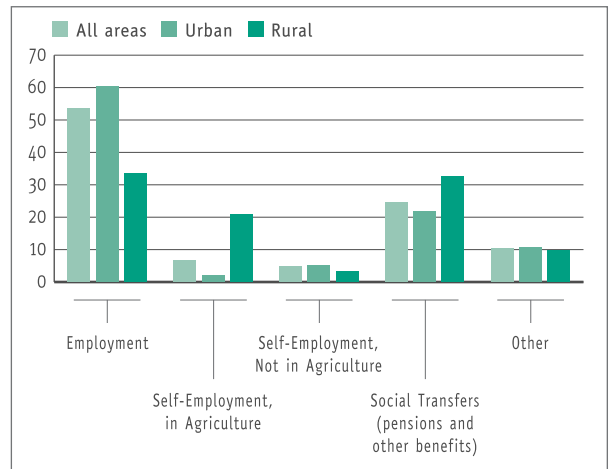
income from **social transfers** *(pensions and other benefits)*, compared to only 21.9% for urban people. City dwellers derived the largest share (60.3%) of their income from **employment**, which is almost double the share (33.6%) for rural dwellers. In the chapter "Demographic Trends and Snapshots", we have already seen that the rural population has higher proportions of children (0-14 years) and the elderly (over working age: 65+ years) than the urban population. Consequently, the rural population has proportionally fewer people contributing wage income to households than the urban population.

C. Trends in Consumption Expenditure by Residential Area: 1996-2002

Overall, the average monthly consumption expenditure per capita increased 19.5%, from 348.1 Lt in 1996 to 416.1 Lt in 2002, up from the 2001 figure of 411.0 Lt, as shown in Figure P9. Again, the city people were able to increase their spending by 23.5% during these 6 years (373.3 Lt to 461.1 Lt), while the rural people could only increase their spending by 11.3% (292 Lt to 324.9 Lt). This disparity in increase has widened the gap between the consumption expenditures of city and rural people, from 21.8% in 1996 to 29.5% in 2002.

Figure P7
Average Monthly Disposable Income per Capita by Residential Area: 1996-2002

Figure P9
Average Monthly Consumption Expenditure per Capita by Residential Area: 1996-2002
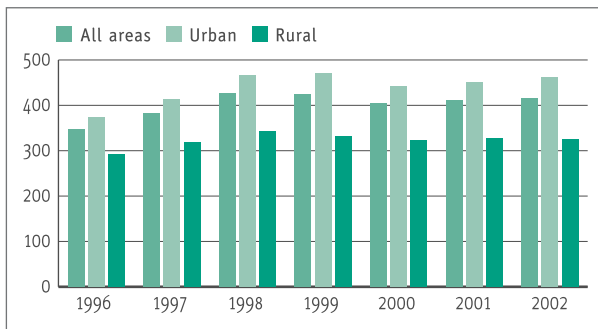
D. Snapshot of Expenditure Categories by Residential Area: 2002

Figure P10 displays the percentage of consumption expenditure by category and residential area in 2002. Over half (52.7%) of rural people's spending goes to **food and non-alcoholic beverages**, while only 36.5% of urban people's spending goes to this category. Rural people also spend a higher percentage (4.2% vs. 3.6%) on **alcohol and tobacco** than city dwellers. In all other categories, city people spend proportionally more than rural people. City people spend considerably more than rural people in three categories: **housing, utilities, furnishings, and maintenance** (20.9% vs. 13.2%), **recreation, culture, hotels, and restaurants** (10% vs. 5.7%), and **transportation and communication** (12.7% vs. 10.7%).

Snapshots of Combinations of Factors Affecting Relative Poverty: 2002

A. Socio-Economic Group by Residential Area

The next four figures examine the extent of poverty when the socio-economic factors, discussed previously, are combined with residential area for 2002. Figure P11 shows that the poverty

Figure P10
Percentage of Consumption Expenditure by Category and Residential Area: 2002
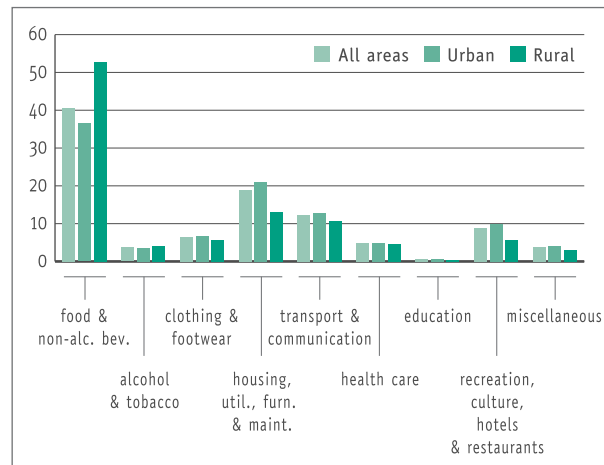
level is much higher for employees, pensioners, and others of rural areas than for the same categories of people in urban areas. Rural employees are 165.4% more likely to live in poverty than urban employees (21.5% vs. 8.1%). Rural pensioners are 53.4% more likely to be poor than city pensioners (27.0% vs. 17.6%). Similarly, rural others (living mostly on social benefits) are 75.9% more likely to live below the relative poverty line than their counterparts in the city (55.4% vs. 31.5%). The two other socio-economic groups (self-employed in agriculture and self-employed, not in agriculture) cannot be compared across the residential divide because of too few numbers.

B. Education Level of Household Head by Residential Area

Figure P12 examines the depth of poverty by education level of household head and residential area in 2002. Generally speaking, an inverse relationship exists between education and poverty, i.e., as the education level increases, the poverty level decreases. This is the case for Lithuanians as a whole in 2002 and for urban Lithuanians, as well. However, there is a slight exception for rural Lithuanians. They experienced their highest level of poverty (38.8%) among households whose head had completed a lower secondary (basic) education, not among households whose head only had a primary (30.4%) or

Figure P11

Percentage Living Below the Relative Poverty Line by Socio-Economic Group and Residential Area: 2002
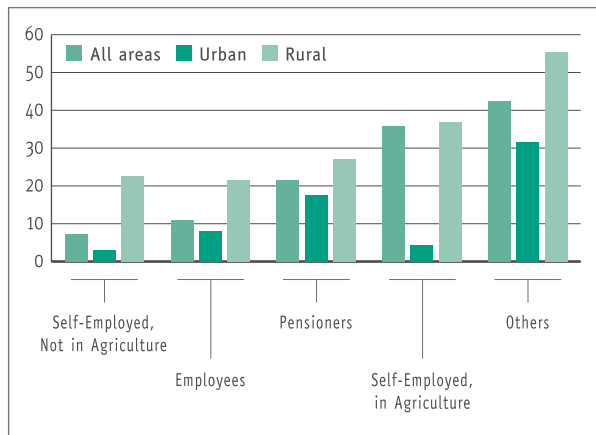
no (37.6%) education. As the education level becomes higher, the poverty gap tends to become wider between rural and urban people. Those household heads with primary education were 40.7% more likely to be poor if they lived in rural areas rather than in urban areas (30.4% vs. 21.6%). Rural households whose head had a lower secondary (basic) education were twice as likely to be poor than urban households whose head had the same education (38.8% vs. 19.4%).

Figure P12

Percentage Living Below the Relative Poverty Line by Education Level of Household Head and Residential Area: 2002
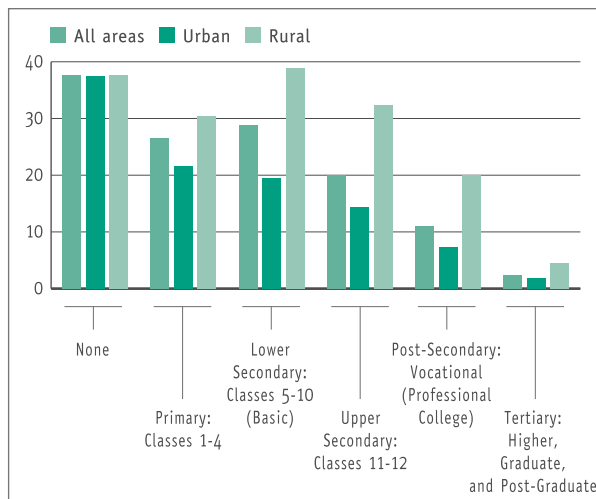
Rural households whose head had an upper secondary education were 126.6% more likely to live in poverty than urban households whose head had the same education (32.4% vs. 14.3%. And, rural households whose head had a post-secondary, vocational (professional college) education were 175.3% more likely to live in poverty than urban households whose head had an equivalent education (20.1% vs. 7.3%). But, households whose head had achieved a tertiary level education were 136.8% more likely to be poor if they lived in rural areas rather than in the cities or towns (4.5% vs. 1.9%).

C. Household Type by Residential Area

Figure P13 displays the extent of poverty when household type is combined with residential area for 2002. Among all households; whether or not they had children less than 18 years old in the household or were headed by couples, single adults, or others; rural households experienced remarkably higher poverty levels (from 91.2% to 225.3% higher) than urban households of the same type. Again, we notice that the presence of children less than 18 years old in a household increased the likelihood of poverty and that couples tended to be better off than single adults as heads of households.

D. Number of Children Less Than 18 Years in Household by Residential Area

Figure P14 shows the extent of poverty when the number of children less than 18 years old in the household is combined with residential area for 2002. We have previously seen in Figure P6 the direct relationship that exists between the number of children and poverty, i.e., as the number of children increases, so does the level of poverty. This same direct relationship exists among urban and rural households but at lower and higher poverty levels, respectively. In each household category, the poverty experienced among rural households was considerably higher (from 67.6% to 173.2% higher) than among urban households. As expected, rural households with 3 or more children were the most vulnerable to poverty. Their poverty level reached a high of 40.9% in 2002.

Figure P13
Percentage Living Below the Relative Poverty Line by Household Type and Residential Area: 2002
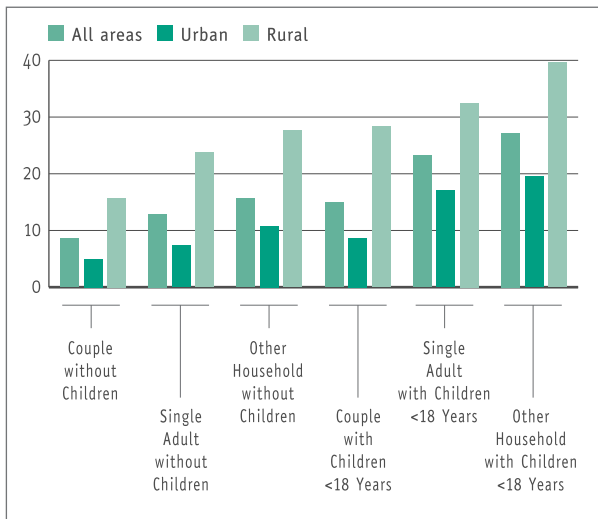
E. Number of Children Less Than 18 Years in Household by Household Head

Figure P15 displays the percentage of people living below the relative poverty line when the number of children less than 18 years old in the household is combined with household head for 2002. We have already seen in Figure P6 that there is an increase in poverty as the number of children in the household increases. But Figure P15 also shows that within households of 0, 1, or 2 children, there is an increase in poverty as the household head changes from couple to single adult to other. There is an approximate doubling effect in poverty level

Figure P14
Percentage Living Below the Relative Poverty Line by Number of Children Less Than 18 Years in Household and Residential Area: 2002

Figure P15
Percentage Living Below the Relative Poverty Line by Number of Children Less Than 18 Years in Household and Household Head: 2002
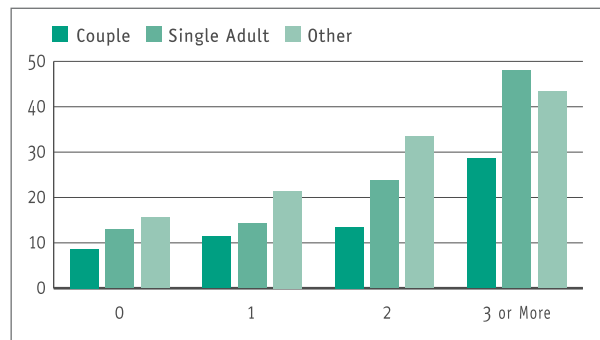
when the number of children in a household goes from 2 to 3 or more, whether the household is headed by a couple (from 13.5% to 28.6%) or by a single adult (from 23.8% to 48.0%). The increase in poverty level for other households is less (from 33.4% to 43.4%). Almost half (48%) of the people living in households headed by a single adult with 3 or more children lived below the relative poverty line in 2002, thus making this household type the most vulnerable to poverty.

Markers for Poverty at the County Level

A. Unemployment Rates: 1995-2002

Since poverty data at the county level are not available, we will use markers for poverty that we do have data on. We have seen that the unemployed (included in the socio-economic group: Others) are at high risk for living in poverty. Therefore, we will use high unemployment rates as a marker for poverty. Table P16 shows the average unemployment rates by county, provided by the National Labour Exchange. In 2002, Telsiai County had the highest unemployment rate at 15.9%, followed by Panevezys County at 15.5%. Four other counties had unemployment rates above the national average of 11.3%. They were Marijampole at 14.8% and Taurage at 14.6%, followed

AVERAGE ANNUAL UNEMPLOYMENT RATE, 2002

County	Unemployment Rate, in per cent
Lithuania	11.3
Vilnius	8.7
Kaunas	8.8
Klaipėda	10.0
Šiauliai	14.2
Panevėžys	15.5
Marijampolė	14.8
Alytus	14.2
Utena	11.0
Telšiai	15.9
Tauragė	14.6

Legend

In per cent:

< 9.0

9.0–13.0

13.1–17.0

17.1–21.0

21.1 <

—— County border

Sources: © Statistics Lithuania   © State Enterprise Centre of Registers

by Šiauliai and Alytus, both at 14.2%. Vilnius and Kaunas Counties had the lowest unemployment rates, at 8.7% and 8.8%, respectively.

B. Average Monthly Gross Earnings by County: 1996-2002

We have already seen that rural residents experience poverty at a much higher level than their urban counterparts and that the disposable income for urban residents is much greater than that for rural residents. Therefore, we will use low average monthly gross earnings as a marker for poverty. Table P17 displays the average monthly gross earnings by county. In 2002, Taurage County had the lowest average monthly gross earnings at 761 Lt, followed by Marijampole County at 805 Lt. These earnings were 25.0% and 20.6% below the national average of 1,014 Lt, respectively. Vilnius County had the highest average monthly gross earnings at 1,180 Lt, followed by Utena County at 1,069 Lt. These earnings were 16.4% and 5.4% above the national average of 1,014 Lt, respectively.

AVERAGE MONTHLY GROSS EARNINGS BY MUNICIPALITY, 2002

County	Average Monthly Gross Earnings in Litas
Lithuania	1014
Vilnius	1180
Kaunas	937
Klaipeda	993
Šiauliai	825
Panevėžys	899
Marijampolė	805
Alytus	882
Utena	1089
Telšiai	983
Tauragė	761

Legend

Average monthly gross earnings LTL

- < 580
- 750–900
- 901–850
- 851–950
- 951 <

— County border

Sources: ⬛ Statistics Lithuania   ⬛ State Enterprise Centre of Registers

C. Gross Domestic Product (GDP) per Capita by County: 1997-2002

Low productivity is often associated with poverty. Therefore, we will use low gross domestic product (GDP) per capita as a marker for poverty. Table P18 shows the gross domestic product (GDP) per capita by county. In 2002, Taurage County had the lowest GDP per capita at 8.4 thousand Litai, followed by Marijampole County at 9.7 thousand Litai. Their GDPs were 42.5% and 33.6% lower than the national average of 14.6 thousand Litai per capita. Vilnius County had the highest GDP per capita at 21.0 thousand Litai, followed by Klaipeda County

at 15.9 thousand Litai. Their GDPs were 43.8% and 8.9% higher than the national average of 14.6 thousand Litai per capita.

D. Education Level of Population by County: Census, 2001

We have already seen that households whose head has a lower level of education experience poverty at a much higher rate than households whose head has a higher level of education. Therefore, we will use low

P 16 Average Annual Unemployment Rates from National Labor Exchange

	1995	1996	1997	1998	1999	2000	2001	2002
Lithuania	6,1	7,1	5,9	6,4	8,4	11,5	12,5	11,3
Vilnius	5,3	7,3	6,5	5,7	6,8	9,2	10,0	8,7
Kaunas	4,9	5,6	4,2	4,6	6,4	9,2	9,7	8,8
Klaipeda	6,6	6,9	4,9	5,1	7,1	10,0	11,0	10,0
Siauliai	7,1	7,1	6,8	9,0	12,5	16,3	16,5	14,2
Panevezys	6,0	6,3	6,1	7,6	10,5	14,6	16,4	15,5
Marijampole	5,6	5,9	5,9	8,0	11,2	15,0	16,9	14,8
Alytus	8,5	9,0	7,2	8,6	9,8	13,7	15,8	14,2
Utena	6,4	6,9	6,7	7,0	8,2	10,7	12,0	11,0
Telsiai	7,4	7,4	5,0	6,4	9,1	13,0	15,7	15,9
Taurage	12,6	12,0	8,3	8,8	10,9	15,1	16,2	14,6

P 17 Average Monthly Gross Earnings in Litas

	1996	1997	1998	1999	2000	2001	2002
Lithuania	618,0	778,0	930,0	987,0	971,0	982,0	1014,0
Vilnius	700,0	880,0	1063,0	1138,0	1118,0	1145,0	1180,0
Kaunas	588,0	736,0	864,0	914,0	885,0	909,0	937,0
Klaipeda	651,0	799,0	948,0	993,0	976,0	966,0	993,0
Siauliai	528,0	674,0	805,0	811,0	800,0	801,0	825,0
Panevezys	555,0	719,0	850,0	879,0	887,0	879,0	899,0
Marijampole	494,0	622,0	753,0	770,0	786,0	780,0	805,0
Alytus	541,0	698,0	842,0	887,0	849,0	862,0	882,0
Utena	690,0	831,0	981,0	1031,0	1011,0	1037,0	1069,0
Telsiai	612,0	781,0	935,0	1007,0	982,0	940,0	983,0
Taurage	469,0	603,0	720,0	793,0	766,0	754,0	761,0

educational attainment by the population as a marker for poverty. Table P19 displays the percentage of the population (aged 10 years and older) by education level for all of Lithuania's counties. Of the lowest education levels (primary and basic), Taurage County ranked first (primary: 25.6% and basic: 17.4%), followed by Telsiai County (primary:

P 18 Gross Domestic Product (GDP) per Capita in thousands of Litas

	1997	1998	1999	2000	2001	2002
Lithuania	10,8	12,3	12,1	12,8	13,6	14,6
Vilnius	12,9	15,9	16,0	17,1	18,7	21,0
Kaunas	10,8	12,1	11,8	12,3	13,3	13,9
Klaipeda	11,8	13,2	13,2	14,4	15,0	15,9
Siauliai	9,5	9,8	9,6	9,9	10,1	10,7
Panevezys	10,7	11,6	10,7	11,5	12,1	12,6
Marijampole	8,6	9,6	8,3	9,3	9,1	9,7
Alytus	9,1	10,0	10,2	10,4	10,8	11,2
Utena	9,9	11,0	11,1	10,6	11,3	11,9
Telsiai	9,2	10,5	10,4	10,9	11,8	12,2
Taurage	6,4	6,8	7,2	7,8	8,2	8,4

24.0% and basic: 17.4%) and Marijampole County (primary: 24.5% and basic: 16.6%). Of the highest education levels (higher-university and higher-non-university), Vilnius County ranked first (higher-university: 17.9% and higher-non-university: 18.5%), followed by Kaunas County (higher-university: 15.7% and higher-non-university: 18.1%) and Klaipeda County (higher-university: 11.5% and higher-non-university: 20.0%).

E. Percentage of Population in Young and Old Age Groups Residing in Rural Areas by County: 01/01/2003

We have previously observed that rural households with 3 or more children less than 18 years old (40.9%) and rural pensioners (27.0%) are particularly susceptible to living in poverty. Since we do not have available the percentage of rural households with 3 or more children less than 18 years old or the percentage of the rural population who are pensioners by county, we will use high percentages of young (0-17 years) and old (65+ years) living in rural areas by county as markers for poverty. Figure P20 displays the percentage of the population in young and old age groups residing in rural areas by county. Taurage County has the highest percentage of young people residing in rural areas at 16.3%, followed by Marijampole County at 13.4% and Telsiai County at 11.3%. Utena County has the highest percentage of old people residing in rural areas at 11.5%, followed by Taurage County at 10.1% and Alytus County at 9.9%.

F. Percentage of All Households with Three or More Children Less than 18 Years Old by Household Type and County: Census, 2001

We do have, however, the percentage of all households with 3 or more children less than 18 years old by county (Figure P21) from the census data of 2001. Again we see that Taurage County was in the lead with 6.4% of its households having 3 or more children, followed by Marijampole County with 5.8%, and Telsiai County with 5.7%. These three counties had percentages of households with

Figure P19 Percentage of Population (aged 10 years and older) by Education Level for Lithuania and Its Conties: Census, 2001

	Higher: University	Higher: Non-University	Upper Secondary: Classes 11-12	Lower Secondary (Basic): Classes 5-10	Primary: Classes 1-4
Lithuania	12,6	19,3	27,2	15,0	20,8
Vilnius	17,9	18,5	29,7	12,1	17,1
Kaunas	15,7	18,1	28,4	14,7	19,0
Klaipeda	11,5	20,0	27,5	15,4	20,3
Siauliai	9,1	19,7	26,0	16,7	22,9
Panevezys	9,0	21,3	24,5	16,8	23,5
Marijampole	7,0	20,5	26,0	16,6	24,5
Alytus	9,5	21,8	23,7	15,8	24,1
Utena	9,3	20,3	24,5	15,8	24,1
Telsiai	8,0	18,7	25,3	17,4	24,0
Taurage	6,8	18,6	24,8	17,4	25,6

3 or more children well above the national average of 3.7%. Vilnius County had the lowest percentage (2.4%) of households with 3 or more children, followed by Kaunas County with 3.0%.

Conclusions

Lithuania's national quantitative overall target was set in the **Lithuanian Poverty Reduction Strategy**[3] as to eliminate extreme poverty in Lithuania by 2003 (from 0.9% in 1999) and to reduce relative poverty (according to the relative poverty line) to at

Figure P20

Percentage of Population in Young and Old Age Groups Residing in Rural Areas of Lithuania and Its Counties: 01/01/2003
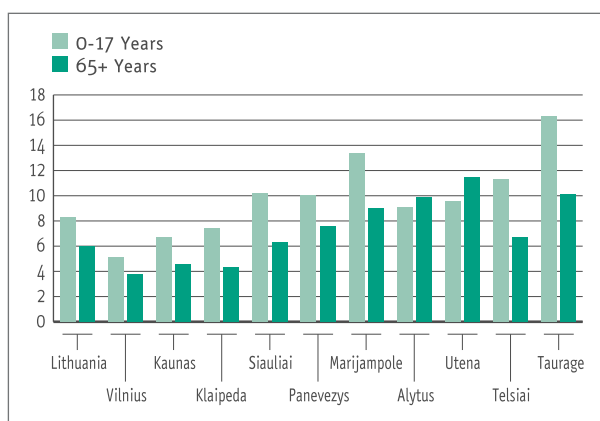
Figure P21

Percentage of All Households with Three or More Children <18 Years Old by Household Type for Lithuania and Its Counties: Census, 2001
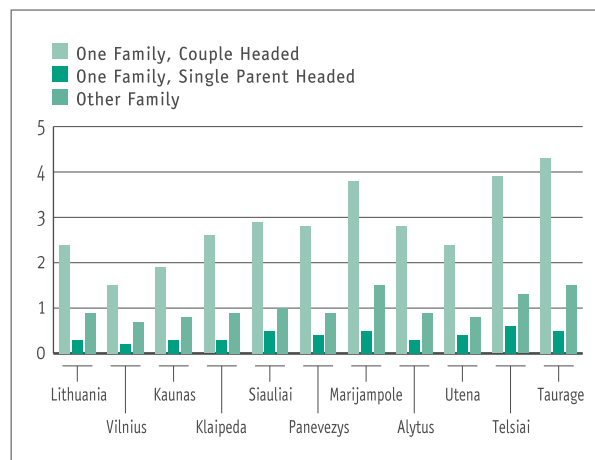
least 13% by 2005 (from 15.8% in 1999). The Lithuanian Republic Poverty Reduction Strategy Implementation Programme for 2002-2004[4] was approved in November 2002. These documents forms the basis for social inclusion policy. From 1996 to 1999, the overall poverty level fell 12.2%, which showed a moderate degree of progress. But since 1999, the overall poverty level has been creeping upwards, a 5.1% rise in 3 years. Urban Lithuania has made a good deal of progress in reducing poverty by 27.9% over the entire 6-year period. But this progress is more than offset by rural Lithuania's poor poverty record, a 9.6% rise during the same period. In 2002, 1.1% of the entire Lithuanian population lived in extreme poverty, and the level of rural poverty rose to 28.5%. Few societal groups were more exposed to poverty than households with three or more children, households with income solely from social benefits, and farmers and pensioners living in rural areas. And, households having multiple poverty-related characteristics were particularly vulnerable to poverty.

Despite current national political efforts to address poverty and social exclusion, the data indicate that Lithuania should design

[3] Available from Internet: http://www.undp.lt/en/?id=9

and implement better strategies to alleviate the conditions that lead to poverty in all areas and segments of the population.

Promise for the Future as a New Member of the European Union

Upon joining the European Union in May 2004, Lithuania will undertake new EU commitments to fight poverty and social exclusion. As a new member of the EU, Lithuania should make progress toward meeting its targets for poverty reduction by coordinating its efforts and learning the 'best practices' among the 25 members of the EU.

The *Joint Memorandum on Social Inclusion (JIM)*[5] was signed by Lithuania and the European Union on December 18, 2003, in Brussels. Immediately after entering the EU, Lithuania will use this document as the foundation for developing future national action plans for social inclusion. This document provides Lithuania with an important instrument for tracking changes and reporting on its progress in fighting poverty and promoting social inclusion.

Lithuania's accession to the European Union will require it to adjust its indicators for measuring the extent of poverty and other social-economic characteristics of the population. Some of the required EU indicators are the same or similar to what Lithuania's Department of Statistics already uses. But other required indicators

are very different or not used at all by the Department of Statistics. Lithuania's adjustment of their social indicators to EU requirements should provide a better basis for monitoring poverty reduction measures and easier comparability with other EU member states.

One should note that the application of the new Leaken methodology[6] with more detailed breakdowns, involving gender, will slightly increase the number of Lithuanians living below the poverty line and will reveal new groups exposed to income poverty. In other words, the application of EU indicators to income poverty calculations will reveal new vulnerable groups, which will have policy implications for amendments to the Lithuanian Poverty Reduction Strategy and Action Plan.

Thus, Lithuania should persistently work on fighting the existence of poverty by: 1) targeting policy measures more directly to the socio-economic groups most vulnerable to poverty, and 2) designing measures for new risk groups emerging from swift socio-economic transformations.

Recommendations

1) Concerning Social Protection

Social assistance benefits (means-teasted) should be better targeted. Social assistance in Lithuania requires further development as far as it is not accessible to some population groups, which are vulnerable to or are already experiencing poverty, such as small land holders. Most of the social support benefits are aimed at certain population categories, instead of being means-tested.

More *active* social support and employment initiatives are required. The current social support system is oriented around passive measures aimed at alleviating the *consequences* of poverty instead of its *causes*. For example, about half of the employment fund is allocated to unemployment benefits.

Incorporation of incentives for recipients to leave the social assistance system is necessary. The current measures do not always provide incentives for recipients to earn income.

---

[4] Lithuanian Republic Poverty Reduction Strategy Implementation Programme for 2002-2004 was approved by the Resolution No. 1753 of the Government of the Republic of Lithuania dated 7 November.

[5] The JIMs for the 10 countries joining the Union in 2004 were formally signed by the Commission and the national authorities on 18th December 2003. Available from Internet: http://europa.eu.int/comm/employment_social/soc-prot/soc-incl/jim_en.html

[6] The EU risk of poverty rate is defined as being below 60% of national median equivalised total net household income and based on applied modified OECD equivalent scale while Lithuanian relative poverty line is applied as 50 % of average equivalised expenditure and based on classical OECD scale.

2) Concerning Labor Market Policies

Active labor market policies, directed especially to population groups vulnerable to poverty and social exclusion or with disabilities and special needs, should be promoted and supported. *Active* employment measures should also give special attention to new entrants to the labor market, as well as to the long-term unemployed.

Flexible employment options, especially for families with children, should be implemented.

Job creation policies should be given more support, especially in regions with high unemployment and poverty rates.

3) Concerning Educational Policies

It is necessary to tackle the educational disadvantages experienced by various urban and rural populations and children from different social groups. Increasing access to education at all levels (pre-school, primary, secondary, tertiary, vocational, and also adult training) can help stop the recycling of poverty from generation to generation that is occuring more frequently.

Young people with various disabilities need special educational attention.

Public internet sites should be established so that all can have access to the "knowledge society".

All citizens should have the opportunity to gain the necessary skills to participate in the changing labor market.

4) Concerning Regional Policies

It is necessary to address the wide disparities that exist in regional development, especially in terms of employment and social development. Special education, health, and social services should be provided to disadvantaged rural areas in need of revitalization.

5) Working Together for a Common Purpose

In order for all of these recommendations to be successfully implemented, it is necessary to mobilize all relevant institutions and actors. Local, regional, national, and international institutions; independent experts; NGOs and social partnerships - *all* - have to be involved in mainstreaming and coordinating policies aimed at combating poverty and social exclusion in Lithuania.

Goal 2: Achieve Universal Primary Education
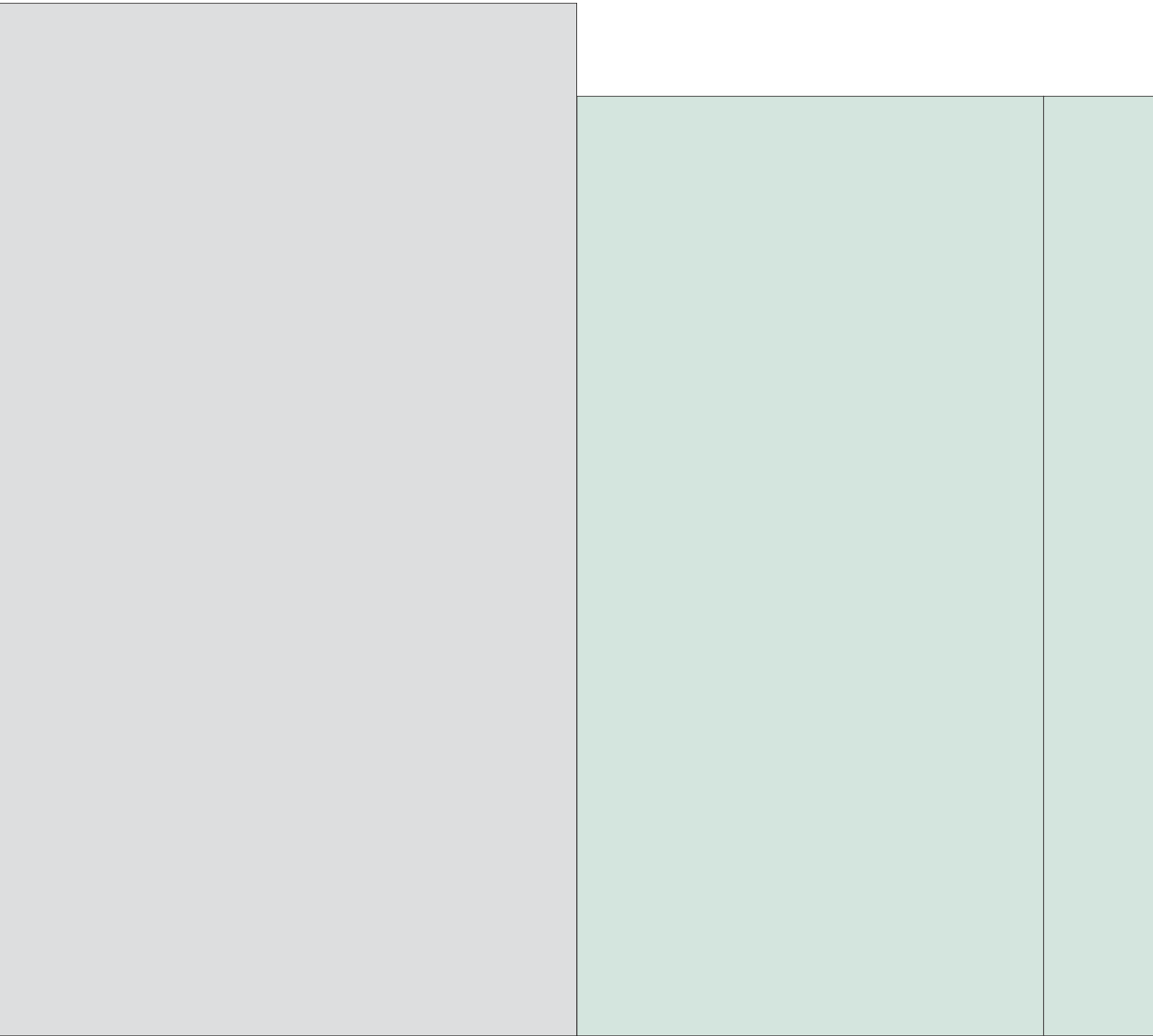
The **second Millennium Development Goal (MDG)** is to achieve universal primary education. Figure E1 shows that Lithuania has essentially achieved this goal during the 6-year period, 1996 to 2002, by having a net primary school enrolment rate over 95% for each year of the period. Lithuania's second Millennium Development Goal (MDG) could be reworded *to achieve universal secondary education.* The suggested target for Lithuania for this goal is *to ensure that, by 2015, children everywhere, boys and girls alike, will be able to complete a full course of secondary schooling.*

Primary Education

Despite having a net primary school enrolment rate over 95% during the last 6 years, the overall rate has declined 1.5%[1], from 96.9% in 1996 (boys: 98.2%, girls: 95.5%) to 95.4% in 2002 (boys: 95.5%, girls: 95.3), as shown in Figure E1. There are two main reasons that the net enrolment for mandatory education (primary: classes 1-4, lower secondary: classes 5-10) is below 100%.

The first reason is a by-product of the very first Law on Education in independent Lithuania, which gave parents the right to choose when to first enrol their children in school, at 6 or 7 years of age. Parents with higher education made better use of this freedom to choose than parents with lower education[2]. Research has shown that the average age of children starting class 1 was 7.3 years[3]. The Law on Education, which was revised and adopted on 17 June 2003, no longer provides this right to parents. The law now stipulates that a child shall start attending class 1 of primary school when he or she has turned 7 years of age in the calendar year in question.

[1] All differences between enrolment or graduation rates will be calculated as a percentage increase or decrease.
[2] Kalvaitis A. Apie tėvus - skaičiais (About Parents: In Figures)// Dialogue, 4 September 1992, No 35 (3682), p. 7.
[3] Lietuvos pedagogai ir moksleiviai: analizė ir prognozė. Monografija (Lithuanian Teachers and Schoolchildren: Analysis and Prognosis. Monograph)/ G. Dzemyda, P. Gudynas, V. Šaltenis, V. Tiešis. - Vilnius: Mokslo aidai, 2001. p. 55.

Figure E1
Net Enrollment Rate in Primary and Secondary Education by Gender: 1996-2002
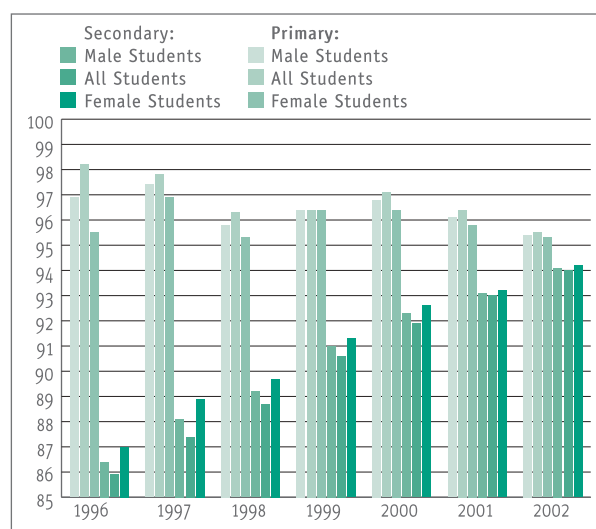
The second reason for less than 100% enrolment in mandatory education is that not all children who are of mandatory school age are enrolled in school. For years Lithuania has been trying to implement the Register of Children of Mandatory School Age, which should aid in the detection of children who do not attend school, when it is operational. Thus, vigilance in Lithuania's education system is necessary to keep these net primary school enrolment rates well above the 95% mark, so that Lithuania can continue to claim universal primary education.

Secondary Education

A. Net Enrolment Rates: 1996-2002

Secondary education is a combination of *basic or lower secondary education* (classes 5-10), which is mandatory, and *upper secondary education* (classes 11 and 12), which is not mandatory.
Figure E1 also displays the net enrolment rates for *secondary education* by gender from 1996 to 2002. These net enrolment

POPULATION WITH A PRIMARY OR BASIC EDUCATION BY MUNICIPALITY
(10 years and older)
2001 Population and Housing Census data (06/04/2001)

County	Basic or Primary education, in per cent
Lithuania	35.8
Vilnius	29.2
Kaunas	33.7
Klaipeda	35.7
Siaulia	39.6
Panevėžys	40.3
Marijampolė	41.1
Alytus	39.5
Utena	39.9
Telšiai	41.4
Tauragė	43.1

Legend
In per cent:

- < 40.0
- 40.0–42.5
- 42.6–45.0
- 45.1–47.5
- 47.6 <

—— County border

Sources: ● Statistics Lithuania   © State Enterprise Centre of Registers

rates increased by 8.9% from 86.4% in 1996 (boys: 85.9%, girls: 87.0%) to 94.1% in 2002 (boys: 94.0%, girls: 94.2%). One should note that in *secondary education,* girls had a slightly higher net enrolment rate than boys (1,002 girls to every 1,000 boys in 2002), which was the reverse in primary education, where boys had a slight edge (998 girls to every 1,000 boys in 2002).

[4] A type of comprenensive school, which enrolled students in classes 1 through 12, is a Soviet heritage.

B. Historical Background

In Lithuania, basic education can be acquired at basic, secondary[4], and youth schools, as well as gymnasiums. While academic (upper) secondary education can be acquired at secondary schools and gymnasiums. The responsibility for establishing and maintaining comprehensive schools, which include basic, secondary, and youth schools, as well as gymnasiums, belongs to the municipalities of Lithuania.

1. Youth Schools

Youth schools were first established after Lithuania regained its independence. They were primarily founded in major cities and municipality centres and were intended for students who, for various reasons, had lost the motivation to learn. Of all comprehensive school students, only 0.49% were enrolled in youth schools in 2002. This low youth school enrolment was principally due to too few youth schools. In 2002, Lithuania had just 25 youth schools, operating in only 38% of all municipalities.

A county comparison indicates that Alytus County had the highest percentage (1.92%) of comprehensive school students who were enrolled in youth schools in 2002, followed by Kaunas County with 0.61% and Telsiai County with 0.60%. Whereas, Klaipeda and Utena Counties had the lowest percentages (0.12% and 0.16%, respectively) of students enrolled in youth schools. These statistics lead to the conclusion that youth schools are poorly accessible to a rather sizable number of students of mandatory school age who have lost the motivation to learn, especially in rural areas.

2. Gymnasiums

Gymnasiums were first established in Lithuania in 1989. In the beginning, gymnasiums were aimed at students who possessed higher intellectual skills and were more focused on an academic education. But now, gymnasiums' admission requirements are less restrictive. Gymnasiums evolved from "long" secondary schools, which were also accredited by the state. They enrol students in classes 9 through 12. The quality of education provided by gymnasiums is generally better than that of secondary schools because they usually employ better-qualified teachers. In 2001, 25.6% (girls: 26.9 %, boys: 23.9 %) of all 11th and 12th formers attended classes 3 and 4 at gymnasiums. In 2002, this percentage rose

to 28.1% (girls: 29.8 %, boys: 26.0 %). This low gymnasium enrolment was mainly due to too few gymnasiums. In 2002, Lithuania had just 89 gymnasiums, operating in only 75% of all municipalities. From these data, one may draw the conclusion that a large number of Lithuanian students with higher intellectual skills and motivation do not have the opportunity to attend gymnasiums. Recently, the state has announced a strategic guideline that all secondary schools may develop into gymnasiums at the discretion of the founders[5].

C. Dropout Rates

Research has shown that both boys and girls have common internal and/or external factors affecting school dropout rates of under-aged individuals, who live under similar conditions and are exposed to similar relationships. Compared to girls, boys are more frequently left in the same class for the second year in a row, and they withdraw from comprehensive school twice as often. It has also been found that the family structure of dropout students who are of ethnic minorities is the same as that of dropout students who are ethnic Lithuanians[6]. The dropout rate from day comprehensive school is shown in Figure E2. The dropout rate has hovered around 1% for many years.

Figure E2

Withdrawal from different types of education establishments
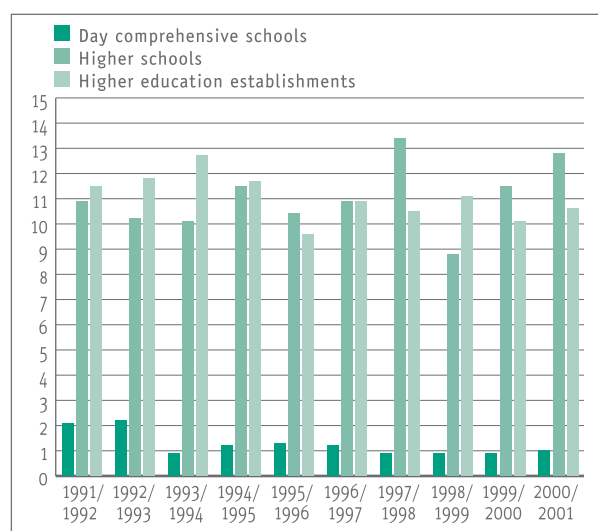
[5] Valstybinės švietimo strategijos 2003-2012 metų nuostatos 2003-2012 (Provisions of the National Education Strategy) [online]. [cited 2004-02-12]. Available from Internet: <http://www.smm.lt/kiti/strategija2003-12.doc>.
[6] Dereškevičius P. Rimkevičienė V. Targamadzė V. Mokyklos nelankymo priežastys (Causes for Absence from School). - Vilnius: Žuvėdra, 2000.

D. National Examinations

Analysis has shown that the type of school strongly influences the results of the national examinations students take upon completion of comprehensive school. In 2000, students who had attended larger, usually urban, schools and students who had acquired basic education at gymnasiums scored higher on these final state examinations than students who had attended smaller, usually rural, schools and students who had acquired basic education at adult or vocational schools[7]. And gymnasium students performed much better on these final state examinations than students from other secondary schools[8].

E. Graduation Rates: 1992-2002

Figure E3 shows the graduation rates for basic (lower) secondary and *upper secondary education* as percentages of their respective populations, 15-year olds (16-year olds for 2000, 2001 and 2002) for *basic (lower) secondary school* graduates and 18-year olds for *upper secondary school* graduates.

1. Basic (Lower) Secondary School Graduation Rate

The basic (lower) secondary school graduation rate fluctuated between a low of 74.4% in 1995 and 1997 to a high of 83.1% in 2002. Overall, the rate had only increased by 2.2%, from 81.3% in 1992 to 83.1% in 2002, up from 80.6% in 2001.
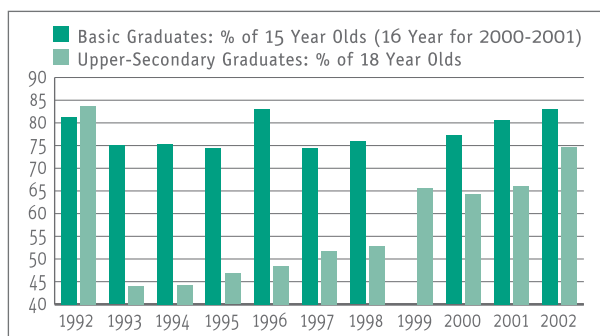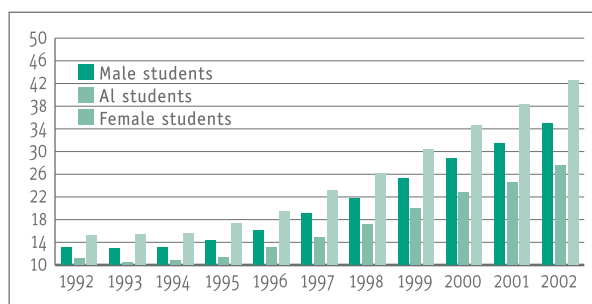
Gross Enrollment Rate in Tertiary Education by Gender: 1992-2002

2. Upper Secondary School Graduation Rate

In 1993, the graduation rate for *upper secondary school* plunged to 44.1%, from 83.8% just a year earlier. This plunge in 1993 was mainly due to the transformations of a post-socialist economy, which brought about easy opportunities to earn big money without a higher-level education. Thus, many youths had little aspiration to acquire an education beyond what was mandatory. Since 1993, the graduation rate for *upper secondary school* has continued to climb to 74.7% in 2002, an increase of 69.4% in 9 years, and up from 66.1% in 2001.

Tertiary Education

A. Gross Enrolment Rates: 1992-2002

More and more Lithuanians are pursuing *higher (tertiary) education* than ever before. Figure E4 shows that gross enrolment in *tertiary* institutions [professional (vocational) colleges, colleges, and universities] increased by 167.2%, from 13.1% in 1992 to 35.0% in 2002, up from 31.4% in 2001. We notice that women dominated men in

---

Figure E3
Basic and Upper-Secondary School Graduates as Percentage of Specified Population: 1992-2002

[7] Ar lygiavertis Lietuvos moksleivių bendrasis pagrindinis išsilavinimas? 2000 metų pagrindinės mokyklos baigiamųjų egzaminų rezultatų analizė (Is General Basic Education of Lithuanian Schoolchildren Equal? Analysis of 2000 Results from Final Examinations of the Basic School). - Vilnius: National Examination Centre, 2001.
[8] Ar lygios Lietuvos moksleivių galimybės įgyti vidurinį išsilavinimą? 2000 metų brandos egzaminų rezultatų analizė (Is General Basic Education of Lithuanian Schoolchildren Equal? Analysis of 2000 Results from Final Examinations of the Basic School). - Vilnius: National Examination Centre, 2000.

POPULATION WITH A TERTIARY EDUCATION BY MUNICIPALITY
(10 years and older)
2001 Population and Housing Census data (06/04/2001)

County	University or Non-University education, in per cent
Lithuania	32.0
Vilnius	36.4
Kaunas	33.7
Klaipėda	31.4
Šiauliai	28.7
Panevėžys	30.2
Marijampolė	27.5
Alytus	31.3
Utena	28.6
Telšiai	26.7
Tauragė	25.5

Legend
In per cent

< 24.0
24.0–26.0
26.1–30.0
30.1–38.0
38.1 <

——— County border

Sources: © Statistics Lithuania

© State Enterprise Centre of Registers

enrolment statistics for tertiary education. In 1990, the gross enrolment ratio was 137 women to 100 men. By 2001, this ratio had increased to 157 women to 100 men. Though the gross enrolment rates are up for both men and women in 2002, the ratio has decreased slightly to 154 women to 100 men.

B. Historical Background

In 1993, Lithuanian secondary school graduates experienced a disinclination to pursue higher education, similar to that found at lower education levels. But, this is not reflected in Figure E4. Enrolment in Lithuanian higher educational establishments has always been, and still is, based on competitive admission. Thus, all student seats at higher educational establishments were fully occupied. During the last few years, however, Lithuania has been

developing a network of university and non-university, higher educational establishments to accommodate more students. All higher educational establishments that had operated in Soviet times became universities, and a few new universities were founded. Former higher schools are becoming non-university, higher educational establishments, i.e. colleges, after completing the accreditation process.

1. Applying to Lithuanian Universities

The percentage of secondary school graduates applying to Lithuanian universities varies among municipalities, thus in the research report[9] it was analysed what proportion of 2001 school leavers from different municipalities were applying to Lithuanian universities. The municipalities with the lowest percentages of secondary school graduates applying to Lithuanian universities were: 1) Rietavas with 36%, 2) Visaginas city with 39%, 3) Pagegiai with 46%, 4) Panevezys region with 46%, 5) Skuodas region with 47%, 6) Ignalina region with 51%, and 7) Salcininkai region and Vilnius region, each with 52%. The municipalities with the highest percentages of secondary school graduates applying to Lithuanian universities were: 1) Alytus city and Siauliai city, each with 79%, 3) Panevezys city with 78%, 4) Birstonas and Kaunas city, each with 76%, and 6) Joniskis region with 75%. Applications to Lithuanian universities depend on a graduate's willingness and financial ability to live far from home. Graduates of national minority schools rarely choose Lithuanian universities in which to pursue their higher education.

2. Financing a Higher Education

The costs of obtaining a higher education can be paid for in one of three ways: 1) by studying in state-funded establishments, 2) by paying a small study contribution, or 3) by paying full tuition. In 2002, the majority of students in higher education were studying in state-funded establishments (51.6%

[9] Stumbrys E. Trakas G. Zabulionis A. 2001 metų abiturientų universitetinių studijų pasirinkimai. Tyrimo ataskaita (University Study Choices of School Graduates in 2001). Research report. - Vilnius: Open Society Foundation, 2002. p. 7.

of college students and 55% of university students). Only a minority were paying a small study contribution (3.4% of college students and 6% of university students). But a sizable number of students had to pay full tuition (45% of college students and 39% of university students). A study loan program was developed in Lithuania to ease the financial burden of students enrolled in higher education. Unfortunately, despite frequent attempts at improvement, this program is still not available to the majority of students. Consequently, the percentage of university students paying full tuition approximately doubled from 1998 to 2001. For bachelor's level students, this percentage increased from 21% to 39.6%. A similar increase was noted for master's level students (from 16% to 34%).

C. Women's Enrolment in Different Fields of Study: 2001

The priorities of women pursuing higher education are reflected in their enrolment in different fields of study in 2001. Women, at the bachelor's level, dominated the enrolment in the following fields of study: social services (87%), humanities (79%), teacher training and education (78%), manufacturing and processing (76%), and health care (75%). At the master's level, women were dominant in: social services (87%), teacher training and education (85%), humanities (81%), and journalism (74%). The least popular fields of study for women at the bachelor's level were: security services (3%), transport services (14%), engineering and engineering occupations (22%), and computer science (26%). At the master's level, the least popular fields for women were: engineering and engineering occupation (22%), computer science (26%), and transport services (31%).

From 1999 to 2001, women's enrolment at the bachelor's level increased in mathematics and statistics but decreased in agriculture, forestry, and fishery, as well as social services fields of study. Comparing the same two years at the master's level, women's enrolment increased in humanities

and transport services but declined in agriculture, forestry, and fishery, as well as architectural fields of study.

D. Women's Enrolment in Science, Mathematics, and Engineering Fields of Study: 2002

Women lag behind men when it comes to studying *science, mathematics, or engineering.* Figure E5 shows the percentage of *tertiary students* who were enrolled in these "hard science" fields of study by gender in 2002. Overall, 25.5% of students were enrolled in *science, mathematics, or engineering* fields of study. But the gender stereotype prevails when you compare women to men. In all tertiary education programs combined, only 12.8% of women studied these "hard science" fields, compared to 44.6% of men. However, in master's and doctoral level education programs, the women-to-men gross enrolment ratio for hard science fields increased from 0.29 overall (29 women to every 100 men) to 0.44 (44 women to every 100 men) and 0.54 (54 women to every 100 men), respectively.

E. Dropout Rates

Figure E2 also displays fluctuations in the dropout rates of higher educational establishments. There has been a slight overall decline in the dropout rates of universities and colleges.

F. Female Share of University Graduates: 1995-2002

Figure E6 looks at the percentage of university graduates who were women from 1995 to 2002. Combining all university programs, we see that the percentage of graduates who were women increased by 17.0%, from 53.6% in 1995 to 62.7% in 2002, up from 61.0% in 2001. But this was not the case for all university programs. Only in the bachelor's level programs have the women graduates outnumbered the men throughout the 7 years, from 55.5% to 61.9%. In the master's level programs, women

Figure E5
Percentage of Tertiary Students Enrolled in Science, Mathematics, or Engineering by Program and Gender: 2002
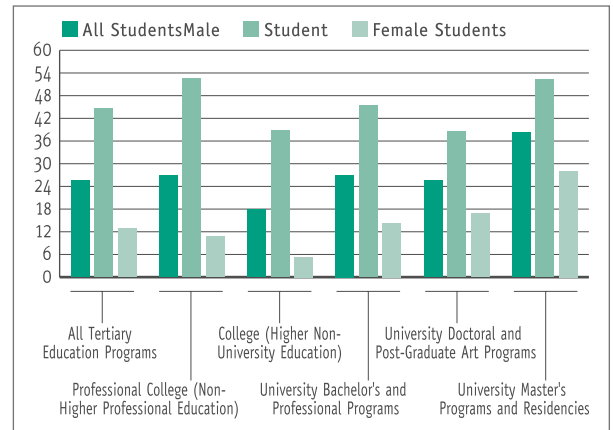
graduates began to outnumber men only in 1997 with 56.3%. This percentage increased to 64.3% in 2002, up from 60.2% in 2001. However, women graduates were outnumbered by men graduates in the doctoral level programs from 1995 to 1999. Their graduation percentage rose to 50% in 2000 and has continued to climb since then. In 2002, women made up 56.3% of all doctoral level graduates, up from 52.5% in 2001.

Figure E6
Percentage of University Graduates Who Are Female by Program: 1995-2002
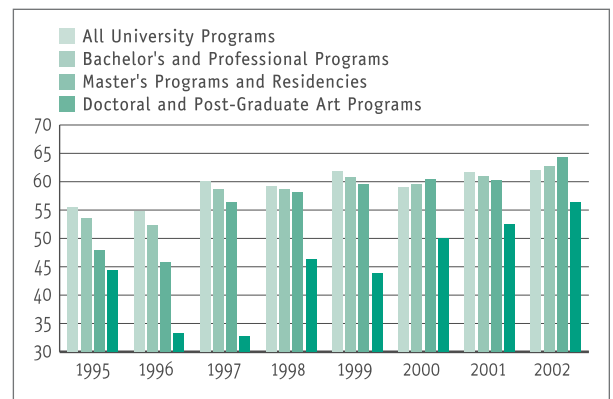
Educational Attainment of the Population by County: Census, 2001

Since we do not have available enrolment and graduation rates by county (or for that matter by residential area: urban vs. rural), we will look at the educational attainment of the population by county, provided by the Census of 2001, as a marker for a county's educational progress. Let us recall Table P19 from the previous chapter "Eradicate Extreme Poverty ". This figure displays the percentage of the population (aged 10 years and older) by the education level attained for all of Lithuania's counties.

Taurage County ranked first at the lowest education levels (primary: 25.6%, basic: 17.4%), followed by Telsiai County (primary: 24.0%, basic: 17.4%) and Marijampole County (primary: 24.5%, basic: 16.6%). In other words, these three counties had the least educated populace. This is probably due to two reasons. First, these counties have almost no higher educational establishments. Consequently, without an effective study loan program, it is difficult for the population of these counties to travel at their own expense to other, larger, cities to pursue a higher education. The continued development of a long distance learning system in Lithuania (via personal computers and the internet) would be of tremendous help in addressing the problem of insufficient educational attainment by the populace of these counties. Second, these counties have few industries, which require higher-level education. As a result, the people have little fiscal incentive to enhance their education.

At the highest education levels, Vilnius County ranked first (higher-university: 17.9%, higher-non-university: 18.5%), followed by Kaunas County (higher-university: 15.7%, higher-non-university: 18.1%) and Klaipeda County (higher-university: 11.5%, higher-non-university: 20.0%). Thus, these three counties had the most educated populace. This is primarily due to the fact that the majority of higher educational establishments are located in these three counties, particularly in their centres, where the labour market imposes the toughest requirements for higher-level education.

We have seen the association of low educational attainment with high levels of poverty. Therefore, it is doubly important for Lithuania to ensure equal educational opportunities for all of its children, regardless of where they reside.

Recommendations

Lithuania has made tremendous progress toward meeting its target that *all children complete a full course of secondary schooling* by 2015. This is above and beyond the expectation of the original MDG of *universal primary education.* Net secondary school enrolment rates have increased 8.9% in 6 years. Essentially full enrolment (above 95%) should be achievable in the next few years. However, Lithuania must still be diligent at increasing the graduation rates at both *lower and upper secondary schools* to above 95%, from their 2002 rates of 83.1% and 74.7%, respectively.

The recent *Provisions of the State Education Strategy for the Year 2003-2012,* covering the whole education system and aimed at bringing the qualitative changes in the development of Lithuanian education system, were adopted by the Seimas of the Republic of Lithuania in 2003[10]. These provisions envisage the objectives of education for the forthcoming years and their implementation measures with a particular attention to be paid to the coherence and efficiency of education system, rational financing, strengthening of the link between education and practical life, and safeguarding social justice and life learning opportunities.
The following suggestions could be considered for improving Lithuania's educational system:

1. The Register of Children of Mandatory School Age should be implemented without delay. Attention should focus on the twin problems of families that fail to enrol their children in school and students of mandatory school age that drop out of school.

2. Annual assessments of the enrolment and

graduation rates at the county and municipal levels should be made.

3. Development of an efficient network of comprehensive schools, especially youth schools and gymnasiums, should continue to ensure higher enrolment of students at these schools. All types of schools should be equally accessible to students needing such schools, irrespective of their place of residence or the social status of their parents.

4. Public supervision of schools should insist that all schools provide the same high quality of education and that the results of national examinations not be too diverse.

5. Development of efficient, universally accessible study loan programs and long distance learning systems should be hastened, so that more people can attain a higher level of education, regardless of place of residence or income.

6. Society should endeavour to motivate young college and university women to study in the fields of *science, mathematics, and engineering.* This in turn will increase the number of women who work in *hard science* occupations, which should assist women in achieving wage parity with men. Overall, having more women in *hard science* occupations will help Lithuania in its technological development and in its participation in the global marketplace.

---

[10] Provisions of the State Education Strategy for the Year 2003- 2012 approved by the Resolution No. IX-1700 of the Seimas of the Republic of Lithuania dated 4 July 2003. Available from Internet: http://www.smm.lt/kiti/strategija2003-12.doc

# Goal 3: Promote Gender Equality and Empower Women

The **third Millennium Development Goal (MDG)** is *to promote gender equality and empower women.* In the previous section "Achieve Universal Primary Education", we have seen that gender issues are not a major problem in the Lithuanian educational system. Female enrollment rates were comparable to men's in primary and secondary education, and they dominated men's in tertiary education. One area for improving gender equality in education is to encourage the study of *science, mathematics, and engineering* among women. However, Lithuania's main targets for this goal should be *to promote gender equality in the work place and to increase women's share in governance by 2015.*

The Work Place

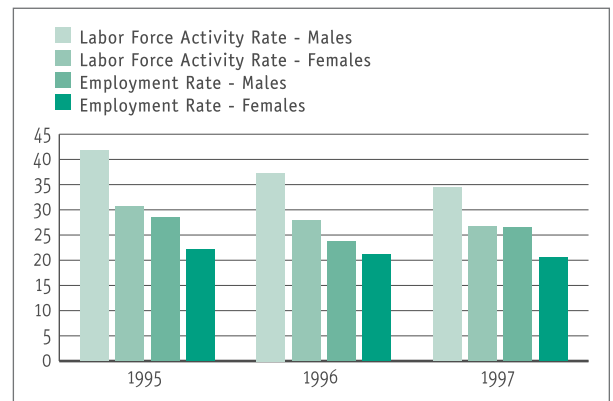## A. Labor Force Activity and Employment

Figure G1a displays the labor force activity and employment rates among people 15-64 years old by gender (1995 to 2002 for labor force activity rate; 1997-2002 for employment rate), provided by the labor force surveys. Men's labor activity rate declined 10.7%[1], from 82.0% in 1995 to 73.2% in 2002. Though women's labor activity rate is at least 10% lower than

Labor Force Activity Rate and Employment Rate in Ages 15-64 Years by Gender: 1995-2002*

Labor Force Activity Rate - Males
Labor Force Activity Rate - Females
Employment Rate - Males
Employment Rate - Females
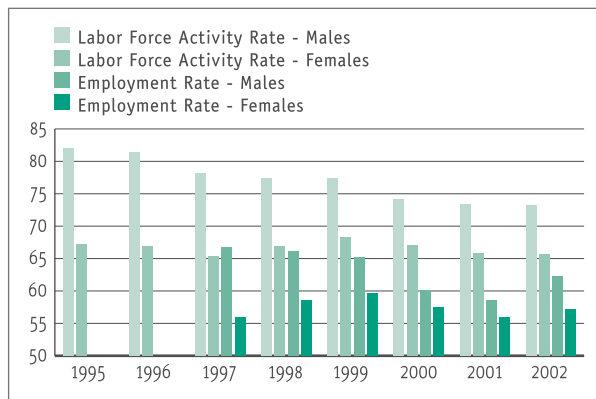
[1] All differences between labor force activity, employment, or unemployment rates will be calculated as a percentage increase or decrease.

Labor Force Activity Rate and Employment Rate in Ages 15-24 Years by Gender: 2000-2002*

Labor Force Activity Rate - Males
Labor Force Activity Rate - Females
Employment Rate - Males
Employment Rate - Females

men's, their rate has declined only 2.2% in the last 7 years (from 67.2% to 65.7%).

Men's employment rate fell 12.4% from 1997 to 2001 (66.8% to 58.5%), but rose in 2002 to 62.3%. Over the entire 5-year period, men's employment rate fell 6.7%. On the other hand, women's employment rate, which fluctuated little over the period, actually rose 2.0%, from 56.0% in 1997 to 57.1% in 2002.

Figure G1b show the labor force activity and employment rates among people 15-24 years old by gender from 2000 to 2002. Young men's labor force activity rate declined 17.3%, from 41.7% in 2000 to 34.5% in 2002, compared to young women's labor force activity rate, which fell 12.7%, from 30.6% to 26.7% during the same period. Young women's labor force activity rate is at least 22.6% lower than young men's rate. This differential in labor force activity partially explains why young women dominate young men with respect to enrollment at the tertiary education level.

Young men's employment rate fell 16.2%, from 28.4% in 2000 to 23.8% in 2001, but it rose again in 2002 to 26.5%. Young women's employment rate declined 7.2%, from 22.2% in 2000 to 20.6% in 2002.

B. Unemployment

Figure G2a indicates that the female unemployment rate (percentage of the female labor force: 15-64 years old) remained quite

stable during the last 5 years, fluctuating between 12.4% and 14.9%. In 2002, the female unemployment rate was13.0%, down from 14.9% in 2001. On the other hand, the male unemployment rate (percentage of the male labor force: 15-64 years old) climbed 41.0%, from 14.4% in 1997 to 20.3% in 2001, but it fell abruptly in 2002 to 14.8%. This increase in male unemployment coincided with the Russian economic crisis, which began in August, 1998, and poorly affected the Lithuanian economy. This coincidence allows us to make the assumption that men as a social group are more exposed to external economic factors than women. Traditionally, women as a social group are more willing to be employed in the public service sector, which is less sensitive to external influence. And women tend to put up with working conditions, which may violate their rights.

Figure G2b shows the unemployment rate among people 15-24 years old by gender from 2000 to 2002. Young men's unemployment rate rose 13.2%, from 31.9% in 2000 to 36.1% in 2001, but it fell a dramatic 36.0% in 2002 to 23.1%. The unemployment pattern for young men was similar to that of the male labor force 15-64 years old above, only at a higher level. Young women's unemployment rate declined 16.4%, from 27.4% in 2000 to 22.9% in 2002.

C. Female Share of Employed Population and Management

Figure G3 shows that the female share (%) of the total employed population (15 years and over) increased 7.8%, from 47.2% in 1997 to 50.9% in 2000, but it has declined slightly since then. In 2002, the female share of the employed population was 49.7%, down from 50.8% in 2001. In the non-agricultural sector, the female share rose 9.6%, from 48.9% in 1997 to 53.6% in 2001. But in 2002, the female share in the non-agricultural sector dropped to 51.9%. This figure remarkably shows that the female share of the total employed population was increasing during the period when the Lithuanian economy was badly affected by

Figure G2a
Unemployment Rate in Labor Force, 15-64 Years, by Gender: 1997-2002*

the Russian financial crisis and started to decline when the Lithuanian economy began to stabilize.

The female share in the agricultural sector has fluctuated between 37.8% and 41.1% during this 5-year period. These data indicate that women face major difficulties in finding employment in the agricultural sector. According to the survey carried by the Lithuanian Department of Statistics "Women and Men in a Lithuanian Village"[2], 64.3% of rural women indicated their dependency on the State (receipt of retirement benefit - 33%) or on family members (31,3%).

Figure G4 displays the remarkable rise in the female share (%) of founders and managers of newly created enterprises from

Figure G2b
Unemployment Rate in Labor Force, 15-24 Years, by Gender: 2000-2002*

[2] Data provided by the Division of Demographic Statistics, Lithuanian Department of Statistics (not published).

**Female Share (%) of Employed Population
(Ages 15+) by Sector: 1997-2002***
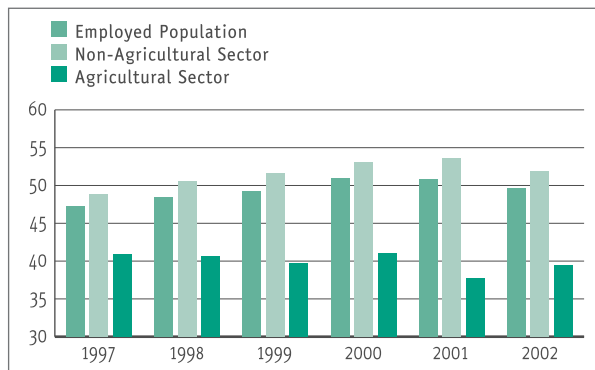
28.8% in 1997 to 40% in 2001. However, these data do not indicate which sector, non-agricultural or agricultural, is more open for initiatives promoting women in management.

D. Wages

The concept of *equal pay for equal work and work of equal value* is probably of more concern to every working woman in Lithuania than anything else. Figure G5 shows that in the whole economy women's average monthly gross earnings as a percentage of men's rose 13.8%, from 72.0% in 1995 to 81.9% in 1999. But the progress toward wage parity has stalled since then. In fact, women's earnings as a percentage of men's were slightly lower at 81.2% in 2002. The *pay for equal work* is strictly regulated by the legislative acts in the state sector; however in the private sector the pay is frequently set through the negotiation process. Whereas

Figure G4 _____
**Female Share (%) of Founders/Managers of
Newly Created Enterprises: 1997-2001***
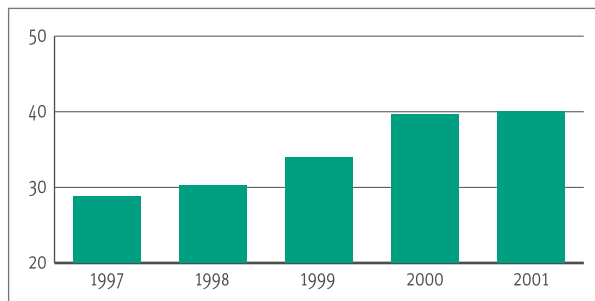
placing the concept of *work of equal value* into practice requires additional studies, selection of criteria and use of techniques for both sectors. It should be stressed that the problem of guaranteeing equal *pay for equal work and work of equal* value entails a multifacetal aspect and can be solved only in line with the advancement of other social issues as an increase in employment, reconciliation of family and work, and safeguard of vertical and horizontal labour market's segregation.

There has been more progress toward wage parity in the private sector than in the public sector. Women's percentages of men's earnings have risen 16.4% in the private sector, from 73.0% in 1995 to 85.0% in 2002. On the other hand, women's percentages of men's earnings in the public sector rose only 8.1%, from 71.4% in 1995 to 77.2% in 1999. And since then, women's earnings as a percentage of men's have regressed. In 2002, women's average monthly gross earnings were only 74.9% of men's in the public sector despite the fact that women dominated men in tertiary education. However, what the figure does not show is the fact that wages in general are higher in the public sector than they are in the private sector. This figure also implies that Lithuanian women are still battling a *glass ceiling phenomenon* (an invisible barrier arising from a complex set of structures in male-dominated organizations which prevents women from obtaining senior position).

E. Occupation Groups

Figure G6 shows the percentage distribution of the male and female employed populations by occupation group in 2002. The percentage of employed women exceeds that of men in the following occupation groups: professionals (20.7% to 8.7%), technicians and associate professionals (14.1% to 5.9%), clerks (6.2% to 1.7%), service and shop/market sales workers (16.3% to 7.4%), and elementary occupations (10.2% to 9.3%). However, the percentage of employed men exceeds that of women in the highest occupation group and the one with the highest wages, i.e. legislators, senior officers, and managers by 8.4% to 6.6%.

Women's Average Monthly Gross Earnings as a Percentage of Men's: 1995-2002
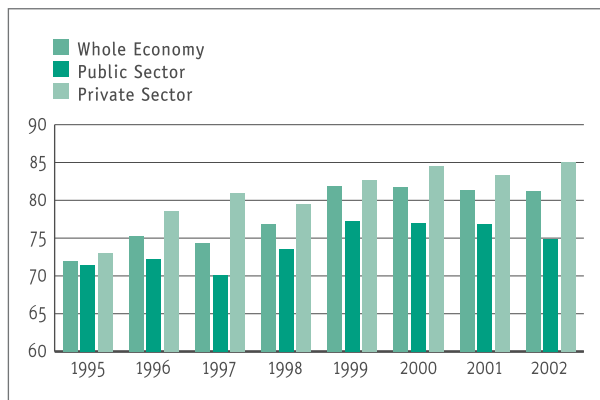
Men also dominate the following occupation groups: skilled agricultural and fishery workers (17.1% vs. 12.7%), craft and related trade workers (24.4% to 10.2%), plant/machine operators and assemblers (16.6% to 2.9%), and the armed forces (0.5% to 0%). The data show that a clear-cut division between *men's* and *women's* professions still persists in Lithuania and that male-dominated occupation groups tend to have higher salaries than women-dominated occupation groups. This division creates a basis for *horizontal*, as well as *vertical*, discrimination against women and acts as a serious obstacle for implementing the principle *equal pay for equal work.*

Percentage Distribution of Male and Female Employed Populations by Occupation Group: 2002
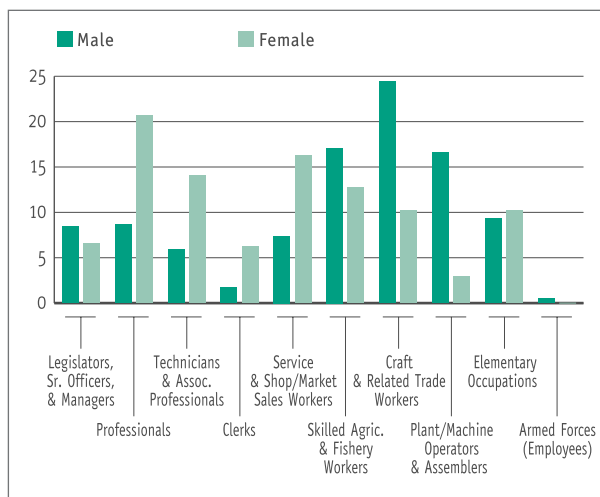
Female Share of Governance

A. Parliament

The last figure, G7, indicates the share (%) that Lithuanian women have in governing their country. In the 1992 national election, 10 women (7.1%) gained seats in Lithuania's parliament (Seimas) out of 141 seats. At the election of 1996, women increased their membership in the Seimas by 15 for a total of 25 women (18.0%) out of 139 elected members. With the election of 1996, Lithuania had the highest representation of women in parliament of any country in Eastern and Central Europe (18.1%)[3]. But then in the 2000 election, women lost 10 of their 25 seats and kept only 15 (10.6%) out of the total 141 seats in parliament. Unfortunately, in the same election, the activity of women candidates decreased as well. Women had a 20.62% share of the total number of candidates in the Seimas elections of 1996. That share dropped to 18.25% in the Seimas elections of 2000[4]. Thus, women were gradually removed from the process of political decision-making. Low political participation by women tends to result in the disregard of gender-sensitive issues during legislative processes and national decision-making.

Unfortunately, there are no official figures showing women's involvement in the work of electoral committees and NGO activities. However, the recent poll "Public Opinion Poll of Lithuanians: Women and Politics" carried by the public opinion company "Baltic Surveys"[5] reveals a lack of women's interest in politics. Eighty-nine per cent of the women responded negatively to the question regarding their participation in any political party and mentioned subjective, as well as objective, reasons for their negative attitude.

[3] Viktorija Jonikova, Moterys kaip socialine atskirtis (Women Facing Social Exclusion).[online]. [cited 2004-02-12]. Available from Internet: http://www.sociumas.lt/Lit/nr20/moterys.asp
[4] Lietuvos Respublikos Seimo rinkimai 2000 (Elections to the Seimas of the Republic of Lithuania 2000) [online]. [cited 2004-02-12]. Available from Internet: http://www.lrs.lt/n/rinkimai/20001008/index-1.htm

Figure G7
Elected Membership of Government Entities
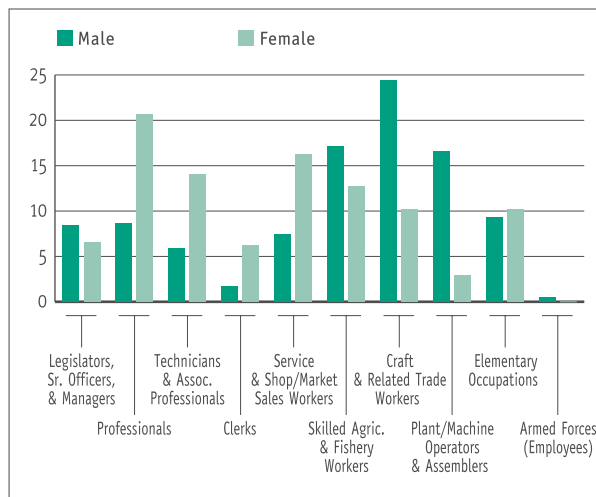
Only 7% of the women expressed their wish to participate in the work of political parties. It is important to consider that 59% of Lithuanians do not know what possibly could be done to advance women's participation in politics; 34% of them support the idea of giving quotas to women candidates and 26% do not.

B. Local Government Councils and City Hall

In 1997, women had 326 (22%) of the 1,484 seats of the local government councils. By 2000, the female share of local governance decreased to 274 (17.5%) of the 1,562 seats. With respect to city hall, there were only 3 (5%) women out of the 60 mayors who were elected in 2000.

In general, women are better represented at regional and municipal political levels than in national governance structures.

Recommendations

In conclusion, while Lithuania has made some progress in bringing gender equality to the work place, more work is needed to promote the upward mobility of women to managerial positions and to ensure their *equal pay for equal work and work of equal value* by 2015.

However, Lithuania has not made much progress since independence on promoting women to share in the governance of their own democratic country. Major obstacles for advancing gender equality in Lithuania are: 1) conservatism of public opinion, 2) lack of unity in the Lithuanian women's movement, and 3) the unwillingness of political parties and movements to motivate female voters and to involve female leaders in their work. Unfortunately, Lithuanian women themselves lack activity in the political domain and do not know how to pursue gender equality. The experience of Western Europe countries and especially of the Scandinavian ones proves that motivating women to seek equal treatment is closely related not only to learning about democracy but also to developing the tools necessary for building a democratic society.

A more diligent approach is needed to explore women's rights and opportunities and to promote women for office at all levels of government. The poll "Public Opinion Poll of Lithuanians: Women and Politics"[6], earlier cited in this chapter, indicates that the main obstacles to a more active political participation by women are family responsibilities, fatigue, conservative public opinion, and dependence on husband's decisions. These findings imply that it is critically important for men to assume a greater share of family responsibilities if women are to participate more fully in the public domain. On the other hand, increasing women's willingness to participate in political processes and civic activities remains an essential hurdle that must be overcome. It will be difficult for Lithuanian society to make these changes without special measures and political action.

Participation in political processes is closely related to economic resources. Thus, women's political activity is hardly conceivable without economic autonomy. Consequently, it is important to consolidate

[5] Lietuvos gyventoju apklausa: moterys ir politika (Public Opinion Poll of Lithuanians: Women and Politics). [online]. [cited 2004-02-12]. Available from Internet: http://www.gap.lt/tyrimai/moterys_ir_politika

[6] Lietuvos gyventoju apklausa: moterys ir politika (Public Opinion Poll of Lithuanians: Women and Politics). [online]. [cited 2004-02-12]. Available from Internet: http://www.gap.lt/tyrimai/moterys_ir_politika

efforts in combating: 1) the glass ceiling phenomenon; 2) horizontal and vertical, direct and indirect discrimination against women; 3) women's unemployment, especially in agriculture sector; and 4) traditional female stereotyping, which persists at various levels of Lithuanian society: family, school, work, church, and government. Particular attention should be paid to the female stereotypes reproduced by mass media, advertisement, and textbooks. Women's reproductive rights, which are still not legitimized by law, remain a vulnerable issue in Lithuania.

There is an urgent need for collecting data at the regional level to monitor the Lithuania's progress in promoting gender equality in different socio-economic areas, such as women's occupations, entrepreneurships, and participation in governance. Knowledge of how gender equality issues are affected by different factors such as aging, disability, ethnicity, etc., would be of crucial importance for the initiation of legislative action. Unfortunately, there are no opinion surveys indicating how different social groups in Lithuania comprehend gender equality issues and support gender mainstreaming processes.

Tere are other forms of discrimination against women that are of concern. Many Lithuanian women lack legal awareness to improve their living conditions and to protect their children. Violence against women and children, whether it be sexual harassment in the work place, domestic violence, or trafficking in women and children, is a national, as well as a global, issue. The Lithuanian Government

has already ratified the United Nations "Convention on the Elimination of All Forms of Discrimination against Women" (CEDAW) and set up institutional structures to deal with women's issues, such as the Office of Equal Opportunities Ombudsman, a gender statistics section in the Department of Statistics, a Parliamentary Commission of Family and Child Affairs, as well as an Inter-Ministerial Commission on Equal Opportunities for Women and Men. Since 2001, the Ministry of Social Security and Labour was officially delegated the functions on equal opportunities safeguarding, analogical to the functions performed by the ministries of equal opportunities in Nordic countries. The position of adviser on equal opportunities, family and NGO issues related issues was established within the Government machinery since 2002. *The National Programme on Equal Opportunities for Women and Men*[7] aimed at creating equal opportunities for both men and women to participate in all spheres of life with a view to increasing representation of men and women in such spheres of activities, where they are least represented and to achieve more equal distribution of services and financial resources directed at both men and women, point out specific problems of men and women finding respective solutions, was adopted in 2003. Lithuania put forth the efforts to fully comply with the principles of CEDAW sequentially implementing the recommendations and preparing the CEDAW reports. Lithuania was one of the first countries that have signed the CEDAW Optional Protocol in 2000 and is ready for its ratification this year.

[7] 2003-2004 National Programme on Equal Opportunities for Women and Men approved by the Resolution No. 712 of The Government of the Republic of Lithuania dated 3 June 2003. Available from Internet: www.lygus.lt

Goal 4: Reduce
Child Mortality
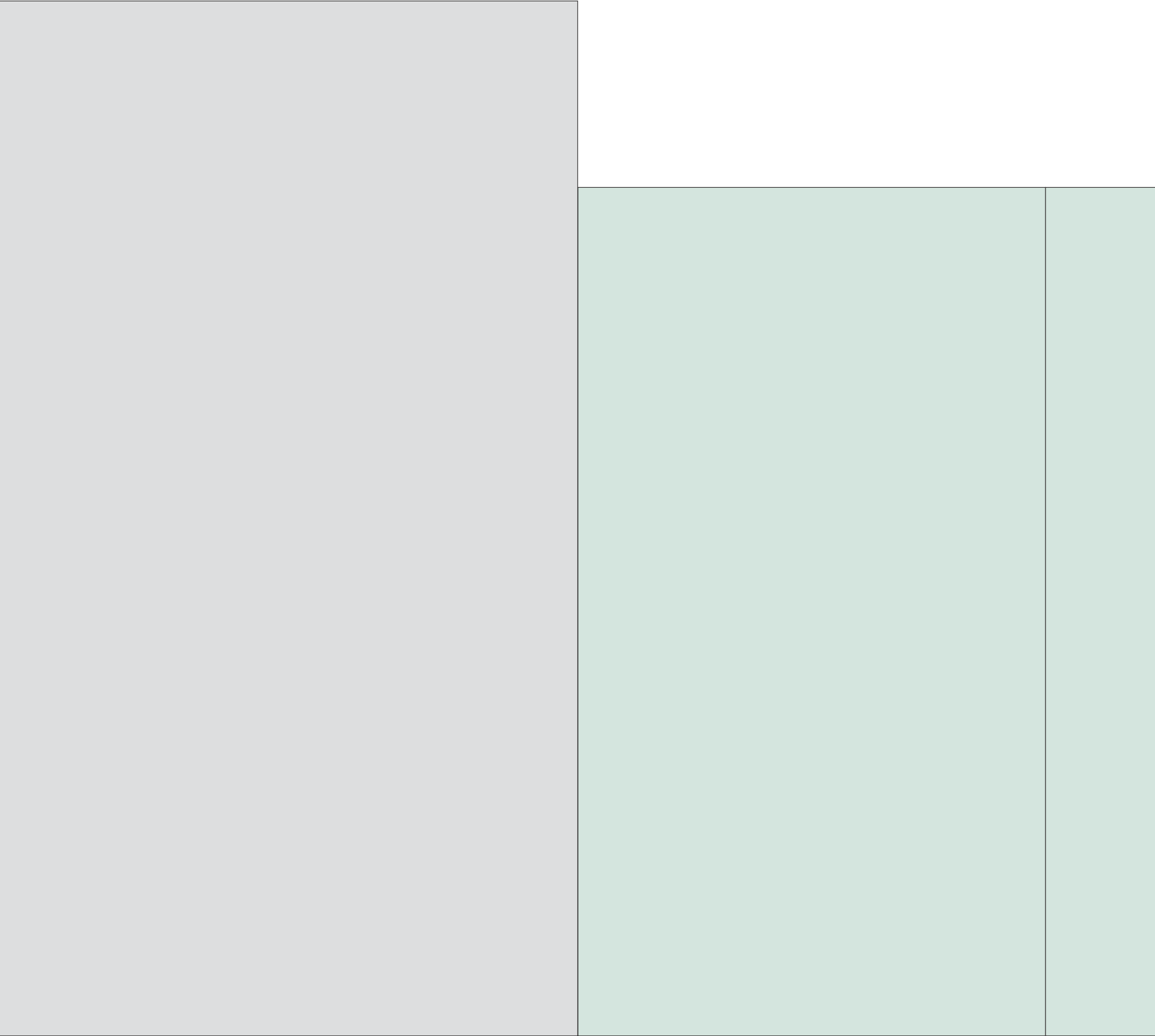
The **fourth Millennium Development Goal (MDG)** is *to reduce child mortality.* Lithuania's proposed target for this goal could be *to reduce by two-thirds, between 1990 and 2015, the child under five years mortality rate.* To assess Lithuania's progress toward meeting this target, we will examine the trends in Lithuania's infant (<1 year) and child (<5 years) mortality rates from 1990 to 2002 and childhood immunization coverage from 1990 and 1995-2002. We will also take a close-up look at the 2002 infant and child mortality rates by residential area and county. In addition, we will examine the mortality rates from the major causes of infant deaths in 2002.

# Trends in Child Mortality: 1990-2002

A. Child Under 5 Years Mortality

In 1991, the minimum standards for the registration of births, both live and stillborn, were officially changed. The standards were lowered to 500 grams and 22 weeks of gestation. Since the children born alive at these new lower limits had an increased risk of dying, the infant mortality rate shot up dramatically in the following year 1992. Before this official change, children born alive at these lower limits, who subsequently died, were not even counted. Every year since 1992 the same standards for registering births have been applied, therefore we will use the year 1992 as the starting point for our comparisons.

Figure C1 displays the overall child (<5 years) mortality rates from 1990 to 2002. It also shows the components of the **overall child (<5 year) mortality rate**[1] *(the number of deaths of children <5 years of age per 1,000 live births)*: the **overall infant (<1 year) mortality rate** *(the number of deaths of infants <1 year of age per 1,000 live births)* and the

[1] The mortality rates for overall child (<5 years) and for early childhood (1 year to <5 years) are approximate, because only the number of live births in the year of death was used in the denominator.

Overall Childhood, Infant, and Early Childhood Mortality Rates: 1990-2002

* Approximate rates; number of live births in current year used as denominator.
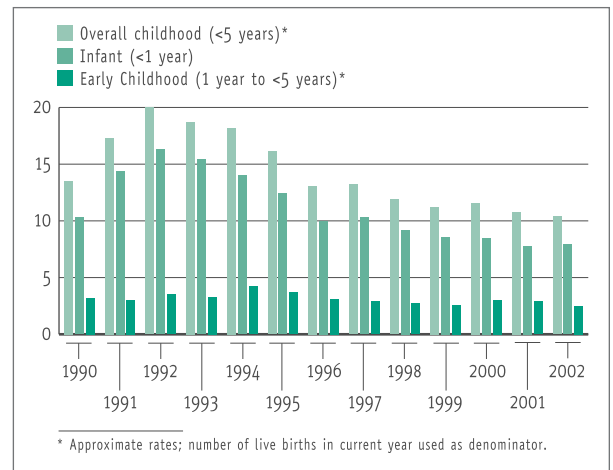
**early childhood (1 year to <5 years) mortality rate**[1] *(the number of deaths of children from 1 year to <5 years of age per 1,000 live births)*. The early childhood mortality rate has remained fairly steady, fluctuating in the range of 2.5 to 4.2. It decreased 28.6%[2] in the ten years from 1992 to 2002, down from the 2001 figure of 2.9. However, the more interesting component of the overall child (<5 years) mortality rate is the overall infant (<1 year) mortality rate. The overall infant (<1 year) mortality rate dropped 52.1% during the 9 years from 1992 to 2001, from 16.3 to 7.8. In 2002, continued progress was put on hold when the overall infant mortality rate rose slightly to 7.9. Despite the slight increase, the overall infant (<1 year) mortality rate is the component driving the 48.0% decrease in the overall child (<5 years) mortality rate from 20.0 in 1992 to 10.4 in 2002, down from 10.8 in 2001.

B. Infant Mortality

Figure C2 takes a more detailed look at the components of the overall infant (<1 year) mortality rate: the **early neonatal (0-6 days) mortality rate** *(the number of deaths of infants from 0-6 days of age per 1,000 live births)*,

[2] All differences between mortality rates will be calculated as a percentage increase or decrease.

Infant, Early Neonatal, Late Neonatal, and Post-Neonatal Mortality Rates: 1990-2002

Legend:
- Overall Infant (<1 year)
- Early Neonatal (0-6 days)
- Late Neonatal (7-27 days)
- Post-Neonatal (28 days to <1 year)
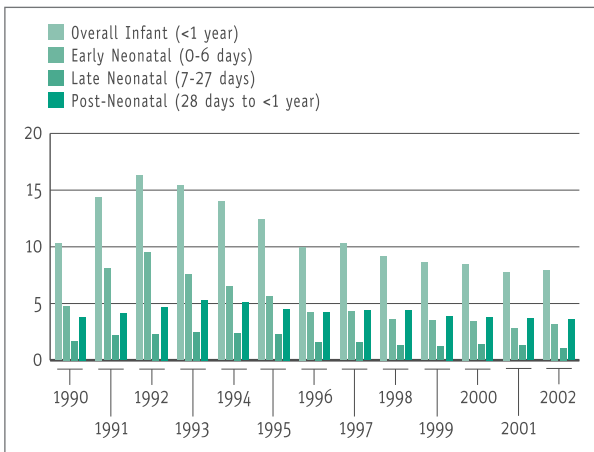
the **late neonatal (7-27 days) mortality rate** *(the number of deaths of infants from 7-27 days of age per 1,000 live births),* and the **post-neonatal (28 days to <1 year) mortality rate** *(the number of deaths of infants from 28 days to <1 year of age per 1,000 live births).* The biggest improvement in infant mortality came in the early neonatal (0-6 days) period with a 70.5% decrease during the 9 years from 1992 to 2001, from 9.5 to 2.8. In 2002, progress was thwarted when the early neonatal (0-6 days) mortality rate rose 14.3% to 3.2. The other periods showed more modest decreases from 1992 to 2002 (late neonatal: a 52.2% decrease; post-neonatal: a 23.4% decrease).

Figure C3

Perinatal (Stillbirths + Early Neonatal) Mortality Rates: 1990-2002

Legend:
- Perinatal (Stillbirths + Early Neonatal) Deaths per 1,000 births
- Stillbirths per 1,000 births
- Early Neonatal (0-6 days) Deaths per 1,000 live births
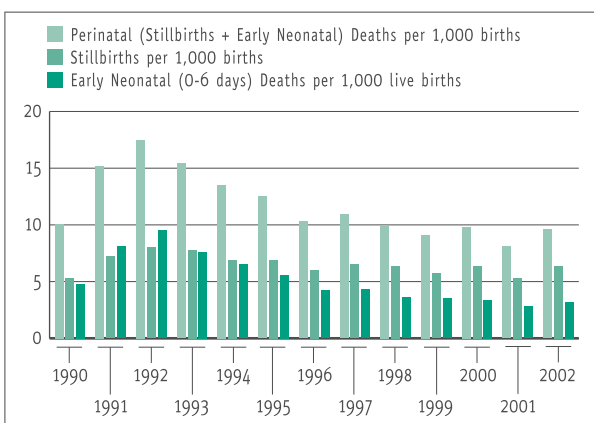
C. Perinatal Mortality

Figure C3 takes an even more detailed look at infant mortality by examining infant deaths during the perinatal period. The **perinatal mortality rate** is defined as *the number of stillbirths (infants born dead) plus the number of early neonatal deaths (infants born alive who died 0-6 days after birth) per 1,000 births.* In the 9 years from 1992 to 2001, the perinatal mortality rate decreased 53.7%, from 17.5 to 8.1. The real strides in reducing perinatal mortality during these 9 years came in the early neonatal (0-6 days) period with a 70.5% decrease, from 9.5 to 2.8. Improvement in reducing the stillbirth rate was more modest (a 33.8% decrease) in these 9 years, from 8.0 to 5.3. In 2002, progress was again put on hold when the perinatal mortality rate rose 18.5% to 9.6, the early neonatal mortality rate rose 14.3% to 3.2, and the stillbirth rate rose 20.8% to 6.4.

D. Infant (<1 Year) Mortality by Residential Area

Figure C4 looks at the overall infant (<1 year) mortality rate by residential area. As we have seen in the previous section, "Eradicate Extreme Poverty", rural people bear a higher burden than urban people regarding matters of life importance. Therefore, not unexpectedly, we see that the infant mortality rates were higher in rural areas than in urban areas during the 12-year period: 1990-2002. The rural infant mortality rate peaked at 18.7 in 1993. Nonetheless, it decreased 51.7%, from 17.4 in 1992 to 8.4 in 2001. Unfortunately, continued progress in lowering the rural infant mortality rate has been reversed. In 2002, the rural infant mortality rate rose 14.3% to 9.6. Progress has continued for the urban infant mortality rate, however, which decreased 57.5% in the 10 years from 1992, from 16 to 6.8. The urban infant mortality rate mirrors the national rate, just slightly lower.

Infant Mortality Rate by Residential Area:
1990-2002

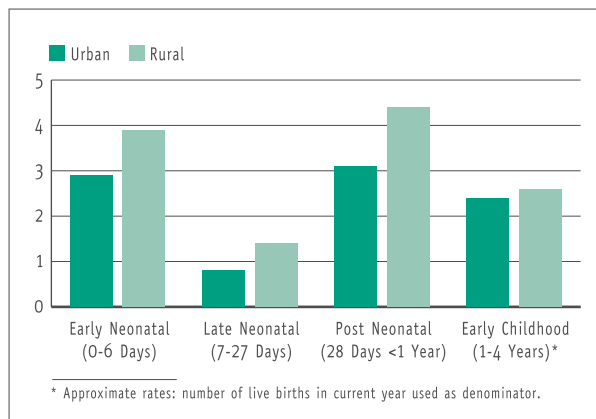Figure C4 chart: Infant Mortality Rate by Residential Area 1990-2002 (Urban, All, Rural)
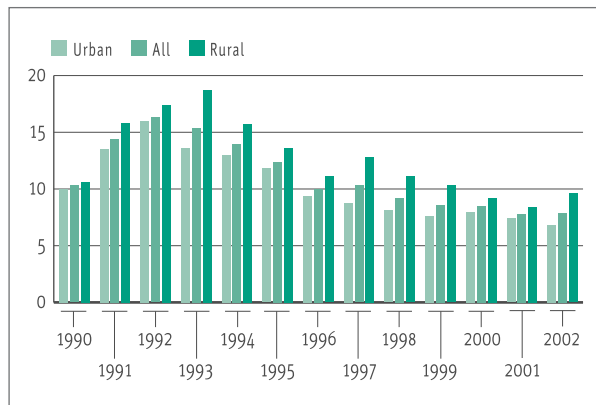
the early neonatal (0-6 days) period, 75% more likely to die during the late neonatal (7-27 days) period, and 41.9% more likely to die during the post-neonatal (28 days to <1 year) period than urban infants. In 2001, however, only minimal differences were observed during the early and late neonatal periods, but a sizable difference was noted during the post-neonatal period (rural infants were 33.3% more likely to die than urban infants). In 2002, during the early childhood (1-4 years) period, rural infants were 8.3% more likely to die than urban infants. This was a substantially smaller difference than that (69.6%) which occurred in 2001.

Snapshot of Child Mortality: 2002

A. Child (<5 Years) Mortality by Residential Area

Figure C5 examines the 2002 mortality rates of all the periods that comprise overall child (<5 years) mortality by residential area. Large differences in overall child (<5 years) mortality between urban and rural areas occurred during the early neonatal, late neonatal, and post-neonatal periods. Rural infants were 34.5% more likely to die during

B. Child (<5 Years) Mortality by County

Figure C6 displays the 2002 overall child, infant, and early childhood mortality rates by county. Alytus County had the highest infant mortality rate at 10.7, followed by Siauliai County at 9.9 and Klaipeda County at 9.3. These were the 3 counties that had infant mortality rates above the national average of 7.9. Panevezys County had the lowest infant mortality rate at 5.8 and Kaunas County had the second lowest infant mortality rate at 6.6.

Siauliai County had the highest early childhood mortality rate at 4.0, followed by Taurage County at 3.2, Utena County at 3.0, and Kaunas County at 2.8. These were the 4 counties that had early childhood mortality rates above the national average of 2.5. Marijampole County had the lowest early childhood mortality rate at 1.1 and Panevezys County had the second lowest early childhood mortality rate at 1.9.

Siauliai County had the highest overall child mortality rate at 14.0, followed by Alytus County at 13.4, Klaipeda County at 11.6, Utena County at 10.7, and Taurage County at 10.5. These were the 5 counties that had overall childhood mortality rates above the national average of 10.4. Panevezys County had the lowest overall childhood mortality rate at 7.7, much lower than any other county.

Figure C5
Child Mortality Rates by Age Group and Residential Area: 2002

Figure C5 chart: Child Mortality Rates by Age Group and Residential Area 2002 (Urban, Rural) — Early Neonatal (0-6 Days), Late Neonatal (7-27 Days), Post Neonatal (28 Days <1 Year), Early Childhood (1-4 Years)*

* Approximate rates: number of live births in current year used as denominator.

C. Infant (<1 Year) Mortality by Cause and Residential Area

Figure C7 shows the **infant mortality rate** *(number of infant deaths per 10,000 live births)* by cause and residential area for 2002. The mortality rate from all causes for rural infants (96.4) was 42.4% higher than that for urban infants (67.8).

Congenital anomalies were the number one killer of infants in 2002. They caused 38.7% of all infant deaths. However, the infant mortality rate from congenital anomalies was 45.6% higher for rural infants (37.7) than for urban infants (25.9).

The number two killer of infants in 2002 was diseases originating in the perinatal period, which caused 29.4% of all infant deaths. The infant mortality rates from these causes were similar in rural (24.5) and urban (22.2) areas.

External causes (accidents, poisonings, and traumas, etc.) were the third major cause of infant deaths in 2002. They were responsible for 9.2% of all infant deaths. However, the infant mortality rate from external causes for rural infants (10.5) was double that of urban infants (5.3).

Trends in Childhood Immunization Coverage: 1995-2002

Figure C8 displays the childhood immunization coverage for the seven-year period: 1995 to 2002. In 2002, they achieved over 99% coverage for tuberculosis (99.3%) and hepatitis b (99.6%). They had 97.9% coverage for measles, mumps, and rubella and 97.0% coverage for poliomyelitis. Only for diphtheria/tetanus (94.8% coverage) and pertussis (whooping cough: 94.8% coverage) did Lithuania fall short of 95% coverage. Lithuania's coverage for all childhood diseases in 2002 equaled or bettered their coverage in 2001, except for poliomyelitis. The coverage for poliomyelitis fell from 97.5% in 2001 to 97.0% in 2002. Lithuania has impressively increased their coverage for all childhood diseases since 1995 (for hepatitis b since 1998), except for diphtheria/tetanus and pertussis. The rates of coverage have fallen from 97.3% to 94.8% for diphtheria/tetanus and from 95.8% to 94.8% for pertussis.

Figure C6 —————————————————————
Childhood Mortality Rates for Lithuania and its Counties, All Areas: 2002

* Rates are approximate, as only 2002 live births were used in the denominators
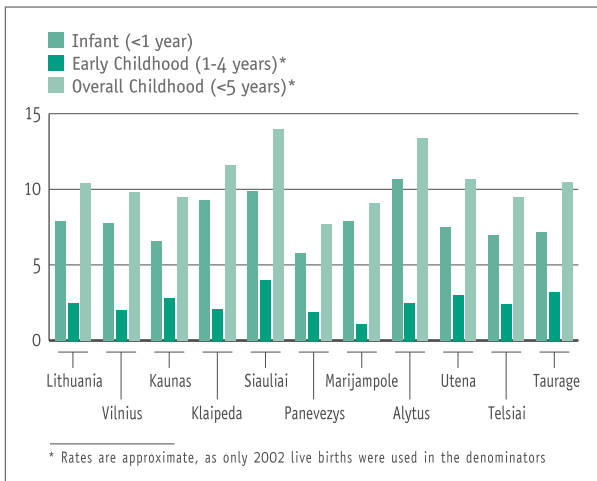
Figure C7 —————————————————————
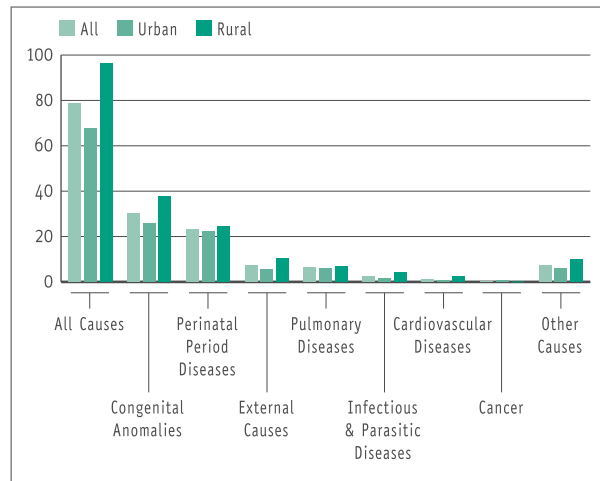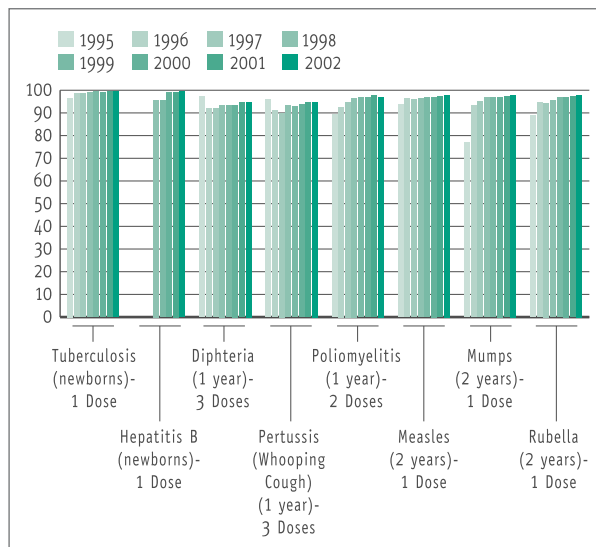### Infant Mortality Rate by Cause and Residential Area: 2002

Figure C8
Childhood Immunization Coverage: 1995-2002

Recommendations

Lithuania has shown steady progress in reducing overall child (<5 years) mortality by 48.0% in the past 10 years. But this progress has come primarily during the early neonatal period, from 1992 to 2001. The two factors that strongly affected this observed reduction in infant mortality are: 1) the 1992 implementation of the *Perinatology Program*. The adopted new *Perinatology Program for 1997 - 2000* ensures continuation of the previous program[3] 2) the developments in prenatal care, which were defined by the decree of Lithuania's Ministry of Health on the care for pregnant women, birthing mothers, and newborns[4] and implemented in 1999.

The year 2004 has been officially proclaimed the *Year of Children's Health* by the Lithuanian Seimas. By this resolution, the Seimas took a step forward to raise public awareness on the health status of children, contribute to the search of more effective methods for prevention of childhood diseases and work towards the improvement of treatment

and service provision for children. The Ministry of Health is organizing numerous conferences on various aspects of children's health to take place during this year. Also, Lithuanian authorities in the health protection sector have incorporated children's health aspects into 12 major national health programs. The *National Mother and Child Program* is still under draft.

In 2002, the rural infant mortality rates were substantially higher than the rates of urban areas in the early neonatal, late neonatal and post-neonatal periods. The infant mortality rates from congenital anomalies and external causes were also substantially higher for rural infants than for urban infants. This gap between rural and urban infant mortality rates has actually widened since 2001[5].

Mortality data from 1988 to 2000 indicate the dominant role played by external causes, such as accidents, poisonings, and traumas, in the deaths of Lithuanian children and adolescents[6]. Accidents, poisonings, and traumas caused 54.6% of the deaths of boys, aged 1 to 4 years, and 46.9% of the deaths of girls, aged 1 to 4 years. The mortality rates of children and youths diverged according to rural/urban and gender factors.

Findings of the study on *Socio-economic Inequalities in Health in Lithuania: Indicators for Monitoring and Latest Situation*[7] revealed that education and marital status were strong predictors of newborns' health inequalities from 1995 to 1998. Moreover, behavioral risk factors, such as smoking, alcohol abuse, drug use, and hard physical work during pregnancy, had significant associations with stillbirths and births of low birth weight babies.

The following suggestions could be considered for improving the health of infants and children less than 5 years of age in Lithuania:

1. Elaboration and implementation of the *National Mother and Child Program* should be accelerated.

---

[3] Decree of the Ministry of Health of the Republic of Lithuania No. 137 (Mar. 26, 1997).
[4] Decree of the Ministry of Health of the Republic of Lithuania No. 117 (Mar. 15, 1999).

[5] Causes of Death: 2001-2002. Statistics of Lithuania. - Vilnius 2003.
[6] Annual Report of the National Health Board (2002). - Vilnius 2003.
[7] Socio-economic Inequalities in Health in Lithuania: Indicators for Monitoring and Latest Situation. Report under the project financed by the WHO PAE-ECHP. April 2, 2002. Available from Internet: www.vsv.lt

2. A comprehensive annual analysis of the data from the National Register of Newborns, which became operational in 1995, should be conducted to assess regional differences in infants' health and pinpoint areas where additional resources are needed.

3. New research studies, that could possibly explain some regional differences in infant mortality rates, should be conducted. The results of these studies could assist in the development of new, efficient strategies for improving the health of infants.

4. A comprehensive approach to national policy on young children's mortality prevention, which takes into account the multi-causal nature of their deaths, needs to be taken.

The above suggestions should help Lithuania ensure that rural infants and young children have the same acce ss as their urban counterparts to quality pediatric care on a regular basis and that all pregnant women have thorough prenatal care during their entire pregnancies to help reduce the number of stillbirths and early neonatal deaths.

Goal 5: Reduce Child Mortality
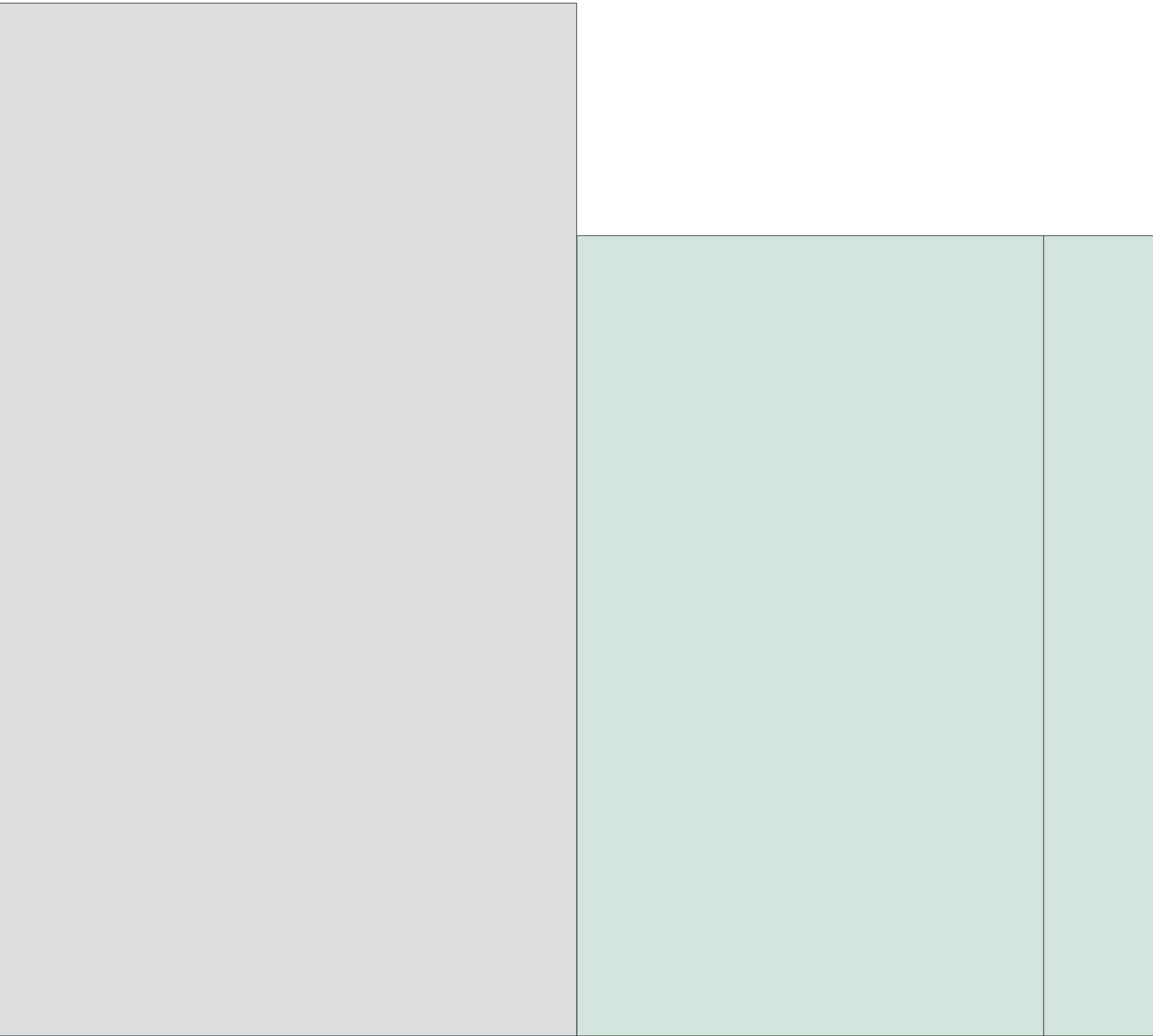
The **fifth Millennium Development Goal (MDG)** is *to improve maternal health*. Lithuania's target for this goal should be *to reduce by three-quarters, between 1990 and 2015, the maternal mortality ratio*. Figure M1 displays the overall maternal mortality ratios of 1990 and from 1994 to 2002. These ratios were available for urban and rural areas, starting in 1999. From 1990 to 2001, Lithuania reduced the number of maternal deaths from 13 to 4. The corresponding maternal mortality ratios decreased 43.7%, from 22.9 to 12.9 maternal deaths per 100,000 live births, respectively. However, in 2002, the number of maternal deaths increased to 6 (maternal mortality ratio of 20.0). Thus, 2 extra deaths produced an increase of 55.0% in the maternal mortality ratio. Consequently, because the numbers of maternal deaths are so few, the calculated ratios are highly unstable. Therefore, we can only report the data; we cannot make any conclusions about Lithuania's status vis-à-vis this target.

Let us consider three important factors, which influence women's reproductive health, as well as newborns' health, in the country, today.

Figure M1
Maternal Mortality Ratio: 1990, 1994-2002 and by Residential Area: 1999-2002
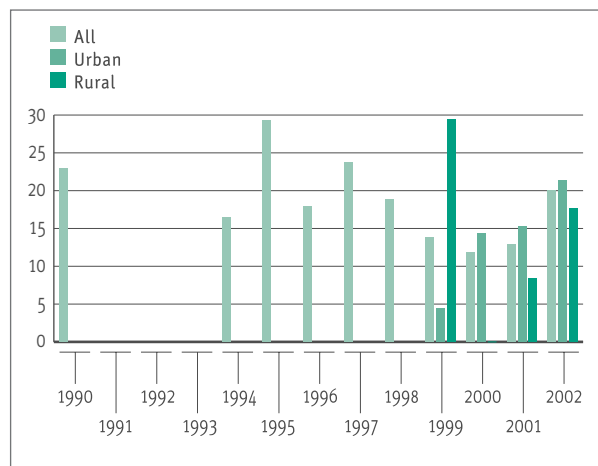
[1] Statistical Yearbook of Lithuania 2003. - Vilnius, 2003.

Fertility

The overall **total fertility rate** *(average number of children born per woman)* has declined 38.9%, from 2.03 in 1990 to 1.24 in 2002, as seen in Figure D4a from the „Demographic Trends and Snapshots" chapter. In other words, the overall total fertility rate in 1990 was 1.64 times the rate in 2002.[1] From 1990 to 2002, the urban total fertility rate declined 41.0%, from 1.78 to 1.05, while the rural total fertility rate declined 36.6%, from 2.76 to 1.75.

Figure M2 displays the **age-specific fertility rates** *(number of live births per 1,000 females at specified age)* by residential area in 1990 and 2002. The decline in age-specific fertility rates was especially dramatic for urban women during the last 12 years. Among urban women, 20-24 year-olds experienced the largest decline (56.4%) in their age-specific fertility rate, from 144.2 to 62.8. Urban women in other age categories experienced large, but less remarkable, declines in their age-specific fertility rate. The age-specific fertility rate for 15-19 year-old urban women declined 49.1%, from 31.6 to 16.1, while the age-specific fertility rate for 25-29 year-old urban women declined 32.2%, from 106.0 to 71.9. Rural women also experienced a notable decline in their age-specific fertility rates during the last 12 years. However, among rural women, 15-19 year-olds experienced the largest decline (51.6%) in their age-specific fertility rate, from 65.7 to

Figure M2
Age-Specific Fertility Rates by Residential Area: 1990 and 2002
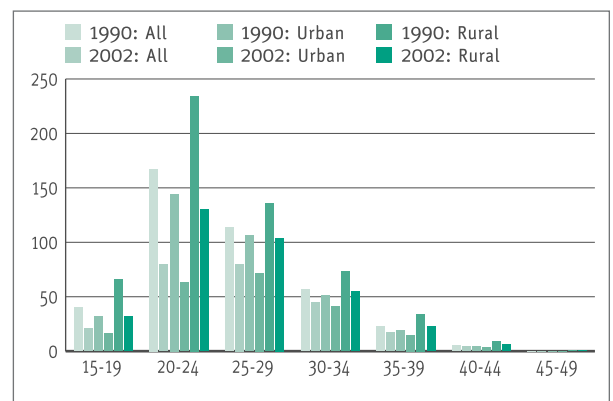
31.8. For rural women in other age categories, the decline in age-specific fertility rate was less severe. The age-specific fertility rate for 20-24 year-old rural women declined 44.5%, from 234.3 to 130.0, while the age-specific fertility rate for 25-29 year-old rural women declined only 23.6%, from 135.8 to 103.8.

In 1990, both urban and rural women experienced their peak age-specific fertility rates in the 20-24 year-old age category (144.2 and 234.3, respectively). However, in 2002, the age category with the highest age-specific fertility rate for urban women shifted to the 25-29 year-olds (71.9). For rural women in 2002, the age category with the highest age-specific fertility rate remained the same: 20-24 year-olds (130.0).

Thus, in 2002, urban women's total fertility rate was only 60% that of rural women's (1.05 vs. 1.75), and urban women reached their peak fertility 5 years later than rural women.

Abortion

The **total abortion rate** *[total number of abortions, including spontaneous abortions (miscarriages), per 100 live births]* has declined 31.1%, from a peak of 91.4 in 1995 to a low of 63.0 in 2002.

There has been an even more dramatic decline (45.5%) in the **legally induced abortion rate** *(number of requested and therapeutic abortions per 100 live births)*, from a high of 76.4 in 1992 to a low of 41.6 in 2002. Figure M3 displays the legally induced abortion rate (number of requested and therapeutic abortions per 100 live births) from 1991 to 2002. The legally induced abortion rate reached a peak of 76.4 in 1992. Since then it has declined 45.5%, to a low of 41.6 in 2002. Regional disparities exist in the legally induced abortion rate. Urban areas experience higher legally induced abortion rates than rural areas, which can partially be explained by easier accessibility to abortion services. Similarly, the counties with the highest legally induced abortion rates in 2002, Vilnius with 64.3 and Klaipeda with 63.1, as seen in Figure

Figure M3
Legally Induced* and Spontaneous** Abortion Rates: 1991-2002

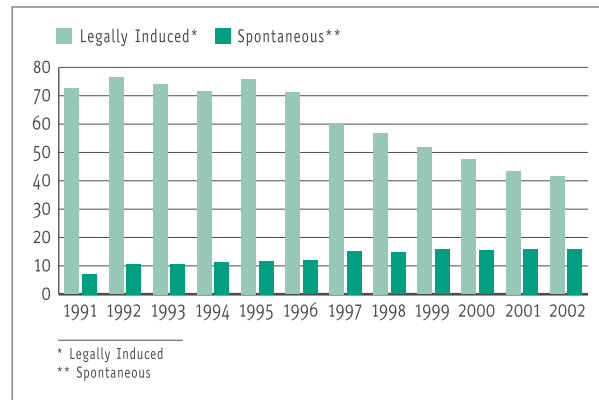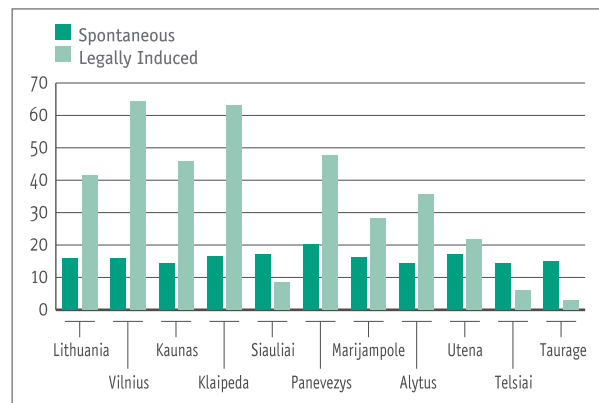

* Legally Induced
** Spontaneous

Figure M4
Legally Induced and Spontaneous Abortion Rates for Lithuania and Its Counties: 2002

M4, are also the most urbanized, 78.3% and 73.2%, respectively, as seen in Figure D1e. The counties with the lowest legally induced abortion rates in 2002 were Taurage with 2.8, Telsiai with 6.0, and Siauliai with 8.5, as seen in Figure M4. These three counties were the only ones to have legally induced abortion rates lower than their spontaneous abortion rates of 14.9, 14.5, and 17.1, respectively.

The **spontaneous abortion rate** *[number of spontaneous abortions (miscarriages) per 100 live births]*, however, has increased a remarkable 122.2%, from a low of 7.2 in 1991 to a high of 16.0 in 2002, as seen in Figure M3. In 2002, Kaunas, Alytus, and Telsiai Counties shared the lowest spontaneous abortion rate of 14.5, while

Figure M5
Percentage of Live Births That Are Extra-
Marital by Residential Area: 1990, 1995,
2000-2002
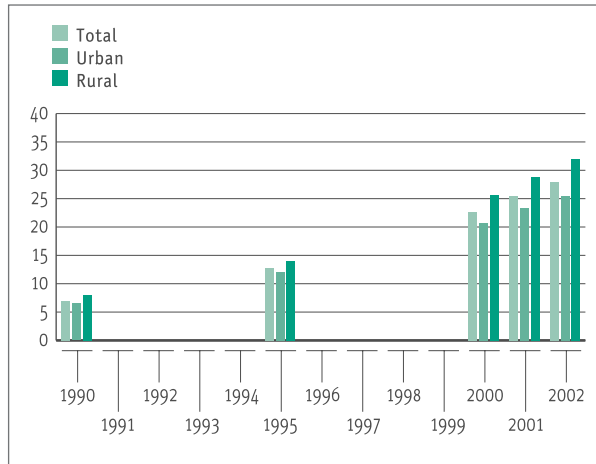
Panevezys County experienced the highest
spontaneous abortion rate of 20.1, as seen
in Figure M4.

Extra-Marital Live Births

Figure M5 shows the percentage of live births
that are extra-marital by residential area in
1990 and 1995 and from 2000 to 2002. The
total percentage of live births that are extra-
marital has had a four-fold increase during the
12-year period, from 7.0% in 1990 to 27.9%
in 2002[2]. The rate of increase was similar
for both urban and rural areas. In 2002,
25.5% of the live births in urban areas were
extra-marital, compared to 32.0% in rural
areas. Marital status appeared to be linked to
Lithuanian newborns' health from 1995-1998.

Recommendations

Currently, Lithuania does not have any
legal documents on women's reproductive
health. The law on reproductive health
is being drafted, while a comprehensive
National Mother and Child Program is under
elaboration.
  Comprehensive studies on causal factors,
influencing mother and child mortality
(such as education, marital status, woman's
age and etc.), would be a pre-requisite for
further development of mother and child
mortality reduction policy in Lithuania.
  Maternal health is closely related to
women's reproductive health, therefore it is
crucially important to analyze the effects
various reproductive health indicators have
on maternal health status. Comprehensive
research in this area should assist policy
development, which in turn will lead to
improvements in women's reproductive and
maternal health.

[2] Statistical Yearbook of Lithuania 2003. - Vilnius, 2003.

Goal 6: Combat HIV/AIDS Respiratory Tuberculosis, and Ther Diseas
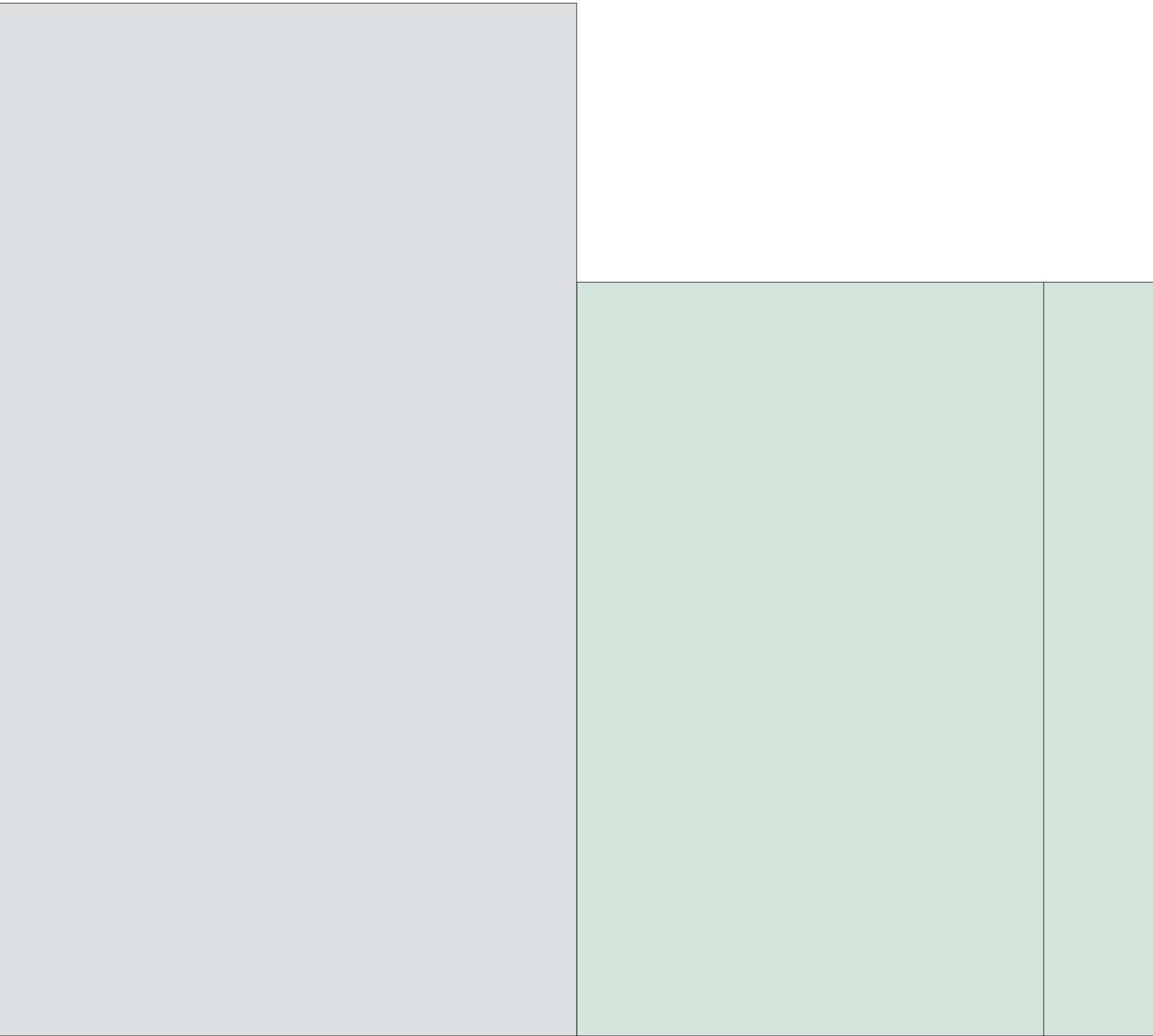
The **sixth Millennium Development Goal (MDG)** is *to combat HIV/AIDS, malaria, and other diseases*. The suggested targets for Lithuania for this goal should be *to reduce the incidence of HIV/AIDS by 2015 and to reduce the incidence of respiratory tuberculosis by 2015*.

HIV/AIDS

A. HIV Incidence

In 1988, the first HIV-positive person to be diagnosed in Lithuania was a man[1]. Two years later, in 1990, the first woman in Lithuania was diagnosed HIV-positive. As of December 31, 2003, a total of 845 people have been diagnosed HIV-positive. Of these, 762 (90.2%) were men and 83 (9.8%) were women. The largest number of new cases of HIV (294: 34.8%) was diagnosed in the 30-39 year old age group. In fact, 81.3% (687 cases) of all new cases of HIV were under 40 years of age at the time of diagnosis. The youngest patient diagnosed in Lithuania was 15 years old, while the oldest patient was 68 years old. The predominant mode of transmission was through intravenous drug use (678 cases: 80.2%), followed by heterosexual contact (70 cases: 8.3%) and homosexual contact (63 cases: 7.5%). No cases have been reported due to mother-to-child transmission or through HIV-contaminated blood products. Although in the last 34 cases (4.0%), the mode of transmission remains unknown. Except for the cases discovered in prisons (discussed below), many of the 845 cases were reported from major metropolitan areas, such as Klaipeda with 203 cases (24.0%), Vilnius with 145 cases (17.2%), Kaunas with 27 cases (3.2%), and Siauliai with 26 cases (3.1%).

The spike in HIV incidence occurred in May of 2002, when 207 prisoners tested HIV-positive in Alytus Strong Regime Colony (hereinafter referred to as Alytus prison).

[1] The data on HIV/AIDS was provided by the Lithuanian AIDS Center (www.aids.lt).

HIV Incidence Rate by Gender: 1990-2002
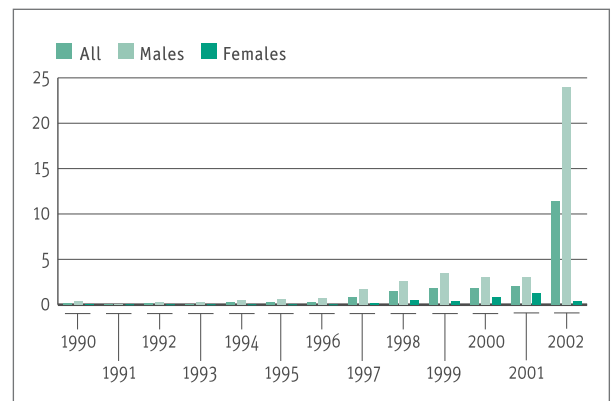
By the end of 2002, Alytus prison had 92 more inmates diagnosed HIV-positive. All 299 HIV-infected men from Alytus prison acquired the virus through intravenous drug use. Altogether, 397 people were diagnosed HIV-positive in 2002.

Figure H1a displays the HIV incidence rates by gender from 1990 to 2002. The rise in incidence was slow and steady until 2002. In that year, the overall HIV incidence rate[2] increased dramatically (453%), from 2.07 in 2001 to 11.44. This increase is due solely to the remarkable rise (697%) in the men's HIV incidence rate, from 3.01 in 2001 to 24.00 in 2002, which is primarily due to the Alytus prison outbreak, discussed above. The women's low HIV incidence rate actually

Figure H1b
HIV Incidence Rate by Residential Area and Gender: 2002
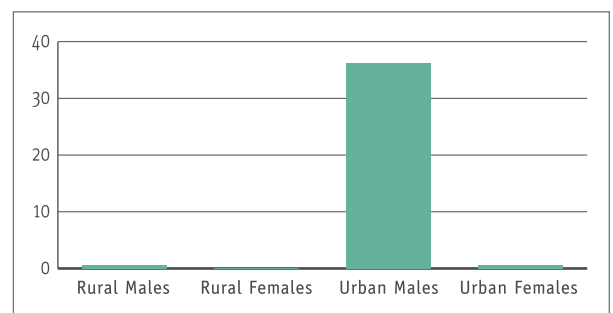
[2] All incidence rates mentioned in this section will be defined as the number of new cases per 100,000 average population.
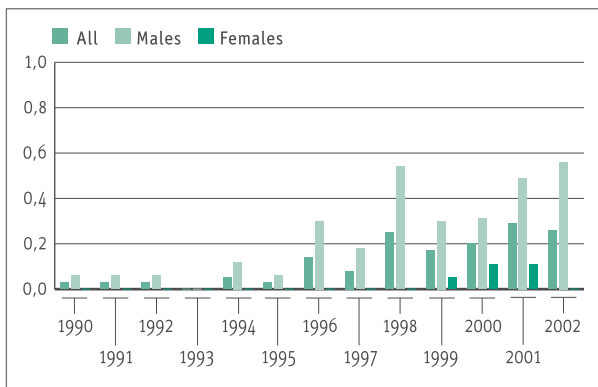
fell, from 1.24 in 2001 to 0.43 in 2002. Of the 397 people diagnosed in 2002, 389 (98%) were male and 8 (2%) were female. All were from urban areas (which include Alytus prison), except for 3 men (0.76%), who were from rural areas. Figure H1b shows the 2002 HIV incidence rates by residential area and gender. The only high rate was 36.21 among urban males.

B. AIDS Incidence

The first case of AIDS in Lithuania was a man, who was diagnosed in 1988. Eleven years later, in 1999, the first woman in Lithuania was diagnosed with AIDS. As of December 31, 2003, a total of 64 people have been diagnosed with AIDS. Of these, 59 (92.2%) were men and 5 (7.8%) were women. Figure H1c shows the AIDS incidence rates by gender from 1990 to 2002. The overall AIDS incidence rate has risen slowly during the past 12 years (from 0.03 to 0.26), but it still remains quite low. The men's AIDS incidence rate is of course higher; it has risen from 0.06 in 1990 to 0.56 in 2002. The women's AIDS incidence rate has never exceeded 0.11 and was 0 in 2002.

C. HIV/AIDS Mortality

AIDS claimed its first victim in Lithuania in 1988. As of December 31, 2003, 60 HIV-infected people have died: 28 men from AIDS and 32 people (25 men and 7 women) from other causes not associated with HIV. Figure H1d shows the
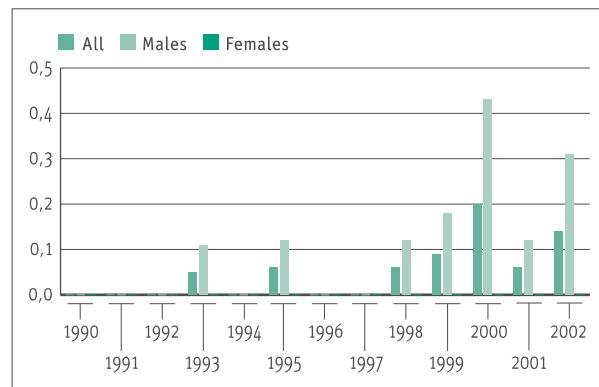
HIV/AIDS mortality rates[3] by gender from 1990 to 2002. These rates have also remained very low (less than or equal to 0.43).

D. Recommendations

Despite a comparatively low prevalence in Lithuania (HIV prevalence is the lowest among the three Baltic states), the growing rates in new HIV infections in the cross-border and close neighborhood of Lithuania should alert the consciousness of policy makers. According to the regional UNDP report **Reversing the Epidemic: Facts and Policy Options**[4] growth rates in new HIV infections reported over the last several years in Estonia, Russia and Ukraine are among the world's highest. Thus, Lithuania should rapidly undertake appropriate actions to prevent increasing rates in new HIV infections.

On October 14, 2003, the Government approved the **National HIV/AIDS Prevention and Control Program 2003-2008**[5], which defined major goals for HIV/AIDS prevention, control, and monitoring activities. The major goals of the Programme are aimed at reducing transmission of HIV/AIDS and

---

[3] All mortality rates of specific diseases or classes of diseases (cardiovascular, cancer, external causes, etc.) mentioned in this section will be defined as the number of deaths per 100,000 average population.
[4] Reversing the Epidemic: Facts and Policy Options. UNDP, Bratislava, 2004
[5] National HIV/AIDS Prevention and Control Programme 2003-2008 adopted by the Resolution No 1196 of the Government of the Republic of Lithuania dated 4 October 2001. Available from Internet: http://infosveikata.sam.lt/files/National%20programe%202003-2008.doc

related infections, mitigating consequences of HIV and related infections to an individual and society, providing appropriate health care services to people with HIV and AIDS and improving HIV/AIDS surveillance system. This Program is a step forward policy instrument because of its multisectorial approach entailing measures for prevention, treatment and effectiveness monitoring. However, several aspects should be taken into consideration. While the Programme envisages a wide range of activities and measures, the allocation of resources in line with Programme's directions and measures is not sufficient and does not ensure the sustainable implementation of the Programme. It is recommended to prioritize the most efficient measures and activities. The required financial inputs for each measure (activity) should be estimated more accurately in accordance with the allocated resources in the implementing agencies. The Government should make conscious efforts for the allocation of sufficient finances for the successfully meeting the goals addressed in the Programme.

In response to HIV/AIDS epidemic, Lithuania needs to implement more effective prevention and control measures that are targeted to specific high-risk population groups. Prisons should enhance HIV voluntary and confidential counseling and testing, target prevention measures to inmates who are at highest risk of acquiring HIV (intravenous drug users), and provide better health care to HIV-infected inmates. The international experts after carrying the *Assessment of Communicable Disease Control in Lithuanian Prisons*[6] in 2003 recommended that "The policy of compulsory testing of prisoners should be revisited. In the present state of knowledge it is considered ineffective activities and discriminatory and therefore unethical". The experts pointed to the insufficiency of training and prevention activities (including harm reduction) as well as the lack of collaboration of different institutions coordinating the efforts towards preventing HIV/ AIDS incidences in prisons.

[6] Assessment of Communicable Disease Control in Lithuanian Prisons. Task Force on Communicable disease control in the Baltic Sea region. Available in the internet: http://www.baltichealth.org

   Lithuania also needs to target prevention strategies to intravenous drug users and other vulnerable groups living in large metropolitan areas, such as Klaipeda and Vilnius. HIV-positive people are at increased risk of acquiring multi-drug resistant tuberculosis. Therefore, coordinating efforts to meet the health care (treatment) and social care (counseling) needs of all HIV-positive people (not only those residing in major cities, but also those leaving prisons) should be a high priority for Lithuania.

Respiratory Tuberculosis

A. Respiratory Tuberculosis Incidence

Figure H2a displays the respiratory tuberculosis incidence rates of 1990 and from 1995 to 2002. In 1990, the incidence rate was 34.2 (1,265 new patients). By 1998, the respiratory tuberculosis incidence rate had increased 132.7% to 79.6 (2,826 new patients). Since then, the incidence rate has declined 24.1% to 60.4 in 2002 (2,097 new patients, down from 2,225 new patients in 2001). The incidence rates for men have been over double that of women. For example, the rates for men and women in 2002 were 84.5 and 39.4, respectively. Over the entire 12-year period, the respiratory

Figure H2a
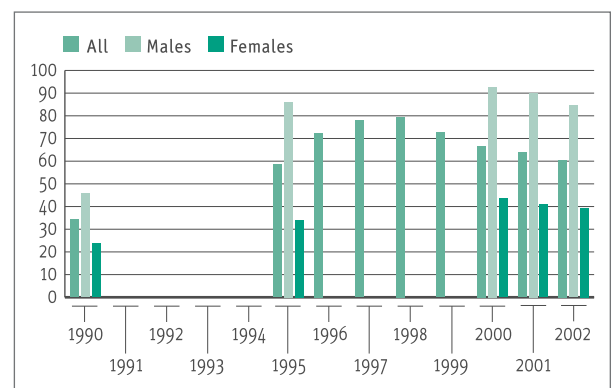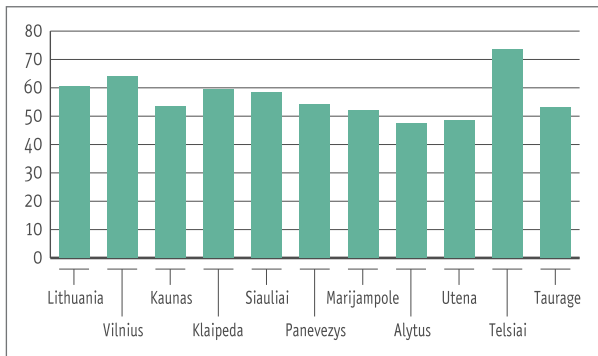Respiratory Tuberculosis Incidence Rate by Gender: 1990, 1995-2002

Respiratory Tuberculosis Incidence Rates for
Lithuania and Its Counties: 2002

Respiratory Tuberculosis Mortality Rate by
Residential Area and Gender: 1999-2002

tuberculosis incidence rate in Lithuania has
increased 76.6%, from 34.2 to 60.4 (down
from 63.9 in 2001).

Figure H2b shows the 2002 respiratory
tuberculosis incidence rates for Lithuania and
its counties. Telsiai County had the highest
incidence rate at 73.6, followed by Vilnius
County at 63.9. These were the only two
counties to have incidence rates above the
national rate of 60.4. Alytus County had the
lowest respiratory tuberculosis incidence rate
at 47.6, followed by Utena County at 48.4.

B. Respiratory Tuberculosis Mortality

Figure H2c shows the respiratory tuberculosis
mortality rates of 1990, from 1994 to 1995, and
from 1997 to 2002. From 1990 to 1995, the
mortality rate for respiratory tuberculosis doubled,

from 6.4 to 12.8. Since 1995, the mortality rate
decreased 48.4% to 6.6 in 2002 (down from 7.7 in
2001). Over the entire 12-year period, respiratory
tuberculosis mortality has increased only 3.1%. In
2002, the mortality rate for men with respiratory
tuberculosis was almost 6 times that of women
(11.8 vs. 2.0, down from 13.9 vs. 2.3 in 2001).

Figure H2d shows the mortality rate
by residential area and gender, taken in
combination, from 1999 to 2002. Despite
the decline, rural men were 40.4% more
likely to die from tuberculosis than urban
men in 2002 (14.6 vs. 10.4, down from 17.1
vs. 12.2 in 2001). The mortality rates for
rural and urban women in 2002 were similar
(2.1 vs. 1.9, down from 2.4 vs. 2.3 in 2001).

C. Recommendations

Lithuania needs a better surveillance and
early treatment program in areas where the
risk for respiratory tuberculosis is high,
i.e., prisons, poor people living in crowded
conditions, the homeless, and people with
HIV/AIDS. Not only is the prognosis for
recovery much better when tuberculosis can
be detected and treated in its latent stage,
but the communicability of the disease is
also lessened, which in turn decreases its
incidence.

By the end of 2001, Lithuania had
expanded its treatment of tuberculosis
patients in the regions with directly observed
treatment methods (DOTS: recommended
by the World Health Organization) to

Respiratory Tuberculosis Mortality Rate by
Gender: 1990, 1994-1995, 1997-2002

between 30% and 45%. Also, in 2001, the Government launched the **National Tuberculosis Prevention and Control Program for 2003-2006.**[7] This program focuses on improving the following areas: 1) the skills of health care providers, 2) the recording and reporting system, 3) laboratory and diagnostic services, and 4) subsidies for treatment.

   According to the report of the **Task Force on Communicable Disease Control: Baltic Sea Region**[8], issued in October of 2003, Lithuania needs to strengthen its efforts in tuberculosis control because no clear trend in incidence was seen and a considerable number (14%) of its cases went without treatment in 2002. The report also pointed out the unfavorable situation in Kaunas, where all indicators were cause for concern. The report proposed that Lithuania give priority attention to treating multi-drug resistant tuberculosis because its prevalence was dangerously high among newly diagnosed and „old" cases. In addition, the report proposed shifting resources to strengthen ambulatory services and to establish nursing homes for the elderly and shelters for the homeless with out-reach programs for anti-tuberculosis treatment.

Other Health Issues

A. Life Expectancy

The health of a nation is often measured by two international criteria: infant mortality and life expectancy. Lithuania has made tremendous progress in reducing its infant mortality, as we have seen in the discussion of the United Nation's fourth Millennium Development Goal (MDG). So we will now direct our attention to life expectancy for Lithuanians.

[7] National Tuberculosis Prevention and Control program for 2003-2006 approved by the Resolution No. 1611 of the Government of the Republic of Lithuania dated by 10 October 2002. Available from Internet (in Lithuanian): http://www3.lrs.lt/cgi-bin/preps2?Condition1=188333&Condition2=
[8] Task Force on Communicable Diseases Control: Baltic Sea Region. Report on Task Forces Project No. 69. TB11: Expansion of DOTS for prevention and control of TB in Lithuania.

Figure H3a
Life Expectancy at Birth by Residential Area and Gender, Taken Singly: 1990-2002
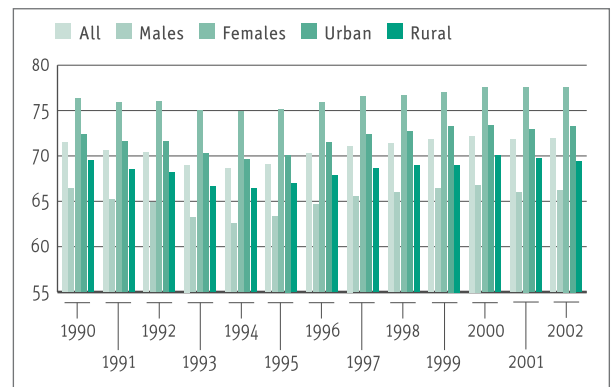
The average life expectancy at birth for all Lithuanians in 2002 was 71.9 years, up from 71.8 years in 2001. This means that a baby born in 2002 could expect to live on average 71.9 years. The United Nations has developed the life expectancy index, which measures a country's relative achievement in life expectancy at birth. The minimum goalpost for this index is 25 years; the maximum is 85 years. Applying this standard to Lithuania, we calculate their life expectancy index for 2002 to be 0.782. By using this index, we can then compare Lithuania's achievement to any other country. For example, the U.S. life expectancy index is 0.86, while the index for Pakistan is only 0.58.

   Overall, life expectancy at birth has fluctuated during the past 12 years between a low of 68.6 years in 1994 and a high of

Figure H3b
Life Expectancy at Birth by Residential Area and Gender, Taken in Combination: 1990-2002
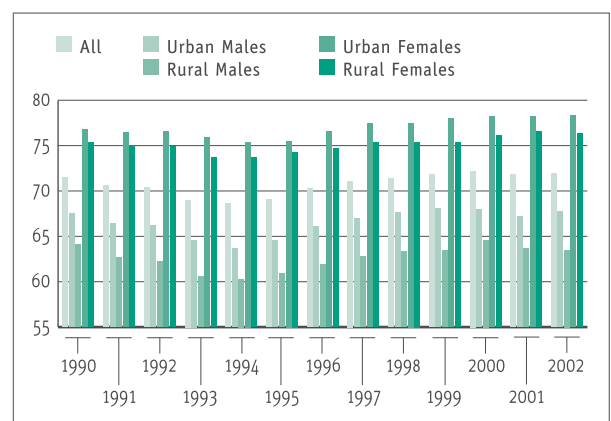
Mortality Rate by Residential Area and Gender,
Taken Singly: 1990-2002

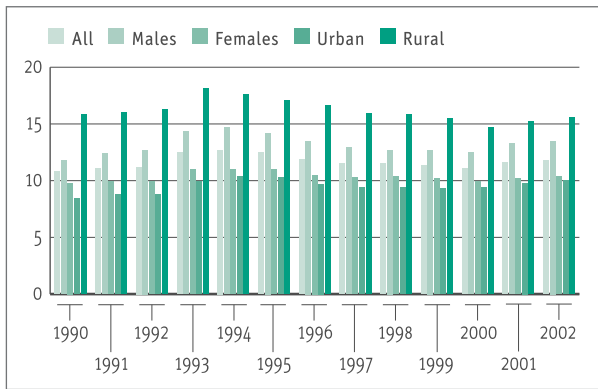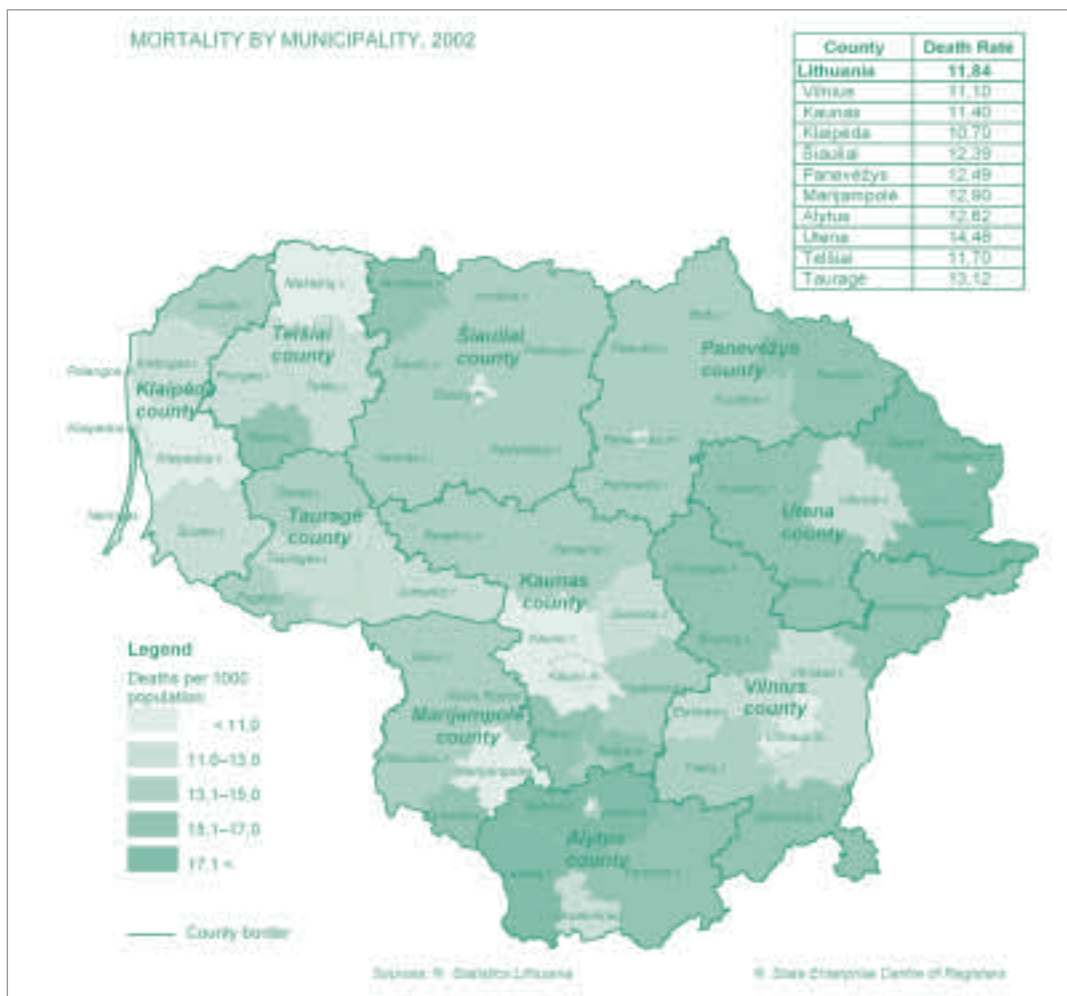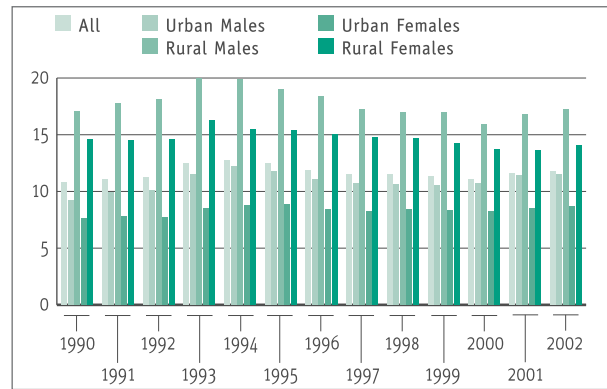Mortality Rate by Residential Area and Gender,
Taken in Combination: 1990-2002

MORTALITY BY MUNICIPALITY, 2002

County	Death Rate
Lithuania	11.84
Vilnius	11.10
Kaunas	11.40
Klaipėda	10.70
Šiauliai	12.39
Panevėžys	12.49
Marijampolė	12.90
Alytus	12.82
Utena	14.48
Telšiai	11.70
Tauragė	13.12

72.2 years in 2000. Figures H3a and H3b display Lithuania's life expectancy at birth from 1990-2002 by two factors: residential area and gender, taken singly and in combination.

Figure H3a shows the factors, taken singly,

and we see that gender is a more important factor than residential area on life expectancy at birth, because the differences between females and males are greater than the differences between urban and rural. A woman born in 2002 can expect to live 11.4 years longer than a man born the same year (77.6 vs. 66.2 years, compared to 77.6 vs. 66.0 years in 2001). And a city dweller born in 2002 can expect to live 3.9 years longer than a rural resident born the same year (73.3 vs. 69.4 years, compared to 72.9 vs. 69.7 years in 2001).

Figure H3b looks at the effect of the two factors, taken in combination. We can see that urban women have the highest life expectancy at birth throughout the 12 years. An urban woman born in 2002 can expect to live 10.6 years longer than an urban man born the same year (78.3 vs. 67.7 years, compared to 78.2 vs. 67.2 years in 2001). Rural women have the next longest life expectancy throughout the period. They can expect to live 12.8 years longer than their male counterparts, if they were born in 2002 (76.3 vs. 63.5 years, compared to 76.6 vs. 63.7 years in 2001).

B. Mortality

Figures H4a and H4b examine the mortality experience of the Lithuanian people from 1990 to 2002 by residential area and gender, taken singly and in combination. Overall, the mortality rate[9] increased 9.3% from 1990 to 2002, from 10.8 to 11.8 (up from 11.6 in 2001). The mortality rate reached its peak in 1994 at 12.7, and it had been on decline until 2000 at 11.1.

Figure H4a shows us the mortality rates by residential area and gender, taken singly. Unlike life expectancy, residential area was a more important factor than gender in affecting the mortality experience of the Lithuanian

[9] The overall mortality rates of different groups of people mentioned in this section will be defined as the number of deaths per 1,000 average population.

people, because the differences between residential areas were greater than the gender differences. Rural people died at a rate 56.0% higher than urban people in 2002 (15.6 vs. 10.0). And, men died at a rate 29.8% higher than women in 2002 (13.5 vs. 10.4).
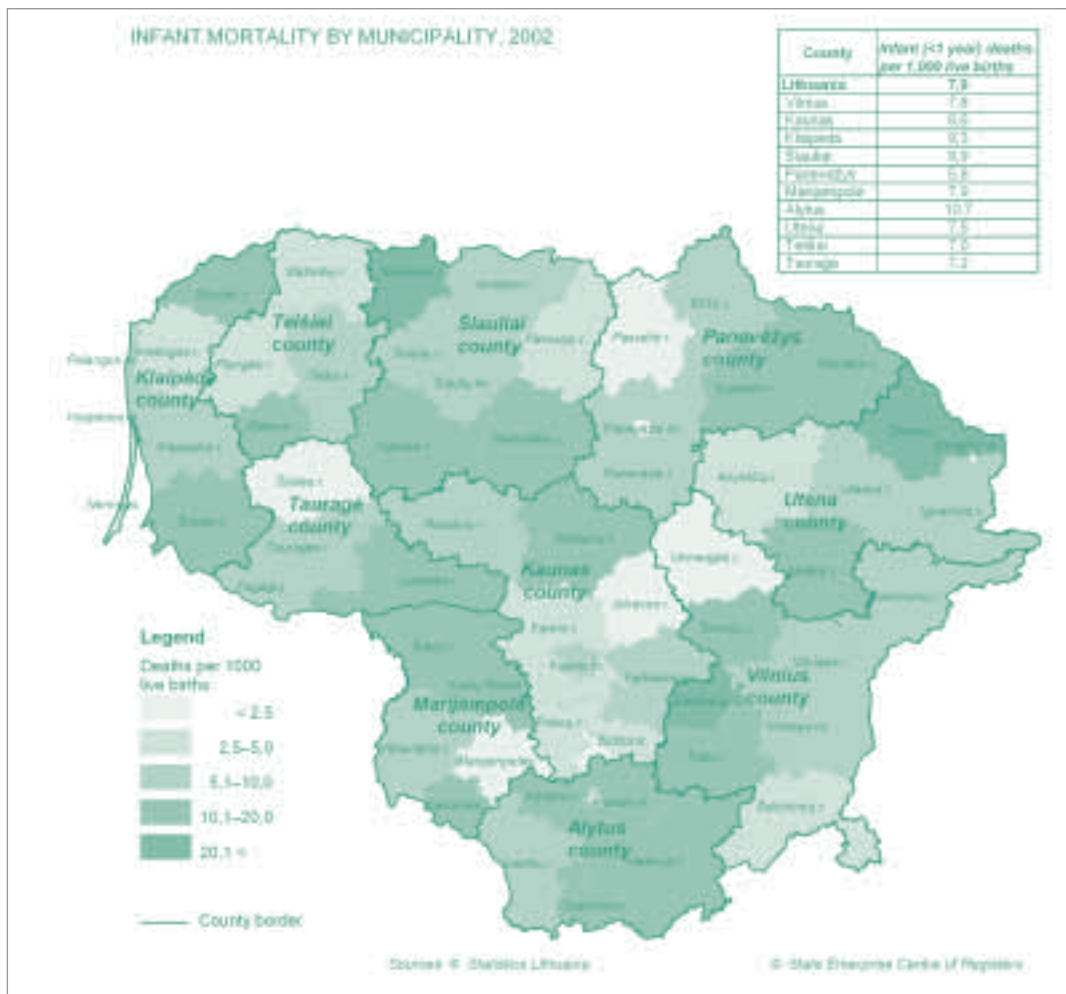
Figure H4b displays the mortality rates by residential area and gender, taken in combination. We see that rural men had the highest mortality rates throughout the period, ranging from a high of 20.0 in 1993 to a low of 15.9 in 2000. Rural women had the next highest mortality rates, ranging from a high of 16.3 in 1993 to a low of 13.6 in 2001. In 2002, rural men died at a rate 49.6% higher than urban men (17.2 vs. 11.5). And rural women died at rate 62.1% higher then city women in 2002 (13.6 vs. 8.5).

Please recall Figure D2d, which was presented earlier in the section „Demographic Trends and Snapshots", showing the vital statistics of Lithuania and its counties in 2002. Utena County had the highest mortality rate at 14.5 and Klaipeda County had the lowest mortality rate at 10.7.

C. Regional Disparities in Life Expectancy Due to Differences in Mortality

Regional disparities in life expectancy and mortality in Lithuania are regularly assessed, using life expectancy data and age-standardized mortality rates over three-year periods to avoid annual fluctuations. The latest published analytical report (in 2002), *Socio-economic inequalities in health in Lithuania: indicators for monitoring and latest situation*[10], covered the period: 1997-1999. The report found that regional disparities in the life expectancy of men were mainly determined by differences in mortality due to external causes, while regional disparities in the life expectancy of women were mainly determined by differences in mortality due to cardiovascular diseases. With respect to the health of the Lithuanian people, the report concluded that the eastern part of Lithuania was the most unfavorable region of the country. Regional disparities in preventable mortality were also analyzed

INFANT MORTALITY BY MUNICIPALITY, 2002

County	Infant (<1 year) deaths per 1,000 live births
Lithuania	7.9
Vilnius	7.8
Kaunas	6.6
Klaipeda	9.3
Šiauliai	8.9
Panevėžys	6.6
Marijampolė	7.9
Alytus	10.7
Utena	7.5
Telšiai	7.0
Tauragė	7.2

Legend
Deaths per 1000 live births:

< 2.5
2.5–5.0
5.1–10.0
10.1–20.0
20.1 +

—— County border

Sources © Statistics Lithuania   © State Enterprise Centre of Registers

for the periods: 1992-1995 and 1996-1999. The report indicated regions where cause-specific, age-standardized mortality rates were significantly higher than the national average.

Similar profile studies could be helpful in understanding and interpreting the mortality situation and could serve as a source of information for designing effective health care policies.

D. The Leading Causes of Death

Cardiovascular diseases, cancer, and external causes are the three leading causes of Lithuanian deaths. In 2002, they were responsible for 86.4% of all deaths. For men, cardiovascular diseases caused 6.7% more deaths than those caused by cancer and external causes, combined (45.7% vs.

20.1% + 18.9%). For women, it is striking that cardiovascular diseases caused 40.1% more deaths than those caused by cancer and external causes, combined (64.2% vs. 18.1% + 6.0%).

Figure H5 shows the 2002 mortality rates for these three leading causes of death by residential area and gender, taken in combination. For cancer and external causes, rural men and urban men died at higher rates than both rural women and urban women. Only in cardiovascular diseases, did women's mortality rates exceed men's. The reason for this apparent inconsistency in pattern is that men tend to die earlier than women and from other causes. But all people have to die sometime; and if they survive long enough, bypassing cancer and other causes of death, they tend to wind up dying from cardiovascular diseases. Thus, since women tend to outlive men by at least 11 years, they wind up having a higher cardiovascular mortality

CANCER MORTALITY BY MUNICIPALITY, 2002
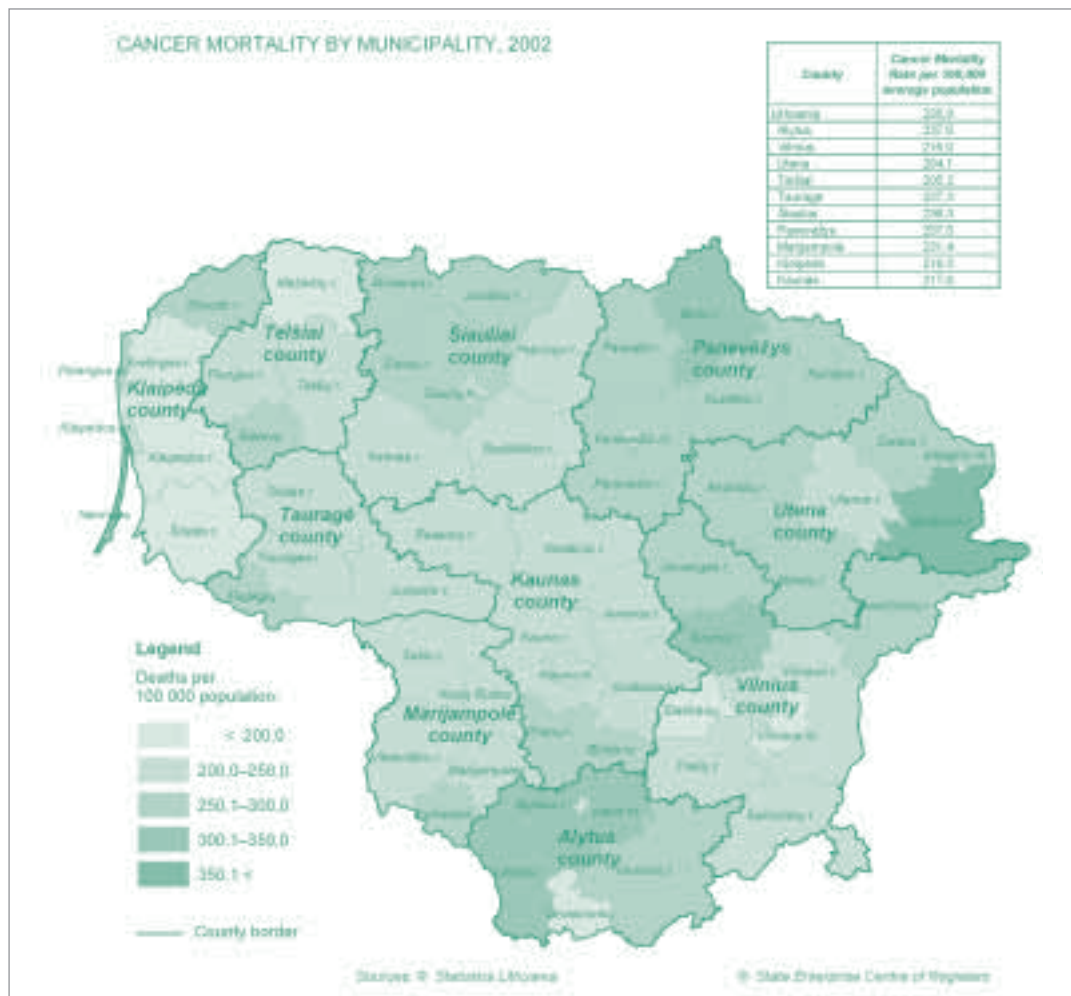
rate than men. For rural men, the death rate from external causes exceeded that of cancer (336.2 vs. 328.3). But for the rest of the groups, the diseases ranked (with respect to mortality): cardiovascular diseases, cancer, and external causes, in that order.

1. Cardiovascular Diseases

Cardiovascular diseases are the leading cause of death for Lithuanians. Figures H6a and H6b display the cardiovascular mortality rates from 1990 to 2002 by residential area and gender, taken singly and in combination. During this 12-year period, the mortality rates fluctuated mildly and ranged from a high of 680.2 in 1993 to a low of 598.1 in

2000. In 2002, the overall cardiovascular mortality rate was 643.7 (up from 628.2 in 2001), a 3.4% increase over the rate in 1990 (622.3).

Figure H5
Mortality Rate by Main Cause of Death, Residential Area, and Gender: 2002
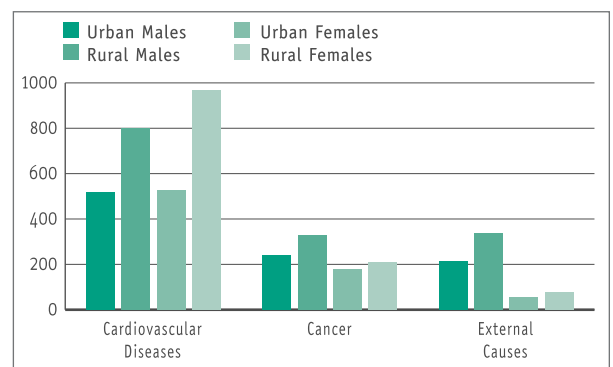
[10] Socio-economic inequalities in health in Lithuania: indicators for monitoring and latest situation. Report under the project financed by the WHO PAE-ECHP. April 2, 2002. www.vsv.lt

Figure H6a shows the cardiovascular mortality rate by residential area and gender, taken singly. Residential area was a more important factor than gender in affecting the cardiovascular mortality experience of the Lithuanian people, because the differences between residential areas were greater than the gender differences. Rural people died at a rate 69.6% higher than urban people in 2002 (887.5 vs. 523.2). And, women died at a rate 8.8% higher than men in 2002 (668.9 vs. 615.0).

Figure H6a
Mortality Rate Due to Cardiovascular Diseases by Residential Area and Gender, Taken Singly: 1990-2002
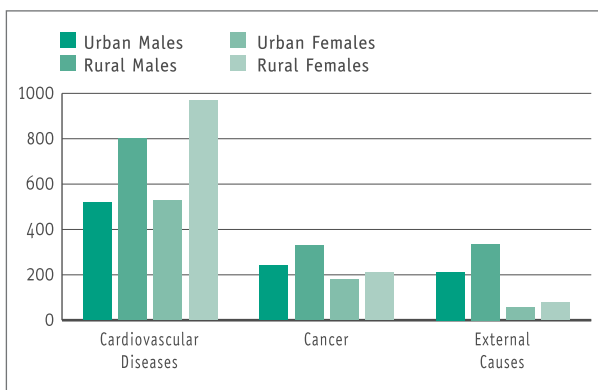

Figure H6b displays the cardiovascular mortality experience by residential area and gender, taken in combination. Rural women had the highest cardiovascular mortality rates throughout the 12-year period. Their mortality rate peaked in 1993 at 1,094.3 and reached its lowest point in 2000 at 937.3. From 1990 to 2002, the cardiovascular mortality rate for rural women declined 8.3%, from 1,055.0 to 967.6. Rural men had the next highest cardiovascular mortality rates. Similarly, their rate peaked in 1993 at 976.8 and fell to its lowest point in 2000 at 729.3 Overall, rural men had a 8.9% decline in their cardiovascular mortality rates during the 12-year period, from 880.7 to 802.0. In 2002, rural women died at a rate 83.3% higher than urban women and 20.6% higher than their own rural men. Urban women and urban men had similar cardiovascular mortality rates in 2002 (528.0 vs. 517.7).

Figure H6b
Mortality Rate Due to Cardiovascular Diseases by Residential Area and Gender, Taken in Combination: 1990-2002
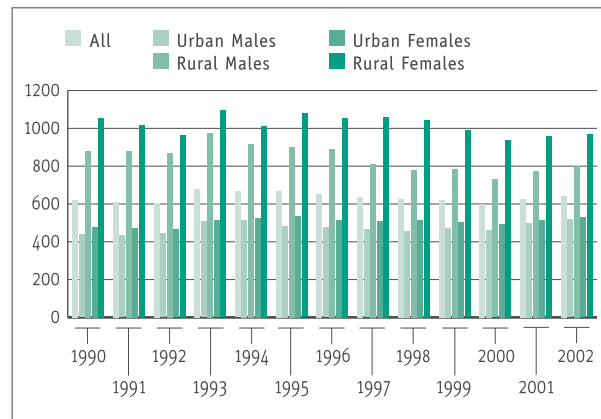

Figure H6c shows the cardiovascular mortality rates by gender for Lithuania and its counties for 2002. Utena County had the highest cardiovascular mortality rate at 833.1. This is not surprising because Utena County not only has the largest percentage (17.7%) of people, aged 65 years and older, but it also has the largest percentage of rural elderly (11.5%), the largest percentage of female elderly (11.7%), and the largest percentage of rural female elderly (7.6%) of all the counties. Taurage County ranked second with its cardiovascular mortality rate of 764.0, followed by Marijampole County with its rate of 735.8. Klaipeda County had

Figure H6c
Cardiovascular Mortality Rates by Gender for Lithuania and Its Counties: 2002
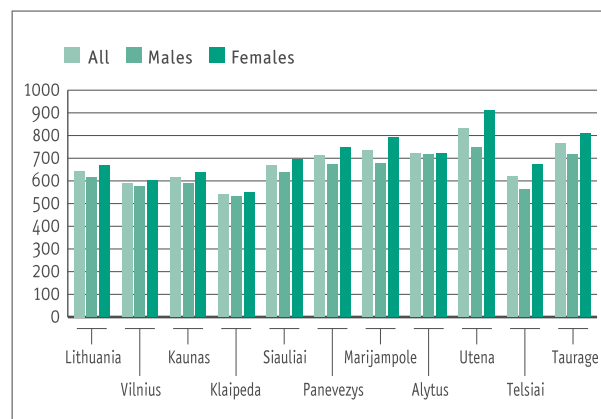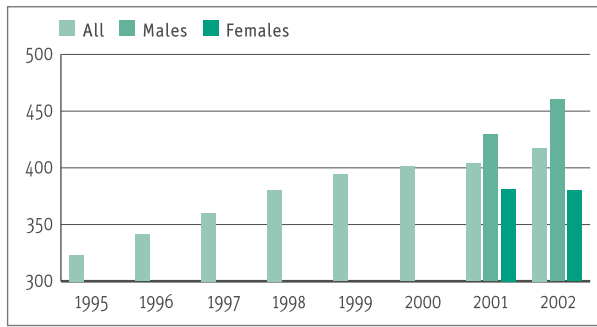
Figure H7a
Cancer Incidence Rate: 1995-2002

Figure H7b
Cancer Incidence Rates by Gender for Lithuania
and Its Counties: 2002

the lowest cardiovascular mortality rate at 540.2, followed by Vilnius County at 588.6. It also is no coincidence that these counties had the smallest percentages (13.7% and 13.6%, respectively) of people, aged 65 years and older, the smallest percentages of rural elderly (4.3% and 3.8%, respectively), the smallest percentages of female elderly (8.8% and 8.9%, respectively), and the smallest percentages of rural female elderly (2.7% and 2.5%, respectively) of all the counties.

2. Cancer

Cancer is the second leading cause of death for Lithuanians.

a. Cancer Incidence: 1995-2002
Figure H7a shows that the cancer incidence rate climbed 29.3% in the last 7 years, from 323.0 to 417.5 (up from 403.9 in 2001).
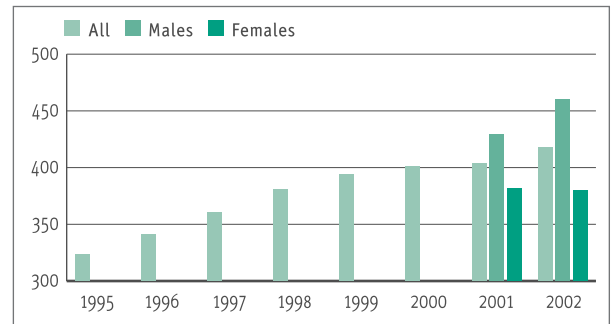
b. Cancer Incidence by Gender and County: 2002
Figure H7b displays the cancer incidence rates by gender for Lithuania and its counties for 2002. Panevezys County had the highest overall cancer incidence rates at 470, followed by Utena County at 455. Telsiai County had the lowest overall cancer incidence rates at 287.

i. Prostate Cancer Incidence by County: 2002
Figure H7c displays the prostate cancer incidence rates for Lithuania and its counties for 2002. Utena County had the highest prostate cancer incidence rate at 125.5, followed by Vilnius County at 105.1, Alytus County at 101.6, and Panevezys County at 99.3. These four

counties were the only counties to have prostate incidence rates above the national prostate incidence rate of 82.0. Telsiai County had the lowest prostate cancer incidence rate at 48.3.

ii. Incidence of Female Breast Cancer and Uterine Cervix Cancer by County: 2002
Figure H7d shows the incidence rates of female breast cancer and uterine cervix cancer for Lithuania and its counties for 2002. Taurage County had the highest incidence rates for both cancers (female breast: 74.1, uterine cervix: 35.6). With respect to female breast cancer, Vilnius County had the second highest incidence rate at 72.5, followed by Kaunas County at 71.9 and Panevezys County at 70.3. Telsiai County had the lowest female breast cancer incidence rate at 40.2. With respect to cancer of the uterine cervix, Panevezys County had the second

Figure H7c
Prostate Cancer Incidence Rates for Lithuania
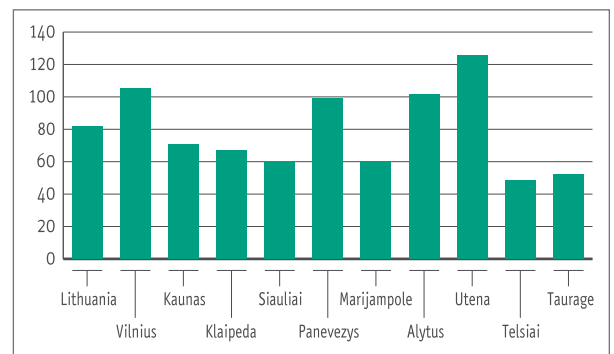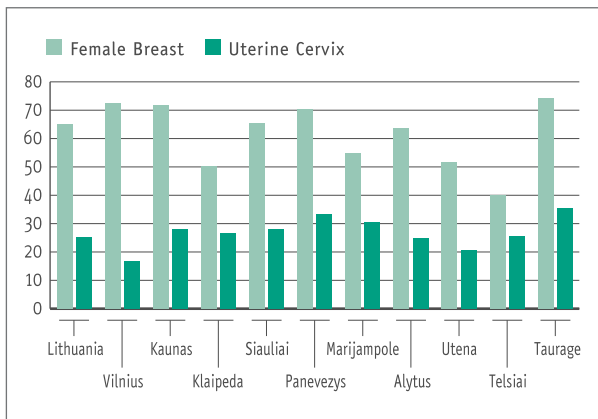and Its Counties: 2002

Figure H7d

Female Breast and Uterine Cervix Cancer
Incidence Rates for Lithuania and Its Counties:
2002

Figure H7e

Cancer Mortality Rate by Residential Area and
Gender, Taken Singly: 1990-2002

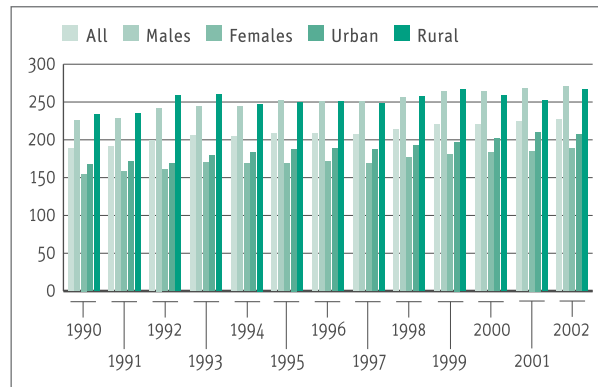highest incidence rate at 33.3, followed
by Marijampole County at 30.5. Vilnius
County had the lowest uterine cervix
cancer incidence rate at 16.9.

c. Cancer Mortality: 1990-2002

Figures H7e and H7f display the cancer mortality
rates from 1990 to 2002 by residential area and
gender, taken singly and in combination. The
overall cancer mortality rate climbed slowly, but
steadily, from a low of 188.2 in 1990 to a high
of 226.9 in 2002, an increase of 20.6%. For
2002, gender was the more important factor than
residential area in influencing cancer mortality,
because the differences between men and women
were greater than the differences between rural
and urban areas. Figure H7e shows that men were
43.8% more likely to die from cancer than women
in 2002 (270.8 vs. 188.3). And rural people were
28.8% more likely to die from cancer than urban
people in 2002 (266.8 vs. 207.1).

In Figure H7f, we see that rural males had the
highest cancer mortality rates throughout
the 12-year period, but their rate increased
only 10.9%, from 296.1 to 328.3. The cancer
mortality rates for urban males, though
lower than for rural males, had the steepest
increase (25.5%) of any group, from 191.9
in 1990 to 240.8 in 2002. Urban females,
while having the lowest cancer mortality
rates of any group, had a 23.5% rise in their
rates during the 12-year period (from 144.5
to 178.5), compared to a 18.1% increase for
rural females (from 177.1 to 209.2). In 2002,

rural men were 36.3% more likely to die from
cancer than urban men (328.3 vs. 240.8) and
56.9% more likely to die from cancer than
their rural women (328.3 vs. 209.2). Urban
men were 34.9% more like to die from cancer
than their urban women (240.8 vs. 178.5).
And, rural women were 17.2% more likely to
die from cancer than urban women (209.2 vs.
178.5) in 2002.

d. Cancer Mortality by Gender and County: 2002

Figure H7g displays the cancer mortality rates by
gender for Lithuania and its counties for 2002.
Utena County had the highest overall cancer
mortality rate at 264, followed by Panevezys
County at 258 and Alytus County at 238. Utena
County also had the highest male cancer mortality
rate at 337, followed by Alytus County at 304 and

Figure H7f

Cancer Mortality Rate by Residential Area and
Gender, Taken in Combination: 1990-2002

FEMALES CANCER MORTALITY, 2002
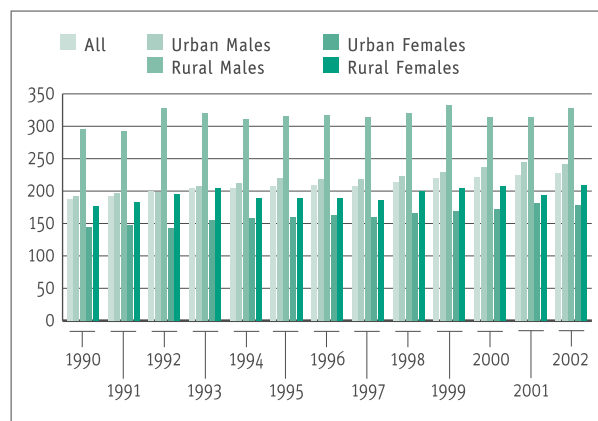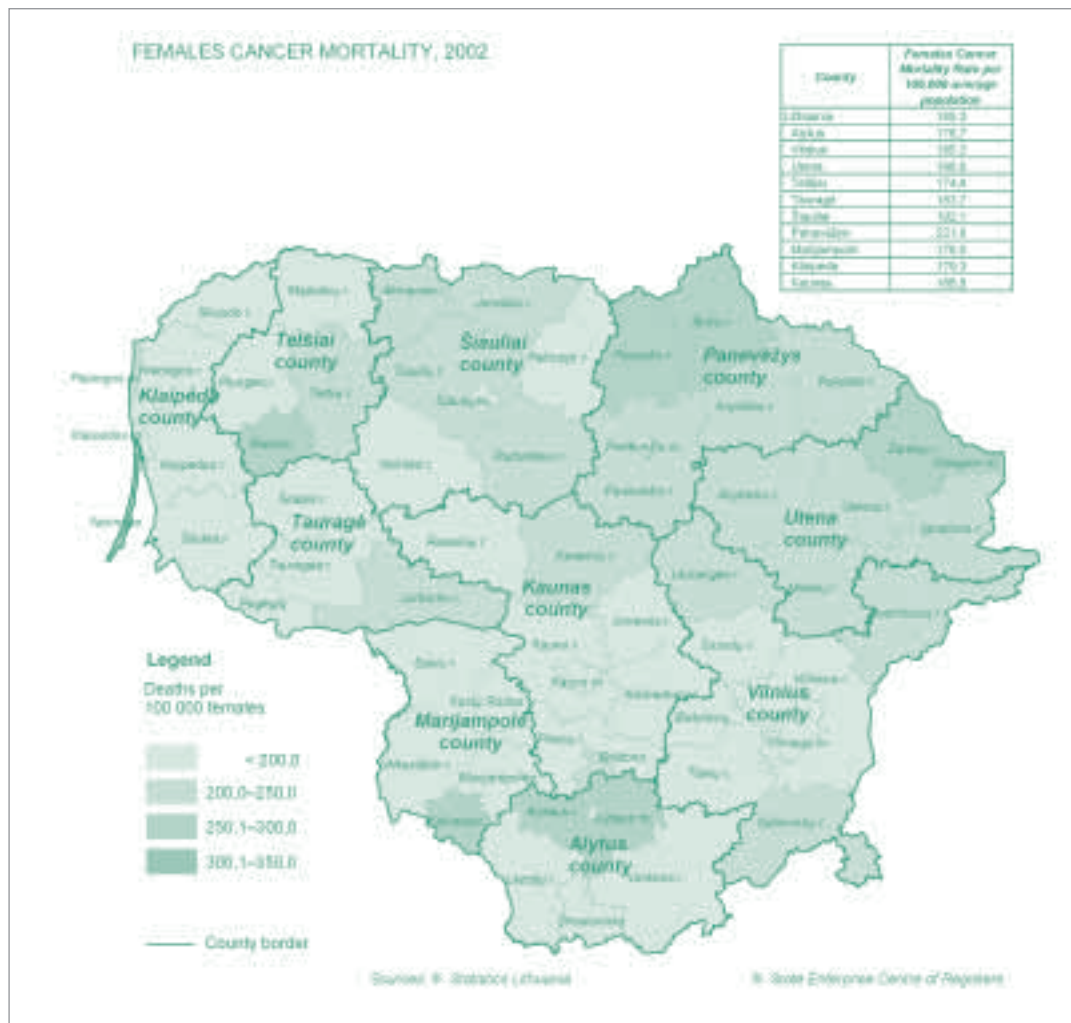
Panevezys County at 299. Whereas, Panevezys County had the highest female cancer mortality rate at 222, followed by Utena County at 199 and Siauliai County at 192.

Telsiai County had the lowest overall, male, and female cancer mortality rates at 205, 239, and 175, respectively.

e. Cancer Mortality by Primary Cancer Site, Gender, and Residential Area: 2002

Figure H7h shows the mortality rate by primary cancer site, residential area, and gender for 2002. Overall, cancers of the lung, bronchus, and trachea accounted for 18.0% of the cancer deaths. The 2002 lung, bronchus, and trachea cancer mortality rate was 67.9% higher for rural men than for urban men (103.1 vs. 61.4). When these rates are compared to the rates in 2001 (93.9 vs. 65.4), we notice that the rate increased for rural men but decreased for urban men. Cancers of the lung, bronchus, and trachea accounted for 31.4% and 25.5% of the cancer deaths of rural and urban men, respectively.

Stomach cancer explained 11.7%, cancer of the prostate and other male genital organs explained 10.3%, and colo-rectal cancer explained 7.7% of the cancer deaths of rural men. Colo-rectal cancer accounted for 10.9%, and prostate (and other male genital organs) cancer accounted for 10.1%, and stomach cancer accounted for 10.0% of the cancer deaths of urban men.

Breast cancer is the predominant cancer for women. The 2002 breast cancer mortality rate was 8.3% higher for rural women than for urban women (31.4 vs. 29.0). The reverse was true in 2001, when urban women's

MALES CANCER MORTALITY BY MUNICIPALITY, 2002
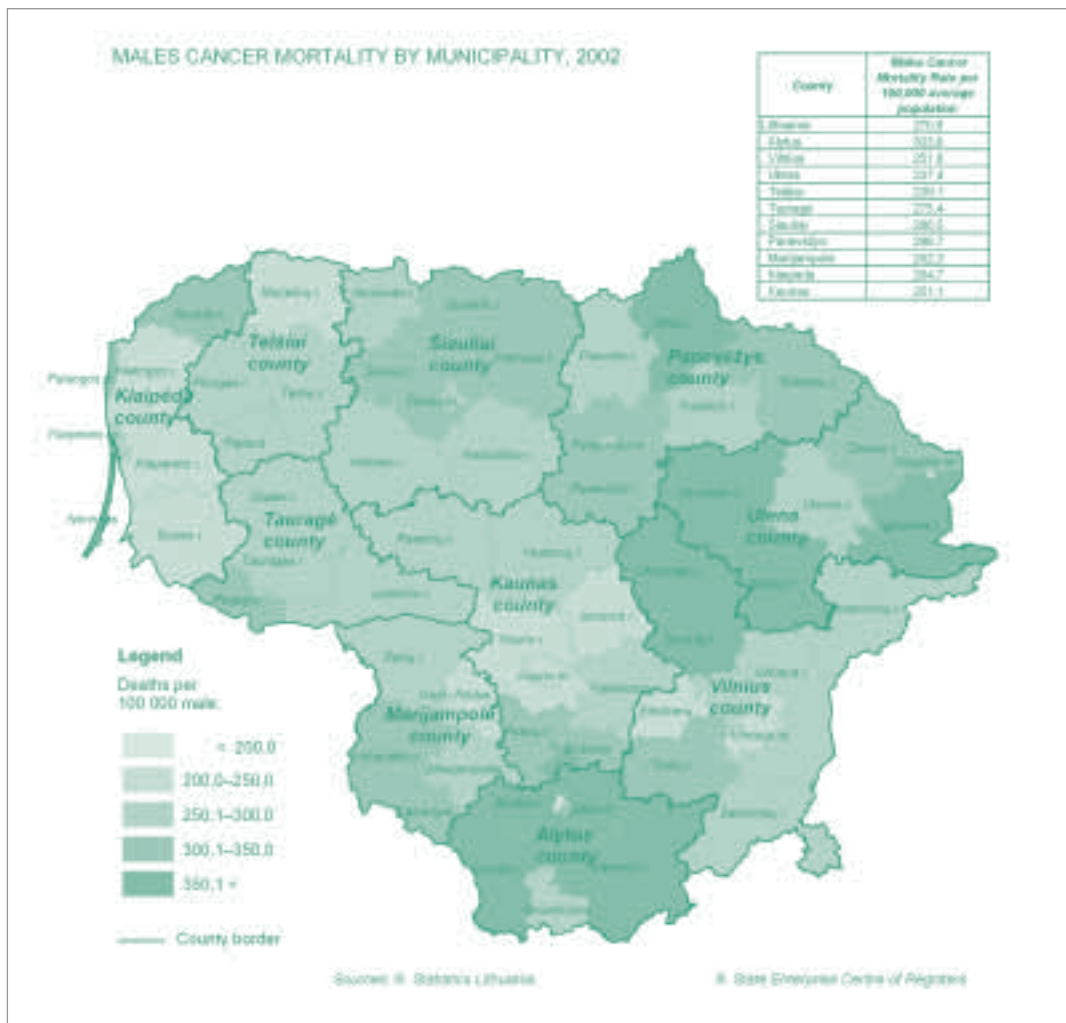
breast cancer mortality rate was 9.8% higher than rural women's rate (30.3 vs. 27.6). In 2002, breast cancer accounted for 16.2% and 15.0% of the cancer deaths of urban and rural women, respectively. Colo-rectal cancer explained 13.2%, stomach cancer explained 8.4%, and cancers of the lung, bronchus, and trachea explained 6.0% of the cancer deaths of urban women. Similarly, colo-rectal cancer accounted for 12.6%, stomach cancer accounted for 12.3%, and cancers of the lung, bronchus, and trachea accounted for 4.3% of the cancer deaths of rural women.

i. Prostate Cancer Mortality by County: 2002
Figure H7i displays the prostate cancer mortality rates for Lithuania and its counties for 2002. Alytus County had the highest prostate cancer mortality rate at 30.2, followed by Marijampole County at

29.0 and Panevezys and Utena Counties, which tied for third at 28.8.
Vilnius County had the lowest prostate cancer mortality rate 23.0, followed by Telsiai and Taurage Counties, which tied for second at 23.6.

ii. Mortality of Female Breast Cancer and Uterine Cervix Cancer by County: 2002
Figure H7j shows the female breast cancer and uterine cervix cancer mortality rates for Lithuania and its counties for 2002. Panevezys County had the highest female breast cancer mortality ra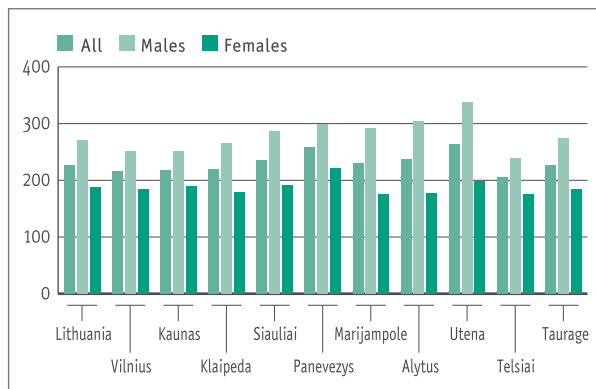te at 38.9, followed by Kaunas County at 34.6, Alytus County at 30.8, and Vilnius County at 30.2. All four of these counties had female breast cancer mortality rates higher than the national average of 29.8. Marijampole County had the lowest female

breast cancer mortality rate at 19.3.

With respect to cancer of the uterine cervix, Utena County had the highest mortality rate at 20.6, followed by Panevezys County at 18.2, Siauliai County at 15.8, and Vilnius County at 13.4. All four of these counties had uterine cervix cancer mortality rates higher than the national average of 12.7. Marijampole and Taurage Counties were tied for the lowest uterine cervix cancer mortality rates at 7.1.

3. External Causes

External causes *(suicide, transport accident, falls, accidental alcohol poisoning, accidental drowning, homicide, etc.)* are the third leading cause of death for Lithuanians. Figures H8a and H8b show the mortality rates due to external causes from 1990 to 2002 by residential area and gender, taken singly and in combination. The mortality rate had been in decline since its peak in 1994 at 189.2, to 2000 at 145.8. Since 2000, it rose to 157.9 in 2001 and fell to 152.2 in 2002. Overall, the rate rose 26.2% during the 12-year period, from 120.6 to 152.2.

In Figure H8a, we see that gender is a more important factor than residential area in its influence on external causes of death, because the differences between men and women are much greater than the differences between rural and urban areas. In 2002, men died from external causes at a rate 307.2% higher than women (254.5 vs. 62.5). And rural people died from external
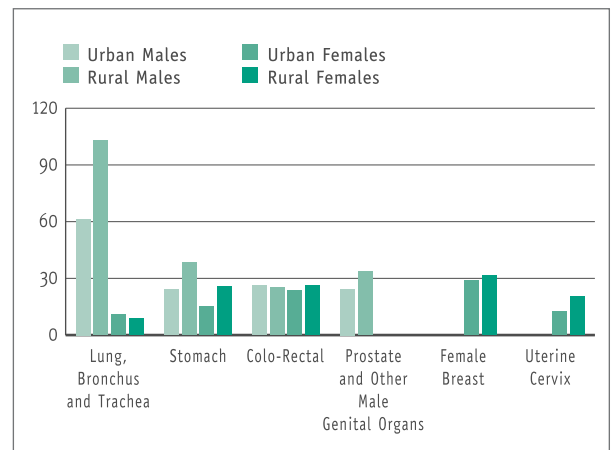
causes at a rate 60.5% higher than urban people (203.5 vs. 126.8).

Figure H8b shows that rural men had the highest mortality rate due to external causes of any group. Since its peak in 1994 at 402.9, their mortality rate has fluctuated. Overall, rural men's mortality rate due to external causes rose 26.5% during the 12-year period, from 266.1 to 336.6 (down from 343.2 in 2001). Urban men had the next highest mortality rate due to external causes, which showed a similar pattern of rise and fall as the rates of rural men, only at a lower level. The mortality rates for rural and urban women fluctuated minimally and at much lower levels than the men during the 12-year period. In 2002, rural men were 59.0% more likely to die from external causes than urban men (336.6 vs. 211.7), and 327.2% more likely to die than rural women (336.6 vs. 78.8). Similarly, urban men were 286.3% more likely to die from external causes than urban women (211.7 vs. 54.8) in the same year. And rural women were 43.8% more likely to die from external causes than urban women (78.8 vs. 54.8).

a. Mortality Rate by External Cause of Death, Residential Area, and Gender: 2002
Figure H8c displays the leading external causes of death for 2002. It is readily apparent that suicide is the leading external cause of death for Lithuanians. Following

Figure H7i

Prostate Cancer Mortality Rates for Lithuania and Its Counties: 2002
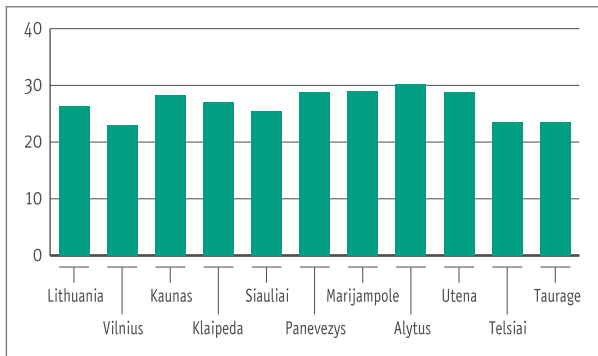
suicide-transport accident, falls, accidental alcohol poisoning, accidental drowning, and homicide are the leading external causes of death for Lithuanians, in order of frequency. Rural men dominate the mortality rates for external causes in four categories. Rural men were 92.5% more likely to commit suicide, 85.5% more likely to die in a transport accident, 75.9% more likely to drown, and 26.2% more likely to be murdered than urban men. Their mortality rates due to falls and accidental alcohol poisoning were similar to urban men.

Both rural and urban women had dramatically lower mortality rates than their men for all external causes of death. But when we compare just the women, we notice that rural women were 38.5% more likely to commit suicide, 38.4% more likely

to die in a transport accident, 11.3% more likely to die in a fall, 164.0% more likely to drown, and 55.6% more likely to be murdered than urban women. However, urban women were 29.8% more likely to die from accidental alcohol poisoning than rural women.

b. Suicide

As we have already noted, suicide is the leading external cause of death for Lithuanians. Figures H8d and H8e show the trend in suicide rates from 1990 to 2002 by residential area and gender, taken singly and in combination. Overall, the suicide rate has risen 70.6% during the 12-year period, from 26.2 to 44.7 (up from 44.1 in 2001). The peak came in 1996 at 47.8.

In Figure H8d, we can see that gender is a more important factor influencing suicide than residential area. In 2002, men were 516.0% more likely to commit suicide than women (80.7 vs. 13.1, compared to 77.2 vs. 15.0 in 2001), and rural people were 89.9% more likely to commit suicide than urban people (65.5 vs. 34.5, compared to 62.8 vs. 34.8 in 2001).

Figure H8e shows that rural men had by far the highest suicide rates of any group. Their rates remained fairly stable from 1995 to 2002 with only a small overall increase of 4.0% (113.5 to 118.0). In 2002, rural men committed suicide at a rate 92.5% higher than urban men (118.0 vs. 61.3, compared to 110.8 vs. 59.8 in 2001) and 628.4% higher than their rural women (118.0 vs. 16.2,

Figure H7j

Female Breast and Uterine Cervix Cancer Mortality Rates for Lithuania and Its Counties: 2002
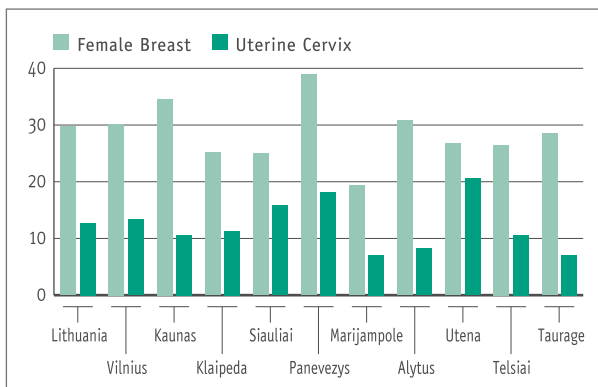

Figure H8a

Mortality Rate Due to External Causes by Residential Area and Gender, Taken Singly: 1990-2002
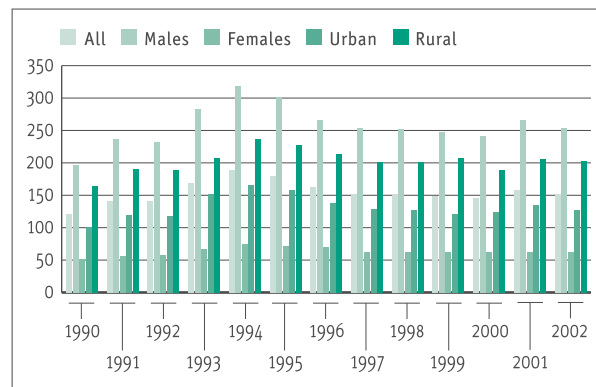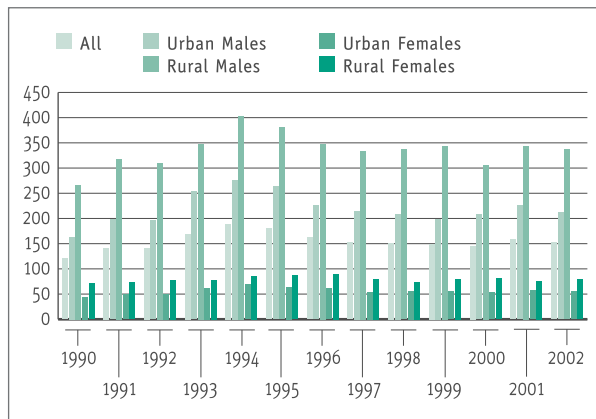
Figure H8b
Mortality Rate Due to External Causes
by Residential Area and Gender, Taken in
Combination: 1990-2002

compared to 110.8 vs. 17.8 in 2001). Urban
men committed suicide at a rate 423.9%
higher than their urban women (61.3 vs.
11.7, compared to 59.8 vs. 13.7 in 2001).
And rural women committed suicide at a rate
38.5% higher than urban women (16.2 vs.
11.7, compared to 17.8 vs. 13.7 in 2001).

E. Recommendations

Even though there are no specific Millennium
Development Goals to cover the three leading
causes of death, the following suggestions could
be considered for improvement in the health status
of Lithuanians.

1. Fighting Cancer

There has been 29.3% increase in the cancer
incidence rate over the past 7 years and
a 20.6% increase in the cancer mortality
rate over the past 12 years. We have seen
that cancers of the lung, bronchus, and
trachea accounted for 18.0% of the cancer
deaths in 2002, and we know that smoking
is the leading cause of preventable death.
Therefore, it may by recommendeded that

[11] National Cancer Prevention and Control Program for 2003-2010 approved by
the Resolution No. 1593 of the Government of Lithuania dated 10 December
2003. Available from Internet (in Lithuanian): http://www3.lrs.lt/cgi-bin/
preps2?Condition1=223295&Condition2=
[12] The study on Psychological Features of Individuals Who Made an Attempt
to Commit Suicide carried within the project on Social Exclusion and Poverty
during Transition that was supported by UNDP and OSF, 2002.

a national anti-smoking campaign be
established to stem the high incidence
and mortality rates of cancers of the lung,
bronchus, and trachea among. We also
suggest that the budget of the Lithuanian
health system be increased in order to
provide all Lithuanian people Lithuaniains in
particular among men with common cancer
screening tests (e.g., Pap test, mammogram,
PSA, occult blood, etc.) that are readily
available in western countries.

In 2003, the Government approved the *National
Cancer Prevention and Control Program for 2003-
2010*[11], which is expected to advance the fight
against cancer. The program's main responsibility
is to establish guidelines for cancer prevention and
control activities in the country. The program aims
to decrease regional disparities in cancer incidence
and mortality rates, as well as the number of
advanced stage cancer diagnoses, based on
differential indicators. A principal area for cancer
prevention and control activities is the detection
of cases in the pre-cancerous and early stages of
disease, when treatment can be more successful,
as in colo-rectal, uterine cervix, and breast
cancers. At the end of 2003, the Government
allocated additional funding for primary health
care providers who were very successful in the
early detection of cancer and timely referral of
patients to specialists.

Studies on regional disparities in
preventable cancer mortality have already
indicated large territorial variance in cancer
of the uterine cervix among women 15-

Figure H8c
Mortality Rate by External Cause of Death,
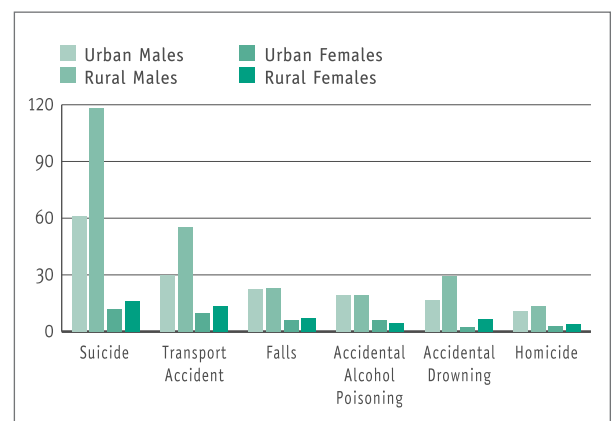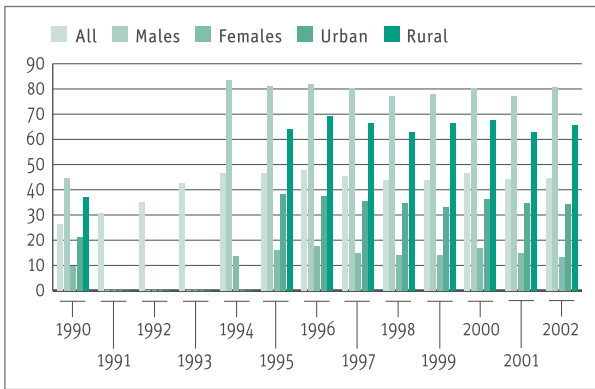Residential Area, and Gender: 2002

Suicide Mortality Rate by Residential Area and
Gender, Taken Singly: 1990-2002

64 years old and in cancers of the lung,
bronchus, and trachea among people 5-64
years old. More research in preventable
cancer mortality, as well as in-depth
analyses of the performance of health system
indicators, could support the planning
and implementation of additional targeted
activities in the fight against cancer.

2. Preventing Suicide

Lithuania has one of the highest suicide rates
(above 40 suicides per 100,000 inhabitants)
in Europe[12]. In 2002 the suicide rate in
Lithuania was 44.7. Lithuanian absolute
figures show that more people commit
suicides in the big cities, however suicide
rate in rural areas are twofold higher than

Figure H8e
Suicide Mortality Rate by Residential Area and
Gender, Taken in Combination: 1990-2002
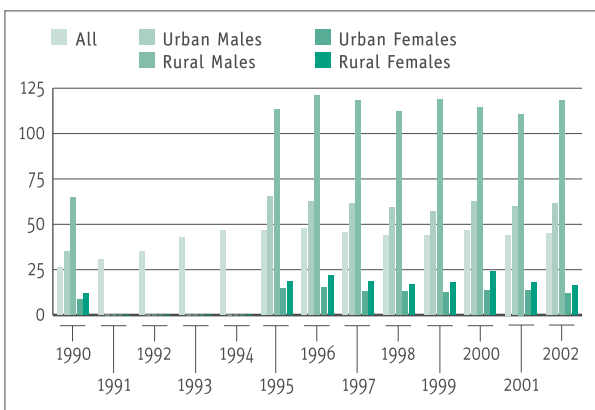
in urban[13]. The suicide problem is especially
acute among rural men aged 40 - 49 years.
Two highest women suicidal risk group are
rural women aged 40 - 49 and women above
75 years[14]. Gender and regional disparities
draw a picture of the typical suicide: a
middle-aged, unemployed man living in a
rural area. Apart from improving the general
economic situation, it is recommended that
the national health system implement a
suicide prevention strategy that promotes
mental well-being in the general population,
discourages alcohol abuse, raises public
awareness of the potential warning signs of
suicide, and assigns more community mental
health professionals to help deal with the
problem, especially in rural areas.

Within the scope of the multidisciplinary
project on **Social Exclusion** *and Poverty during
Transition*[15] research on *Psychological Features
of Individuals Who Made an Attempt to Commit
Suicide* was carried in 2002. The findings
of the research indicated that young people
under the age of 25, two thirds of whom
were girls and young women, dominated
among these who made an attempt to
commit suicide. The majority of those who
made an attempt to commit suicide (86%)
used so-called 'soft' methods, like poisoning
by different poisons or drugs (medicines).
Particular concern should be alerted by the
fact that in Lithuania the most common
mean for committing suicide is tranquillisers
and sedatives. These findings draw on the
conclusion that tranquillisers and sedatives
were easily accessible to those who made
attempt to commit suicide.

The research revealed society's lack of
knowledge about the symptoms of suicide
risk and opportunities to help those at
risk. These and similar findings should be
seriously considered and professionally
addressed while designing the measures for
suicides' prevention.

The findings evidenced an insufficiency
of the existing system of help to suicidal
persons because only few persons reported

[13] [14] Gailienė D. Savižudybių prevencijos idėjos (Approaches towards Suicide
Prevention). - Vilnius: Tyto Alba, 2001
[15] The project on Social Exclusion and Poverty during Transition carried by
Social Policy Unit and was supported by UNDP and OSF, 2002.

about received professional long-term psychological help after their try to commit suicide. Based on the findings of the research it was recommended to differentiate preventative measures by specific suicide risks of different age groups.

In 2003, the Government approved the *Suicide Prevention Strategy for 2003 - 2005*[16]. Its implementation is currently being monitored and assessed. The integration and coordination of suicide prevention efforts with mental health policy, both horizontally and vertically, will likely be a great challenge. The successful implementation of the Program is an issue of great concern because of inadequacy of financial allocations identified in the Programme. The experts carrying the *Assessment of National Mental Health Policy Outcomes*[17] particularly stressed the urgent need of reviewing and improving the Programme with the purpose to bring about a positive impact within the field of suicides' prevention. Adequate financial allocations should be safeguarded for effective implementation of the Programme.

3. Reducing Injury and Death Caused by Motor Vehicle and Other Accidents

There are significant regional disparities in mortality due to motor vehicle accidents involving people 5-64 years old. The National Health Board addressed various accident and trauma-related issues in its *Annual Report of 2002*[18]. The report indicated a need for targeted actions because the mortality rate due to transport accidents in rural areas was nearly double the rate in urban areas. The report also stressed that accidents are a major cause of injury and death among young people. Because of the high, and steadily increasing, rate of injuries incurred by students, the Ministry of Health and local governments joined their efforts to restore medical care units in schools. The experience of other countries in implementing efficient and effective school health care programs, especially with regard to handling head injuries among young students, could be useful for designing future health care policies in Lithuania.

[16] Suicide Prevention Strategy for 2003 - 2005 approved by the Resolution No. 451 of the Government of the Republic of Lithuania dated 10 April 2003. Available from Internet (in Lithuanian): http://www.savizudybes.lt/vidinis.asp ?DL=L&TopicID=10
[17] Final Report of the Project Assessment of National Mental Health Policy Outcomes commissioned by Open Society Fund Lithuania. 2003
[18] Annual 2002 year Report of the National Health Board, Vilnius 2003.

Goal 7: Ensure Environmental Sustainability
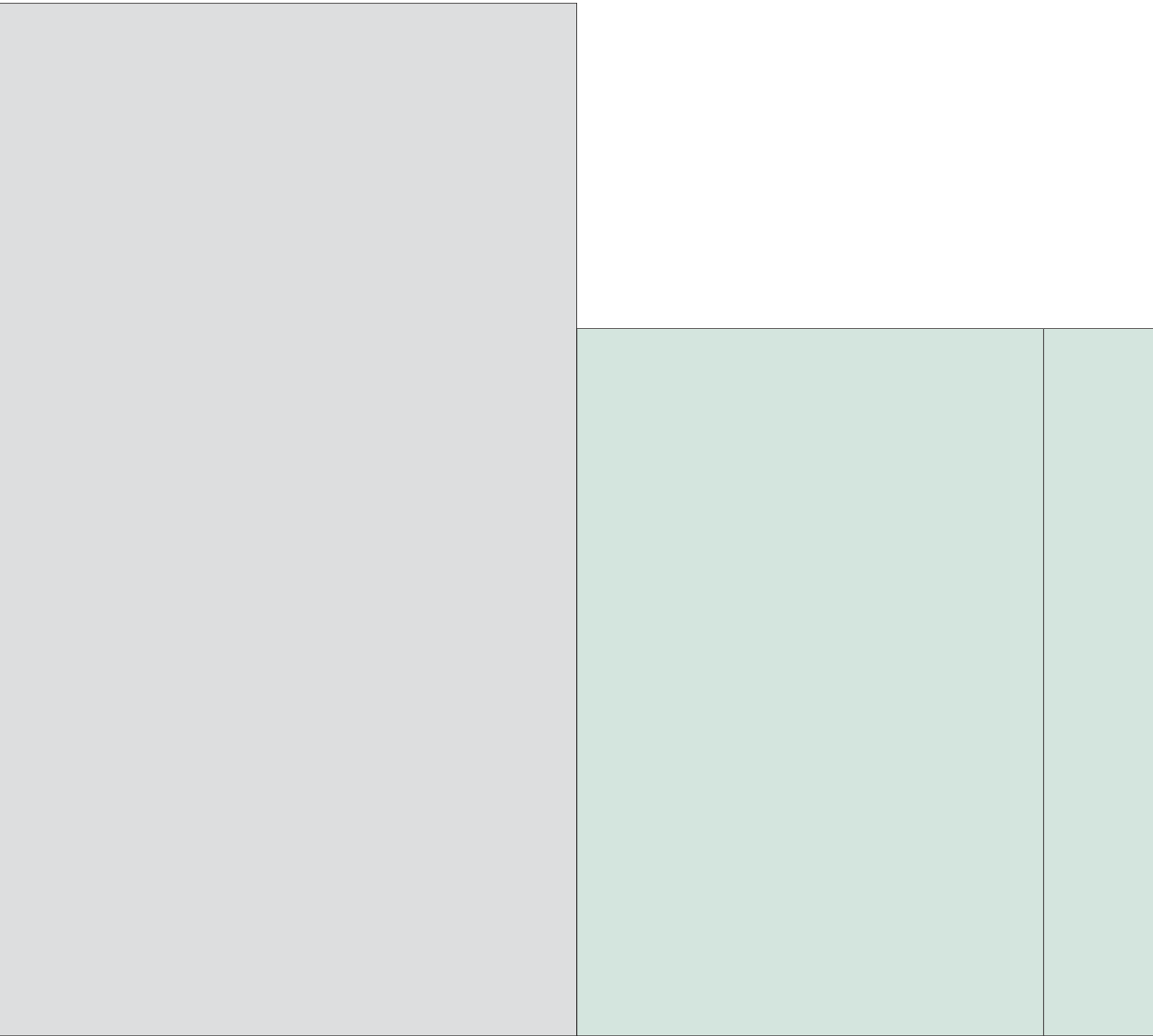
The **seventh Millennium Development Goal (MDG)** is to ensure environmental sustainability. Lithuania's targets for this goal should be: (1) to protect the quality of the landscape for maintaining biological diversity and (2) to reduce air and water pollution.

The Government of Lithuania approved the **Lithuanian Strategy for Sustainable Development** in September, 2003[1], following the recommendations of the European Council meeting in Barcelona, (2002) and the *Implementation Plan*[2] of the World Summit on Sustainable Development meeting in Johannesburg (2002). Formulation of priorities and objectives drew on the earlier prepared strategic documents, such as *National Long-term Development Strategy*[3], *Long-term Economic Development Strategy of Lithuania until 2015*[4]. The main task set in the Strategy is to reach the current average of the European Union member states by 2020, according to economic and social indices as well as the indicators of population health and efficiency of consumption of natural resources, also ensuring a clean and healthy environment. The Strategy foresees significant reductions in the consumption of energy and other natural resources as well as in emissions of pollutants and greenhouse gas emissions per GDP unit aiming at the current average level of the EU countries; preservation and rational use of landscape and biological diversity; reduction of negative impact from waste to environment and human health; promotion of environment friendly technologies and others.

Protecting the Territory

Lithuania's five most valuable landscapes needing protection are: (1) the seashore, which includes the continental Baltic seashore, the Curonian Spit, and the Nemunas River delta; (2) the Zemaiciai highlands, which include forests and cultivated fields between massive hills; (3) the Aukstaiciai highlands, which include forest islands and small and medium-sized lakes between hills; (4) Dzukai highlands, which include large forest areas, river valleys, and continental dunes; and (5) the Middle Nemunas River Valley, which includes forests, pastures, and meadows.
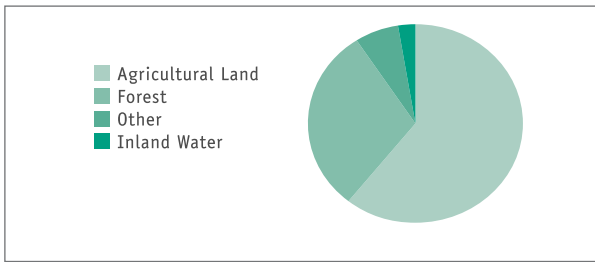
A. Historical Developments Affecting Changes to the Territory

Private ownership of the land was restored in 1991. Over the years, increasing land privatization (at a rate of 3%-5% per year) resulted in increasing urbanization and fragmentation of the land. By 2002, 43% of the territory of Lithuania was privately owned. Swift economic development and a growing GDP, as well as favorable loan conditions, facilitated a 38.9% increase of urban territory in 2002 alone (from 933,300 hectares in 2001 to 1,296,430 hectares in 2002)[5].

Increasing land urbanization, along with new economic priorities, has changed the structure of the Lithuanian territory during the past 13 years. For centuries the prevailing structure of the landscape had been agrarian with varying degrees of forest coverage. One of the most important functions of the forest today is to maintain biological diversity. As of January 1, 2003, 60.7% of the Lithuanian landscape is dedicated to agriculture, while 30.1% remains forest, as seen in Figure F1. However, forest coverage varies depending on the region. Some regions of southeastern

[1] National Strategy for Sustainable Development approved by Resolution No. 1160 of the Government of the Republic of Lithuania dated 11 September 2003. Available from Internet: http://www.am.lt/files/cd_en.pdf
[2] Plan of Implementation. World Summit on Sustainable Development in Johannesburg (2002). Available from Internet: http://www.am.lt/EN/VI/article.php3?article_id=38
[3] National Long-term Development Strategy approved by the Resolution No. IX - 1187 of Seimas of the Republic of Lithuania dated 12 November 2002. Available from Internet: www.am.lt/EN/VI/files/0.901665001073997792.pdf
[4] Long-term Economic Development Strategy of Lithuania until 2015 approved by the Resolution No. 853 of the Government of the Republic of Lithuania dated 6 June 2002. Available from Internet: www.ekm.lt/index.php/en/strategies/long

[5] State of Environment 2002, Ministry of Environment. - Vilnius, 2003. Available from internet site: http://www.am.lt/EN/VI/files/0.436721001074336491.pdf

Figure F1

Territory of Lithuania as of January 1, 2003: 6,530,000 ha

- Agricultural Land
- Forest
- Other
- Inland Water

Lithuania (the sandy plains) are covered by almost 65% forest, while some of the most fertile regions of southern Lithuania (clay plains) have less then 15% forest coverage.

Figure F2 shows that although the average size of farms registered in the Register of Farmer Farms as of 1/1/2003 was 15.24 hectares, almost half (49.1%) of the farms were <10 hectares in size. More farms (29.4%) were in the 10 to <20 hectare-size group than any other size group. And only 21.5% of the farms were 20 hectares or over. This preponderance of small farms contributes greatly to the economic inefficiency of the agricultural sector.

But, the landscape, in general, is influenced not only by small farms but also by small private land plots, according to environmental indicators. The smallest private land plots are in counties having the largest cities: Vilnius, Kaunas, and Klaipeda. The average size of private land plots is about 2.5 hectares. The largest private land plots (more than 3 hectares) can be found in Siauliai and Utena Counties, while

Figure F2

Percentage of Total Number of Farms by Size: 1/1/2003

the smallest private land plots (about 1.7 hectares) are spread throughout Vilnius County[6].

Since 1990, the reconstruction of the Klaipeda Seaport, the construction of the Butinge Oil Terminal, and the accompanying development of new housing and recreational infrastructure have caused a decrease in the migrating sand drift, which in turn has intensified the erosion of the seacoast. It is estimated that about 8 ha of coastal area are lost every 10 years; this loss makes the seashore narrower and wetter.

B. Actions Taken to Protect the Land and Biodiversity

During the past 13 years, the Lithuanian territory under protection has increased from 4.7% to 12.0%. In 2002, the area under protection increased by 11,460 hectares, which was mainly due to the establishment of the Zuvintas Biosphere Reservation (18,493 hectares). Figure F3 displays the percentage distribution of the protected land areas, as of January 1, 2003. Thirty regional parks comprise the largest area (438,480 hectares: 55.81%) of protected land. Five national parks (152,294 hectares) and 254 state reserves (146,238 hectares) account for 19.38% and 18.61% of the protected areas, respectively. There are other, smaller areas, which are protected. They are 5 state reservations (18,922 hectares: 2.41%), one biosphere reservation (18,493 hectares: 2.35%), 101 municipal reserves (11,186 hectares: 1.42%), and one small strict nature reserve (120 hectares: 0.02%).

Lithuania plans to implement NATURA 2000, a European Union (EU) Nature Conservation policy, which aims to expand a

Figure F3

Protected Land Areas in Lithuania as of January 1, 2003: 785,733 ha

- Regional Parks (30)
- National Parks (5)
- State Reserves (254)
- State Reservations (5)
- Biosphere Reservation (1)
- Municipal Reserves (101)
- Small Strict Nature Reserve (1)
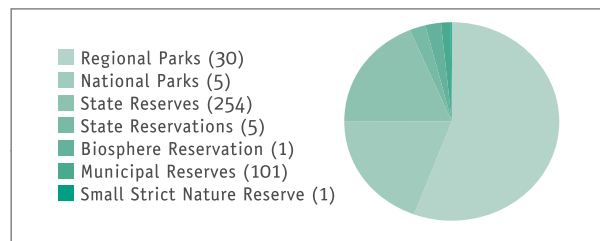
network of protected areas covering fragile and valuable natural habitats and species of particular importance for the conservation of biological diversity within the territory of Lithuania and the EU.

In 2002, the Parliament (Seimas) of the Republic of Lithuania approved the *General Spatial Plan of the Territory of Lithuania*[7]. The plan's priorities are: 1) to establish and improve national nature carcass, 2) to protect and improve natural elements of the landscape, and 3) to increase forest areas in poor soils, giving preference to districts with low forestation, such as Middle Zemaitija, Eastern Aukstaitija, and Suvalkija. In fact, the plan proposes to evaluate the feasibility of establishing Suvalkija National Park and Daugai and Plinksiai Regional Parks.

Also, in 2002, the Seimas ratified the European Landscape Convention (the Florence Convention). This convention opens the gateway for Lithuania to manage their landscape according to EU legislation and to receive EU funds. EU agricultural policy stipulates the consolidation of small farms into large and productive agriculture units. Implementing EU agricultural policy is expected to increase the size of private farms in Lithuania.

C. Recommendations

1) During the process of spatial and territorial planning, especially at the regional level, it is important to: a) evaluate landscape, cultural, and biodiversity values, b) take into consideration ethnographical aspects, c) restore value areas, and d) protect the natural hydrographical and water ecosystem.

2) Regional and local authorities, as well as administrators of protected areas, should take into consideration the feasibility of using landscape value for tourism and recreational purposes. Such arrangements may contribute to reducing regional economic disparities and improving social inclusion.

3) Administrators should involve local people in the management of protected areas,

particularly by showing them the benefits from such activities. Awareness of the need to protect certain landscapes must actively be raised among regional civil servants and the public at large.

Reducing Air Pollution

A. The National Air Monitoring System

The national air monitoring system was optimized in 2002. This national system is a network of 14 permanently operating stations (8 fully automatic and 6 DAOS type[8]). Additional municipal air quality stations have been established and are operating in Kaunas and Siauliai, but they are not included in the national air monitoring system. The national system encompasses the Vilnius and Kaunas agglomerations and zone (all the territory of Lithuania, excluding Vilnius and Kaunas). The measurement points are installed in large cities (Vilnius, Kaunas, Klaipeda, and Panevezys), close to the main generators of emissions, such as SC „Achema" nitrogen fertilizer manufacturing company in Jonava in Kaunas County, SC „Lifosa" phosphorus fertilizer manufacturing company in Kaunas County, SC „Mazeikiu Nafta" oil refinery company in Telsiai County, and Naujoji Akmene cement manufacturing company in Siauliai County.

B. Air Pollutant Emissions

During the past 12 years the emission of pollutants into the atmosphere has been greatly diminished, mainly as a consequence of the economic decline experienced after independence was reestablished. Air pollutants can be categorized by their source: (1) stationary, pollutants which are emitted by industry and the energy sector; and (2) mobile, pollutants which are emitted by transport vehicles.

1. Air Pollutant Emissions from Stationary Sources

Figure F4a shows the quantity of air pollutants emitted from stationary sources by treatment status for 1990 and from 1995-2002. The quantity of air pollutants emitted from stationary sources before neutralization treatment decreased 88.5%, from 2,245.8 thousand tons in 1990 to 258.2 thousand tons in 2002. The quantity of pollutants actually emitted into the air (pollutants with inadequate neutralization + pollutants without treatment) after treatment neutralization decreased 75.6%, from 385.4 to 94.2 thousand tons during the same period.

Despite the overall progress in reducing atmospheric pollution from stationary sources, Figure F4b shows that the percentage of air pollutants going without treatment has more than doubled in the last 12 years, from 15.1% to 35.1%. Efforts should be made to ensure that fewer pollutants escape the neutralization treatment process.

Figure F5 takes the quantity of pollutants actually emitted into the air after treatment neutralization and separates them into their main components: solids (dust), sulfur dioxide, carbon oxide, nitrogen oxides, and other gases and liquids. Emission of solids (dust) from stationary sources has decreased 92.1% during this 12-year period, from 59.7 to 4.7 thousand tons. Sulfur dioxide emissions have

Figure F4b

Percentage of Air Pollutants Emitted From Stationary Sources by Treatment Status: 1990, 1995-2002
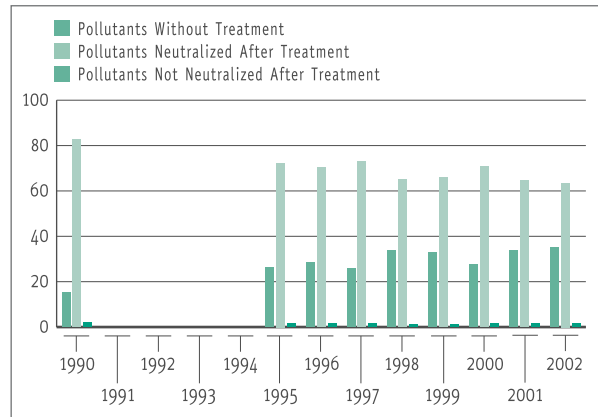
decreased 79.2%, from 142.6 to 29.7 thousand tons. Emissions of carbon oxide have declined 77.0%, from 91.5 to 21.0 thousand tons. Also, emissions of nitrogen oxides have declined 68.8%, from 35.2 to 11.0 thousand tons. And emissions of other gases and liquids have fallen 50.7%, from 56.4 to 27.8 thousand tons.

Figure F6a displays the quantity of air pollutant emissions from stationary sources by county for 2002. Telsiai County produced 35.6% (33.6 thousand tons) of all the air pollutants emitted in Lithuania, far more than any other county. The "Mazeikiu Nafta" Oil Refinery was the major source of this heavy output of air pollutants, mostly in the

Figure F4a

Air Pollutants Emitted From Stationary Sources by Treatment Status: 1990, 1995-2002

Figure F5

Air Pollutants Emitted From Stationary Sources After Treatment by Type: 1990, 1995-2002
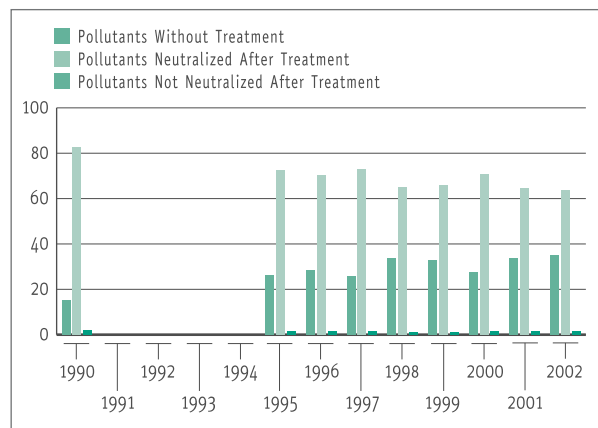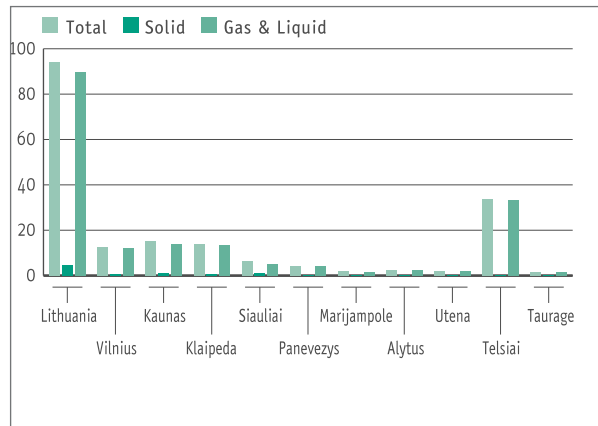
Figure F6a
Air Pollutants Emitted From Stationary Sources After Treatment by Type for Lithuania and Its Counties: 2002

form of gas and liquids. Kaunas County was a distant second with 15.3 thousand tons (16.2%), Klaipeda County was third with 14.0 thousand tons (14.9%), and Vilnius County was fourth with 12.6 thousand tons (13.4%). Taurage County emitted the least amount of air pollutants with 1.7 thousand tons (1.8%). Figure 6b looks at air pollution emission in another way: the average quantity of air pollutants emitted per square kilometer by county in 2002. The average quantity of air pollutants emitted over all of Lithuania was 1,443 kilograms per square kilometer. Telsiai County's average emissions were 7,716 kilograms per square kilometer, which is over 5 times the national average.

Figure F6b
Average Air Pollutants Emitted From Stationary Sources After Treatment by Type for Lithuania and Its Counties: 2002
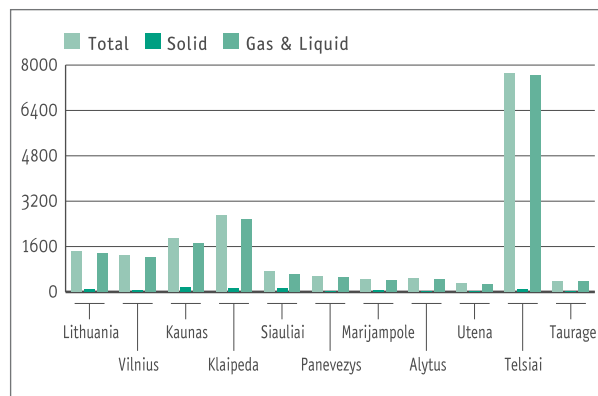
The main stationary sources of air pollutants in Lithuania remain industry and energy facilities. There is no possible way to distinguish pollution strain by counties since the sources of pollutant emissions are located in rather rural areas, e.g., Mazeikiai, Jonava, Kedainiai. The dominant air polluter in Lithuania, "Mazeikiu Nafta", has its main impact on air pollution indicators in Telsiai County. But, "Mazeikiu Nafta" has installed environmental measures to decrease air emissions.

2. Air Pollutant Emissions from Mobile Sources

The air quality of urban areas in Lithuania is mainly influenced by air pollutants emitted by mobile sources, i.e., transport vehicles. By the end of 2002, passenger cars numbered 1,180,945, an increase of 64.4% over the number (718,469) at the end of 1995 (Figure F7a). Another way of describing passenger cars is to quantify them per 1,000 inhabitants. Figure F7c shows that the number of passenger cars per 1,000 inhabitants increased 66.3%, from 190 in 1995 to 316 in 2002. During this same period, the number of road trucks increased 60% (from 7,469 to 12,037), while the number of motorcycles increased only 5% (from 20,033 to 21,017) (Figure F7b).

However, the number of other road vehicles decreased from 1995 to 2002: special purpose road vehicles were down 33.3% (from 15,346 to 10,231), buses were down 9.9% (from 17,052 to 15,376), and trucks were down 7.8% (from 101,422 to 93,508) (Figures F7a and F7b).
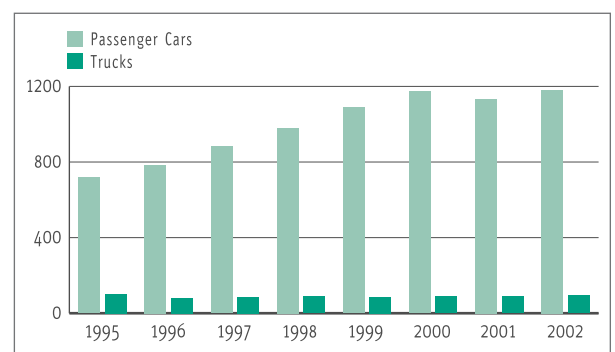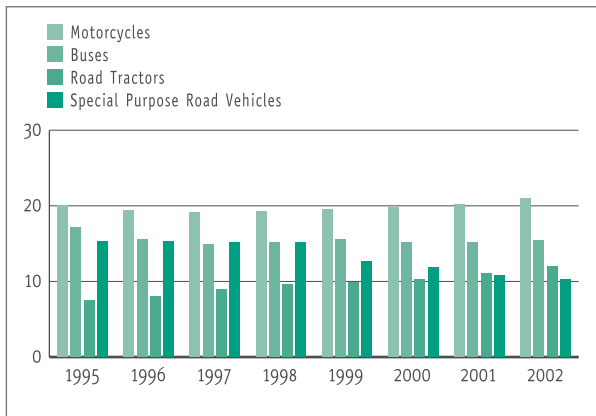
Figure F7a
Number of Passenger Cars and Trucks: 1995-2002

Number of Other Road Vehicles by Type: 1995-2002

From 1996 to 2000, total auto fuel (petroleum, diesel and liquid gas) consumption declined 6% because of the addition of excise taxes to the cost of fuel[9]. But the use of liquid gas for auto fuel has more than quadrupled, from 26.2 thousand tons in 1996 to 108.4 thousand tons in 2001[10]. These changes have affected emissions, particularly of carbon monoxide (CO), which declined 71.0%, from 318.9 thousand tons in 1998 to 92.4 thousand tons in 2001[11].

The main cities of Vilnius, Kaunas, and Klaipeda have the most concentrated emissions from transport vehicles. As Lithuania continues its rapid economic growth, the number of passenger cars will inevitably soar, which, in turn, will magnify the air pollution from mobile sources.

Figure F7c

Number of Passenger Cars per 1,000 Inhabitants: 1995-2002
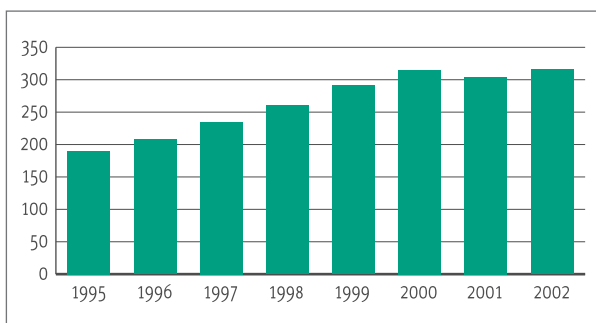
C. Global Warming

1. Greenhouse Gas Emissions

Global climate warming, which began in earnest with the dawn of the Industrial Revolution in the 19th Century, is caused by greenhouse gases (carbon dioxide, methane, nitrous oxide, and chlorofluorocarbons), which are emitted as byproducts of industrial processes. The most influential sector on greenhouse gas emissions is the energy sector.

Carbon dioxide, the greenhouse gas emitted when fossil organic fuel is burned and human beings exhale, is the single most important cause of global warming. Emissions of carbon dioxide in Lithuania have fallen 64.4%, from 45 million tons in 1991 to 16 million tons in 2000.

The second leading greenhouse gas contributing to global warming, is methane, a naturally occurring gas emitted into the atmosphere from various sources, such as cattle herds, garbage dumpsites (as a byproduct of decomposition), wastewater treatment facilities, industrial production, and rice cultivation. In Lithuania, methane emissions have decreased 34.4%, from 350 thousand tons in 1991 to 230 thousand tons in 2000.

2. Actions Taken to Reduce Greenhouse Gas Emissions

In the past decade, Lithuania has established national programs for implementing the requirements of the *United Nations Framework Convention on Climate Change and the Kyoto Protocol*[12]. Today, Lithuania's greenhouse gas emissions are below the limits set by the Kyoto Protocol, but the risk of reaching them will emerge immediately after the closure of both units of the Ignalina Nuclear Power Plant.

New environmental regulations were introduced concerning the use of boiler oil and natural gas. Thus, building renovations

---

[9] State of Environment 2001. Ministry of Environment, Vilnius, 2002. Available from internet site: http://www.am.lt/EN/VI/files/0.443687001074337088.pdf
[10] State of Environment 2002. Ministry of Environment, Vilnius, 2003, p.19. Available from internet site: http://www.am.lt/EN/VI/files/0.436721001074336491.pdf
[11] State of Environment 1999, Ministry of Environment, Vilnius, 2000; State of Environment 2002, Ministry of Environment, Vilnius, 2003. Available from Internet: http://www.am.lt/EN/VI/files/0.443687001074337088.pdf

Consumption of Substances Depleting the Ozone Layer (ODS): 1995-2001

Legend:
- CFC (AI)
- Halons (AII)
- Carbon Tetrachloride (BII)
- HCFC (CI)
- Methylbromide (EI)
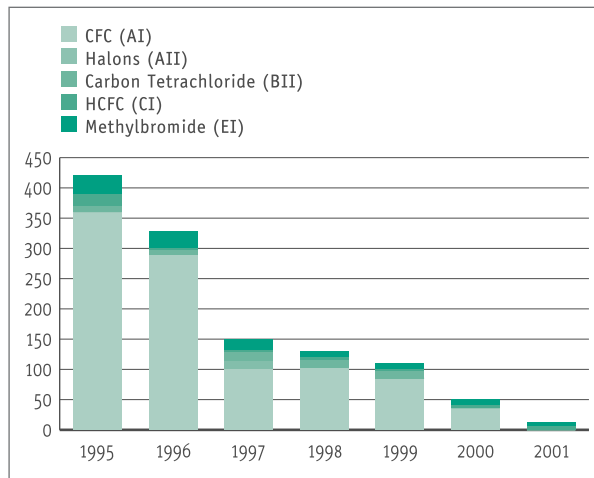
have installed more energy efficient central heating systems, and in many cases, bio-fuel (timber, straw) has been substituted for fossil organic fuel.

Greenhouse gas emissions have slowed since its peak in 1980 and have remained almost stable since 2000, primarily due to international cooperation in the phase-out of chlorofluorocarbons (ozone depleting gases), which was initiated by the *Montreal Protocol*[13]. Lithuania has fulfilled its obligations under the Montreal Protocol. Lithuania neither manufactures any substances depleting the ozone layer, nor imports, since 2001, chlorofluorocarbons (CFC), halons, methylcholoroform, and carbon tetrachloride, except for purposes (e.g., manufacturing refrigerators and aerosols), which are exempt under the protocol.

Figure F8 shows that the total quantity of all ozone depleting substances (ODS) consumed in Lithuania has dramatically decreased by 96.8%, from 421.6 ODS tons in 1995 to 13.3 ODS tons in 2001.

D. Recommendations

1) Lithuania needs to increase the energy efficiency of large combustion plants. Development of renewable energy projects should be promoted and supported.
2) All environmental and best available technical measures, as well as appropriate management measures, should be implemented prior to the closure of the Ignalina Nuclear Power Plant.
3) According to the *Single Programming Document 2004-2006*[14], the key task is to reduce the socio-economic disparities of Lithuania's regions. It is very important that economic development, particularly the construction of new manufacturing plants and other pollution generators, proceed according to the principles of sustainable development.
4) The infrastructure of public transportation in urban areas needs to be better developed, since this is paramount to decreasing air pollution in the cities. This development should be accompanied by public awareness campaigns to promote the use of public transportation. Railways should be used more frequently for the transportation of goods and loads.

Reducing Wastewater Pollution

A. Polluted Wastewater Discharged into Surface Waters

Figure F9a displays the quantity of polluted wastewater discharged by treatment status for 1990 and from 1995 to 2002. Over the entire period (1990-2002), the quantity of polluted wastewater discharged *before treatment* declined 61.8%, from 446.1 to 170.4 million cubic meters. Similarly, the quantity of polluted wastewater actually discharged into surface waters (polluted wastewater inadequately treated + polluted

[12] Available from Internet: http://unfccc.int/resource/docs/convkp/conveng.pdf
[13] Available from Internet: http://www.unep.org/ozone/Montreal-Protocol/Montreal-Protocol2000.shtml

[14] Sets the Framework for Single Programming document 2004-2006 Lithuania's Access to the EU Structural Funds. Available from Internet: http://www.finmin.lt/notes_images/web/stotis_inf.nsf/0/314DCE3B83E64089C2256DE80037C032/$File/Lithuanian%20SPD%20(03_11_20)_engl.doc

wastewater not treated) *after treatment* declined 61.3%, from 348.4 to 134.9 million cubic meters.

However, the decline in polluted wastewater discharged into surface waters has not been steady. In 2000, higher standards for the maximum allowable quantity of pollutants were implemented, which caused a sudden upswing in the quantity of polluted wastewater *inadequately treated* (from 51 to 141 million cubic meters) and a corresponding downswing in the quantity of polluted wastewater *adequately treated* (from 110 to 24 million cubic meters) from 1999 to 2000. Despite this upgrade in standards, the quantity of polluted wastewater not treated has steadily declined during the 12-year period, from 121.7 to 1.3 million cubic meters (an overall decline of 98.9%).

Figure F9b shows the percentage of polluted wastewater discharged by treatment status for 1990 and from 1995 to 2002. With the upgrade in standards in 2000, the percentage of polluted wastewater *inadequately treated* jumped from 28% in 1999 to 83.9% in 2000. Since then, this percentage has been lowered to 78.4% in 2002. Correspondingly, the percentage of polluted wastewater *adequately treated* fell from 60.4% to 14.3%, from 1999 to 2000. Since then, this percentage has been raised to 20.8% in 2002. Only 0.8% of polluted wastewater was *not treated* at all in 2002.

Figure F9b

Percentage of Polluted Wastewater Discharged by Treatment Status: 1990, 1995-2002

Figure F10a displays the quantity of polluted wastewater discharged by treatment status for Lithuania and its counties in 2002. There is a high correlation between the quantity of polluted wastewater *inadequately treated* and the size of the county. The counties discharging the largest quantity of polluted wastewater *inadequately treated* are: 1) Vilnius with 39.9 million cubic meters, 2) Kaunas with 29.4 million cubic meters, and 3) Klaipeda with 22.4 million cubic meters.

Figure F10b shows the percentage of polluted wastewater by treatment status by county for 2002. The counties with the highest percentage of polluted wastewater inadequately treated are: 1) Siauliai with

Figure F9a

Polluted Wastewater Discharged by Treatment Status: 1990, 1995-2002

Figure F10a
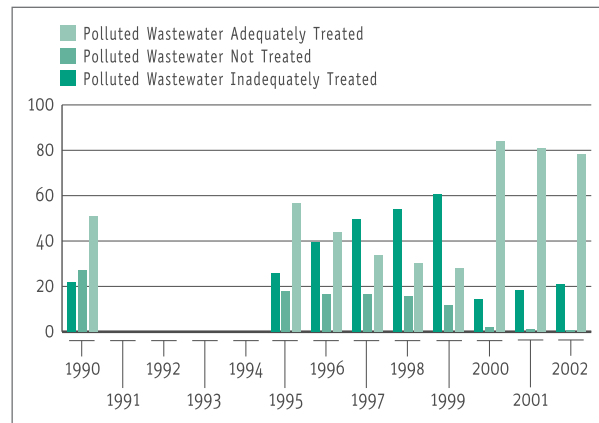
Polluted Wastewater Discharged by Treatment Status for Lithuania and Its Counties: 2002
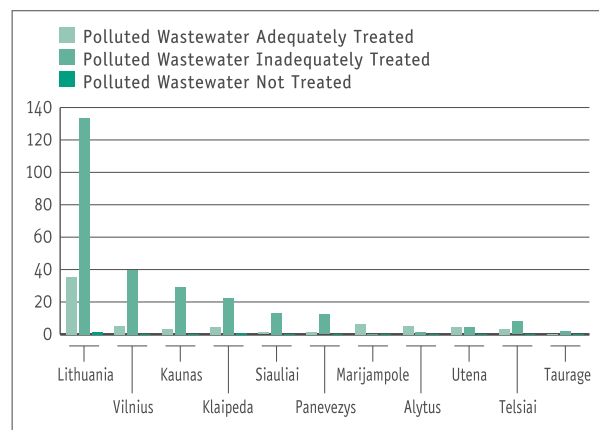
Figure F10b

Percentage of Polluted Wastewater Discharged by Treatment Status for Lithuania and Its Counties: 2002

For new town districts, sewerage systems were developed and connected to the wastewater treatment facilities in Pakruojis, Prienai, and Vilkaviskis.

In Siauliai, the new wastewater and biological treatment facility will begin operation in the second quarter of 2004.
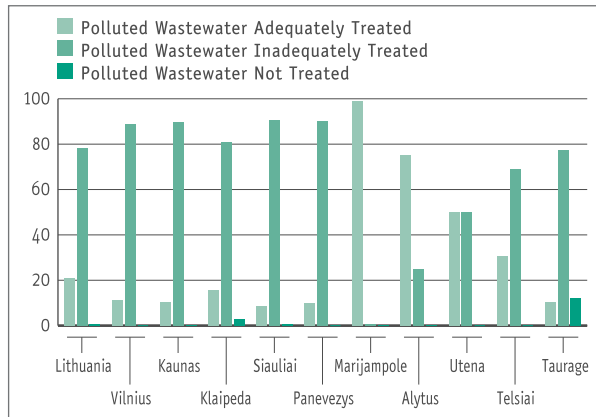
90.8%, 2) Panevezys with 90.0%, 3) Kaunas with 89.5%, 4) Vilnius with 88.8%, and 5) Klaipeda with 81.1%. These five counties all have percentages higher than the national average of 78.4% for polluted wastewater *inadequately treated*.

B. Actions Taken to Reduce Polluted Wastewater

Water management, especially wastewater treatment, is a key priority of the National Environmental Strategy and Action Plan. In 2002, new wastewater treatment facilities were constructed in Birzai (Panevezys County), Palanga (Klaipeda County), Varena and Lentvaris (Vilnius County), and Jurbarkas (Taurage County), while the wastewater treatment facility in Vilnius was reconstructed.

C. Recommendations

1) The promotion of cleaner production principles in industry is particularly important because swift economic developments will increase the use of water in industry and other sectors, which in turn will increase the quantity of wastewater discharged into surface waters.
2) Further policy actions are needed to implement a river basin management system and to promote ecological farming, sustainable consumption, and other measures for decreasing water consumption and pollution.
3) Continuous building of the competence of appropriate civil servants and raising the public's environmental awareness should help Lithuania in its task to ensure environmental sustainability.

Goal 8: Develop a Global Partnership for Development
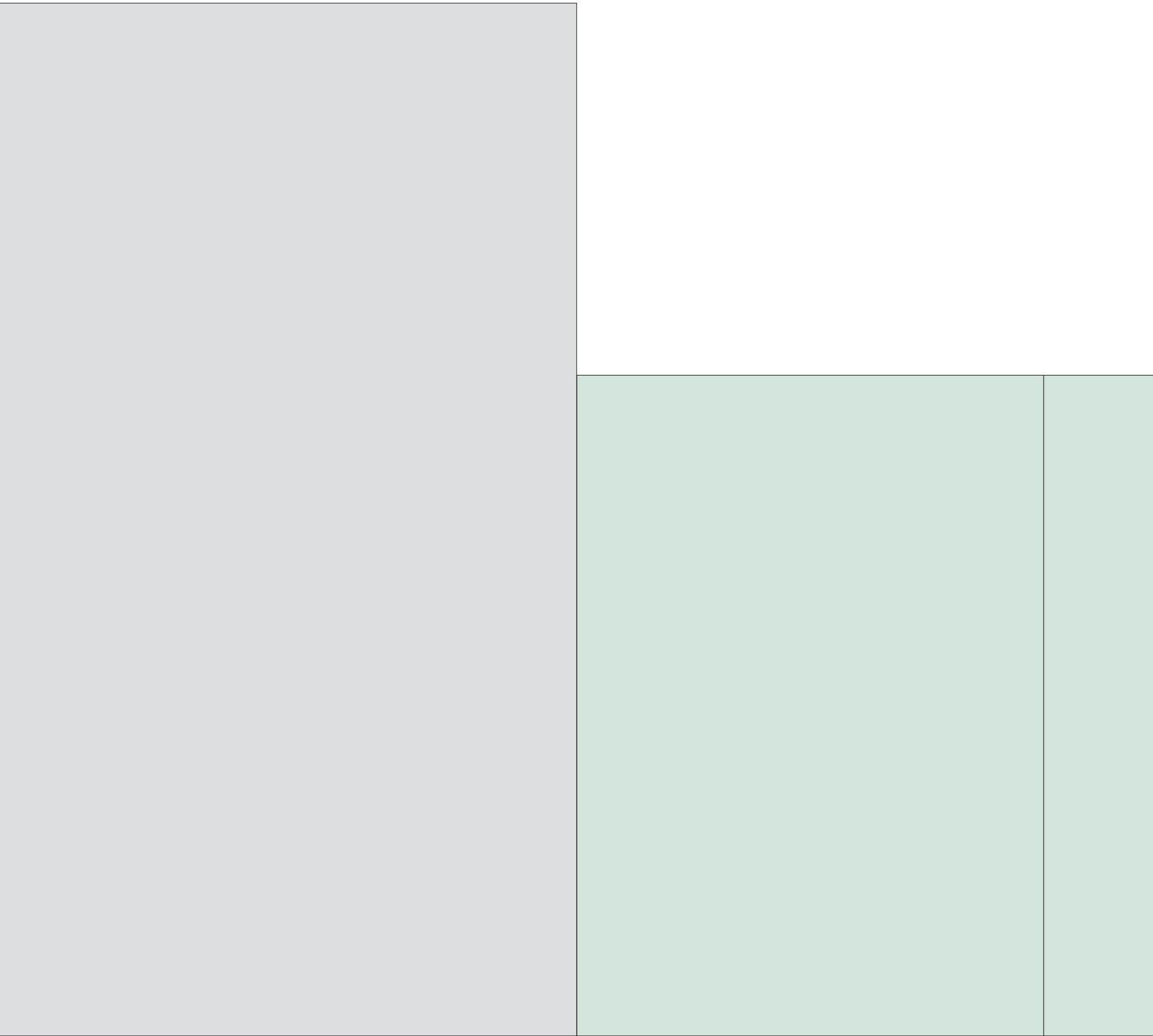
I. Moneterrey Consensus

A major element for meeting the Millennium Development Goals is the mobilization of adequate financial resources, which is why the *International Conference on Financing for Development* that took place in Monterrey (2002) was a timely counter-part to the *Millennium Summit of 2000*. The Conference offered for the political leaders, development practitioners, and representatives of civil society and public sector a possibility to advance progress towards interrelated and mutually supportive MDGs while building *"a new partnership for development"*[1]. Monterrey Consensus embodied not only a call for "new partnership" but also mutual obligations between developed and developing countries in the macroeconomic and financial areas. It called for actions by the developed countries, particularly emphasising the coherence in the policies of developed countries in the areas of aid, trade, debt and global governance.

The Monterrey Consensus entailed new commitments to increase *Official Development Assistance (ODA)* in real terms by about $16 billion a year by 2006. In March, 2002 the United States, EU and various other countries proclaimed future increases in ODA by setting benchmarks. The EU member states individually committed themselves towards striving to raise financing for development cooperation to at least 0.33 percent of gross national income (GNI) by 2006[2]. Lithuanian Government has participated in the Monterrey Conference and has resolved to work towards the achievement of Goal 8 - *develop a global partnership for development*.

United Nations Development Programme's **Human Development Report 2003**[3] made clear that the Millennium Development Goals can be achieved worldwide by 2015 but only if poor countries pursue wide-ranging reforms and wealthy nations

respond with improved trade terms and increased aid. This Report, built on the commitment of the world leaders made at the 2002 Monterrey Conference, provided a broad framework on how national development strategies, international development cooperation, international agencies and others can be better aligned with the extent of the challenge of the MDGs achievement worldwide and set a *Millennium Development Compact*. The main idea of the Compact, which was fully illustrated with different countries' examples, is that allocation and mobilization of domestic resources, strengthening governance and institutions and adopting solid socio-economic policies are necessary but far from sufficient pre-requisites of the Goals achievement worldwide. Various obstacles as geographical isolation, hostile environments and others may troublesome a countrys' efforts towards progress vis-à-vis MDGs. Thus, sustained external support is crucial for the advancement of such countries' development.

The circumstances of donor countries are widely different in terms of mobilization of financial resources vis-à-vis MDGs. While goal 8 has no quantative target, one should see the ODA target of 0,7 of GDP set by the United Nations General Assembly in 1970 as an indispensable pre-requisite of MDGs.

II. Lithuanian Policy for Developmen Cooperation

After remarkable progress in economic, political and social areas and an accumulation of expertise during transition period, Lithuania is evolving from a recipient country into an emerging donor. According to the statistical report prepared by the Ministry of Foreign Affairs for the Organisation for Economic Cooperation and Development (OECD), Lithuania's development cooperation contribution in 2001 was 0,025 percent of GNI and 0,022 percent in 2002 (membership contributions to the international organisations, bilateral projects and spending on the maintenance of refugees centres are included). It seems to be a

---

[1] Mark Malloch Brown. A New Partnership for Development. Choices (Supplement). UNDP, 2002
[2] The European Union committed itself to an average 0.39 ODA target by 2006.
[3] Global Human Development Report. UNDP, 2003. Available from Internet: www.undp.org/hdr2003

small share of the country's wealth devoted for development cooperation comparing with the contribution to ODA of European countries such as Denmark, Norway, Sweden, the Netherlands and Luxembourg already committing above 0,7 percent of GNI, but it should be taken into account that Lithuania's contribution will be progressively increasing upon its entrance into the Union: 4,68 percent of Lithuania's contribution to the EU budget will be directly used for the purposes of development cooperation.

The membership of Lithuania in the European Union (EU) and in the North Atlantic Treaty Organisation (NATO), admission into the Organisation for Economic Co-operation and Development (OECD), participation in the United Nations since 1991 and the membership in the World Trade Organisation (WTO) that ensure stability and credibility of Lithuanian trade regime and empower Lithuania to participate and influence global negotiation processes, relate to Lithuania's obligations to take an active role in the domain of international development cooperation.

A new impetus for Lithuania's participation in the domain of development cooperation is given by the euro-integration processes. Upon joining the EU in May 2004, Lithuania will be urged to undertake the new EU commitments for development cooperation. Thus, for the few past years, the Government has been engaged in reshaping its foreign policy objectives and has focused on building the foundation for effectively playing its role as an emerging donor. *The Policy Paper of Lithuania for the provisions of Development Assistance for 2003-2005*[4] was approved by the Government, in accordance with the *National Long-Term Development Strategy*[5] approved by the Seimas of the Republic of Lithuania. The overall objectives of Lithuanian development cooperation policy framed in the Policy Paper are grounded in the Millennium Development Goals derived from Millennium Declaration.

[4] Development Assistance Policy for 2003-2005 of the Republic of Lithuania was approved by the Resolution No. 564 of the Government of the Republic of Lithuania dated 6 May 2003. Published in Official Gazette 2003, No. 45-2025
[5] National Long-Term Development Strategy approved by Resolution No. IX-1187 of the Seimas of the Republic of Lithuania dated 12 November 2002. Published in the Official Gazette 2002, No. 113-5029

By approving the Policy Paper, the Government made a strong commitment towards sharing precious transitional policy experience towards democratization and free market economy with other countries undergoing political, socio-economical transformations. The Policy Paper defines the objectives and tasks, the principles of Lithuanian development cooperation policy and specifies the target countries/regions to work with, selected according to strategic, political, socio-economic and historic determinants. In the nearest term, Lithuania opted to provide assistance to Kaliningrad Region of Russian Federation, Ukraine, the Republic of Belarus, the Republic of Moldova, Afghanistan and Iraq with the perspective of extending its assistance in the future to other regions, particularly to South Caucasus and the Balkans. The types and forms of assistance, the sectors targeted and the measures for ensuring the efficiency of the development cooperation policy of the Republic of Lithuania are clearly set up in the Policy Paper.

With the foresight of the approval of the Policy Paper, the Government committed human and financial resources for making development cooperation policy framework operational. A new Division for Development Assistance has become part of the Department of Multilateral Relations in the Ministry of Foreign Affairs to institutionalize the development cooperation policy into the organizational structure of the Ministry. The budget line with the allocation of a modest amount of money was assigned to the Ministry of Foreign Affairs with the perspective of significant increase in funding after the development cooperation programme becomes fully-fledged.

Lithuania's current involvement in committing to global partnership is seen in undergoing bilateral cooperation of Lithuanian technical ministries, public institutions, certain NGOs with neighboring countries and others further East and in Central Asia on promoting democratic governance, human rights, equal opportunities and eradication of poverty. These significant efforts indicate the country's wish to extend its assistance to others but at the same time reflects evolving nature of present development

cooperation activities. Overall information about Lithuanian expertise in practice areas of specialization, the NGOs already providing their accumulated knowledge and practice in the countries in need, the existing demand for the specificity of Lithuanian expertise in the target countries are not yet fully identified and coordinated. Another aspect to be emphasized in the framework of development cooperation is public support, starting from the reversal of mentality from being a recipient to a country sharing its accumulated expertise and increased resources with the other countries in need. Thus, UNDP on the request of the Ministry of Foreign Affairs has initiated the preparation of a project on *Strengthening National Capacity of Lithuania as an Emerging Donor*. Lithuania, committed to building a global partnership for development, still needs to bring all the relevant stakeholders together for effective collaboration towards the progress on development and ensure consistency of its national efforts with international ones. Therefore, it should be particularly stressed that Lithuania's accumulated experience as a successful transition economy within the past decade could be brought into the development cooperation framework particularly in East-East and East-South directions. The robust recovery of Lithuania (the largest of the three Baltic economies which used to lag behind the other two) from the 1999 recession caused by the Russian crisis[6], strict monetary policy that brought about market reduction in inflation (inflation felt from 45% in 1994 to 0.3% in 1999)[7] that currently remains very low despite the slowdown in Europe[8], monetary policy arrangements showing Lithuania's readiness to join the euro zone in 2007; all the achieved progress demonstrates valuable Lithuanian experience to be shared with the countries in political and

socio-economical transitions. Lithuania was identified as one of the three best prepared states for EU entry by the European Commission in November 2003, and with a growth rate of 8.9% (6.8% in 2002) during the yar, it became the fastest growing economy in Europe. IMF evaluated positively the efforts of Lithuanian Government in implementing policies for impressive economic development, low inflation and fast integration in the euro zone[9]. The solid economic performance of Lithuania is worth sharing with countries in transition.

Lithuania has made a remarkable progress in developing democratic institutions and establishing the rule of law. The reform of the judiciary has been at the centre of these developments. The establishment of a four-tier system of courts of general competence contributed to building a more elaborate and competent structure for the defense of human rights and rightful interests. The Law-making Improvement Outlines, approved by the Seimas of the Republic of Lithuania in 2002, is supposed to become the main and principal legal act, designed for all legislative entities. *National Human Rights Action Plan*[10], adopted in November 2002, is already considered as good example by the other countries in the Region. The National Human Rights Action Plan is being implemented since 1 January, 2003. The Lithuanian system of administrative justice is still relatively new, but at the same time it has already been identified as progressive model and being studied by other countries.

Lithuania has steadily accumulated experience in preparing strategic documents and reporting on poverty and social exclusion. The first poverty studies came up with a national definition of poverty. Poverty measures for the analysis of the extent, depth of poverty. and design of effective policies were agreed in 1997. Afterwards in early 1999, a National Social Committee comprising representatives of

[6] UNDESA. World Economic and Social Survey 2002. - New York, 2002
[7] Lithuanian Development Agency et. al. Doing Business in Lithuania. - Vilnius, 2003
[8] Republic of Lithuania: 2003 Article IV Consultation-Staff Report; Staff Supplement; Public Information Notice on the Executive Board Discussion; and Statement by the Executive Director for the Republic of Lithuania. IMF Country Report, 2003

[9] Republic of Lithuania: 2003 Article IV Consultation-Staff Report; Staff Supplement; Public Information Notice on the Executive Board Discussion; and Statement by the Executive Director for the Republic of Lithuania. IMF Country Report, 2003
[10] National Human Rights Action Plan was approved by the Resolution No. IX-1185 of the Parliament of the Republic of Lithuania dated 7 November 2002. Available from Internet: www.lrs.lt/hrap

state authorities and non-governmental organisations was established for designing a Poverty Reduction Strategy. **Lithuanian Poverty Reduction Strategy**[11] was launched in June 2000. In the Strategy Lithuania took a significant step forward and set the numeric and time-bound targets (first of this kind in the entire region) targets based on national indicators. The Government approved the following **Lithuanian Republic Poverty Reduction Strategy Implementation Programme for 2002-2004**[12] in November 2002. These above mentioned documents formed the basis for social inclusion policy

in Lithuania and for the *Joint Memorandum on Social Inclusion (JIM)*[13], which will form the foundation for the future *National Action Plans on Social Inclusion (NAPs/Incl)* and fully engage the new member states to participate in the open method of co-ordination.

Accumulated transitional experience during Lithuania's growth towards democratization proves its expertise capacities for playing an active role on the international platform and significantly contributing towards the advancement of Millennium Development Goals worldwide.

113

[11] Available from Internet: http://www.undp.lt/en/?id=9
[12] Lithuanian Republic Poverty Reduction Strategy Implementation Programme for 2002-2004 was approved by the Resolution No. 1753 of the Government of the Republic of Lithuania dated 7 November 2002. Available from Internet: http://www.undp.lt/files//MDG_pres/skurdo%20programa%20english.pdf
[13] The JIMs for the 10 countries joining the Union in 2004 were formally signed by the Commission and the national authorities on 18th December 2003. Available from Internet: http://europa.eu.int/comm/employment_social/soc-prot/soc-incl/jim_en.html

List of Acronyms

AIDS	Acquired Immune Deficiency Syndrome
CCA	Common Country Assessment
CCF	Country Co-operation Framework
CIS	Commenwealth of Independent States
CSD	Commission on Sustainable Development (in Lithuania)
EBRD	European Bank for Reconstruction and Development
ECHR	European Convention for the Protection of Human Rights and Fundamental Freedoms
EU	European Union
FAO	Food and Agriculture Organisation of the United Nations
GDP	Gross Domestic Product
GEF	Global Environment Facility
GVA	Gross value added
HDR	Human Development Report
IAEA	International Atomic Energy Agency
IBRD	International Bank for Reconstruction and Development
ICT	Information and Communication Technologies
IDU	Injecting Drug Users
IMF	International Monetary Funds
IOM	International Organization for Migration
ITT	Information, Technologies and Telecommunications
MDGs	Millennium Development Goals
MSSL	Ministry of Social Security and Labour (in Lithuania)
NGO	Non-governmental Organization
ODA	Official Development Assistance
OECD	Organization for Economic Co-operation and Development
ODS	Ozone Depleting Substance
PHARE	Pologne Hongrie Assistance aux R formes Economiques
PPP	Purchasing Power Parity
UNAIDS	Joint United Nations programme on HIV/AIDS
UNCED	United Nations Conference on Environment and Development
UNHCR	United Nations High Commissioner for Refugees
UNDG	United Nations Development Group
UNDP	United Nations Development Programme
UNESCO	United Nations Educational, Scientific and Cultural Orgnaization
UNFPA	United Nations Population Fund
UNICEF	United Nations Children's Fund
UNIFEM	United Nations Development Fund for Women
UNS	United Nations System
WB	World Bank
WHO	World Health Organization
WSSD	World Summit on Sustainable Development
WTO	World Trade Organization

Selected Bibliography

Administrative Justice in Lithuania. Prepared by Daniel A. Bilak, UNDP,Vilnius, 2002.

Annual 2002 year Report of the National Health Board, Vilnius 2003.

Annual Report 2002, National Health Board, Vilnius 2003.

Ar lygiavertis Lietuvos moksleivių bendrasis pagrindinis išsilavinimas? 2000 metų pagrindinės mokyklos baigiamųjų egzaminų rezultatų analizė (Is General Basic Education of Lithuanian Schoolchildren Equal? Analysis of 2000 Results from Final Examinations of the Basic School), National Examination Centre, Vilnius, 2001.

Assessment of Communicable Disease Control in Lithuanian Prisons. Task Force on Communicable disease control in the Baltic Sea region. Available from Internet: http://www.baltichealth.org

Causes of Death. 2001-2002. Department of Statistics of the Republic of Lithuania. Vilnius 2003.

Children and Women in Lithuania. Lithuanian National Committee for UNICEF, Vilnius, 2003.

Common Country Assessment for Lithuania: Progress for All, United Nations, Vilnius, 2001.

Common Country Assessment for Lithuania: Report on the Millennium Development Goals, United Nations, Vilnius, 2002.

Counties of Lithuania, A 115, Department of Statistics of the Republic of Lithuania, Vilnius, 2001.

Declaration of Commitment on HIV/AIDS, United Nations General Assembly Special Session on HIV/AIDS, New York. Available from Internet: http://www.unaids.org/UNGASS/docs/AIDSDeclaration_en.pdf, 2001.

Demographic Yearbook 2000, A 300, Department of Statistics of the Republic of Lithuania, Vilnius, 2001.

Demographic Yearbook 2001, A 300, Department of Statistics of the Republic of Lithuania, Vilnius, 2002.

Dereškevičius P. Rimkevičienė V. Targamadzė V. Mokyklos nelankymo priežastys (Causes for Absence from School).Vilnius, 2000.

Doing Business in Lithuania. Lithuanian Development Agency et. al. Vilnius, 2003.

Economic and Social Development in Lithuania 2002, B 111, Department of Statistics of the Republic of Lithuania, Vilnius, 2002.

Education, A 360, Department of Statistics of the Republic of Lithuania, Vilnius, 2000.

Education, A 360, Department of Statistics of the Republic of Lithuania, Vilnius, 2002.

Final Report of the Project Assessment of National Mental Health Policy Outcomes commissioned by Open Society Fund Lithuania, Vilnius, 2003.

Joint Memorandum on Social Inclusion. Ministry of Social Security and Labour, 2003. Available from Internet: http://europa.eu.int/comm/employment_social/soc-prot/soc-incl/jim_en.html

Kalvaitis A. Apie tėvus - skaičiais (About Parents: In Figures)// Dialogue, 4 September 1992, No 35 (3682).

Labour Force, Employment and Unemployment 1997-2001, A 325, Department of Statistics of the Republic of Lithuania, Vilnius, 2002.

Lietuvos gyventojų apklausa: moterys ir politika (Public Opinion Poll of Lithuanians: Women and Politics) carried by the public opinion company "Baltic Surveys". Available from Internet: http://www.gap.lt/tyrimai/moterys_ir_politika

Lietuvos Respublikos Seimo rinkimai 2000 (Elections to the Seimas of the Republic of Lithuania 2000). Available from Internet: http://www.lrs.lt/n/rinkimai/20001008/index-1.htm

Lietuvos švietimas 2002/Lithuanian Education 2002, Vilnius, 2003.

Lithuania in Figures 2002, A 103, Department of Statistics of the Republic of Lithuania, Vilnius, 2002.

Lithuanian Human Development Report 1995, United Nations Development Programme, Vilnius, 1995.

Lithuanian Human Development Report 1996: Human Development and Living Environment, United Nations Development Programme, Vilnius, 1996.

Lithuanian Human Development Report 1997: Living Standards and Choices, United Nations Development Programme, Social Policy Unit, Vilnius, 1997.

Lithuanian Human Development Report 1998: State and Human Development, United Nations Development Programme, Social Policy Unit, Vilnius, 1998.

Lithuanian Human Development Report 1999: Globalisation and Human Development, United Nations Development Programme, Social Policy Unit, Vilnius, 1999.

Lithuanian Human Development Report 2000: Territorial Disparities in Human Development, United Nations Development Programme, Social Policy Unit, Vilnius, 2000.

Lithuanian Human Development Report 2001: Opportunities for Youth and Human Development, United Nations Development Programme, Social Policy Unit, Vilnius, 2001.

Lithuanian Human Development Report 2002-2003: Knowledge, Information, Technology and Human Development, United Nations Development Programme, Social Policy Unit, Vilnius, 2003.

Lithuanian Population by Age, A 301, Department of Statistics of the Republic of Lithuania, Vilnius, 2002.

Lithuanian Poverty Reduction Strategy, National Social Committee, Vilnius, 2000.

Lithuanian Residents' Health and Activities of Health Care Institutions, Lithuanian Health Information Centre, Vilnius 1995-2003.

Lithuanian Strategy for Sustainable Development, Ministry of Environment/UNDP, Vilnius, 2003

Lithuanian Teachers and Schoolchildren: Analysis and Prognosis. Monograph (Lietuvos pedagogai ir moksleiviai: analizė ir prognozė. Monografija)/ G. Dzemyda, P. Gudynas, V. Šaltenis, V. Tiešis. Vilnius, 2001.

Main Economic Indicators of Lithuania, B 113, Department of Statistics of the Republic of Lithuania, Vilnius, 2002.

Millenium Development Goals: A compact among nations to end human poverty. Human Development Report 2003. United Nations Development Programme, Oxford University Press, New York, 2002.

National HIV/AIDS Prevention and Control Programme 2003-2008, Ministry of Health of the Republic of Lithuania/Lithuanian AIDS Center/UNAIDS Theme Group in Lithuania, Vilnius, 2003.

National Poverty Reduction Action Plan for 2002-2004, Ministry of Social Security and Labour of the Republic of Lithuania, Vilnius, 2002.

National Report on Sustainable Development,

from Rio to Johannesburg from Transition to Sustainability, Ministry of Environment of the Republic of Lithuania, Vilnius, 2002.

Population by Sex, Age, Ethnicity and Religion, Results of the 2001 Population and Housing Census in Lithuania, Department of Statistics of the Republic of Lithuania, Vilnius, 2002.

Project on Social Exclusion and Poverty during Transition carried by Social Policy Unit, supported by UNDP and OSF, Vilnius, 2002.

Report of the Secretary-General to the General Assembly on the Implementation of the United Nations Millennium Declaration, A/57/270, New York, 2002.

Republic of Lithuania: 2003 Article IV Consultation-Staff Report; Staff Supplement; Public Information Notice on the Executive Board Discussion; and Statement by the Executive Director for the Republic of Lithuania. IMF Country Report, 2003.

Reversing the Epidemic: Facts and Policy Options, United Nations, Bratislava, 2004.

Social Protection in Lithuania 2001, A 362, Department of Statistics of the Republic of Lithuania, Vilnius, 2002.

Socio-Economic Inequalities in Health in Lithuania: Indicators for Monitoring and Latest Situation, Report under the project financed by the WHO PAE-ECHP, 2002. Available from Internet: www.vsv.lt

State Education Strategy for the Year 2003-2012. Ministry of Education and Science. Available from Internet: http://www.smm.lt/kiti/strategija2003-12.doc

State of Environment 1999. Ministry of Environment, Vilnius, 2000.

State of Environment 2001. Ministry of Environment, Vilnius, 2002. Available from internet site: http://www.am.lt/EN/VI/files/0.443687001074337088.pdf

State of Environment 2002. Ministry of Environment. - Vilnius, 2003. Available from internet site: http://www.am.lt/EN/VI/files/0.436721001074336491.pdf

Statistical Information of Departmental Information Technologies Center of the Ministry of Education and Science.

Statistical Yearbook of Lithuania 2002, A 101, Department of Statistics of the Republic of Lithuania, Vilnius, 2002.

Statistical Yearbook of Lithuania 2003, A 101, Department of Statistics of the Republic of Lithuania, Vilnius, 2003.

Synthesis Report: Lithuania. Country Report. Second Draft, November 2002. In Study on the Social Protection Systems in the 13 Applicant Countries 2002, [CD-ROM]

Task Force on Communicable Diseases Control Baltic Sea Region. Report on the Task Force Project No.69. TB11: Expansion of DOTS for prevention and control of TB in Lithuania. Available from Internet: www.baltichealth.org

Valstybinės švietimo strategijos 2003-2012 metų nuostatos 2003-2012 (Guidelines of the National Education Strategy for 2003 -2012). Ministry of Education and Science. Available from Internet: http://www.smm.lt/kiti/strategija2003-12.doc

Women and Men in Lithuania 2001, A 303, Department of Statistics of the Republic of Lithuania, Vilnius, 2002.

World Economic and Social Survey 2002. United Nations, New York, 2002.