

## report on the

MILLENIUM
DEVELOPMENT
GOALS

poland



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#### **Editorial Note**

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present Report has commissioned by the UN Representative in Poland and prepared by the Gdańsk Institute for Market Economics. Its aim is to present the state and prospects for Poland's development in the context of the United Nations Millennium Declaration adopted at the Millennium Summit in New York on 6-8 September 2000, and to prepare recommendations which might be helpful for Poland's government and international partners in achieving progress in social development. The general methodological concept of the Report is based on the concept of the Millennium Development Goals Report (MDGR) prepared by the United Nations Development Group (UNDG). The year 1990 is the reference point for the future, and the 1990-2000 period is subject to analysis. The goals set for the future are to be achieved over the next ten to fifteen years.

Given the fact that in some cases the proposed scheme does not correspond with Poland's situation due to Poland's relatively high level of economic and social development, some necessary changes have been introduced in line with the following assumptions:

- development goals, targets and indicators for Poland should be as close to the original proposal as possible;
- specific goals and targets should reflect the most crucial development issues for Poland within the given area;
- the proposed indicators should, as far as possible, be compatible with those used in international comparisons and in international statistics.

Consequently, the Gdansk Institute for Market Economics, in agreement with the UN Representative in Poland and upon consultation with UN Country Team in Poland, has introduced targets and indicators specific to Poland's situation<sup>1</sup>.

The ultimate set of goals, targets and indicators for Poland is presented in the table on a page 6.

The original contents of Goal 1 in the final version prepared by UNDG relate to extreme poverty and hunger (eradicate extreme poverty and hunger) and are incommensurate with the situation in Poland, as hunger is not a case for concern here. Although poverty is a major problem in Poland, it has not assumed extreme dimensions. This is why it has been decided to reformulate that goal into "reduce poverty", as one better corresponding with Polish terms. Given the weight of the problem and developments recorded in the field of poverty in Poland in the 1990s an ambitious target has been proposed, namely to halve the number of the population living below the poverty line by 2015.

Goal 2, in its original wording, relates to access to primary education. In view of the universal access to primary education in Poland, the goal of increasing the enrolment ratio in tertiary education has been adopted instead. In 1990, compared with other European countries, Poland characterized by a low rate of university graduation. The relatively low level of education in society, which doesn't correspond to actual requirements, is one of the reasons for poverty and unemployment. Increasing the share of the population with university education is also a significant factor influencing Poland's development opportunities and the stability of democracy. Furthermore, unlike in the original proposal, in order to achieve changes in higher level education it is proposed to introduce a gross (not net) enrolment ratio in tertiary education. This indicator, which is also used in international comparisons, will make it possible to achieve changes in adult education in Poland, the development of which is one of Poland's main developmental targets.

GOAL		Goals, targets and indicators
GOAL 1	Goal	Reduce poverty
	Target	Halve the proportion of people living in poverty by 2015.
	Indicator	Proportion of population below national poverty line
GOAL 2	Goal	Achieve substantial progress in the education of the
		population at the tertiary level
	Target	Achieve five-fold increase in the number of university
		students relative to academic age persons <sup>2</sup> by 2010.
	Indicator	Gross enrolment ratio in tertiary education
GOAL 3	Goal	Promote gender equality and empower women
	Target	Diminish gender inequality in the labor market by 2015
	Indicator	1. Female unemployment rate to male unemployment
		rate
		2. Womens long-term unemployment rate to men's
		long-term unemployment rate
GOAL 4	Goal	Improve health and reduce child mortality
	Targets	1. Reduce child mortality rates by 75% by 2010
		2. Reduce premature adult mortality by 25% by 2010
	Indicators	1. Under-5 mortality rate
		2. Probability of death at age 15-59
GOAL 5	Goal	Improve maternal health
	Targets	1. Reduce teenage pregnancy rate by 75% by 2015
		2. Reduce maternal mortality ratio by 75% by 2015
	Indicators	1. Teenage pregnancy rate
		2. Maternal mortality rate
GOAL 6	Goal	Stable and viable democratic system, which is
	T	supported by the majority of population
	Targets	1. Achieve substantial progress in anti-corruption
		policy.  2. Support social trust in democratic institutions.
		3. Increase participation of civil society in providing
		public goods and services
	Indicators	1. CPI (corruption perception index),
	marcators	2. Share of grants for NGOs in public budget
		to provide public services,
		3. Public opinion of changes in system after 1989.
GOAL 7	Goal	Access to basic household amenities
	Targets	1. Reduction of the share of urban homes without
		connection to water mains network in the total
		number of urban homes by 3.5% by 2015.
		2. Reduction of the share of rural homes without
		connection to water mains network in the total
		number of rural homes by 24% by 2015.
	Indicators	1. Share of urban homes with mains water supply
		facilities in the total number of urban homes
		2. Share of rural homes with mains water supply
		facilities in the total number of rural homes
GOAL 8	Goal	Ensure environmental sustainability
	Target	Integrate the principles of sustainable development
		into national policies and programs and reverse
		the loss of environmental resources
	Indicator	Implementation of the national strategy

In its original wording, Goal 3 relates, inter alia, to gender disparities in primary and secondary education. Although gender inequality is an existing problem in Poland, it is not reflected in access to education. Significant and deepening gender inequalities in Poland are found in the labor market, in terms of both opportunities for re-employment and also employee compensation. Equal opportunities in the labor market is not only a part of the wider issue of equality in professional life; they also have their impact on the social status of women and men. Labor market discrimination against women might be also one of the reasons for the decline in the pregnancy rate in Poland in recent years.

Although decline in infant mortality (the original Goal 4) is one of major indicators of the improvement of the health of Poland's population, in order to monitor this improvement, the original contents of Goal 4 have been expanded to include the reduction of premature mortality within the population aged 15-59. Excess mortality in this age group and especially among males, which is typical among post-communist countries, is an issue of considerable relevance in improving the health of Poland's population. The progress achieved in this field marks a change in the intensity of factors relevant to the health of Poland's population, such as the wide-spread habit of tobacco smoking, alcohol use and an unhealthy diet.

In the case of Goal 5, one of the indicators proposed in the original version, i. e., "proportion of births attended by skilled health personnel", does not seem to reflect significant problems associated with reproductive health in Poland. At present, there is full access to skilled health personnel as regards giving birth. On the other hand, teenage pregnancy rates in Poland seem to be a more of a concern for reproductive health analysis. Despite an apparent downward trend, they still remain

higher than in other developed countries. Pregnancy among very young females involves a risk of complications due to the physical immaturity of expectant mothers. Children born to young mothers, more frequently than other children, characterized by low birth weight, higher incidence of various diseases, and higher mortality rates. Early initiation of sexual activity preceding conception, as well as promiscuity, pose a high risk of sexually transmitted diseases, including HIV/AIDS, and are closely related to subsequent female infertility, the risk of cervical cancer or the growing incidence of ectopic pregnancies. Early childbearing may also involve socio-economic and demographic consequences. The former include: breaking the education process; a lower level of education attained; relatively less attractive job prospects and a less successful professional career; an unstable financial position, while the latter cover: single motherhood and the instability of teenage marriages.

The original wording of Goal 6 relates, inter alia, to the enormous global spread of HIV infections as well the spread of malaria and other diseases. Nevertheless, it is much less relevant in the case of Poland. Although the spread of HIV/AIDS is also a problem faced by Poland, for the time being it is not assuming dimensions that would pose a threat to the population. For this reason, the expert group of the Gdansk Institute for Market **Economics** resigned monitoring that goal. Better governance, which means greater participation, coupled with accountability, is a major factor of social progress. Since democratic mechanisms were restored in Poland in 1989, we consider the assessment of their efficiency and the existing threats to democracy to be a significant dimension of social development.

Access to safe drinking water was considered one of the eight development

goals in the UNDG working papers. Although the problem of access to safe drinking water applies to Poland, it is of only local relevance. On the other hand, securing access to mains water is an important task from the point of view of improving life quality and economic development opportunities. The civilization gap between urban and rural areas is quite substantial. In fact, it is most acute not in terms of the equipment of homes with water mains facilities, but of their equipment with gas and central heating facilities, as well as in terms of the environmental pressure exerted by households. As a result of a lack of lavatory and bath appliances connected to a proper sewerage system, a substantial part of effluents generated by households is discharged directly into the natural environment, this way adversely affecting the quality of water resources. Hence, although the final version of the document worked out by the United Nations Development Group did not provide for the monitoring of the scale of that problem, a monitoring process has been maintained in the present report in order to watch development in Poland. The availability of drinking water, as one of many civilized amenities which determine household living standards is shown by a selected indicator.<sup>3</sup>

In the case of the goal concerned with ensuring of environmental sustainability (Goal 8), it has been decided, in line with UNDG drafts, that implementation of the national strategy of sustained development would be the primary task. In the present study an additional set of indicators has been adopted to monitor the progress of the implementation of that strategy with reference to the most crucial environmental pressures. <sup>4</sup>

Estimation of the future value of indicators was based on an analysis of trends recorded so far (between 1990 and 2000), as well as on international comparisons. The level of the indicators' value representing a goal that would be ambitious, but attainable under certain conditions was adopted as a general rule for setting these values. At the same time, that level would provide a benchmark for monitoring the country's development in certain fields.

<sup>&</sup>lt;sup>1</sup> The final results of the United Nations Development Group work on the MDGR methodological concept were unknown at the time the Gdansk Institute for Market Economics prepared the present report. This is another reason for which some UNDG proposals could not be fully taken into account in this report. Therefore, it would be advisable, during the course of preparation of subsequent reports scheduled for the coming years, to review the targets and indictors used for monitoring Poland's development.

<sup>&</sup>lt;sup>2</sup> Academic age: 19-24 years.

Commenting on that indicator we should point out its limited scope and conventional nature in reference to the complex issue of water supply. Not only supplying water but also improving the quality of drinking water available from water mains still remain very urgent issues in Poland. Despite being universally available tap water is assessed as too heavily polluted, excessively saturated with flourine, or lacking necessary consumer properities (color, smell and taste). The primary reason for that include: poor quality of many water resources, the level of wastewater treatment still being inadequate in quantitative and technological terms, poor technical condition of many water supply networks. As a result of the above, the use of available underground water resources in particular of Oligocene water for consumer purposes, has become widespread. The continuing situation is unfavorable, as the expenditure on mains water supply does not contribute to a reduction of exploitation of underground water resources, which are available free of charge, although it is known that they cannot be treated in the same way as renewable resources of surface water. Besides, it should be added that some areas of Poland suffer from water shortages attributable to low percipitiaton figures and to the lack of a nearby, sufficient source of water for consumption and for domestic use. These shortages are being alleviated through technological solutions, such as development of water supply and wastewater systems, as well as temporary water supplies to rural areas by means of water-cart vehicles. Although it is a local occurrence, it should not be marginalized as Poland's natural conditions and its water balance make it one of countries of Europe which are most poorly endowed with water.

<sup>&</sup>lt;sup>4</sup> The possibility of adding some indicators put on the final list of indicators adopted by the UNDG shuold be cousidered in the following edition of the report.

## Reduce poverty

#### Halve the proportion of people living in poverty by 2015.

Indicator	1994	1999	2015
Population under poverty line as percentage of total population* (%)	19%	14,9%	9,5%

<sup>\*</sup> poverty line - average poverty line qualifying citizens for social assistance in 1999 per capita in a household at prices of a given year.

Source: Individual data from Households Budgets Survey (CSO), I. Topińska calculations.

#### 1. The trend for the 1990s.

At the beginning of the transition period GDP fell rapidly and poverty increased (see: Table I. 6). In 1994-1999, some progress in reducing poverty was achieved, although it was not regular and evenly distributed among all socio-economic groups. While the share of the population living under the poverty line in total population had been declining progressively in 1994-1998, it rose again in 1999 (Table I. 1). Reduction of the level of poverty did not involve all socio-economic groups. Poverty increased in households of farmers, and declined only insignificantly in households of employees-farmers. Interestingly, the most pronounced reduction of poverty occurred households subsisting on non-earned sources, composed mostly of households subsisting on social benefits other than old age, survival and disability pensions (Figure I. 1).

The factors adding to the risk of poverty did not change considerably over that time. Poverty is closely correlated with unemployment (Table I. 2), and with the education of the heads of the household (Table I. 3). It is more common in families with many children and in single-parent families (Table I. 4). It is the least common in large city complexes and most common in rural areas (Table I. 5).

#### 2. Is the country on track for the targets?

It will be very difficult to attain the assumed target. From the limited progress achieved in the reduction of poverty in 1994-1999, when the Polish economy was developing at a very fast rate, we can deduce that fast economic growth alone is unable to secure realization of this ambitious goal. Furthermore, the reduction of poverty was evenly distributed among socio-economic groups. It will particularly difficult to achieve progress in reducing poverty in rural areas and in farming households, i. e. in the fields in which it takes the most acute form.

# 3. What are the major factors which will contribute to success or failure in meeting the target? What policies is the Government following which could help?

Reduction of the currently high rate of unemployment<sup>1</sup> will have a major impact on the attainment of the assumed target. Improvement of employee skills through the public education system and vocational education will be another factor providing better opportunities for reaching that target. Poverty reduction also depends on increasing aid for families with many children and for parents bringing up their children alone. Development of rural areas, involving the creation of effective jobs

alternative to agriculture, is an extremely important element of the anti-poverty policy.

If the policies outlined above should fail, the attainment of the assumed target will be threatened. Likewise, a protracted slowdown in the growth rate of the economy and cuts in expenditure on social welfare and aid for families with many children may reverse the positive trends.

<sup>&</sup>lt;sup>1</sup> The present unemployment rate is 18%.

# Achieve a substantial progress in the education of the population at the tertiary level

#### Five-fold increase in the number of university students relative to persons of academic age' in 2010.

Indicator	1990/1991	2000/2001	2015	
Gross enrolment ratio in tertiary education (%) *	12,9	40,7	65	

Source: Statistical Yearbook (CSO),

#### 1. The trend for the 1990s.

In 1990-2000, the number of persons studying at higher education establishments in Poland rose dramatically. The number of students more than trebled (Table II. 2). This was due, on the one hand, to a sharp increase in the population of academic age<sup>1,2</sup> and, on the other hand, to a substantially growing propensity to take up tertiary education (revealed by both academic and non-academic age persons). At that time, the net enrolment ratio<sup>3</sup> more than tripled by growing from 9.8% in the academic year 1990/1991 to 30.6% in the academic year 2000/2001 (Table II. 1). The gross enrolment ratio rose from 12.9% to 40.7%, respectively. More women go to university than men (Table II. 1).

## 2. Is the country on track for the 2015 target?

In the 1990s, the fast increase in the number of students was not accompanied by a corresponding rise in public expenditure on higher education. Although the number of students tripled, the proportion of public expenditure on higher education fell from 0.82% of GDP in 1991 to 0.78% in 2000 (Table II. 4), and the share of public expenditures in higher education financing fell to a level of 56% (69% in public schools)

in 2000, compared to 73.8% and 78.7%, respectively, in 1996 (Table II. 5). This has resulted in a marked decline in the university teaching staff relative to the number of students (Table II. 3), and in a deterioration in other studying conditions. As a consequence, the level of teaching is frequently criticized, especially in the case of private universities.

Students participate to a growing extent in tertiary education financing (Table II. 5), which poses an additional barrier to availability of university education for young people from less wealthy families, living far from academic centers<sup>4</sup>. Burdens associated with the costs of studying are not evenly distributed. In the academic year 2000/2001, those studying at private universities (and paying full tuition) accounted for one third of all students. Evening courses and extra-mural studies at public and non-public schools (with full or partial tuition) were attended by 56% of students.

Thus, improvement of access to university studies for young people from rural areas and small towns, and improvement of the quality of teaching in tertiary education establishments are among major tasks of the educational policy.

<sup>\*</sup>The relation of persons studying (as of the beginning of the school year) in universities (regardless of age) to the population (as of 31 Dec.) within the age group 19-24 in %.

3. What are the major factors which will contribute to success or failure in meeting the target? What policies is the Government following which could help?

The enrolment rate of tertiary education should be increased mostly through providing better access to university studies for youth from less wealthy families and from outside academic centers. In order to achieve this and to improve the quality of studies, it is necessary to increase the share of public funds in higher education financing. Demographic change (falling numbers of children and youth) will enable a shift in public funds from primary and secondary schooling to the benefit of higher education. In the future, this process will be aided by a decline in the absolute number of the academic age population<sup>5</sup>.

Consistent and comprehensive implementation of the educational system reform launched in 1999 is a condition for better access to university studies for youth

originating from rural areas and small towns. Extension of the scope of aid for students in a form of low-interest easily accessible loans from public funds should facilitate access to university studies for youth from poorer families. Standardization of the principles of granting aid to students irrespective of the ownership form of their university should be implemented. The accomplishment of this task is facilitated by progressive expansion of the network of public and non-public higher education establishments.

Improvement of the quality of studies should be among the top priorities of the educational policy. It is indispensable to introduce effective mechanisms to implement and monitor teaching standards<sup>6</sup>.

Making up for the arrears in the level and quality of education in Poland will be rendered possible through launching public-private partnership schemes in the field of professional training and retraining of adults.

<sup>&</sup>lt;sup>1</sup> Academic age: 19-24 years.

<sup>&</sup>lt;sup>2</sup> Between 1990 and 2000 the number of persons aged 18-24 rose by 840,000 (Rocznik Statystyczny GUS, Statistical Yearbook, CSO)

<sup>&</sup>lt;sup>3</sup> The relation of persons aged 19-24 (as of beginning of school year) studying at universities to the population (as of 31 Dec.) aged 19-24.

<sup>&</sup>lt;sup>4</sup> Results of the 1999 nation-wide survey commissioned by the Ministry of National Education indicate that students originating from rural areas accounted for 23% of those polled. (Source: nation-wide survey covering 1,842 students, commissioned by the Ministry of National Education and carried out by the Polish Sociological Society (http://www.men.waw.pl))

<sup>&</sup>lt;sup>5</sup> In 2000-2015, the population aged 7-18 is to decline by 2.3 million and population aged 19-24 by more than 1 million, respectively. Source: Prognoza demograficzna, Rocznik demograficzny GUS, (Demographic Yearbook, Central Statistical Office, Warsaw 2000).

<sup>&</sup>lt;sup>6</sup> The State Accreditation Commission was established in January 2002 to supervise the quality of studies at universities.

### Promote gender equality and empower women

#### Diminish gender inequality in the labor market by 2015

Indicators	1992	2000	2015
Unemployment rate for women unemployment rate for men (%)	1,2	1,3	1
Women's long-term unemployment rate to men's long-term unemplyment rate	1,2	1,5	1

Source: LFS, Registered unemployment (1994, 2000), CSO.

#### 1. The trend for the 1990s

Labor market developments in the period of socio-economic transition had a differing effect on the position of women on the market as opposed to that of men. Women are more threatened by unemployment, their unemployment periods are longer, and it is much more difficult for them than for men to find their first job or to find a job after a period of economic inactivity.

From the very start of the transition, unemployment rates for women were much higher than those of men. According to the Labor Force Survey (LFS), in 1992-2000 the former were 19-39% higher than the latter (Table III. 1, Figure III. 1). Female and male unemployment rate differentials were recorded irrespective of age, place of residence and education (except for higher education in 1992-1994). Throughout the whole analyzed period, the average duration of unemployment of women was longer than that of men. In 1992-1998, the average share of long-term (12 months and longer) unemployed among unemployed women was 49.4%, compared to 41.6% in the case of men. There is a considerable feminization of long-term unemployment, with the ratio of long-term unemployed women to long-term unemployed men being 1.23.

On average, unemployed women have less chance of finding a job than

unemployed men. Although women are less frequently affected by redundancies than men, discrimination against women who for some reason have resigned or lost their job (e. g. to look after their child) is a characteristic feature of the Polish labor market. Consequently, they find it very difficult to re-enter the labor market.

Although on the labor market in Poland women are, on the average, better educated than men, their wages (or salaries) are, on the average, much lower than those of men. Their compensation (outside agriculture) remains some 20% lower than that of men. These differences exist irrespective of the level of education (women with higher education earn lower salaries compared to men), and irrespective of the profession (the largest differences are found in the case of craft and related trades workers) (see Tables III. 2. and III. 3.). Disproportions in the situation of men and women also relate to professional ranks. Women occupy much less top executive posts than men (Table III. 4.).

## 2. Is the country on track for the 2015 target?

Discrimination against women in the Polish labor market has existed for many years and was reflected in lower compensation of women doing the same jobs. As a result of economic transformation

and the emergence of over unemployment in the early 1990s, the labor market situation of women in Poland deteriorated substantially. It is not easy to provide for a marked improvement in the position of women on the labor market. As the experience of the years 1994-1996 has shown, economic growth alone (and the fall in unemployment) does not diminish differences in the unemployment rates of men and women. The legal measures and actions taken so far are insufficient. In 2001 a law was passed amending the Labor Code through, inter alia, introduction of regulations which aimed to prevent both indirect and direct discrimination on the (Dz. U. 001.128.1405). anti-discrimination policy will also be contributed to by Poland's integration with the European Union, where counteracting labor market discrimination against women is one of the key elements of the common policy. Even at the pre-accession stage, Poland aligns its legislation with European Union requirements and implements pre-accession programs providing for equal opportunities in the labor market.

3. What are the major factors which will contribute to success or failure in meeting the target? What policies is the Government following which could help?

The activities undertaken should go in three directions:

- strengthening of legal provisions counteracting labor market discrimination against women as well as effective enforcement of the existing legislation. Although the Constitution and the Labor Code include anti-discrimination provisions, their application is of primary importance. The inequality of labor market opportunities for women is accepted in terms of traditional family patterns and traditional roles of women and men. Besides, women themselves are often unaware of their rights. Promotion of equal rights for women and men should overcome the reluctance of women and judges to handle with the discrimination of women on the labor market. Women who may feel uneasy about suing their employers should find support and legal counseling from non-governmental organizations and trade unions;

- increasing funds allocated for diminishing gender inequality at the labor market. These programs should, first of all, involve women entering or re-entering the labor market after a period of economic inactivity;
- development of social policy, which will make it possible to better reconcile employee duties with those of a person providing childcare or looking after another family member.

## Improve health and reduce child mortality

## Reduce child mortality rate by 75% by 2010 Reduce premature adult mortality by 25% by 2010

Indicators	1990	1999	2010
Under-5 mortality rate *	3,4	1,8	0,9
Probability of death	27,5 (Males)*	23,2 (Males)	19,5 (Males)
between the ages 15-59 (%)	9,8 (Females)*	8,9 (Females)	7,1 (Females)

\*per thousand of population of the age group

Source: CSO data.

#### 1. What is the trend for the 1990s?

#### **Child mortality**

Under-five mortality rates in Poland have been declining steadily for 50 years (Tables IV. 1 and 2; Figure IV. 1). This relates to the populations of both females and males. In the 1990s, that trend continued and even accelerated sharply, especially as regards infant mortality. Under-five mortality rates are very similar for both females and males. There is no relevant variation in child mortality in rural and urban areas, either.

Child mortality rates in Poland are close to the level recorded in the most advanced economies of the world.

#### Premature adult mortality

Between the mid-1960s and the late 1980s an unusual upward trend of mortality of males aged 15-59 was the case. Death probability reached its peak in 1991, when it returned to the level recorded immediately after the end of the war (Table IV. 3; Figure IV. 2).

A reversal of that trend started after 1991, with male mortality rates going down. The fall in mortality rates for that age group is very significant. Death probability in that age group fell from 27.5% in 1991 to 23.2% in 1999 (Table IV. 3; Figure IV. 2).

The main underlying cause of that

decline was the reversal of the trend of mortality related to cardio-vascular diseases, the incidence of which in the 15-59 age group fell by almost 30% in the 1990s. Likewise, in the past decade the incidence of malignant neoplasms and deaths caused by them showed some stabilization, and in some localizations, especially the so-called tobacco-related neoplasms, mostly lung cancer, they showed a sharp decline in males aged younger than 60.

In the female population, premature mortality between the ages of 15-59 remained at a stable level between the early 1970s and 1991. As in the case of males, the premature mortality rate of females has been declining significantly since 1991. It dropped from 10.4% in 1990 to 8.9% in 1999 (see Table IV. 3, Figure IV. 2).

The fall in premature mortality of middle-aged women in Poland in the 1990s is largely attributed to the falling occurrence of cardio-vascular diseases and the number of deaths related to them.

## 2. Is the country on track of the 2010 target?

#### **Child mortality**

Child mortality rates in Poland are relatively low. They are comparable to those in many developed countries, e. g. the United States. It seems that the coming years in Poland should see a further decline in mortality rates, especially of infants. Like in the previous years, this will largely be the result of more healthy behavior among pregnant women, as well as progress in prenatal medicine.

#### Premature adult mortality

Premature male mortality rates in Poland remain very high, almost twice as high as in Western Europe. At the same time, premature female mortality rates are much lower than those of males and do not differ much from the corresponding rates in advanced economies. It seems that there is a real chance of a further decline in premature young and middle aged adult mortality in the next decade. The fall in mortality rates will probably involve both sexes, urban and rural population alike. However, it should be assumed that it will be faster among the better educated population.

The fall in premature mortality rates of both sexes will be mostly the result of reduced incidence of cardio-vascular diseases. However, declining incidence and mortality rates can also be assumed in the case of tobacco-related malignant neoplasms, especially lung cancer in males, and in the case of deaths related to sudden external causes.

3. What are the major factors which will contribute to success or failure in meeting the target? What policies is the Government following which could help?

#### **Child mortality**

There is a need for further implementation of the National Program of Reducing Child Mortality Rates. In particular, this program must be focused on cutting infant mortality rates, which are still higher than those in Western Europe. The reduction of infant mortality is to be arrived at in two ways. First, through educational schemes aimed at

changing attitudes to health among pregnant women. This relates, in particular, to non-smoking during pregnancy, cutting the use of alcohol, as well as to proper nourishment. The above are the major factors which have contributed to a fall in infant mortality rates over the past decade. The other task involves improvement of neonatal care and introduction of new technologies and medicines to medical care provided for newborn babies, especially those with low birth weight. Such technologies are more and more available in Poland, and it can be assumed that their availability is to improve constantly over time.

The fall in infant mortality rates can also be linked to the fact that the number of live births in Poland has declined significantly. Therefore the care provided for newborn babies by both their parents and medical staff has greatly improved.

#### Premature adult mortality

There are three major factors having their impact on premature mortality of middle-aged adults, in particular males. These are: the scale of tobacco smoking, the level and custom of alcohol drinking, and dietary customs. Tobacco consumption in Poland declined substantially in the 1990s, which is bound to be one of the decisive factors of premature mortality rates of both males and females in the next decade. A National Program in this field has been developed, along with a parliamentary legislation for reducing the risks imposed on health by tobacco smoking.

A similar problem is posed by diseases and deaths related to alcohol abuse, involving a need for changing both the structure of alcohol consumption and drinking customs. A campaign for reducing health consequences of drinking large quantities of alcohol on a single occasion, the so-called binge drinking, is one of the major problems of public health in Poland.

Changes in the dietary structure are very closely related to socio-political changes, transition to a market economy and the opening up of Poland's markets to foodstuffs from all around the world. This has led to an evolution in fat consumption patterns towards a higher proportion of vegetable fats, and increased consumption of fruit and vegetables. It seems that the government policy in this field should be continued to ensure further changes of dietary patterns in Poland, being a condition for reducing the incidence of diseases, in particular cardio-vascular diseases and malignant neoplasms. Screening tests of the population, applicable in early diagnostics and treatment of certain diseases (hypertension, breast cancer, cervical cancer, etc.) should additionally contribute to a fall in premature adult mortality rates in the nearest decade.

## Improve maternal health

## Reduce teenage pregnancy rate by 75% by 2015 Reduce maternal mortality rate by 75% by 2015

Indicator	1990	1999	2015
Teenage pregnancy rate*	31,5	17,5	8,0
Maternal mortality rate <sup>10</sup> **	15,2	7,3	4,0

<sup>\*</sup> Teenage pregnancy rate = the number of live births per 1,000 women aged 15-19

Source: Statistical Yearbooks of Demography (CSO), "Zgony matek. Polska 1996-1998", and "Zgony matek. Polska 1999" [Troszyński, 1999, 2000]

#### 1. What is the trend for the 1990s?

#### Teenage pregnancy rate

For thirty years (until 1990) the teenage pregnancy rate in Poland remained relatively stable at above 30 live births per 1,000 women aged 15-19. Since 1990 it has been falling progressively from 31.5 live births per 1,000 women aged 15-19 in 1990 to 17.5 in 1999. (Figure V. 1, Table V. 1). This represents a decline by almost 45% over 9 years. In absolute figures, it was a fall in the number of live births to women aged 19 and younger from 43,900 in 1990 to 28,800 in 1999 (415 births to females aged 15 and younger, 1,427 births to 16 year olds, 4,011 to 17 year olds, 8,308 to 18 year olds, and 14,608 to 19 year olds). It should also be noted that the rate of change is higher for older teenagers. Between 1990 and 1999, the fertility rates for 19 and 18 year old females dropped by 50% and 45%, respectively, while in the group of younger adolescents these declines were estimated at 38% (17 year olds), 36% (16 year olds), and 28% (15 year olds). The non-marital ratio (non-marital births as a proportion of all births) is the highest among teenagers. In 1999, non-marital births accounted for one third of all births to teenage mothers in rural areas, and for half of these births in urban areas (Figure V. 2, Table V. 2). The analyzed period saw a substantial

improvement in the understanding of contraception methods among teenagers (95% of them know about contraceptive methods), a rise in the proportion of teenagers protecting themselves against pregnancy, and a shift in the structure of applied contraceptive methods and devices towards highly effective ones (Table V. 3). At the same time, there was an increase in sexual activity of teenagers and a lowering of the initiation age for sexual activity, especially for adolescents aged 17 and younger (Figure V. 3).

#### Maternal mortality rate

Despite various irregular developments, there is an apparent downward trend in the number of maternal deaths in Poland in both absolute and relative terms (Table V. 4, Figure V. 4) <sup>1</sup>. In connection with a marked decline in the number of births (from 545,800 in 1990 to 382,000 in 1999), the fall in the absolute number of maternal deaths is more relevant than the fall in maternal mortality rates. The number of maternal deaths declined from 83 in 1990 to 28 in 1999, i. e. by 66%, while the maternal mortality rate fell by 50% (from 15.2 to 7.3 per 100,000 live births). In the entire analyzed period, 520 cases of maternal death were recorded in Poland. The most frequent causes of direct maternal deaths2 include: hemorrhages (with placental

<sup>\*\*</sup> Maternal mortality rate = the number of maternal deaths (all deaths attributed to complications of pregnancy, childbirth and the puerperium) per 100,000 live births.

complications accounting for half of the causes of this group), infections (including septic shocks and septic abortions), as well as embolism and hypertension. Thromboembolic diseases and heart diseases are the major causes of indirect maternal deaths. (Table V. 4 presents detailed data on maternal deaths in 1990 – 1999).

## 2. Is the country on track for the 2015 target?

#### Teenage pregnancy rate

The systemic, economic, social and cultural changes which have occurred in Poland in recent years are exerting strong impact on the reproductive health of the population, including a fall in pregnancy rates among teenagers. Continuation of these changes provides an opportunity for the attainment of the target outlined above in reference to older teenagers (aged 18-19). At the same time, this target will be difficult to attain for younger adolescents (aged 17 and younger) <sup>3</sup>.

The following changes are adversely affecting the reduction of teenage fertility rates and require remedial measures:

- the process of secularization and liberalization of values and sexual behavior among teenagers, including instrumental approach to sex and earlier initiation of sexual activities;
- lack of an integrated and internally coherent system of sex education of children and youth coupled with incompetent presentation of issues concerning human sexuality in the mass media;
- easy access of Polish adolescents to materials with explicit pornographic content, and frequent alcohol use;
- growing social inequality, poverty and unemployment.

#### Maternal mortality rate

The fall in maternal mortality rates in Poland is attributable to general developments in that country, such as improvement of the social and economic well-being of the population, more reverence for women's rights and social status.

The factors which are directly related to that improvement include progress in the field of medicine<sup>4</sup>, full medical care during labor and the puerperium (in 1999, hospital births accounted for 99.5% of all births, while only 0.25% of all births were delivered elsewhere, without professional attendance; in 1990 those figures read: 97.8% and 0.4%, respectively), universal accessibility of prenatal care and introduction (as of 1985), within the framework of the national obstetrics and gynecology supervision, of schemes for investigation and specialist analysis of each case of maternal death.

Additionally, there are demographic and social factors of the decline in maternal death rates in Poland. This includes substantial fall in the number of total births, decline in the number and frequency of births to older women<sup>5</sup>, decline in the number of later births (this relates to the fourth and subsequent births), extension of the interval between subsequent births, growing health awareness of women, reflected in family planning: (fall in the number of abortions), frequency of seeing the doctor and quantity and quality of diet.

The factors hampering the fall in maternal mortality rates and posing barriers to attainment of the planned target are the following:

- -the period of implementation of the healthcare system reform, involving new rules and procedures of settling payments for healthcare services provided by hospitals;
- healthcare personnel underfunding, especially low compensation of doctors and midwives;

- impoverishment of a part of the society, which may involve wrong dietary practices and heavy manual work among pregnant women.
- 3. What are the major factors which will contribute to success or failure in meeting the target? What policies is the Government following which could help?

#### Teenage pregnancy rate

It is necessary to continue the policy towards reducing teenage fertility rates. Its essential elements include:

- changes in the educational system towards extending the scope of secondary-level education and increasing the number of secondary school graduates going into university education;
- easy and common access to reliable information and contraception contributing to a better understanding of methods of family planning, including improved knowledge of human physiology and health hazards related to premature initiation of sexual activity.

#### Maternal mortality rate

In order to attain the targeted fall in maternal mortality rates it is necessary to:

- cover all pregnant women with early prenatal care, which will, inter alia, make possible an early diagnosis of high-risk pregnancies;
- introduce selective prenatal care making it possible to cover high-risk patients with care from the beginning of pregnancy;
- improve the organization of medical teams in hospitals (e. g. permanent doctor's supervision; keeping the operating rooms, laboratories and blood banks ready for an emergency);
- take up actions promoting health awareness among women, especially those from lower social status circles (necessity of seeing the doctor in early pregnancy; regular and frequent doctor's visits);
- promote proper nutrition and lifestyle tips for pregnancy;
- provide social aid for women in difficult financial positions.

There are two different sources of statistical data on the maternal mortality rates in Poland: CSO data, based on statistical reports (Statistical Death Reports) and data based on the analysis protocols and assessments prepared by the specialists for every case of death, and collected by the National Supervision in the field of obstetrics and gynecology. Data published in the Statistical Yearbooks of CSO shows lower number of maternal deaths than the data collected by the National Supervision. In the report we use the data of National Supervision, taking into account, that this data are more relevant due to the process of verification and assessment.

<sup>&</sup>lt;sup>2</sup> Maternal deaths cover direct maternal deaths and indirect maternal deaths; direct maternal deaths - result from obstetrical complications of pregnancy, labor, or the puerperium; indirect maternal deaths - are not directly due to obstetrical causes but result from a previously existing disease or a disease that developed during pregnancy, labor, or the puerperium but that was aggravated by pregnancy.

<sup>&</sup>lt;sup>3</sup> The underlying factors of variations in teenage pregnancy rates in Poland include:

<sup>-</sup> place and region of residence - higher teenage pregnancy rates are reported in rural areas than in urban areas (this refers only to older teenagers, as pregnancy rates in the group of adolescent girls are not related to the place of residence), and in the western and northern areas of Poland (in terms of a breakdown into old and regained territories);

<sup>-</sup> education and kind of school attended: childbearing is more common among teenage females with primary or basic vocational education than among those in secondary education;

<sup>-</sup> social status: teenage mothers more often originate from the worst-off groups with low social and occupational status, as well as from families with many children;

<sup>-</sup> lifestyle and culture-related factors: exposure to pornography and alcohol use increase the risk of early initiation of sexual activity and unintended pregnancy, while religiosity reduces that risk;

<sup>-</sup> family planning awareness and access to contraceptives;

<sup>-</sup> age: the younger the age of adolescents having sex the lower the level of protection against pregnancy.

<sup>&</sup>lt;sup>4</sup> More effective antibiotics, better anesthesiological care, supplying of hospitals with blood, etc

<sup>&</sup>lt;sup>5</sup> Maternal deaths are more common among women having their first child when they are over 35.

# Achieve a stable and viable democratic system, which is supported by majority of population

## Achieve substantial progress in the anti-corruption policy. Support social trust in democratic institutions.

Indicators	1995	2000	2015
CPI - (corruption perception			
index)	5.57(*)	4.1	7
Share of grants for NGOs in public budget to provide public services	0.4(*)	N/A	1
Public view of system change after 1989 (**)	59	26	50

Sources of data and remarks:

Public view - CBOS research: Public view of changes after 1989

#### 1. The trend for the 1990s.

The last decade brought the re-birth of democracy in Poland. This was achieved by changes in the law and democratic elections. One may say that by and large the legal framework is compatible with all democratic rules and suitable for democratic political order. At first, the population considered changes advantageous, but this opinion changed with time. Since 1995, a vast majority of the population has been frustrated and has felt that it has not been able to actively participate in public life.

Politicians are commonly seen as corrupt and not accountable to their constituencies. The number of non-governmental organizations is high, but most of them are weak and hardly active. At the same time, public-NGOs partnership in delivering social services is considered not adequate for the needs and potential of the

NGO sector. Growing mistrust towards politicians and democratic order, and a decline in social involvement are reflected in general polls, voter turnout in elections and perception of corruption. As far as the democratic mechanisms are concerned, those are in place and there is no need to change. Instead concerted efforts must be taken to deepen democracy through increasing accountability, fighting with corruption and increasing participation. This should lead to attainment of the main goal.

## 2. *Is the country on track for these targets?*

Currently Poland has to be considered off track for these targets. Both the CPI index and poll results show that the last five years were not successful in increasing public involvement in democratic institutions, and that the popular support

CPI - Transparency International (various issues from www.transparency.org). CPI ranges between 0 and 10, the higher the better (less corruption).

NGO - Leś, Ewa (2001): Potencjał polskich organizacji non-profit w realizacji programów EFS, in Europejski Fundusz Społeczny - szansa i wyzwanie dla Polski, MPIPS

<sup>(\*) -</sup> data for 1996

<sup>(\*\*) -</sup> data from public polls on the question: looking back, can you tell whether the system change in 1989 was worthwhile? Data indicate difference between "worthwhile" and "not worthwhile" answers.

for the democratic changes of 1989 has been dwindling (see: Table VI. 1).

3. What are the major factors which will contribute to success or failure in meeting the target? What policies is the Government following which could help?

Support for democracy under conditions of constantly changing circumstances and challenges is not an easy task even for countries with matured democratic systems. The main task of the Government is to create trust between executive administration, elected representatives and the population at large. One of the major

obstacles is corruption. The policy of transparency, social participation in public life should be taken instrumental in supporting democratic system. Moreover, changes in the penal code criminalizing only one side of bribery may be helpful. Besides, a substantial improvement in the efficiency of the judicial system is required. Social participation and NGO development may be achieved by changes in the tax system. For instance, following the Hungarian example Polish NGOs support the idea of contributing 1% of Personal Income Tax to a certain NGO.

## Improve access to basic household amenities

Reduction of the share of urban homes without connection to the water mains network in the total number of urban homes by 3.5% by 2015

Reduction of the share of rural homes without connection to the water mains network in the total number of rural homes by 24% by 2015.

Indicators	1990	2000	2015*
Share of urban homes with mains water supply	95,3	97,6	98,8
facilities in the total number of urban homes (%)			
Share of rural homes with mains water supply facilities in the total number of rural homes (%)	67,6	83,1	91,6

Source: Wskaźniki przemian warunków życia w okresie przechodzenia do gospodarki rynkowej w latach 1989-1994; Statistical Yearbook, CSO.

#### 1. The trend for the 1990s

From 1990-2000, the proportion of homes with mains water supply facilities kept growing steadily. The rate of change for the better was slow in the entire analyzed period. The share of homes lacking connection to water mains was falling by approximately 0.5 percentage point per annum. Obviously, given the starting-point level in 1990, the rate of change was faster in rural areas (by 1.41% in annual average terms by the year 2000). At the same time, the annual average fall in the share of urban homes without mains water supply facilities was 0.21%.

From 1990-2000, apparent differences continued in access to water mains depending on the place of residence. Compared to villages, towns are much better provided in terms of water supply infrastructure. Nevertheless, the still existing civilization gap has been narrowing progressively. In 1990, the differential

between the relevant indicator for towns and villages was 27.7 percentage points, while in the year 2000 it fell to 13.5 percentage points

The quantity and quality of natural resources available to households depends on the extent of environmental pollution, which damages or even destroys these resources. Hence, the information about drinking water availability should be supplemented with data on rationalization of the use of water resources by households and the entire economy. This relates, in particular, to the total amount of wastewater, the amount of wastewater subject to treatment and the amount of treated wastewater. This is a significant description of the impact exerted on the "supply side" of natural resources (see Tables VII. 1 and VII. 2).

From 1990-2000, the overall amount of discharged wastewater was declining, and municipal wastewater accounted for an ever-diminishing proportion of total wastewater (Table VII. 2). Positive

developments in wastewater treatment should be noted. First, the amount of wastewater requiring treatment declined. Second, the amount of wastewater requiring treatment which are discharged into surface waters as untreated wastewater was also reduced. In this group of wastewater, the share of wastewater discharged into public sewers has been showing a downward trend. Third and finally, the structure of technological projects in the field of wastewater treatment recorded favorable changes, with mechanical and chemical wastewater treatment plants being replaced with biological wastewater treatment plants, including those providing for increase in removal of biogenes. The last solution is particularly favorable for improvement of drinking water quality.

The number of urban wastewater treatment plants and towns operating them had been growing steadily in 1990-2000 (Table VII. 3). Nevertheless, it should be noticed that the proportion of the population of towns not operating wastewater treatment plants still remains excessively high (20.7% in 2000). The issue becomes even more complicated when considered relative to the size of cities. In the group of towns with less than 2,000 inhabitants only 56.2% of their dwellers are served by wastewater treatment plants, and for cities with more than 100,000 inhabitants the relevant percentage is lower than for cities with a population ranging between 20,000 and 99,999. Hence, underdevelopment of wastewater treatment infrastructure can be found in both small towns and in some large city complexes.

## 2. Is the country on track for this 2015 target?

It is very risky to estimate the indicators for 2015. On the one hand, improvement in the field of mains water supply reflects the condition of the entire economy and, on the other hand, the improvement is the effect of political decisions defining the scope of financing of co-financing of such projects. The picture becomes even more complicated due to problems associated with considerable variation in water management infrastructure development costs in small settlements and in non-urbanized areas.

Taking into account the slowdown in the growth rate of the economy, cuts in the state budget expenditure linked to the budget deficit and the limited financial capacity of gminas (municipalities), the so-far trends cannot be simply extrapolated. If the annual average growth rate of indicators was maintained, their level would have reached 100% by 2015! Furthermore, mostly rural areas, but also small settlements and small towns are bound to face a rapid surge in the costs of implementation of water supply projects. This is mostly because villages and the poorest settlements, located far from water sources in hardly accessible areas or particularly disadvantageous physiographic conditions are still deprived of waterworks.

Summing up the issue of the 2015 target level of the selected indicator, one can conservatively assume that cutting the proportion of homes without connection to water mains by half, i. e. by some 1.3 percentage points by 2015 is a difficult but realistic target. Similarly, for rural areas the reduction of the current share of homes without connection to water mains by half, i. e. by 8.4 percentage points can cautiously be found as an attainable target. This way, by 2015 the proportion of homes with access to mains water would have risen to almost 99% in urban areas and to almost 92% in rural areas.

## 3. What are the major factors that will contribute to success or failure in meeting the target? Policy recommendations.

Gradual improvement of the situation in the field of water supply to households in towns and villages in the entire 1990-2000 period indicates that the plans to raise indicators of homes connected to water mains are realistic. It should be noted that the early 1990s saw a deep economic crisis which, nevertheless, did not arrest the growth of both these indicators, despite the recession and negative growth rates of the economy. Between the end of 1992 and the end of the 1990s, the Polish economy experienced a period of particularly fast development, which contributed continuation of the previously outlined upward trend.

It can be assumed that even a slowdown of the growth rate of the economy recorded in the last two years should not have an adverse impact on the upward trend revealed by the indicators. First of all, consolidation of the market economy and inflow of state-of-the-art technologies result in a higher standard of all newly-completed homes. Given the tendencies towards higher social mobility, apartment swapping and autonomous modernization undertakings, it can be expected that the targets adopted for 2015 will be attained.

On the other hand, their attainment may be threatened by the consequences of the crisis in public finances, i. e. the necessity of austerity measures affecting budgetary entities. Wherever the independence of spending on development of water supply networks from budgetary allocations is already the case, or will become so in the future, the continuity of financing of the water supply network development doesn't seem to be under threat. Contrarily, wherever water mains are operated almost exclusively by budgetary entities, which depend on the level of budgetary

allocations, continuation of the existing level and appropriation of expenditures may be jeopardized.

The European Union is currently the major foreign partner advocating the changes that are taking place in the Polish economy. EU requirements in the field of environmental protection exert a crucial impact on Poland's environmental protection policy objectives. The group of significant and difficult goals associated with the water management includes: alignment with EU standards in the field of drinking water quality and meeting the standards in the field of connecting human settlements with over 2,000 equivalent inhabitants to the sewerage network. Both these difficult challenges are closely interrelated. Connection to the sewerage system, especially in rural areas, will significantly improve the quality of consumed water, irrespective of whether it is drawn from a well or supplied through water mains.

On the basis of experience so far, it can be argued that the implementation of international agreements and foreign aid schemes related to environmental protection has been progressing successfully. Operation of the National Environmental Protection and Water Management Fund, as well as the EkoFund. positive examples of disbursement of foreign aid. The funds allocated for environmental protection and water management are properly spent and they bring measurable benefits, including improvement of the purity of waters and the quality of water for consumer use. The PHARE Program and the World Bank play the most significant role in financing of tasks implemented by the National Environmental Protection and Water Management Fund.

## Ensure environmental sustainability

#### Implement national strategies for sustainable development by 2005.

Indicators	1990	2000	2005
Development and implementation			
of the national strategy for	No	Yes	Yes
sustainable development			
"Poland 2025. Long-term			
strategy for sustainable			
development "*			

<sup>\*</sup>Works on the government document "Poland 2025. Long-term strategy for sustainable development" were completed in June 2000. Its task is supporting the implementation of the national strategy for sustainable development.

#### 1. The trend for the 1990s.

The state and improvement of the natural environment are difficult to describe by means of a small set of indicators. Therefore, having the national strategy for sustainable development as the only indicator seems to be even more inadequate. It is only a primary basis for embarking on improvement of the environment. Hence, it is justified to propose additional indicators describing trends in the pressure exerted on the environment and describing the quality of its basic components. They are included in Table VIII. 1. This presents the most typical kinds of pressure exerted on the environment which are, at the same time, of key importance for the economy and the environment. The period covered starts with the year 1988, when the economy was hit by a crisis, and ends with the year 1999, for which a complete set of official data can already be presented. In 1992, the economy recorded a positive growth rate. After that, gross domestic product grew very fast, but this growth was not accompanied by a return to a strong pressure on environmental resources, which had been typical of the previous years.

The basic kinds of pressure exerted on the environment became consistently and sizably reduced in the 1990s. This refers, in

particular, to the reduction of particulate and gaseous emissions to the atmosphere, except for 1996, when nitrogen oxides (NOx) and sulfur dioxide (SO2) emissions went up. Water intake and sewage discharge diminished as well. A downward trend can also be found in generation of industrial wastes, although it was seriously hampered after 1993. Primary energy consumption also declined, apart from the in year 1996-1997. However, the last examined year (1999) is not sufficiently conclusive, as it already witnessed some slowdown of economic growth.

Except isolated cases, such as carbon dioxide (CO2) emissions and primary energy consumption in 1996, the intensity of pressure exerted on the environment also diminished. In the subsequent years, the generation of each GDP unit involved a diminishing amount of pollutants discharged into the environment and a diminishing consumption of natural resources. This is illustrated by Table VIII. 2., which presents simple indicators of the intensity of pressure exerted on the environment<sup>2</sup>.

One should not draw far-reaching conclusions from the presented figures. Firstly, because they cover only selected kinds of pressure exerted on the environment. Secondly, because they

present the picture of pressure exerted on the environment in a macroeconomic perspective. This reservation can be best illustrated by the example of nitrogen oxides (NOx) emissions, which are industrial pollutants but they also accompany the use of motor vehicles, including private cars. The present situation is characterized by effective reduction of NOx emissions accompanied by a steady deterioration of air quality in big city complexes due to the fast growth of road traffic. Hence, despite an improvement in economy-level indicators an analysis of indicators at lower levels, including the local one, is required in order to determine whether the reduction of anthropogenic burden on the environment really contributes to an improvement of both the conditions in nature itself and the living standards of humans<sup>3</sup>.

## 2. Is the country on track for this 2015 target?

It would be right to ask the question: if or to what extent the targets drafted in the document "Poland 2025. Long-term strategy for sustainable development" will be attained in 2015? There is no simple answer to this question. First, most official publications contain no quantified targets. They set the direction of changes but very rarely quote figures which might make it easier to assess the degree of achievement of a goal. Second, the time schedules of attainment of targets are incomplete and imprecise. As a result, the targets envisaged for implementation by the year 2015 cannot be described as a set of key and quantifiable objectives4.

It can be assumed that the trend involving systematic improvement of the natural environment will continue. If, however, low rates of economic growth should become a more permanent phenomenon, the process of improvement may slow down substantially.

A fall in investment outlays on environmental protection may become an obstacle to the attainment of targets associated with permanent and sustained development. The downward trend recorded over the last two years (as illustrated by Table VIII. 3) should be attributed to a slowdown in the rate of economic growth and reduction of the investment capacities of enterprises. Furthermore, the mechanism of accumulating financial means obtained from emission charges in environmental protection and water management funds have become unreliable. Changes in the competence of power in the field of levying and collecting charges are another factor limiting the effectiveness of the mechanism of accumulating and spending financial means. The newly-established Marshal offices are not always in a position to take over the duties of Voivods.

# 3. Which are the major factors which will contribute to success or failure in meeting the target? What policies is the Government following which could help?

An important task is the creation of a single set of sustainable development indicators, which would enable the government to regularly monitor the situation at national, regional and local levels. Conceptual and implementation work on such a set of indicators should be continued under supervision of the Ministry of Environment. The research currently conducted in Poland is aimed at:

- introduction of single sets of sustained development indicators into the system of statistical and non-statistical information at various management levels;
- providing opportunities for current monitoring of the implementation of the idea of sustained development in Poland at various levels (national, regional and local ones), and in comparison with other countries;

- drawing up principles of implementation of a set of indicators into the practice of measuring sustained development, and verification of applicability of the proposed sets of indicators in the processes of preparation and realization of development strategies and programs.

The active involvement of society is a separate issue influencing changes in the attainment of ambitious goals. On the one hand, we should take into account the level of social awareness, which determines, in advance, the degree of citizens' involvement environmental protection issues. self-government and economic initiatives. At the same time, the level of social awareness largely depends on the earlier satisfaction of basic needs. It seems that Poland has already completed that first stage. The next condition for active involvement of the society in solving important issues is the creation and operation of numerous social, self-governmental and non-governmental organizations. Considerable progress has been achieved in this field as well.

Poland's contacts on the international forum, in particular contacts with such international institutions as the European Union, OECD, EEA, Eurostat, UNCSD and the World Bank are the driving force in the field of environmental protection. Adjustment tasks associated with accession to the Union are of key importance here. They determine the direction of undertaken efforts and the interpretation of sustained development on the national and local level.

On the basis of experience so far, it can stated that implementation international agreements and aid programs related to environmental protection has been progressing successfully. Functioning of the National Environmental Protection Fund and the EkoFund are positive examples of the appropriate utilization of foreign aid. Funds allocated environmental protection and water management are properly disbursed and bring measurable benefits.

<sup>&</sup>lt;sup>1</sup>"Poland 2025" is not the first government publication relating to the strategy for sustainable development and to tasks resulting from "Agenda 21" (see references).

<sup>&</sup>lt;sup>2</sup> The indicators of the intensity of pressure exerted on the environment, contained in Table VIII.2, present the quantities of pollutants discharged into the atmosphere and used natural resources per unit of GDP calculated at constant prices of 1990.

<sup>&</sup>lt;sup>3</sup> The only solution which makes sense is the consistent application of the indicator-related approach. This would involve application of single-digit indicators for the entire economy, sets of cross-indicators in the branch, sectoral or spatial perspective, as well as indicators for local communities with would correspond with guidelines of "Local Agenda 21". Research in this area, that has been initiated by the Ministry of Environment, should result in creation of appropriate databases which in connection with information resources of statistical offices will make it possible to create local-level indicators and cross-indicators. The application of selected macroeconomic indicators, which have been currently calculated at scientific research centers, will require separate organizational solutions and political decisions.

<sup>&</sup>lt;sup>4</sup> Unfortunately, the indicators presented in annexes to the document do not meet the necessary requirements for them to be considered complete and quantifiable. This means that those to which specific figures have been attributed do not describe sufficiently the complex social and economic relationships. Furthermore, the "living standards and quality" caption merely covers a long list of potential indicators without quoting their precise value or at least trying to find out the level that Polish society would aspire to in a specific time horizon, which also remains unknown.

### **Conclusions**

Projections and assessments of prospects for developmental progress in the light of the Millennium Development Goals are based on an analysis of Poland's situation and trends recorded in the last decade of the 20th century. This is an exceptional period in Poland's post-war history. The year 1989 marked the beginning of systematic transformation: the communist political and economic systems have been replaced by democratic and economy institutions. Hence, the evaluation of Poland's situation development in the light international development targets simultaneously, an assessment of the achievements and difficulties of the transition period.

The result of this evaluation is positive, although progress has not been regular. In most of the analyzed areas progress has been recorded in Poland, and in the case of some areas this progress has achieved extraordinary dimensions. In the area of health (goal 4) and maternal health (goal 5), tertiary education (goal 2) and environmental protection (goal 8). a reversal of unfavorable trends and/or substantial improvement have been the case. In the field of reducing poverty (goal 1) and in the area of providing homes with water mains facilities (goal 7) some progress has been achieved, but it is moderate or insufficient. The establishment democratic institutions in the wake of transformation systemic a breakthrough in Poland's development in the past fifty years. Nevertheless, the democracy-building process has been brought to a halt and the established institutions have been subject petrification (goal 6, introducing a stable and viable democratic system). Introduction of market mechanisms has contributed to a marked deterioration of the situation in one of the analyzed areas, namely gender equality in the labor market (goal 3).

Some achievements of the transition

period provide a good example of the introduction of a market economy and democracy as a factor of development. Changes of dietary patterns rendered possible by improved access to diversified foodstuffs, availability of information relating to attitudes to health, in association with an effective health policy (pursued through changes in legislation and government programs) have contributed to a reversal of very adverse trends in excess mortality of persons aged 15-59 (especially males), and to achievement of a marked improvement in this field. Likewise, the freedom of operation of non-governmental organizations, leading to a better understanding of environmental problems by the Polish people, in association with an effective policy and international cooperation, have led to a marked progress in the field of environmental protection.

Within this period the development of the democracy and market economics disclosed also its weaknesses. The economic growth resulted in the increase of the income differentiation and anti-poverty police had no success. The development of the market economy together with the lack anti-discrimination policy strengthened the women's discrimination at market. The systemic transformation resulted in the increase of the importance of education. But with the radical increase of the enrolment ratio for tertiary education on the one hand, we can observe the big discrepancies in the access to the tertiary education on the other hand. The quality of the education seems to be insufficient.

Here we may pose the question: why are disappointment and frustration voiced and why is the success achieved in the past decade is generally underestimated, despite the substantial progress that has been made? Finding an answer to that question goes beyond the scope of this report. It seems, however, that apart from high and

growing unemployment and the slowdown of economic growth, in last two years it is the slowdown of the democracy building process that is the main factor affecting the social perception of real achievements. Overcoming the present barriers to the development of democracy and breaking the existing barriers to the development of good governance in Poland is an important condition for achieving progress in the mentioned areas. A policy of transparent government, in both national and local government, as well as social participation in delivering selected public services should be instrumental in supporting democratic order.

The progress expected in the next ten to fifteen years depends, among other things, on the rate of economic growth. Nevertheless, in most cases consistent policies are indispensable for the progress to be achieved. The policy recommendations are included in the specific chapter of the report.

In many of the discussed areas progress will be possible thanks to international cooperation. International organizations of the UN system and the European Union are Poland's major partners. The factors of progress based on international cooperation include: benefiting from the experience of others through cooperation with international institutions, development of the legal system and improvement of its application by joining the system of international law conventions institutions, as well as effective technical and financial aid. Poland's experience of the transition period may also be helpful for other countries with a similar record. The sharing of knowledge and experience to support the development of former communist countries is an important element of Poland's foreign policy.

Conclusions

#### Rederences

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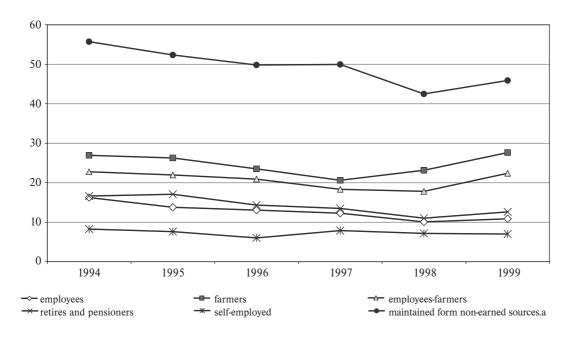
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## Figure I.1. Poverty\* by socio-economic groups (1994-1999)

(as percentage of populatio of socio-economic group)



Source: see table I.1

Notes:

Table.I.1. Poverty\* by socio-economic groups (1993 -1999)

The data from 1993 are not comparible with the data from next years. in %

Number of persons	1993	1994	1995	1996	1997	1998	1999 in
households							
Households of:							
employees	11,0	16,3	13,8	13,1	12,3	10,1	10,9
farmers	23,3	26,9	26,3	23,5	20,6	23,2	27,6
employees-farmers	19,0	22,8	22,0	20,9	18,3	17,8	22,4
retires and pensioners	10,9	16,6	17,1	14,4	13,5	11,0	12,6
emloyed	9,0	8,3	7,6	6,0	7,9	7,2	7,0
maintained form non	55,9	55,7	52,4	49,8	50,0	42,5	45,9
-earned sources <sup>a</sup>							
Total	14,4	19,0	18,0	16,1	15,0	13,0	14,9

Source: Own calculations based on individual data from households budgets' survey CSO Notes:

<sup>\*</sup>poverty line – average poverty line for social assistance in 1999 per capita in a household at prices of a given year.

<sup>\*</sup>poverty line – average poverty line for social assistance in 1999 per capita in a household at prices of a given year. A groups with income from social benefits others than pensions (including groups with income form occasional work)

# Table.I.2. Poverty\* in households with unemployed persons\*\* (1993 -1999)

The data from 1993 are not comparable with the data from the next years. in %

Persons in households	1993	1994	1995	1996	1997	1998	1999
Households	11,4	14,9	14,4	12,9	12,0	10,5	12,2
without unemployed							
Households							
with unemployed	27,6	35,8	33,5	31,3	31,7	28,6	33,0
with 1 unemployed	24,1	32,7	30,5	27,8	28,6	24,8	28,5
person							
with 2 unemployed	45,4	51,0	48,0	48,7	47,8	51,3	56,8
persons							
Households of	56,9	58,4	52,5	50,3	53,6	47,2	57,1
unemployeda							
Total	14,4	19,0	18,0	16,1	15,1	13,0	14,9

Source: own calculations based on individual data from households budgets' survey CSO Notes:

Poverty indicators concerns individuals.

# Table I.3. Poverty\* by the level of education of the head of household (1994 -1999)

The data from 1993 are not comparible with the data from the next years. in %

Education level	1993	1994	1995	1996	1997	1998	1999
Tertiary	1,4	1,6	1,6	1,7	1,4	1,3	1,4
Secondary	7,6	10,2	8,7	8,0	7,4	5,5	7,0
Basic vocational	16,6	22,6	21,6	19,6	18,2	16,3	18,4
Primary	22,1	28,7	27,1	25,2	24,4	21,5	24,2
Total	14,4	19,0	18,0	16,1	15,1	13,0	14,9

Source: Own calculation based on individual data from Households Budgets' Survey, CSO.

Poverty indicators concerns individuals

Education:

1993-1996

Basic vocational - including incomplete secondary; Primary -including incomplete primary.

Without postsecondary, incomplete tertiary and "others".

1997-1999

Secondary including incomlete tertiary. Primary- including incomplete primary.

38 Tables

<sup>\*</sup>poverty line - average poverty line for social assistance in 1999 per capita in a household at prices of a given year.

<sup>\*\*</sup> Unemployed - decleared as unemployed by the households members. 1999 - persons without work, searching for job.

<sup>&</sup>lt;sup>a</sup> Poverty indicators for persons form households with unemployment benefits as a main source of income

<sup>\*</sup>poverty line - average poverty line for social assistance in 1999 per capita in a household at prices of a given year.

# Table I.4. Poverty\* among families with children (1993 -1999)

#### The data from 1993 are not comparible with the data from the next years.

in %

Households	1993	1994	1995	1996	1997	1998	1999
Couple without	3,5	5,9	5,6	5,2	4,4	3,3	3,8
childrena							
Couple and 1 child	6,1	8,4	8,2	6,5	6,8	5,4	6,1
Couple and 2 children	11,7	14,1	13,4	11,4	12,1	10,7	10,9
Couple and 3 children	22,9	26,9	25,1	22,6	22,5	20,6	22,5
Couple and 4	42,6	48,8	47,3	42,6	42,2	36,7	41,3
or more children							
Farther nad children	9,7	13,7	13,0	12.8?	22,6	16,4	22,2
Mother nad children	16,4	20,7	21,1	13.3?	19,6	19,4	17,6
Other	15,6	22,3	20,4	19,5	16,7	14,6	17,4
Total	14,4	19,0	18,0	16,1	15,1	13,0	14,9

Source: Own calculation based on individual data from Households Budgets' Survey, CSO.

Notes:

Poverty indicators concerns individuals

## Table.I.5. Poverty\* by place of residence (1993 -1999)

#### The data from 1993 are not comparible with the data from the next years.

in %

Inhibitiants	1993	1994	1995	1996	1997	1998	1999
>500,000 inhibitiants	•••	7,4	7,4	4,9	4,1	3,0	2,7
200,000 to 500,000 <sup>a</sup>	5,5	10,6	10,5	8,9	8,1	6,2	7,9
100,000 to 200,000	7,9	11,6	10,2	9,2	9,4	7,1	8,2
20,000 to 100,000	11,4	15,7	15,0	12,4	11,9	8,9	9,6
<20,000	14,2	20,0	17,8	16,5	15,8	13,1	14,0
Villages (rural)	22,1	27,5	26,0	24,0	22,8	20,9	24,4
Total	14,4	19,0	18,0	16,1	15,1	13,0	14,9

Source: Own calculation based on individual data from Households Budgets' Survey, CSO.

Notes:

Poverty indicators concerns individuals.

<sup>\*</sup>poverty line – average poverty line for social assistance in 1999 per capita in a household at prices of a given year.

<sup>&</sup>lt;sup>a</sup> Children 24 years old less, without their own source of maintenance

<sup>\*</sup>poverty line – average poverty line for social assistance in 1999 per capita in a household at prices of a given year.

<sup>&</sup>lt;sup>a</sup> In 1993 - 200,000 inhibitiants and more.

Table.I.6. Population with low incomes (1988-1991).

	1988	1989	1990	1991
Percentage of persons with low incomes	20,3	16,8	33,2	34,0
in households of <sup>a</sup> :				
Workers	17,9	13,7	33,2	32,2
Farmers	24,9	22,3	41,8	50,9
Workers-farmers	16,6	12,3	28,3	33,7
Pensioners	28,4	26,4	32,2	26,0
Poverty line <sup>b</sup>				
monthly (in thous. "old" zl)	20,0	70,0	450,0	770,0
as percentage of average income in relation	67,6	62,4	81,4	80,8
to average income <sup>c</sup> (in %)				

Source: "Warunki życia ludności w latach 1986-1990", CSO, Warsaw 1991; "Warunki życia ludności w 1991 r.,CSO Warsaw 1992; and own calculations"

Notes:

### Table II.1. Education ratio

	Age	1990/91	1995/96	1999/2000	2000	/2001
	groups				total	of which female
in %						
		GR	OSS <sup>a</sup>			
Pre-school education <sup>a</sup>	6	95,2	97,3	96,7	95,4	95
Education:						
primary <sup>a</sup>	7 14	99,9	99	100,1°	$100,4^{d}$	99,8 <sup>d</sup>
secondary	15-18	80,1	86,4	89	90,1	91,2
post-secondary	19-24	3,6	4,6	5,4	5,2	6,9
tertiary	19-24	12,9	22,3	36,9	40,7	47
		N	ET <sup>b</sup>			
Education:						
primary	7 14	97,5	97,2	98,3°	98,6 d	98,6 <sup>d</sup>
	15-18	5	3,3	2,8°	2,6 d	1,6 <sup>d</sup>
	19-24	0	0	0,0°	0,0 d	$0,0^{d}$
secondary	7 14	0,2	0,1	0,2	0,2	0,3
	15-18	74,8	80,1	83	84	87,3
	19-244	4	4,4	4,1	4	2,5
post-secondary	15-18	0,1	0,1	0	0	0
	19-24	3,1	4,2	4,6	4,4	5,7
tertiary <sup>f</sup>	15-18	0,1	0,1	0,2	0,2	0,3
	19-24	9,8	17,2	28	3	35,1
for adults	15-18	3,5	3,3	3,4	3,5	2,7
	19-24	3,6	4,5	5	5,3	4

Source: Rocznik Statystyczny 2001 (Statistical Yearbook 2001), GUS (CSO), Warsaw 2001, p. 235 Notes:

<sup>&</sup>lt;sup>a</sup> Selected types of households, <sup>b</sup> Social minimum., <sup>c</sup> Incomes per capita.

<sup>&</sup>lt;sup>a</sup>The relation of persons studying (as of beginning of the school year) on a given educational level (regardless of age) to the population (as of 31. XII) of the age group defined as corresponding to this educational level; primary and secondary education; <sup>b</sup> The relation of persons studying (as of beginning of the school year) on a given educational level (in a given age group) to the population (as of 31. XII) of the age group defined as corresponding to the educational level; <sup>c</sup> & <sup>d</sup> Including people of lower secondary school: c - in 1st class, d - in the 1st and 2nd classes; <sup>c</sup> concerns children aged 6 attanding pre-school sections of primary schools and nursey school.

Table II.2. Students of schools of higher education

	Stu	dents	Graduates			
Years	Total	Total of which females		of which females		
	in thous.					
1990/1991	403,8	202,8	56,1			
1995/1996	794,6	445,1	89	52,5		
1999/2000	1431,9	814,3	215,4	138,5		
2000/2001	1584,8	900,5	261,1	166,5		

Source: Rocznik Statystyczny 2001, GUS (Statistical Yearbook 2001), CSO, Warsaw 2001, p. 246-247

Table II. 3. Academic teachers in schools of higher education as a percentage of total students

	Total	Professors	Associate Professors	Tutors	Assistants	Others			
		in %							
1990/1991	16,0	1,4	1,4	5,6	4,3	3,2			
1995/1996	8,4	1,4	0,1	3,0	2,3	1,7			
1999/2000	5,4	1,1	0,0	1,9	1,3	1,1			
2000/2001	5,0	1,0	0,0	1,8	1,1	1,0			

Source: Rocznik Statystyczny 2001 (Statistical Yearbook 2001), GUS (CSO),

Warsaw 2001, p. 252 and 246; own calculations.

Table II. 4. Public expenditure on tertiary education (1991-2000)

Years	Exper		
	State Budget	Local Governments	as pecentage of GDP
	in m	ıln zl	in %
1991	665	0,5	0,82
1992	1011	0,3	0,88
1993	1269,6	2,1	0,82
1994	1626,4	6,7	0,78
1995	2174,7	2,8	0,75
1996	3002,4	8,9	0,83
1997	3752,2	11,4	0,8
1998	4272,3	10,7	0,77
1999	1070,5	14,2	0,82
2000	5326,7	20,4	0,78

*Source*: Szkoły wyższe i ich finanse w 2000 r. (Schools of Higher Education and their Finances in 2000), GUS (CSO), Warsaw 2000, p. 444; Statistical Yearbook 2001; Warsaw 2001, p.541; own calculations.

Table II.5. Revenues from educational activity of schools of higher education, 1996 and 2000.

	1996	2000
	in	%
Total Revenues	100	100
State Budget	73,8	56
Local Government Budgets and Other Public Funds	0,3	0,2
Tuition	17,3	36,3
Others	8,6	7,5
Public Schools		
Total Revenues	100	100
State Budget	78,7	69
Local Government Budgets and Other Public Funds	0,3	0,3
Tuition	12,1	21,8
Others	8,9	8,9
Private Schools		
Total Revenue	100	100
State Budget	0,4	0
Local Government Budgets and Other Public Funds	0,1	0
Tuition	94,7	98,5
Others	4,8	1,4

*Source:* Finances of Schools of Higher Education in 1996, GUS (CSO) Warsaw 1997, p.26; Szkoły wyższe i ich finanse w 2000 r. (Schools of Higher Education and their Finances in 2000), GUS (CSO), Warsaw 2000, p. 448; own calculations.

# Table II.6. Students of the public schools of higher education receiving scholarships

	1990/91	1995/96	1999/2000	2000/2001
in thous.	162,1	160,6	204,1	214,6
as percentage of total students	40%	20%	14%	14%

*Source:* Rocznik Statystyczny 2001 (Statistical Yearbook 2001), GUS (CSO), Warsaw 2001, p.239 and 246-247; own calculations.

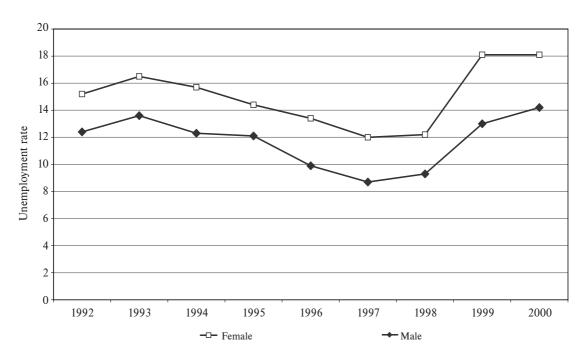
# Table III.1. Main results of the Labour Force Survey

# IV quarter <sup>1</sup>

2000			8066,0	1331,0	5222,0		64,3	55,2	14,2		6474,0	1429,0	8150,0		49,2	40,3	18,1
1999			8100,0	1208,0	5170,0		64,3	6,55	13,0		6473,0	1434,0	8003,0		49,7	40,7	18,1
1998			8421,0	863,0	5023,0		64,6	58,9	9,3		6914,0	964,0	7877,0		50,0	43,9	12,2
1997			8462,0	802,0	4878,0		65,5	8,65	8,7		6853,0	935,0	0,7677		50,0	44,0	12,0
9661	in thousands	Males	8328,0	911,0	4785,0		65,9	59,4	6,6	Females	6775,0	1050,0	7637,0	(%)	50,6	43,8	13,4
1995	ii		0,6808	1110,0	4626,0		66,5	58,5	12,1		6682,0	1122,0	7475,0		51,1	43,7	14,4
1994			8070,0	1135,0	4525,0	(%)	67,0	58,8	12,3		0,7799	1240,0	7256,0		52,2	44,0	15,7
1993			8093,0	1276,0	4096,0		9,69	60,1	13,6		0,6299	1319,0	6917,0		53,6	44,8	16,5
1992			8308,0	1172,0	4054,0		70,0	61,4	12,4		6827,0	1221,0	0,8089		54,2	46,0	15,2
Specification			Employment	Unemployment	Persons outside the labour force		Participation rate	Employment rate*	Unemployment ratea		Employment	Unemployment	Persons outside the labour force		Participation rate	Employment rate*	Unemployment rate

Source: Badanie Aktywności Ekonomicznej Ludności, GUS; (LFS, CSO) Notes: ¹ 1992 - 1998 in November \*Employment rate- as a percentage of the population over 15 years old.

Figure III.1. Unemployment rates by sex (1992-2000)



Source: see table III.1

Table III.2. Average gross earnings by sex and education of employees

Specification	Total	So	ex
		men	women
		October 1999	
		in zł	
Total	1800,31	1990,93	1591,92
Tertiary	2700,98	3354,38	2207,01
Post-secondary	1666,62	2029,26	1583,48
Vacational secondary	1771,03	2001,20	1559,95
General secondary	1765,86	2018,91	1667,27
Basic Vacational	1483,42	1624,28	1131,23
Primary & incomplete primary.	1373,56	1547,99	1130,67
	8	as percentage of men	1
Total	90%	100%	80%
Tertiary	81%	100%	66%
Post-secondary	82%	100%	78%
Vacational secondary	88%	100%	78%
General secondary	87%	100%	83%
Basic Vacational	91%	100%	70%
Primary & incomplete primary	89%	100%	73%

*Source*: Wynagrodzenia według zawodów w październiku 1999 r., Informacje i opracowania statystyczne GUS (CSO), Warsaw 2000, p. 17.

Table III.3. Average gross wages and salariess by sex and occupational groups in 1999

Occupational groups	Average gross wages and salaries					
	Men	Women				
	in PLN	in PLN	as percentage			
			of men			
Total	1990,93	1591,92	80%			
Legislators, senior officials	4413,75	3272,5	74%			
and managers						
Professionals	2812,84	1999,16	71%			
Technicians and associate	2265,37	1618,57	71%			
profesionals						
Clerks	1681,41	1619,08	96%			
Service workers and shop	1419,25	1086,73	77%			
and market sales workers						
Skilled agricultural	1309,76	1188,33	91%			
and fishery workers						
Craft nad relates trades workers	1699,65	1083,19	64%			
Plant and machine operators	1720,39	1441,01	84%			
and assemblers						
Elementary occupations	1243	1026,1	83%			

Source: Rocznik Statystyczny 2001(Statistical Yearbook 2001) GUS (CSO), Warsaw, 2001, p. 167

Table III.4. Women by professional groups in 1998

Professional groups	Total	% of women in the group	Representation rate*
TOTAL	100	45,1	1
Legislators, senior officials	4,6	33,3	0,74
and managers			
Professionals	14,2	62,2	1,38
Technicians and associate	15,4	58,2	1,29
profesionals			
Clerks	13,1	76,7	1,7
Service workers and shop	15,4	67	1,49
and market sales workers			
Skilled agricultural	17,3	46,4	1,03
and fishery workers			
Craft and related trade workers	8,1	18,7	0,42
Plant and machine operators	2,3	11,9	0,26
and asseblers			
Elementary occupations	9,6	53,4	1,18

Source: Economic activity and unemployment in Poland in November 1998, Central Staticstical Office, Warsaw 1999; in: Anna Kowalska (2000).

Notes:

<sup>\*</sup> The representation rate shows in which professional groups women are over-represented in relation to the average participation rate of women in employment. It is quotient of women participation in certain professional groups to the overall womens' participation

Table III.5 . Long-term unemployment in number of unemployment by sex (1992-2000)

Years	Long-term une	employment (%)
	men	women
1992	40,6	49,2
1993	39,6	49,6
1994	38,4	49,4
1995	30,5	42,9
1996	32,8	47,0
1997	32,7	51,8
1998	27,0	49,9
1999	27,9	47,2
2000	35,5	52,1

Source: Bezrobocie rejestrowane w 1994 r., (Registered unemployment in 1994), GUS (CSO), Warsaw 1995; Bezrobocie rejestrowane w 2000 r., (Registered unemployment in 2000) GUS (CSO), Warsaw 2001.

Table III.6. Structure of wages and salaries by sex.

Specification				
	IX 1993	IX 1997	X 1998	X 1999
Total	100	100	100	100
Females	86,89	87,28	89,09	88,42
Males	111,81	111,54	110,47	110,59

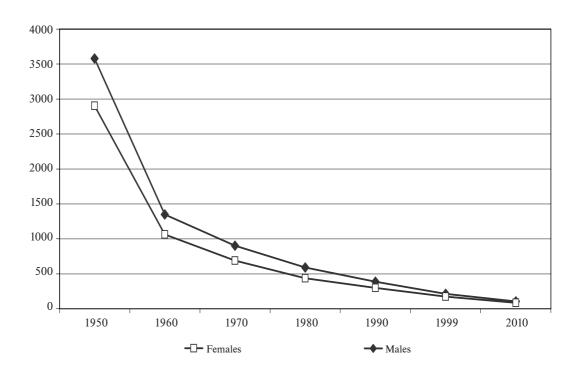
Source: Data of the Central Statistical Office

Table IV.1. Under 5 mortality rates (1950-1999)

Years	per 100 thous. of population
1950	3246,6
1955	2100,4
1959	1634,4
1960	1208,0
1961	1138,7
1962	1138,2
1963	1054,4
1964	1021,3
1965	907,2
1966	850,9
1967	840,3
1968	757,1
1969	795,0
1970	797,8
1971	730,0
1972	702,3
1973	650,5
1974	585,2
1975	623,5
1976	599,9
1977	597,4
1978	542,4
1979	509,2
1980	516,1
1981	485,2
1982	482,1
1983	462,3
1984	445,3
1985	417,3
1986	377,5
1987	366,8
1988	341,6
1989	340,3
1990	344,0
1991	330,1
1992	311,9
1993	285,6
1994	322,0
1995	272,3
1996	254,9
1997	215,9
1998	201,3
1999	193,4
1777	173,1

Source: Data of the Central Statistical Office

Figure IV.1. Under 5 morality rates by sex in 1950 – 1999 (2010 - projection)



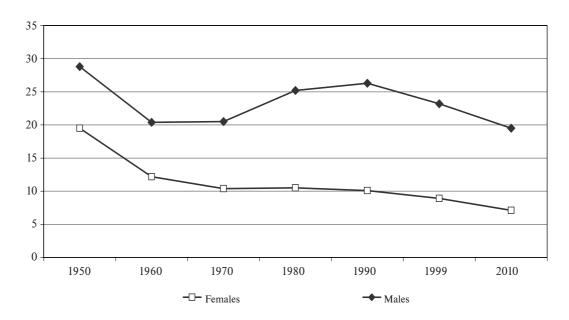
Source: for 1950-1999 see table IV.1

Table IV.2. Death of children by age and sex

Years	0 years	1-4 years
	per 100 thous.	per 100 thous. of
	of live birth	population of each
		sex and age group
1970	3668	105
1980	2548	80
1990	1934	59
1995	1360	43
1998	953	34
1999	885	38
	Ma	ales
1970	4096	117
1980	2879	90
1990	2159	68
1995	1471	47
1998	1037	37
1999	969	42
	Fen	nales
1970	3212	37
1980	2199	32
1990	1696	22
1995	1243	16
1998	864	17
1999	796	15
	Urbar	n areas
1970	3576	91
1980	2568	65
1990	1906	51
1995	1371	40
1998	963	31
1999	917	33
		l areas
1970	3744	117
1980	2524	99
1990	1966	70
1995	1348	46
1998	941	38
1999	847	44

Source: Rocznik Demograficzny 2000 (Demographic Yearbook 2000), GUS (CSO), Warszawa 2000, p. 274.

Figure IV.2. Probability of death in age 15 - 59 (2010 - projection)



Source: see table IV.3

### Table IV.3. Probability of death in age 15-59 (1950-2010)

(2010 - projection)

Years	Males	Females
1950	28,8	19,5
1955	23,7	15,2
1959	21,8	13,1
1960	20,4	12,2
1961	20,7	12
1962	20,9	12,1
1963	20,3	11,7
1964	19,5	11,3
1965	19,2	11
1966	19,2	10,8
1967	20	10,7
1968	20	10,6
1969	20,6	10,9
1970	20,5	10,4
1971	21,3	10,6
1972	20,3	10,1
1973	20,9	10,1
1974	20,3	9,9
1975	21,2	9,9
1976	22,4	10
1977	23,3	10,1
1978	23,9	10,2
1979	23,5	10,1
1980	25,2	10,5
1981	23,3	10,3
1982	23,1	10,5
1983	23,8	10,3
1984	24,8	10,5
1985	25,3	10,3
1986	25,1	10,4
1987	25	10,1
1988	24,7	10,2
1989	25,8	10,4
1990	26,3	10,1
1991	27,5	9,8
1992	26,5	9,5
1993	24,9	9,4
1994	24,6	9,1
1995	24,9	9,1
1996	23,9	9,1
1997	23,7	8,9
1998	23,4	8,9
1999	23,2	8,9
2010 (projection)	19,5	7,1

Source: Data for 1950-1999 of the Central Statistical Office

Table IV.4. Mortality rates\* by age and sex in age 15-59 (1950-1999)

Years	Males	Females
1950	643,6	419,4
1955	499,5	306,6
1959	452,7	259,2
1960	420,6	239,3
1961	429,2	234,5
1962	433,3	236,6
1963	420,7	228,2
1964	397,3	217,9
1965	392,5	210,9
1966	393,6	208,3
1967	409,7	204,1
1968	411,3	201,8
1969	422,7	208,2
1970	421,9	199,0
1971	442,0	202,6
1972	419,0	192,2
1973	432,6	191,9
1974	415,2	187,9
1975	440,8	188,0
1976	467,6	189,9
1977	489,5	192,4
1978	502,4	194,2
1979	493,2	191,2
1980	533,8	198,8
1981	485,2	190,5
1982	479,5	190,9
1983	496,0	191,6
1984	515,9	194,2
1985	527,0	197,7
1986	521,1	193,8
1987	518,6	195,3
1988	510,1	188,9
1989	538,9	191,1
1990	552,9	191,1
1991	582,7	196,9
1992	558,2	189,6
1993	515,3	179,6
1994	510,1	178,3
1995	517,4	176,4
1996	489,8	171,0
1997	489,3	169,5
1998	483,3	165,4
1999	475,1	165,6

Source: Data of the Central Statistical Office

Notes:

<sup>\*</sup>per 100 thous. of population of each sex and age group

### Table IV.5. Deaths by Selected Causes (1970-1998)

in %

	per 10 thous. of population						
Diseases	1970	1980	1990	1995	1999		
Infectious and parasitic diseases	3,2	1,6	0,8	0,6	0,6		
Malignant neoplasmus	14,2	17,1	19,3	20,5	20,6		
Diseases of the circulatory system	32	47,4	53,4	50,5	53		
Diseases of the respiratory system	6,8	5,5	4,1	3,4	5,5		
Diseases of the digestive system	3,3	3,6	3,2	3,3	3,2		
External causes	6	7,6	7,8	7,5	7,9		
Other	16,7	16,5	13,8	14,3	15,22		

Source: Demographic Yearbook 2000, CSO, p. 292-295; Statistical Yearbook 2001, CSO, p.111.

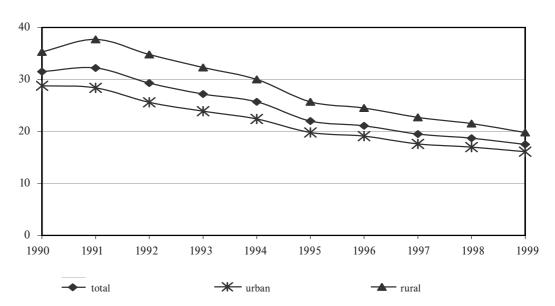
Table V.1. Teenage fertility per 1.000 women (1990-1999)

	total	urban	rural			Age		
				<=15	16	17	18	19
1990	31,5	28,8	35,3	1,72	6,63	20,07	47,13	89,52
1991	32,2	28,4	37,7	1,9	6,84	21,2	48,85	89,96
1992	29,3	25,6	34,8	1,85	6,47	19,1	43,35	82,04
1993	27,2	23,9	32,3	1,69	6,2	17,99	40,22	74,19
1994	25,7	22,4	30	1,67	5,82	16,73	37,1	69,02
1995	22	19,8	25,7	1,4	4,6	14,4	32,3	58,6
1996	21,1	19,1	24,5	1,3	4,8	13,6	30,1	56,9
1997	19,5	17,6	22,7	1,3	4,4	13,1	27,9	51,5
1998	19,1	17	21,5	1,11	4,2	12,7	24,06	48,98
1999	17,5	16,1	19,8	1,23	4,23	12,33	25,81	45,27

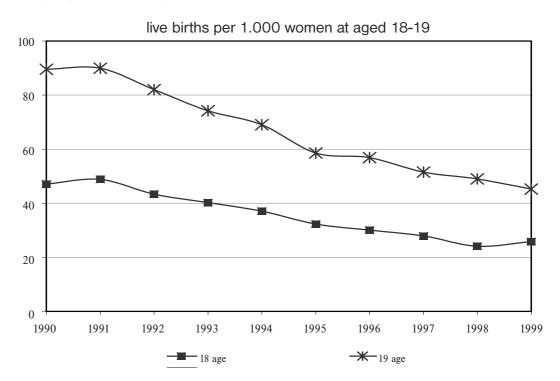
Source: Demography of Yearbooks, CSO

### Figure V.1. Teenage fertility (1990-1999)

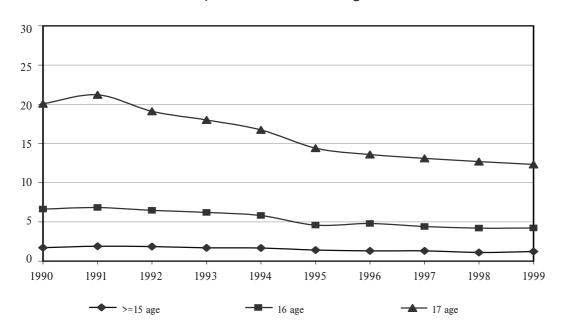
### A) live births per 1.000 women aged at 15-19



### B) Age-specific fertility rates



live births per 1.000 women at aged 15-17



Source: see table V.1.

Table V.2. Births out of wedlock among teenagers (1990-1999)

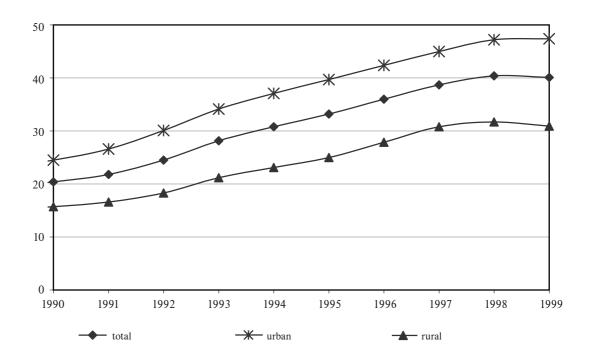
% of births at age 15-19

	Total	Urban	Rural
1990	20,4	24,5	15,7
1991	21,8	26,6	16,6
1992	24,5	30,1	18,3
1993	28,14	34,14	21,2
1994	30,8	37,09	23,1
1995	33,2	39,7	25
1996	36	42,36	27,88
1997	38,7	45	30,8
1998	40,4	47,2	31,7
1999	40,1	47,4	30,9

Source: own calculations based on Demographic Yearbooks, CSO

# Figure V.2. Births out of wedlock among teenagers (1990-1999)

% of live births



Sources: see table V.2

Table V.3. Contraceptive use at first intercourse

females		SAA, 1996		
	c 1947-51	c 1957-61	c 1967-71	c 1978-81
no method	59,3	56,2	50	22,3
Withdrawal	13,7	13,8	16	22,3
Periodic abstinence	16,1	18,1	16,6	6,4
Condom	7,2	6,5	11,2	55,7
Diaphragm	1,3	1,5	3	6,4
IUD	0,4	1,4	1,3	0
Pill	2,4	2,5	2,1	3,8
males		FFS '91*		SAA, 1996
	c 1947-51	c 1957-61	c 1967-71	c 1978-81
no method	49,3	45,3	39,2	19,7
Withdrawal	19,1	20,8	18,6	10,1
Periodic abstinence	8,9	8,5	8,1	4,8
Condom	20,5	23,9	29,4	68,8
Diaphragm	1,1	0,6	2,4	5,3
IUD	0,5	0,5	0,3	0
Pill	0,7	0,6	2,2	6,3

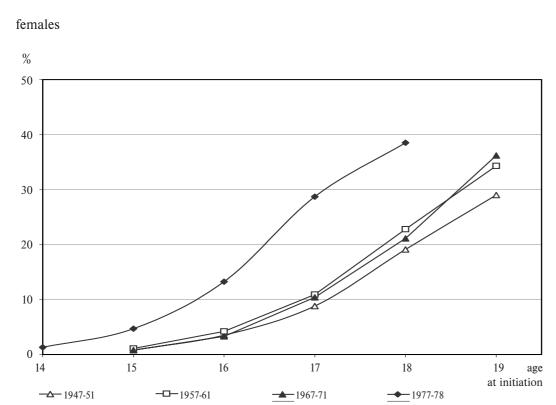
Source: on the base of FFS'91 and of "Sexual attitudes of adolescents" 1996

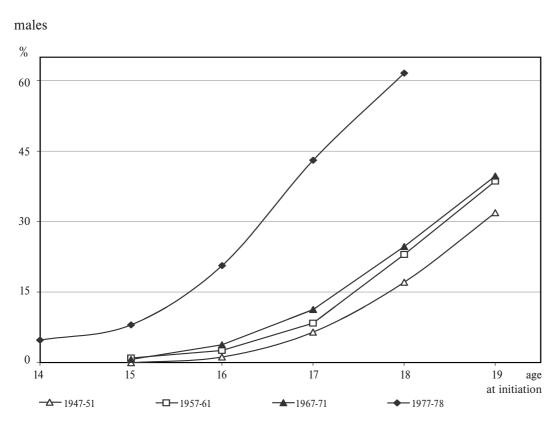
<sup>\*</sup> Methods and means used by the respondent or his/her partner

c - births cohort

Figure V.3. Sexual experiences for selected birth cohorts

% of males and females with sexual experiences





Source: on the base FFS'91 (c 1947-71) and "Sexual attitudes of adolescents" 1996 (c 1977-78)

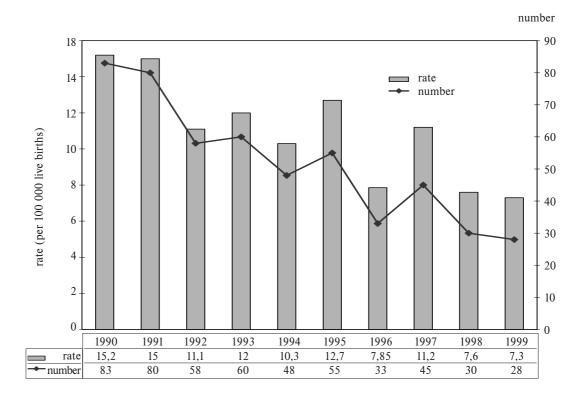
### Table V.4. Maternal mortality in Poland (1990-1999)

### Deaths of mothers in Poland (1990-1999)

Maternal mortality rate (per 100 000 live birth)								
Years	Total		from ol	ostetrical cause	es			
		total	haemorrhage	infections	gestosis	embolia		
						and others		
1990	83	15,2	5,1	4,6	1,5	4,0		
1991	80	15,0	5,1	2,9	3,1	3,6		
1992	58	11,1	4,5	2,9	3,1	0,6		
1993	60	12,0	5,7	1,7	2,6	2,0		
1994	48	10,3	3,4	3,4	0,6	2,8		
1995	55	12,7	1,9	3,9	2,3	4,6		
1996	33	7,8	1,2	2,1	0,5	4,1		
1997	45	11,3	3,2	2,2	1,0	2,7		
1998	30	7,6	1,3	1,5	1,3	3,5		
1999	28	7,3	1,8	1,3	0,3	3,8		

Source: "Zgony matek. Polska 1996-1998". M.Troszyński (ed). IMiDZ, Warsaw, 1999; "Zgony matek. Polska 1999". M.Troszyński (ed). IMiDZ, Warsaw, 2000.

Figure V.4. Maternal mortality (1990-1999)



Source: see table V.4.

## Table VI.1. CPI and public perception of the system change after 1989 in Poland (1996-2001)

Indicator	1996	1997	1998	1999	2000	2001
CPI (corruption	5,57	5,08	4,6	4,2	4,1	4,1
perception index)						
Public perception of the system change after 1989*	n.a.	56	n.a	39	26	n.a.

Sources of data and remarks: CPI - Transparency International (various issues from www.transparency.org). CPI is between 0 and 10, the higher the better (less corruption).

Public view - CBOS research: Public view of changes after 1989

# Table VII.1. Basic household amenities; housing units with basic amenities as a proportion of all inhabited housing units

in %

Amenity	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000
Urban housing units											
Water	95,3	95,6	95,9	96,2	96,4	96,7	96,9	97,1	97,4	97,6	97,6
mains											
Lavatory	86	86,5	87	87,4	87,9	88,3	88,7	89,1	89	89,4	90,3
Bath	83,5	84,1	84,7	85,1	85,6	86	86,5	86,9	87,4	87,9	88,3
Grid gas	71,8	72,4	73	73,4	74,3	74,9	75,4	75,9	76	76,4	
Central	74,4	75,3	76,1	76,6	77,3	77,8	78,3	79	79,6	80,3	80,8
heating											
				Rur	al housi	ng units					
Water	67,6	69,4	71,2	72,2	74,4	76,2	77,8	79,4	80,8	82,1	83,1
mains											
Lavatory	49,4	51	52,6	54	55,4	57	58,4	59,8	61,4	62,6	63,8
Bath	54,2	55,7	57,3	58,6	60	61,5	62,9	64,2	65,3	66,4	67,6
Grid gas	6,3	6,7	7,2	7,6	10,2	12,1	13,1	13,8	13,9	15,1	
Central	42,9	44,4	45,8	47	48,3	49,7	50,9	52,2	52,2	53,3	54,4
heating											

Source: Wskaźniki przemian warunków życia w okresie przechodzenia do gospodarki rynkowej w latach 1989-1994; Statistical Yearbooks, CSO.

<sup>\*</sup> data from public polls on question: Looking back, can you tell whether the system change in 1989 was worthwhile? Data indicate difference between "worthwhile" and "not worthwhile" answers.

Table VII.2. Industrial and municipal sewage discharged into surface waters in cubic hectometers and as a percentage (%)

	1990	1995	1996	1997	1998	1999	2000
Total:	11368,4	9980,9	10075,5	9961,0	9843,5	9492,2	9160,7
Iutai.	(100)	(100)	(100)	(100)	(100)	(100)	(100)
Industrial	9054,5	8128,5	8323,7	8269,0	8188,0	7902,3	7666,7
industrial	(79,6)	(81,4)	(82,6)	(83,0)	(83,2)	(83,3)	(83,7)
Municipal	2313,9	1852,4	1751,8	1691,9	1655,5	1589,9	1494,0
Withiicipai	(20,4)	(18,6)	(17,4)	(17,0)	(16,8)	(16,7)	(16,3)
Sewage requiring	4114,7	3019.8	2913.8	2849.1	2801,9	2664.8	2501,5
treatment:	(100)	(100)	(100)	(100)	(100)	(100)	(100)
Treated:	<u> </u>	`		2328,8		` ′	2200,2
Treated.	2772,1	2319,4	2303,0	-	2377,7	2288,4	-
M 1 · 11	(67,4)	(76,8)	(79,0)	(81,7)	(84,9)	(85,9)	(88,0)
Mechanically	1458,5	917,3	902,5	913,5	926,6	850,1	732,7
	(35,5)	(30,4)	(31,0)	(32,0)	(33,1)	(31,9)	(29,3)
Chemically	217,8	188,0	178,2	175,3	142,5	134,6	131,2
	(5,3)	(6,2)	(6,1)	(6,2)	(5,1)	(5,1)	(5,2)
Biologically	1095,8	1133,0	1096,6	1024,1	980,3	919,6	875,9
	(26,6)	(37,5)	(37,6)	(35,9)	(35,0)	(34,5)	(35,0)
With increased	_	81,1	125,6	215,8	328,2	384,2	460,4
removal	-	(2,7)	(4,3)	(7,6)	(11,7)	(14,4)	(18,4)
of biogenes							
Untreated:	1342,6	700,2	610,8	520,3	424,2	376,4	301,3
	(32,6)	(23,2)	(21,0)	(18,3)	(15,1)	(14,1)	(12,0)
Discharged	419,7	105,4	103,6	102,7	80,1	79,2	50,8
directly	(10,2)	(3,5)	(3,6)	(3,6)	(2,8)	(3,0)	(2,0)
from industrial							
plants							
Discharged into	922,9	594,8	507,2	417,6	344,1	297,2	250,5
public sewers	(22,4)	(19,7)	(17,4)	(14,7)	(12,3)	(11,1)	(10,0)

Source: Ochrona Środowiska 2001. Informacje i opracowania statystyczne. GUS, (CSO), Warsaw, 2001.

### Table VII.3. Towns and urban sewage treatment plants

	1990	1995	1999	2000
Towns:				
Total	830	860	875	880
operating wastewater treatment plants	467	643	778	801
not operating wastewater treatment plants	363	217	97	79
Urban wastewater treatment plants	566	793	943	965
Inhabitants of towns operating wastewater		15554,5	18647,3	18928,1
treatment plants in tous.				
As percentage of total urban population		65,1	78	79,3

Source: Ochrona Środowiska 2001. Informacje i opracowania statystyczne. GUS, (CSO), Warsaw, 2001.

Table VIII.1. Pressure exerted on the environment

Specification	1988	1989	0661	1661	1992	1993	1994	1995	9661	1997	1998	1999
Water intake	14800	15100	14200	13300	12600	12300	11978	12066	12008	11799	11313	11275
(million cu.m)												
Sewage discharge	12059	12266	11368	10584	10048	9738	7676	1866	10076	1966	9844	9492
(million cu.m)												
SO2 emissions	4180	3910	3210	2995	2820	2725	2605	2337	2368	2181	1897	1719
(1,000 tons)												
NOx emissions	1550	1480	1280	1205	1130	1120	1105	1120	1154	1114	166	951
(1,000 tons)												
CO2 emissions	509	488	407	397	393	366	356	335	373	362	338	330
(million tons)												
Particulate matter	2650	2400	1950	1680	1580	1495	1395	1308	1250	1130	871	815
emissions												
(1,000 tons)												
Industrial wastes	186	171	144	128	122	120	121	123	125	125	133	126
(million tons)												
Energy	5386	5124	4247	4159	4120	4263	4077	4180	4515	4312	4143	3803
consumption												
(1,000 TJ)												

Source: Roczniki ochrony środowiska (Yearbooks of Environmental Protection), GUS (CSO)

Table VIII.2. Intensity of pressure exerted on the environment (per 100 zl of GDP)

Specification	1988	1989	1990	1661	1992	1993	1994	1995	1996	1997	1998	1999
Water intake	23,4	23,82	25,34	25,53	23,57	22,17	20,52	19,32	18.14	69:91	15.27	14.62
Sewage discharge	19,07	18,35	20,29	20,31	18,8	17,55	16,78	15,98	15.22	14.09	13.28	12.30
(cu.m)				,				,				
SO2 emissions	6,61	6,17	5,73	5,75	5,27	4,91	4,46	3,74	3.58	3.08	2.56	2.23
(kg)												
NOx emissions	2,45	2,34	2,28	2,31	2,11	2,02	1,89	1,79	1.74	1.58	1.34	1.23
(kg)												
CO2 emissions	8,0	0,77	0,73	0,76	0,74	99'0	0,61	0,54	0.56	0.51	0.46	0.43
(tons)												
Particulate matter	4,19	3,79	3,48	3,22	2,96	2,69	2,39	2,09	1.89	1.60	1.18	1.06
emissions (tons)												
Industrial wastes	0,29	0,27	0,26	0,25	0,23	0,22	0,21	0,2	0.19	0.18	0.18	0.16
(tons)												
Energy consumption	8,52	8,08	7,58	7,98	7,71	7,68	86,9	69,9	6.82	6.10	5.59	4.93
(GJ)												

Source: Own calculations based on: Roczniki ochrony środowiska (Yearbooks of Environmental Protection), GUS (CSO).

Table VIII. 3. Investment outlays on environmental protection \*

1990 1991
415 840
0,7 1
3,6 5

Source: Roczniki ochrony środowiska. (Yearbooks of Environmental Protection), GUS CSO).

\* since 1996, expenditure on the construction of sewerage networks, on new fuel burning technologies, on water treatment plants and on integrated investment projects has been taken into account in the amount of investment outlays