

**NATIONAL REPORT**  
**Republic of Belarus**

**Problems**  
**of Human Settlements**  
**Development**

# **Contens**

## **Chapter 1.**

<b>Evaluation and priorities Development of Human Settlements and Socio-Economic Trends on the National and International Level.....</b>	<b>3</b>
1.1 Evaluation of past experience .....	3
1.2 New trends.....	4
<b>2. Present conditions in the development of human settlements .....</b>	<b>5</b>
<b>2.1 Population: general overview.....</b>	<b>5</b>
2.1.1. Population growth .....	5
2.1.2. Population mobility and migration .....	5
2.1.3. Age structure .....	7
2.1.4. Employment.....	7
2.1.5. Disease rates .....	8
<b>2.2. Population and human settlements.....</b>	<b>9</b>
2.2.1. Classification of urban settlements .....	9
2.2.2. Urban population .....	10
2.2.3 Rural population.....	10
2.2.4. Living conditions .....	10
2.2.5 Household Quality of Life .....	12
<b>2.3 Housing.....</b>	<b>13</b>
2.3.1. Overview of the housing stock .....	13
2.3.2. Housing development .....	13
2.3.3. Use and repair of housing stock.....	14
2.3.4. Housing construction .....	15
2.3.5. Inventory of the housing stock .....	18
2.3.6. Housing market.....	19
<b>2.4 Rural and urban infrastructure .....</b>	<b>20</b>
2.4.1. Urban transport system .....	20
2.4.2. Transport network.....	20
2.4.3. Maintenance infrastructure .....	21
2.4.4. School education .....	23
<b>2.5. The state of the environment.....</b>	<b>25</b>
2.5.1. Environmental situation .....	25
2.5.2. Environmental pollution in Minsk .....	25
2.5.3. Waste formation and accumulation.....	26
<b>2.6 Territorial resources of populated areas.....</b>	<b>27</b>
2.6.1. The use of territorial resources .....	27
2.6.2 Urban development .....	28
2.6.3. Land market.....	28
2.6.4 Land assessment.....	30
2.6.5. Land payments .....	31
<b>2.7. Local administration and self-rule. ....</b>	<b>32</b>
2.7.1. The present period of this country's development is marked by the formation of a system of local government and self-rule.....	32
2.7.2. Revenues and expenditures of local governments .....	32
2.7.3. Organisation of local government .....	34
2.7.4. Managing the development of human settlements .....	34

# **National report Republic of Belarus**

## **Chapter 2.**

### **National plan of human settlements development**

1. Strategic goals .....	36
2. Priorities and problems of human settlements development .....	36
2.1. Social and economic problems .....	36
2.2. Territorial distinctions .....	37
2.3. The infrastructure .....	38
2.4. Environmental problems .....	38
2.5. Preserving the cultural and historical identity of cities.....	39
3. Human settlements: development strategies.....	39
4. Implementation measures and mechanisms.....	42

## **Chapter 3**

### **International co-operation and assistance in the development of human settlements**

1. Priority .....	44
2. Co-operation programmes .....	45

## **Chapter 4.**

### **Key indicators**

## **Chapter 1. Evaluation and priorities**

### **Development of Human Settlements and Socio-Economic Trends on the National and International Level**

#### **1.1 Evaluation of past experience**

**T**he Republic of Belarus is a large industrial region specialising in sectors such as complex machinery, instrument making, production of mineral fertilisers, petrochemistry, textile industry, wood processing, animal, flax and potato farming.

Belarus has all the necessary conditions for it to use more efficiently the advantages of industries concentrated on its territory. These were as follows:

- **High percentage of resource flexible industries, using imported raw materials and with extensive markets;**
- **Well developed transportation network; growing percentage of agricultural produce for industrial processing; good access to resources for the production of various types of building materials.**

However, the process of territorial concentration of industry was impeded by number of factors, such as the branch structure of new industrial construction, the existing network of populated areas and the natural limits imposed upon production development by the concentration of industry in populated areas.

The conditions of post-war reconstruction and development of Belarus have enabled it to reach a high standard of social and economic development. They have also caused a serious imbalance in the organisation and development of its territory, distribution of human resources, social infrastructure, and use of land and natural resources.

High growth rates in industrial concentration have greatly increased the role of the Republic's eleven biggest cities (Minsk, Gomel, Brest, Vitebsk, Grodno, Mogilev, Orsha, Bobruisk, Pinsk, Baraniovichi, Borisov) which now account for 53.8% of the total industrial output and 65.4% of commercial property.

The process of intensive urbanisation in a limited number of big cities has led to a situation where these cities account for 63% of Belarus' urban and 42% of the total population.

More than a quarter of the population (2.5 million) has migrated from rural to urban areas since the beginning of the 1960's. This process intensified each year, from an annual 0.5% in the 60's to 2% in the 1970's and 2.4% in the 80's.

On the other hand, the development of 169 small urban areas (with less than 20,000 people) has almost stopped. Of them, 30, such as Turov, Kholopenichi and Ulla, have depopulated by at least 15% in the last 15-20 years. Between 1960 and 1985, the number of rural settlements had dropped 28.6% and their average population from 154 to 148.

Considerable territorial disparities are observed in the non-production sphere. The Republic's 11 biggest cities accounted for 82.3% of residential and 87.6% of public buildings. The remaining 198 urban settlements had no more than 17.7% and 12.4%, respectively. Of all housing, 84.5% were equipped with modern conveniences in the bigger cities, 47.3% in smaller towns and only 5.4% in rural areas. Housing construction in smaller towns is 20-40% behind that in medium-sized and big cities.

Differences in access to public amenities and maintenance services have reached a level when, with a general shortage of public amenities equalling 30 — 40%, rural population has no more than 10 — 15% of these services, residents of collective and state farm centres no more than 20 — 25%, and of district centres 30 — 60%. Centralised water supply provides 200 — 300 litres daily per household in big cities, 30 — 100 litres in smaller towns and 10 — 30 litres in rural areas. Substantial differences exist in the development

## **National report Republic of Belarus**

of the transport network. The length of tarmac roads per square kilometre in Vitebsk region is two times lower than in Grodno region, even though the density of populated areas is almost the same in both territories. Considerable disparities are observed, from region to region, in the development of the national and local road networks, where the length of improved roads per unit of territory varies by 30 — 40%. Access to public transport in rural areas is two times lower than in urban settlements. Transport mobility of the population, also an indicator of social activity, declined three per cent in 1975. Only 55% of all rural population live within one hour of one hour of travel from their adjacent district centre.

Because of territorial disparities in the location and development of industry, differences in work and living conditions as well as limited job opportunities in smaller towns and rural areas, the economically active population continues to migrate to bigger cities. This leads to the ageing of the population in 70% of the Republic's territory and in rural areas in particular. The process of depopulation has affected 116 districts out of 118, or 80% of the republic's territory.

**A**n acute shortage of land for new construction is observed in areas affected by intensive urbanisation. 25,000 — 50,000 hectares of land, including 5,000 — 7,000 hectares of agricultural land, are allocated annually for industrial construction, recreation areas, amateur farming co-operatives, oil and gas pipelines, communication and power transmission lines, sewage works, water intakes and storage grounds for industrial and household waste. At the same time, developed farmland is being out of agricultural use. Urban land is being used inefficiently. Only 30-35% of industrial areas, occupying, on average, 20 — 25% of urban territories have so far been

developed. Residential buildings occupy 330 square metres per hectare, which is 10 — 12 times below the optimum level.

The state of the environment is unfavourable in 25% of the Republic's territory. 30% of agricultural land is vulnerable to erosion. More than 60 per cent of the territory is experiencing water shortages. The ploughing of land along rivers and land erosion have increased the annual amount of solid waste by 30 million tonnes. 30 per cent of the total length of rivers has no protective forest belts. More than 5km<sup>3</sup> of liquid waste are dumped into rivers and lakes annually. More than 50% of the river network are polluted. A total of 2.8 million tonnes of pollutants are released into the atmosphere every year. In addition to areas affected by radioactive contamination after the Chernobyl accident, 10% of the republic's territory is exposed to industrial pollution and another 60% to pollutant accumulation.

Combined with other problems, imbalances in the location of industry, social and technological infrastructure, as well as the levels of economic development in different areas and in the use of land and natural resources have ultimately effected the nation's economy and development. The negative results became apparent already in the early 1970's. Losses resulting from such imbalances were estimated to be 6-8% of the total amount of capital investment in the economy.

In the last 15 years, Belarus has failed to implement any radical changes towards intensifying its economy and improving efficiency. This failure has ultimately revealed an inadequate organisation of economic and territorial resources resulting from a lack of an integrated approach to resolving various economic, socio-demographic and environmental problems on all levels and stages, from forecasting and planning to realisation.

### **1.2 New trends**

**T**he development of human settlements in Belarus, which is a complex and multi-level process, has acquired a number of new trends resulting from geopolitical conditions and the historical development of its human settlements. The key role in this process is played by the achievement of independence and formation of new institutions of a democratic society. Also an important

factor is the increasing significance of Belarus' geographic position in the centre of Europe.

An important role in the development of Belarus' human settlements is being played by the progress of market reforms and creation of an adequate legal support mechanism for the entire system of market transformation, expansion of personal rights and freedoms, as well as

## **National report Republic of Belarus**

property reform, formulation of new economic and social policies and reforming local government and self-rule.

Throughout 1995, the national economy of Belarus continued to remain in a state of permanent economic crisis. Gross domestic product (GDP) has been falling steadily for the last several years. In relation to 1994, GDP fell 10% in 1995, industrial output 11.5% and agricultural output 5%. The fall cannot be attributed entirely to structural changes and break-up of economic links with the republics of the former USSR. It was mainly caused by the inefficiency of the national economy and low qualities of domestic products. These two factors resulted in the traditional markets and ability to purchase material inputs.

Among other reasons for the industrial decline are settlements difficulties, high taxes, shortage of working capital and others.

Investment, foreign trade and transport were the hardest hit. Capital investment dropped by 25%, foreign trade figures 24.5% and transportation of cargo by all means of transport 37%.

Between 1994 and 1995, personal incomes had grown 6.3 times and consumer prices 8.1 times. Real incomes had thus dropped 22%, affecting the quality of life. Output of

consumer goods fell 25.8%, and provision of personal services 7%. Unemployment had reached 2.7% of the economically active population by the end of 1995. Throughout the period of economic crisis (1991 — 95), gross domestic product fell by a total of 37.0%, industrial output by 40.8%, gross agricultural output 15.3%, capital investment 64% and industrial investment by 69%.

The transition to the market system highlighted numerous imbalances in the national economy. The economy that had been built within the former Soviet Union has low material and energy efficiency. It is not focused on market demands or domestic needs and requires serious restructuring and modernisation.

The social and economic situation requires formulation of a new economic policy directed at creating the basics of a socially oriented economy built on individual rights and freedoms, such as freedom of private enterprise, liberty to choose a career or profession, equality of all forms of property, their inalienability and use in the interests of society. This new system would link a worker's living standards to his performance in the workplace, provide social support to those unable to work and other vulnerable groups of the population, and promote social partnership.

## **2. Present conditions in the development of human settlements**

### **2.1 Population: general overview**

#### **2.1.1. Population growth**

**T**he Republic of Belarus occupies an area of 207,600 square kilometres with a population of 10,297,000 people as of January 1, 1995.

Belarus' territory is divided into six administrative regions and 118 districts. It has 102 cities, and 109 urban and 24,583 rural settlements. There was a total of 25 municipal districts within the Republic's biggest cities and 1,447 rural Soviets in rural areas. The capital city of Belarus, Minsk, has the status of a separate administrative unit with a population of 1.7 million. 69% of the Republic's population live in cities and 31% in rural areas.

#### **2.1.2. Population mobility and migration**

**T**he Republic's population had been rising until 1994. Growth had been recorded in urban areas while rural areas were steadily depopulating. In 1994, an absolute decline in the population was recorded for the first time in the fifty years following the war. The decrease was caused by a sharp decrease in the birth rate and a rise in the mortality rate.

This year, the population will continue to decline. Due to natural reasons and emigration, the population decreased by 22,200 in 1994. The population declined a further 22,000 because of a high mortality rate in the first nine months of 1995.



## National report Republic of Belarus

Changes in the population figures are shown in Table 1.

During the last 20 years the population has increased by a total of 980,000. The urban population grew by 2,411,700 and the rural population fell by 1,431,700.

Population grew by 0.6% annually between 1975 and 1985, and by 0.35% until 1994. The urban population grew by an annual 2.90 and 1.45%, respectively. Rural areas were depopulating at the rate of 1.3% per year before 1986 and 1.7% up until today.

Changes in the size of the population are determined by such factors as birth and death (i.e. natural mobility), migration and administrative and territorial reforms (see table 2).

Up until the 1990's, population growth largely resulted from a high birth rate, which exceeded the rate of immigration. The latter began to decline in 1990. In 1992 and 1993 the number of immigrants to the Republic exceeded the number of emigrants. In 1993, there were 86,000 immigrants and 47,000 emigrants, mainly to other CIS countries. In 1994, 53,000 arrived in Belarus while 56,000 left it. The rate of emigration to non-CIS countries has remained unchanged since 1993, when 6,900 citizens received permission to emigrate. Changes in immigration figures can be attributed to deteriorating living standards in other regions of the former USSR and the people's desire to return to their former place of residence. In 1994, emigration again exceeded immigration.

Before the 1990's, urban population grew mainly as a result of rural residents' migrations to the cities. More than 1,000,000 rural dwellers moved to cities between 1976 and 1990.

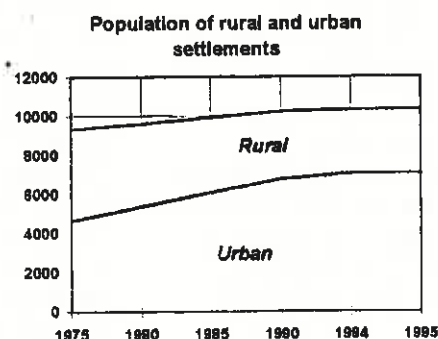
Lately, the rate of migration to urban areas has begun to decline. Only 6,000 rural dwellers moved to the city in 1994, as compared to 86,000 in 1991.

In 1994, the number of deaths among urban dwellers in Vitebsk region and several settlements in the Gomel region exceeded the number of births.

Between 1975 and 1995, rural population decreased by 1,431,700 (30.7%). The deepest reductions were recorded in Gomel, Minsk and Grodno Regions (see table).

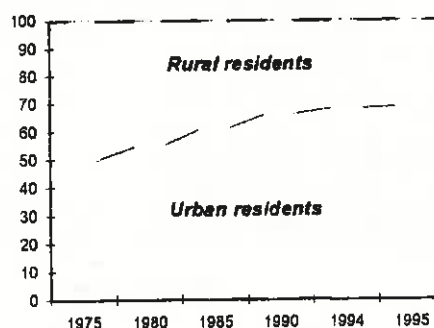
Migration of rural residents to cities has been the main factor leading to a decline in rural population. Migration accounted for 60% of such decline in the 1980's. Migration of young people from rural areas, of whom 50% were women, caused a sharp decline in the number of births, recorded for the first time in 1978. The number of deaths exceeded the number of births for the first time that same year.

**Diagram № 1.1**



**Diagram № 1.2**

as % of the total population



**Table № 1**

<b>Population of rural and urban settlements</b>							
		1975	1980	1985	1990	1994	1995
Number of permanent residents, 1000		9317,2	9591,8	9929	10211,4	10319,4	10297,2
	Urban	4649,1	5361,5	6077,4	6762,4	7036,7	7060,8
	Rural	4668,1	4230,3	3851,6	3449	3283,7	3236,4
As % of the total population:							
	Urban	49,9	54,8	61,2	66,2	68,2	68,6
	Rural	50,1	45,2	38,8	33,8	31,8	31,4

## National report Republic of Belarus

By 1994, the number of deaths exceeded the birth rate in nearly all rural districts. During the last ten years, the excess of deaths over births in rural areas equalled 12,000 — 30,000 annually.

### 2.1.3. Age structure

Changes in the birth rate, number of deaths and migration have affected the age structure of the population. Changes in the age structure are described by the following statistics (see table 4)

Between 1975 and 1995, the number of children aged under 15 had declined from 27.6% to 23.5%, while the number of pensioners had increased from 16.2 to 20.9%. The number of children exceeded the number of those 60 years by 1,056,000 (69.7%) in 1975 and only by 274,000 (12.7%) in early 1995.

Even greater differences are observed in the age structure of the urban and rural population. One third of all rural dwellers are past retirement age. Only 28% of all children live in rural areas. The number of children in rural areas has fallen two-fold over the last 20 years.

Growth in the number of people of employment age is becoming increasingly slow. The number of citizens in this age group grew by 17,000 in 1993 and by only 2,000 in 1994.

Table № 2

	total, 1000 people	Because of:		
		natural mobility	migration changes	in the administrative structure
<b>1975-1980</b>				
Total	349,7	382,6	-32,9	-
Urban areas	858,1	391,9	440,6	25,6
Rural areas	-508,4	-9,3	-472,5	-25,6
<b>1981-1990</b>				
Total	565,5	610,3	-44,8	-
Urban areas	1344,7	703,5	598,7	42,5
Rural areas	-779,2	-93,2	-643,5	-42,5
<b>1991-1993</b>				
Total	106,9	17,4	89,5	-
Urban areas	192,9	92,6	97	3,3
Rural areas	-86	-75	-7,5	-3,3
<b>1994</b>				
Total	-22,2	-19,4	-2,8	-
Urban areas	24,1	12,3	7,9	3,9
Rural areas	-46,3	-31,7	-10,7	-3,9

### 2.1.4. Employment

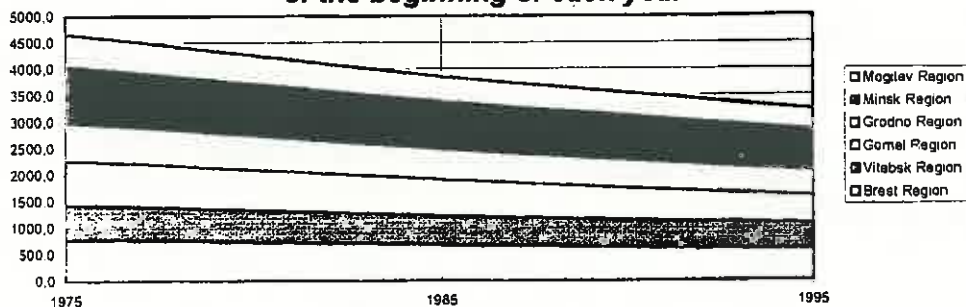
4,500,000 people were involved in all types of economic activity in 1994, four per cent less than in 1993. The number of public sector employees dropped by 100,000 and constituted 60% of the national total. The reduction affected mainly the industrial sector. The number of employees in industrial enterprises fell 8%, construction companies 13% and transport 5%. In the services sector, the number of employees grew 2%, mainly in areas such as health care, education, housing maintenance and banking. In contrast, science and scientific support reduced the number of their employees.

Table № 3

	Number of rural residents at the beginning of			Absolute reduction between 1975 and 1995, 1,000 people	Changes in the size of the rural population	
	1975	1985	1995		1975-1984	1985-1994
	National total	4668,1	3851,5		3236,4	1431,7
<b>By region:</b>						
Brest Region	791,1	678,5	590,5	200,6	3,00	2,70
Vitebsk Region	664,5	549,6	484,7	179,8	3,70	2,70
Gomel Region	824,0	686,2	512,8	311,2	3,60	5,65
Grodno Region	706,5	560,4	466,1	240,4	4,55	3,60
Minsk Region	1067,3	900,4	790,8	276,5	3,35	2,55
Mogilev Region	614,7	476,1	391,1	223,6	4,95	3,85

Diagram № 3.1

Size of the rural population as of the beginning of each year





## National report Republic of Belarus

In 1995, 231,500 people turned to employment services for assistance in finding work. Of them, 118,500 (51.2%) were given employment. As of late December 1995, 131,200 were recorded as officially unemployed, which constituted 2.7% of the economically active population. The unemployment rate equalled 1.4% in December 1993. The number of unemployed has grown by 29,900 (1.3 times) since December 1993 and the number of job vacancies reduced by 7,800 (38%). As of December 1994, there were, on average, 12 unemployed per every job vacancy. In separate regions, this ratio was much higher — 23 per each job vacancy in Brest region, 24 in Minsk Region, 18 in Grodno region, 11 in Gomel Region, 15 in Vitebsk region and 13 in Mogilev Region.

As of late December 1995, 68,700 unemployed (52.4%) were receiving unemployment benefits.

The Republic pursues a policy of providing social support for its population. The size of the minimum wage and the national pay scale are being regularly revised, with equivalent rises being provided in wages, pensions, stipends and benefits. Price control is being preserved on separate goods and services, such as fuel, gas, and electricity sold to the public.

However, few social problems have been eased, and some have even grown worse. Living standards of the least well-off are continuing to fall and the rate of unemployment is rising. Wages are increasingly losing their significance as an incentive for good performance at work. Their share in personal incomes has fallen from 73% in 1990 to 64% in 1994. The gap between the rich and the poor is widening, while the public's buying power is falling along with government spending on social programmes.

### 2.1.5. Disease rates

The core statistics regarding public health look somewhat better than in other CIS countries but much worse than in industrial countries with high per capita GDP. The most typical trends are rising death rates and reductions in the birth rate, falling life expectancy and rising disease rates. The number of births per every 1,000 fell from 17.0 in 1984 to 10.7 in 1994 (37.1%) and the number of deaths per 1,000 rose from 10.5 to 12.6 (20%). Average life expectancy at birth equalled 68.9 years in 1994 (63.5 years for men and 74.3 years for women).

Falling living standards and the poor state of the environment have been the main reasons for the worsening of public health. Among the most alarming effects of the Chernobyl accident are the growing number of diseases of the thyroid glands in children and teenagers (various forms of chronic thyroiditis, tumours, adenomatous and exophtalmic goitre, and hypothyroidism), causing substantial damage to the health of the younger generation. Chronic disease among Chernobyl victims is linked to a great extent with the syndrome of disadaptation, resulting from the metabolic, immune and hormone anomalies acquired in conditions of radioactive and chemical contamination, combined with considerable psychological and emotional tension. 530,000 children and teenagers live in areas affected by radioactive contamination. In 1994, the number of recorded cases of thyroid cancer in children equalled 3.6 per every 100,000. In other European countries, this number did not exceed 0.5 per 100,000. Although the public is becoming increasingly vulnerable to practically all diseases, the rising number of cases of endocrine, digestion and immune problems is especially alarming.

**Table № 4**

<b>Age structure</b>									
	1975			1985			1995		
	Total population	Urban	Rural	Total population	Urban	Rural	Total population	Urban	Rural
Total population, 1,000 people	9317	4649	4668	9929	6077	3852	10297	7061	3236
Of whom:									
below employment age	2570	1246	1324	2409	1598	811	2425	1737	688
at employment age	5233	2928	2305	5720	3758	1962	5721	4258	1463
beyond employment age	1514	475	1039	1800	721	1079	2151	1066	1085
aged 16 — 25	2041	1321	720	2283	1599	684	1992	1496	496
<b>В общей численности населения, %</b>									
Все население, тыс. человек	100	100	100	100	100	100	100	100	100
Of whom:									
below employment age	27,6	26,8	28,4	23,9	26,3	21,1	23,5	24,6	21,3
at employment age	56,2	63,0	49,4	55,4	61,8	50,9	55,6	60,3	45,2
beyond employment age	16,2	10,2	22,2	20,7	11,9	28,0	20,9	15,1	33,5
aged 16 — 25	21,9	28,4	15,4	19,4	26,3	17,8	19,3	21,2	15,3

# National report Republic of Belarus

Table № 5

Classification of urban areas by the size of their population, as of January 1, 1995				settlements Number of residents		
	Total	Towns and Cities	Other urban	Total	Towns and Cities	Other urban
Total	211	102	109	7060,8	6563,9	506,9
Category, by population size, 1000						
3 or less	48	2	46	90,1	5,4	84,7
3-4,9	23	1	22	88,6	4,8	83,8
5-9,9	51	16	35	387,5	128,1	259,4
10-19,9	47	42	5	637,8	581	56,8
20-49,9	18	17	1	533,8	511,6	22,2
50-99,9	10	10	-	723,2	723,2	-
100-249,9	8	8	-	1115,7	1115,7	-
250-499,9	4	4	-	1314,7	1314,7	-
500-999,9	1	1	-	503,2	503,2	-
1.000 and over	1	1	-	1666,2	1666,2	-

Recorded disease rates among Chernobyl victims are generally higher than among the general public.

Among childhood diseases, there is an increasing proportion of inborn and hereditary illnesses. The rise can be attributed to the presence in the environment of a large number of factors inducing mutation, as a result of the Chernobyl accident and the increasing use of chemicals in agriculture. Among the most widespread causes of deaths, heart disease is in the first place, cancerous tumours in the second and accidents, murders, suicides and other types of violence in the third. Ever since the 1990's, there has been a continuous decline in the level of physical development of children and teenagers, caused by worsening diets and opportunities for organised recreation in the summer. The disease rate, and especially the number of recorded cases of breathing problems, is also affected by high atmospheric pollution in a number of Belarusian cities (Mogilev, Novopolotsk, Polotsk, Vitebsk, Orsha, Gomel, Svetlogorsk, Mozyr, etc.)

## 2.2. Population and human settlements

### 2.2.1. Classification of urban settlements

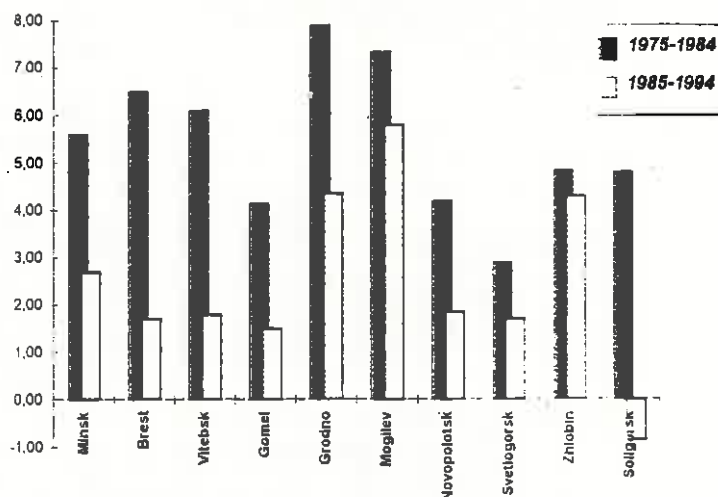
The Republic of Belarus has formed a relatively balanced and well developed network of urban settlements. Occupying 1.1% of the Republic's territory, they account for 69% of its population. At present, Belarus is living in a period of overall stabilisation in the size of its population. Between 1990 and 1995, the population grew by 85,800. The number of urban dwellers grew by 298,400 and rural dwellers decreased by 212,600.

Table № 8

Annual rates of urban population growth/ decline		
	1975-1984	1985-1994
Total urban population	2,90	1,45
Cities:		
Minsk	5,60	2,70
Brest	6,50	1,70
Vitebsk	6,10	1,80
Gomel	4,15	1,50
Grodno	7,90	4,35
Mogilev	7,35	5,80
Novopolotsk	4,20	1,85
Svetlogorsk	2,90	1,70
Zhlobin	4,85	4,30
Soligorsk	4,80	-0,85

Diagram № 9

Annual rates of urban population growth/ decline, %



## **National report Republic of Belarus**

Population growth is slowing down in urban, as well as rural, areas. Between 1979 and 1989, urban population was growing by an annual 2.4% and by only 0.85% annually in the following five years.

The Republic's population by year 2000 is estimated to be 10,000,864, including 7,131.6 thousand urban residents and 2954.8 thousand rural residents.

The network of urban areas is composed of 102 cities and 109 smaller urban settlements. Of 211 urban areas 168 are smaller towns with less than 20,000 dwellers. Together, they account for 17% of the urban population. 53% of urban dwellers live in the large cities, including Minsk. Little over 30% live in medium sized cities.

Urban areas are classified, according to their size, as extra large, large, big, medium sized and small. The trends observed during the last 20 years suggest that of all cities, the largest ones (Minsk, Grodno, Brest, Baranovich, Borisov, Pinsk, Polotsk and Novopolotsk) are the fastest growing. Growth is also being observed in the medium sized cities, whose number has increased from 19 to 29. The population of smaller cities with less than 5,000 dwellers has decreased by a significant 24% during the last 20 years (see table 11).

In recent years, urban population has had a tendency to move out of certain parts of the country. In particular, the number of urban residents in the South East of the country has decreased considerably as result of the Chernobyl accident and the radioactive contamination that followed.

According to their administrative status, urban areas are divided into the following categories: the Capital City, Minsk; regional capitals (6), district centres under regional jurisdiction (34), other district centres (90), other towns and urban settlements. (table 5)

### **2.2.2. Urban population**

**U**rban residents live in 211 urban areas. Between 1975 and 1995, the number of such areas had increased by six.

The classification of urban areas according to the number of residents, as of January 1995, is given in table 5.

92.8% of the urban population live in towns and cities and 7.2% in other urban settlements. More than half (53%) live in Minsk and regional capitals. Another 16% live in the remaining seven cities with more than 100,000 residents. 581,000 people (8.9%) live in smaller cities, with 10,000 — 20,000 residents.

As a result of administrative and territorial reforms conducted since 1975, 75,000 rural dwellers became urban residents.

The population of different cities was not growing at the same rate. The capital city Minsk, regional capitals and new industrial cities such as Novopolotsk, Svetlogorsk, Zhlobin and Soligorsk were growing the fastest (see table 8).

Among smaller urban settlements, 42.2% have less than 3,000 residents and another 32.1% 5,000 — 10,000 residents. Together, they account for more than half of all residents of small urban areas. The classification of urban settlements by region is provided in the appendix.

### **2.2.3 Rural population**

**R**ural dwellers live in 24,583 rural settlements. The size of the rural population is declining, along with the number of rural settlements. Since 1975, the number of such settlements has fallen by 2,828. Following the Chernobyl accident, more than 65,000 residents of villages affected by radioactive contamination were moved to other areas. As a result, another 103 villages were taken off the state register between 1990 and 1994.

The classification of rural settlements by their size and number of residents is given in the table below. (Table 7)

According to the 1989 population census, 16,500 people (0.5% of all rural population) were living in 3,100 villages with less than ten residents (13% of their total number).

There are approximately 40% of smaller villages with less than 50 residents in Vitebsk region, 20% in Minsk Region and 16.4% in Grodno region. Bigger villages prevail in Brest region (see appendix).

### **2.2.4. Living conditions**

**4**8,900 families and individuals (7.4% of those on the waiting list) had upgraded their living conditions in 1994, by moving into new or bigger flats owned by the government

# National report Republic of Belarus

Table No 6

<b>Classification of urban areas by the number of permanent residents</b>								
	<b>Number of urban settlements, by category</b>							
	Total	region						
		Brest Region	Vitebsk Region	Gomel Region	Grudno Region	Minsk	Minsk Region	Mogilev Region
	<b>Total</b>							
	211	29	45	34	33	4	42	24
	<b>Category, by population size (1000)</b>							
under 3	48	5	12	9	11	1	7	3
3-4,9	23	4	7	4	1	1	5	1
5-9,9	51	3	13	8	10	-	10	7
10-19,9	47	10	8	5	5	-	12	7
20-49,9	18	3	1	3	3	1	3	4
50-99,9	10	1	2	3	1	-	3	-
100-249,9	8	2	1	1	1	-	2	1
250-499,9	4	1	1	-	1	-	-	1
500-999,9	1	-	-	1	-	-	-	-
1,000 and over	1	-	-	-	-	1	-	-
	<b>Number of urban residents, 1000</b>							
	7060,8	917,8	954,1	1081,4	742,8	1694,1	802,9	867,7
	<b>Number of residents by category, 1000</b>							
under 3	90,1	11,6	19,7	19,3	21,0	2,4	12,3	3,8
3-4,9	88,6	16,6	24,9	15,5	4,0	3,3	21	3,3
5-9,9	387,5	23,9	103,9	58,2	75,9	-	70,1	55,5
10-19,9	637,8	140,0	115,7	63,9	75,9	-	148,1	94,2
20-49,9	533,8	80,2	23,7	99,1	112,0	22,2	78	118,6
50-99,9	723,2	51,4	184,6	215,1	52,8	-	219,3	-
100-249,9	1115,7	103,8	125,1	107,1	100,9	-	254,1	226,7
250-499,9	1314,7	292,3	356,5	-	300,3	-	-	365,6
500-999,9	503,2	-	-	503,2	-	-	-	-
1,000 and over	1666,2	-	-	-	-	1666,2	-	-
	<b>Towns and cities</b>							
	102	20	19	17	12	1	20	13
	<b>Number of residents by category, 1000</b>							
under 3	2	1	1	-	-	-	-	-
3-4,9	1	1	-	-	-	-	-	-
5-9,9	16	2	5	5	1	-	1	2
10-19,9	42	9	8	4	5	-	11	5
20-49,9	17	3	1	3	3	-	3	4
50-99,9	10	1	2	3	1	-	3	-
100-249,9	8	2	1	1	1	-	2	1
250-499,9	4	1	1	-	1	-	-	1
500-999,9	1	-	-	1	-	-	-	-
1,000 and over	1	-	-	-	-	1	-	-
	<b>Number of residents, 1000</b>							
	6553,9	875,6	853,0	1010,0	650,5	1666,2	697,8	800,8
	<b>Number of residents by category, 1000</b>							
under 3	5,4	2,7	2,7	-	-	-	-	-
3-4,9	4,8	4,8	-	-	-	-	-	-
5-9,9	128,1	16,7	44,7	32,6	8,6	-	8,9	16,6
10-19,9	581,0	125,7	115,7	52,9	75,9	-	137,5	73,3
20-49,9	511,6	80,2	23,7	99,1	112,0	-	78	118,6
50-99,9	723,2	51,4	184,6	215,1	52,8	-	219,3	-
100-249,9	1115,7	301,8	125,1	107,1	100,9	-	254,1	226,7
250-499,9	1314,7	592,3	356,5	-	300,3	-	-	365,6
500-999,9	503,2	-	-	503,2	-	-	-	-
1,000 and over	1666,2	-	-	-	-	1666,2	-	-
	<b>Number of urban settlements</b>							
	109	9	26	17	21	3	22	11
	<b>Number of residents by category, 1000</b>							
under 3	46	4	11	9	11	1	7	3
3-4,9	22	3	7	4	1	1	5	1
5-9,9	35	1	8	3	9	-	9	5
10-19,9	5	1	-	1	-	-	1	2
20-49,9	1	-	-	-	-	1	-	-
	<b>Number of residents, 1000</b>							
	506,9	42,2	101,1	71,4	92,3	27,9	105,1	66,9
	<b>Number of residents by category, 1000</b>							
under 3	84,7	8,9	17,0	19,3	21,0	2,4	12,3	3,8
3-4,9	83,8	11,8	24,9	15,5	4,0	3,3	21	3,3
5-9,9	259,4	7,2	59,2	25,6	67,3	-	61,2	38,9
10-19,9	56,8	14,3	-	11,0	-	-	10,6	20,9
20-49,9	22,2	-	-	-	-	22,2	-	-

## National report Republic of Belarus

or a building co-operative. In 1990, the number of such families was 11.2% of those on the waiting list.

The share of families and individuals that improved their living conditions in 1994 was 5.7% of those on the waiting list in Grodno region, 6.5% in Minsk, 7.4% in Brest Region, 7.6% in Minsk region, 7.7% in Mogilev region, 8.4% in Vitebsk region and 8.9% in Gomel region. In rural areas, the number of such families stood at 6,900, or 21%, in 1994 (11,500, or 32%, in 1991). In comparison with 1990, the number of families that moved into a new flat owned by the state or a building co-operative dropped by 33,200 (1.6 times) an in comparison with 1993, by 10,900 (16%).

The relevant statistics are provided, by region, in the appendix.

The housing problem cannot be resolved without the formation of a housing market. The latter is impossible without privatisation and a mechanism enabling the free sale and purchase of housing. Between 1989 and 1995, 625,300 government

and collectively owned flats (36% of those designated for privatisation) had been privatised.

The privatisation of housing has slowed down. 39,000 flats were privatised in 1991, 69,000 in 1992, 197,000 in 1993, 200,000 in 1994 and only 112,200 in 1995, half as much as in the same period of the previous year.

### 2.2.5 Household Quality of Life

According to a survey of family living standards conducted in September 1995, 37% of the Republic's population and 49% per cent of families with children aged under 18 had a per capita income less than 500,000 roubles.

The minimum consumer budget for a standard family of four then equalled 813,000 roubles per each member. The average per capita income in June was only 652,000, or 80% of the minimum consumer budget.

To most families, building a flat with their own resources is highly problematic. A flat with a dwelling

*Table № 7*

<b>Classification of urban settlements by size and type</b>			
Category	Number of residents, 1000	names	type
Largest	500 and over	Минск	Multi-functional
Large	250 – 500	Гомель, Брест, Витебск, Гродно, Могилев	
Big	100 – 250	Барановичи, Бобруйск, Борисов, Мозырь, Лида, Орша, Пинск, Солигорск	
Medium sized	50 – 100	Жодино, Жлобин, Кобрин, Молодечно, Новополоцк, Полоцк, Речица (Гом.), Светлогорск, Слуцк, Слоним	
	20 – 50	Быхов, Вилейка, Волковыск, Горки, Дзержинск, Калинковичи, Кричев, Лунинец, Новогрудок, Осиповичи, Поставы, Рогачев, Сморгонь, Восточный	Industrial
	10 – 20	Барань, Белоозерск, Житковичи, Заславль, Клецк, Мосты, Новолукомль, Скивель, Шклов, Хойники, Березовка, Микашевичи	
Small	5 – 10	Васильевичи, Россь, Красносельский, Лельчицы, Плещеницы, Руба	
	Менее	Березовка, Косово, Оболь, Сокол, Сосны, Талеханы	
Medium-sized	20 – 50	Береза, Марына Горка, Пружаны	
	10 – 20	Бельничичи, Березино, Браслав, Воложин, Ганцевичи, Городок, Глубокое, Драгичин, Ельск, Жабинка, Ивацевичи, Копыль, Костюковичи, Климовичи, Логойск, Ляховичи, Любань, Мстиславль, Несвиж, Ошмяны, Петриков, Смолевичи, Старые Дороги, Столбцы, Столин, Толочин Фаниполь, Чаусы, Чашники, Щучин, Костюковка	
	5 – 10	Буда-Кошелево, Верхнедаинск, Ветка, Давид-Городок, Докшицы, Дятлово, Крупки, Мноры, Наровля, Славгород, Чериков, Башенковичи, Глуск, Зельва, Ивенец, Кировск, Коханово, Кличев, Круглая, Краснополье, Корма, Лиозно, Лоев, Негорелое, Островец, Радошковичи Речица, Россоны, Смиловичи, Старобин, Узда, Уречье, Ушачи, Хотимск, Шарковщина, Шумилино	Agro-industrial
	менее 5	Дисна, Белицк, Бобр, Богушевск, Большевик, Брагин, Воропаево, Глуша, Городея, Гродзянка, Елизово, Копысь, Комарин, Лынтупы, Новосельня, Ореховск, Паричи, Первомайский, Подсвилье, Правдинский, Руденск, Свислочь, Сопоткин, Сосновый Бор, Татарка, Тереховка	
	10 – 20	Иваново, Малорита, Чечерск	
	5 – 10	Высокое, Дубровно, Каменец, Сенно, Б.Берестовицы, Вороново, Ивье, Кореличи, Копаткевичи, Кр.Слобода, Мядель, Октябрьский, Остриня, Свислочь (Гр.), Холопейничичи	Agricultural
Small	менее 5	Антополь, Бегомль, Ветрино, Видзы, Городище, Домачево, Друя, Езерище, Желудок, Козловщина, Кривичи, Логишин, Любча, Мир, Нарочь, Озаричи, Освея, Пограничный, Порозово, Радунь, Ружаны, Свирь, Стрешин, Сураж, Туров, Уваровичи, Улла, Шерещево, Юратишки, Яновичи	



## National report Republic of Belarus

space of 68 square metres at the price of 3,824,000 roubles per square metre, as approved by the Minsk City Executive in July, will cost a family of four with two children aged under 18 its entire income for 10 years,

provided it doesn't spend money on anything else and that there is no inflation or price growth. In order to enable it to buy food and basic necessities, its per capita income must at least double.

### 2.3 Housing

#### 2.3.1. Overview of the housing stock

As of early 1995, the Republic's housing stock consisted of 200.4 million square metres of floor space. In comparison with 1980, it had grown by 44% (61.5 million square metres). In urban areas, it had grown by 74% to 123.9 million square metres and in rural areas by 13% to 76.5 million square metres.

In 1994, there were 17.5 square metres of living space per every urban resident and 23.7 square metres per every rural dweller. In comparison with 1980, this number had grown 35.7% in urban, and 45.4% in rural areas. The number of square metres per resident was above the national average in Mogilev, Grodno and Vitebsk regions. In 1994, there were 18.7 square metres of floor space per every urban resident and 24.9 square metres per every rural dweller in

Mogilev Region. The number of square metres per resident in rural and urban areas were 18.5 and 24.6, respectively, in Grodno region. 18.1 and 24.1 in Gomel region, 17.7 and 23.9 in Vitebsk region, 17.3 and 23.1 in Minsk region, 16.9 and 22.2 in Brest region and 16.6 square metres per resident in Minsk.

#### 2.3.2. Housing development

As of January 1 1995, As of January 1 1995, there were 2,2432 million flats in all types of urban

Table № 12

Rural settlements by population size				
	50 or less	51-200	201-1000	1,000 and over
Population, nation-wide				
Total size	11240	8790	4136	390
as % of the total	45,8	35,8	16,8	1,6
By the size of the settlement				
Total	246,5	894,2	1697,3	672,4
as % of the total	7	25,5	48,4	19,1

Table № 10

Classification of urban areas						
Category by population size (1,000)	1976		1985		1995	
	Number	Number of residents (1,000)	Number	Number of residents (1,000)	Number	Number of residents (1,000)
Largest — Minsk (1,000 and over)	1	1145,8	1	1457,2	1	1672,6
Large (250 — 1,000)	3	882,1	3	1126,9	5	1829,2
Big (100 — 250)	6	844,8	7	1177,4	8	1119,1
Medium-sized (20 — 100)	21	912,8	25	1189,4	29	1281,1
Small (20 or less)	174	1039,2	173	1160,5	168	1196
Total	205	4824,7	209	6111,4	211	7098

Diagram № 10.1

Number of urban areas by number of city and town

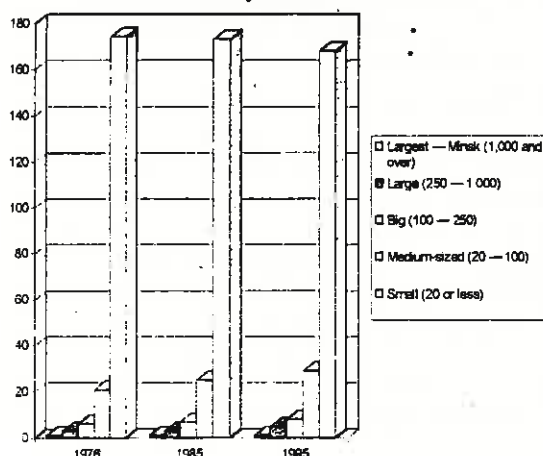
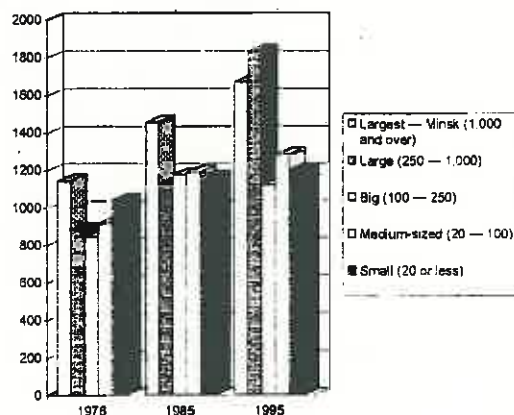


Diagram № 10.2

Number of urban areas by population size, 1000





## National report Republic of Belarus

settlements. In rural areas, the number of flats owned by the government, local authorities and building co-operatives was 261,000. Of the total number of flats (with the exception of those owned privately by rural dwellers), 440,000 (18%) had one room, 1,008 million (40%) to rooms, 827,000 (33%) three rooms, 205,000 (8%) four rooms and 24,000 (1%) five or more rooms.

The distribution, as of late 1994, of publicly and government owned flats in rural and urban areas by the number of rooms and residents in them is shown in Table 19.

As of early 1995, 91% of all community and government owned flats had centralised water supply, 89% a sewage system, 87% central heating, 81% hot water supply and 86% a bathroom and/or shower. Nevertheless, flats in rural and urban areas still have substantial differences in the level of their development.

The statistics regarding the equipment of government and community owned flats with modern conveniences, as of January 1, 1995, are provided in Table 21.

### 2.3.3. Use and repair of housing stock

Considerable financial shortages have caused a sharp decline in the amount of housing repairs. 4,583,000 square metres of floor space had been repaired in houses and 1,412,000 in flats in 1990, 2,556,000 and 751,000, respectively, in 1992, 2,487,000 and 715,000 in 1993, 1,657,000 and 572,000 in 1994. As a result, the floor space of government and publicly owned housing in need of urgent repairs had grown from

Table № 13

Rural settlements by size and number of residents								
	Number of rural settlements by population size				Number of residents, by the category of the settlement			
	50 or less	51-200	201-1000	1,000 and over	50 or less	51-200	201-1000	1,000 and over
<b>Nation-wide</b>								
Total number	11240,0	8790,0	4136,0	390,0	246,5	894,2	1697,3	676,0
As % of the total	45,8	35,8	16,8	1,6	7,0	25,5	48,4	19,4
<b>Brest region</b>								
Total number	471,0	846,0	742,0	126,0	12,6	95,8	318,9	202,4
As % of the total	21,8	38,7	34,0	5,7	2,0	15,2	50,6	32,2
<b>Vitebsk Region</b>								
Total number	4405,0	1718,0	546,0	30,0	84,0	158,1	206,8	55,3
As % of the total	65,8	25,6	8,2	0,4	16,7	31,3	41,0	11,0
<b>Gomel Region</b>								
Total number	743,0	986,0	766,0	82,0	18,7	103,6	346,4	134,3
As % of the total	28,8	38,3	29,7	3,2	3,1	17,2	57,5	22,2
<b>Grodno Region</b>								
Total number	1842,0	1982,0	567,0	31,0	40,0	201,9	209,8	46,3
As % of the total	41,7	44,8	12,8	0,7	8,1	40,5	42,1	9,3
<b>Minsk Region</b>								
Total number	2293,0	1965,0	939,0	93,0	55,5	201,1	388,4	190,7
As % of the total	43,3	37,1	17,8	1,8	6,6	24,1	48,5	22,8
<b>Mogilev Region</b>								
Total number	1486,0	1293,0	575,0	28,0	35,5	133,8	226,5	43,4
As % of the total	43,9	38,2	17,0	0,9	8,0	30,5	51,6	9,9

Diagram № 13.1

Rural settlements by population size

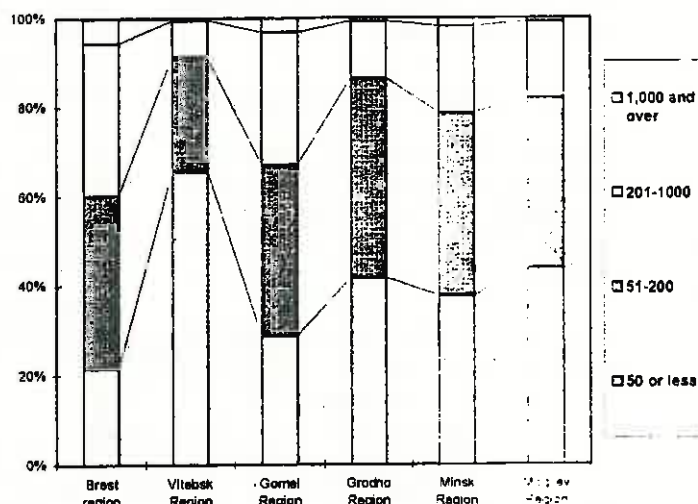


Table № 14

Changes in the number and size of rural settlements								
	Number of rural settlements				Population (1,000)			
	1959 *	1970	1979	1989 **	1959	1970	1979	1989
<b>Total</b>								
	34442	27911	26050	24556	5464,3	5094,6	4298,2	3510,4
<b>Of which with a population of:</b>								
5 or less	1432	1003	1291	1697	5,3	3,2	3,9	5,0
6-10	1624	984	1048	1435	12,7	7,7	8,3	11,5
11-25	3534	2292	2589	3706	62,7	41,0	46,0	66,0
26-50	4783	3447	3928	4402	185,3	131,7	147,9	164,0
51-100	6863	5835	5485	4997	506,4	432,3	402,1	361,4
101-200	7870	6653	5668	3793	1131,2	957,9	807,9	532,8
201-500	6366	5659	4391	3054	1957,5	1730,6	1356,3	960,2
501-1000	1630	1527	1226	1082	1118,6	1031,3	834,8	737,1
1001-2000	306	445	344	303	395,4	578,7	457,9	406,0
2001-3000	29	53	56	58	70,1	125,7	130,7	136,9
3001-5000	5	11	22	21	18,0	42,8	88,6	77,1
5000 and over	-	2	2	8	-	11,7	13,8	52,4

\* As of January 1, 1961

\*\* Settlements with permanent residents only

# National report Republic of Belarus

355,300 square metres in 1991 to 435,600 in 1993 and 722,600 in 1994. The number of residents in such houses had grown from 25,900 to 29,500 and 47,600 respectively. Only 2,700 people had moved to newer and better equipped flats in 1994.

In 1994, the maintenance of government and community owned flats cost a total of 351,200 billion roubles. Of this amount, 115,400 billion was spent on the maintenance of flats owned by the local administration. Total revenues equalled 80,100 billion roubles. Of this amount, 2,700 billion was paid out in rent, 40,700 by maintenance authorities and 1.2 billion by the local executives. Maintenance costs per square metre of floor space totalled 62,000 roubles in 1994, and revenues only 14,000 roubles.

The percentage of personal incomes paid out by the public in rent and for maintenance services had grown from 1.3% in 1994 to 4.4% between April and June 1995.

### 2.3.4. Housing construction

**B**efore 1990, there was a steady growth in new housing construction being built, which was moving the country closer to resolving its housing problem.

**Table № 15**

**Small, medium-sized and large settlements**

	Number of rural settlements				Number of residents (1000)			
	1959 *	1970	1979	1989 **	1959	1970	1979	1989
	<b>Total nation-wide</b>							
	34442	27911	26050	24556	5464.3	5094.6	4298.2	3510.4
<b>Population, by category of settlement</b>								
5 or less	4.2	3.6	5.0	6.9	0.1	0.1	0.1	0.1
6-10	4.7	3.5	4.0	5.8	0.2	0.1	0.2	0.3
11-25	10.3	8.2	9.9	15.1	1.1	0.8	1.1	1.9
26-50	13.9	12.4	15.1	17.9	3.4	2.6	3.4	4.7
51-100	19.9	20.9	21.0	20.3	9.3	8.5	9.4	10.3
101-200	22.8	23.8	21.8	15.4	20.7	18.8	18.8	15.2
201-500	18.5	20.3	16.9	12.4	35.8	34.0	31.5	27.3
501-1000	4.7	5.5	4.7	4.4	20.5	20.2	19.4	21.0
1001-2000	0.9	1.6	1.3	1.2	7.2	11.4	10.7	11.3
2001-3000	0.1	0.2	0.2	0.2	1.3	2.5	3.0	3.9
3001-5000	0.0	0.0	0.1	0.1	0.3	0.8	2.1	2.2
5000 and over	-	0.0	0.0	0.0	-	0.2	0.3	1.5

However, the transition to the market system, accompanied by falling production and living standards, as well as a disorganisation in credit and finance, led to a sharp reduction in housing construction. This aggravated the housing problem, especially in urban areas.

In 1995, companies and organisations in the public and private sector, as well as individuals, constructed 1,822,000 square metres of new housing. This number is 66% less than in 1990 and 46% (1,581,000 square metres) less than in 1993. 1,418,000 square metres had been put into operation in urban areas 2,552,000 (64%), below the 1990 figures. 404,000 square metres of new housing had been built in rural areas, 69% less than in 1990.

\* As of January 1, 1961  
\*\* Settlements with permanent residents only

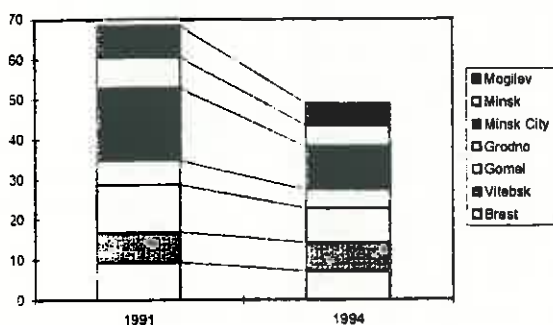
**Table № 16**

**Improvement of living conditions in Belarus**

	Urban areas				Rural areas			
	1991		1994		1991		1994	
	Number of families that have improved their living conditions (1000)	as % of those on the waiting list	Number of families that have improved their living conditions (1000)	as % of those on the waiting list	Number of families that have improved their living conditions (1000)	as % of those on the waiting list	Number of families that have improved their living conditions (1000)	as % of those on the waiting list
<b>Nation-wide</b>	68.4	10.5	48.9	7.4	11.5	32.4	6.9	21
<b>By region:</b>								
Brest	9.4	10.8	7.1	7.4	1.5	23.5	0.8	12.1
Vitebsk	7.5	9.4	7	8.4	2.5	50.3	1.2	24.4
Gomel	11.8	10.7	8.7	8.9	1.8	37.4	1.6	35.8
Grodno	5.9	8.6	4.4	5.7	1.4	22	0.8	14.9
Minsk City	18.2	10.7	10.8	6.5	-	-	-	-
Minsk	7.7	10.7	5.3	7.6	2.6	27.9	1.6	20.5
Mogilev	7.9	12	5.6	7.7	1.7	44	0.9	22.8

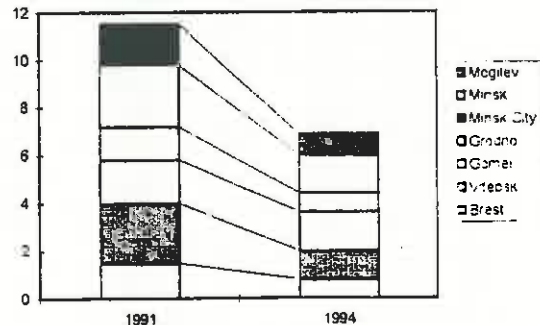
**Diagram № 16.1**

Urban areas



**Diagram № 16.2**

Rural areas



# National report Republic of Belarus

Diagram № 17.1

## Structure of the housing stock, by form of ownership

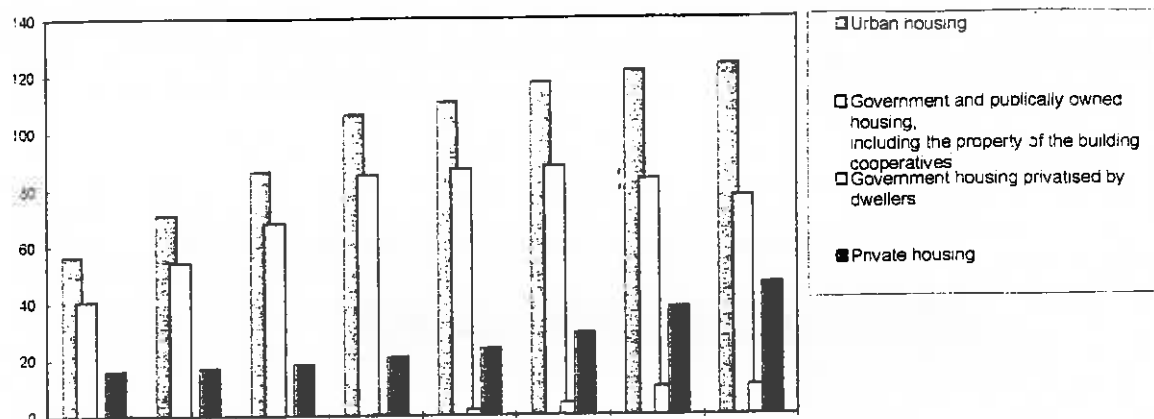


Table № 17

Floor space in each category, million square metres	1976	1981	1986	1991	1992	1993	1994	1995
Urban housing	56,7	71,2	86,5	106,4	110,8	117,4	121,6	123,9
Government and publically owned housing, including the property of the building cooperatives	40,6	54,2	68	85	87	88,1	83,6	77,3
Government housing privatised by dwellers	-	-	-	0,4	2,2	4,4	10	10,4
Private housing	16,1	17	18,5	21	23,8	28,9	38,1	46,5

Table № 18

	1980		1990		1994	
	Urban areas	Rural areas	Urban areas	Rural areas	Urban areas	Rural areas
Total housing stock, %	100	100	100	100	100	100
Of which:						
Government owned	65,9	8,7	68,5	15,7	48,6	10,8
Publically owned	1,8	3,4	0,6	10,8	4,7	10
Property of the building coopeartives	8,3	0	10,8	0,1	9,1	0,1
Privately owned	24	87,9	20,1	73,4	37,6	79,1

Changes in the ownership of housing stock can be seen from the following figures (see table).

Diagram № 18.1

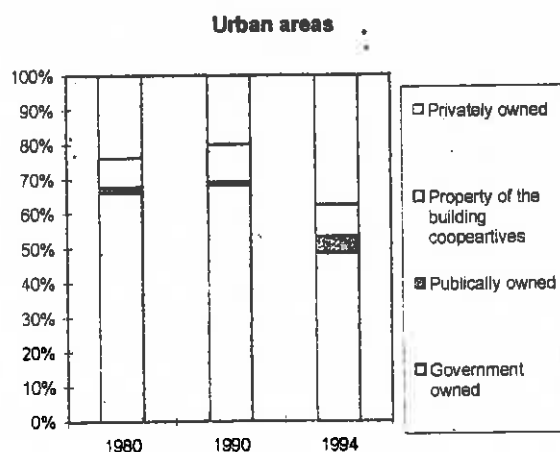
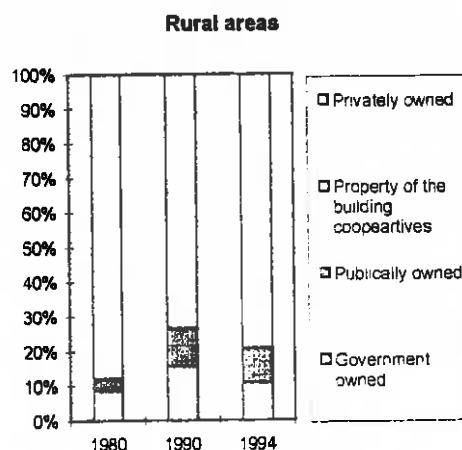


Diagram № 18.2



# National report Republic of Belarus

Table № 20

Share of improved housing, at the beginning of the year								
Floor space in each category, million square metres	1976	1981	1986	1991	1992	1993	1994	1995
Urban housing	100	100	100	100	100	100	100	100
Government, public and privatised housing and housing owned by the building cooperatives	73	76.1	78.6	80.3	80.5	78.8	75.9	70

Diagram № 20.1

Share of improved housing at the beginning of each year

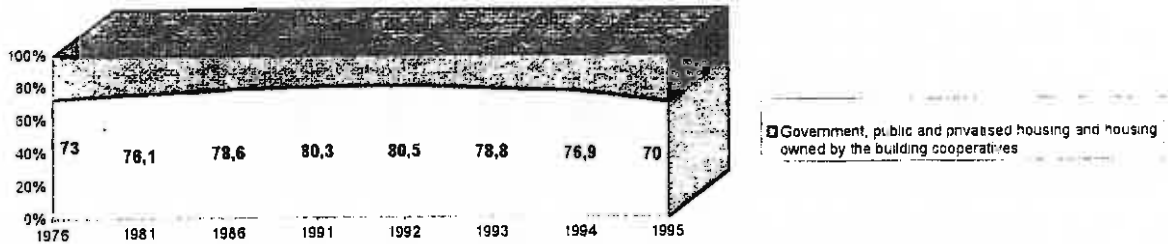
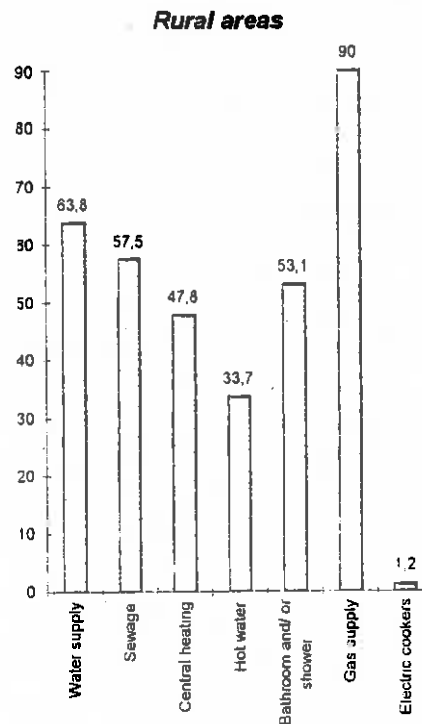
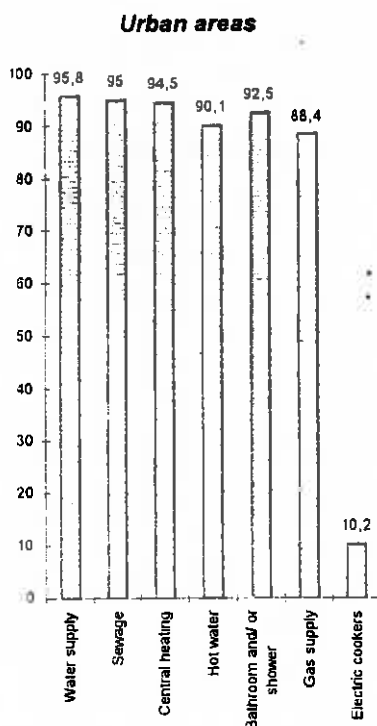


Table № 21

Access of flats to public amenities		
% of flats with access to	Urban areas	Rural areas
Water supply	95,8	63,8
Sewage	95	57,5
Central heating	94,5	47,8
Hot water	90,1	33,7
Bathroom and/ or shower	92,5	53,1
Gas supply	88,4	90
Electric cookers	10,2	1,2

Diagram № 21.1

Diagram № 21.2



## National report Republic of Belarus

The figures below describe the construction of new housing in rural and urban areas (see table 22).

In 1995, the share of capital investment directed towards housing construction equalled 21%, and 20% of the 1990 level. However, taking inflation into consideration, the size of such investment had fallen 29%, in constant 1990 rouble prices.

Changes have affected the number of different types of contractors. Public sector enterprises purchased 71% of new housing in 1990 and only 56% of such housing in 1994. In the same time period, the share of building co-operatives had fallen from 12% to 11%, while the share individual contractors had risen from 8% to 28%. 177 square metres of floor space per every 1,000 citizens were put into operation in 1994 (201 in urban, and 126 in rural areas). In 1990, these numbers were 517, 584 and 385 square metres, respectively.

25,700 new flats were built in 1995, 50,900 in 1994 and 86,100 in 1990. 12,700 flats had been put into operation during the first ten months of 1995, 55% below the previous year's figures. As of January 1, 1995, 651,800 families and individuals were on the waiting list for new flats. Of this number, 623,000 (28% of the total number of families) were waiting for a city flat and 156,500 (25%) for a flat in Minsk. 28,800 families and individuals (2%) were on the waiting list for a flat in rural areas. Of the total number of families waiting for a flat, 72,300 (12%) had been on the waiting list for ten or more years,

137,400 (22%) were living in dormitories and another 7,000 (1%) in flats that needed urgent repairs.

During the last 20 years, commercial housing construction has been financed out of public investment and contributions by government owned enterprises.

The increase in housing stock was due mainly to intensive housing construction in cities. The share of newly built flats located in multi-storeyed buildings, built chiefly by the state grew steadily, from 33.7% in 1976 to 61.7% in 1991. In the same time period, the percentage of flats in low-rise buildings had fallen from 40% to 20%.

1991 began a period of radical change in the trends that had been observed during the previous 15 years.

### 2.3.5. Inventory of the housing stock

The housing inventory on record is divided, according to its ownership, into the following four categories:

Government housing, owned by the local Soviets and government agencies;

Community owned housing, owned by collective farms and other co-operatives, as well as industrial associations, trade unions and other public organisations;

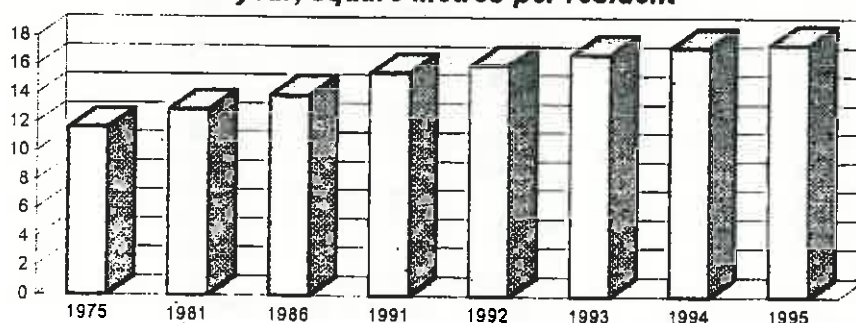
Housing owned by building co-operatives and individuals.

Table № 25

<b>Access to housing in urban areas</b>								
	1975	1981	1986	1991	1992	1993	1994	1995
<b>Square metres per resident</b>	11,6	12,9	13,9	15,5	16	16,8	17,3	17,5

Diagram № 25.1

**Access to housing in urban areas at the beginning of the year, square metres per resident**





# National report Republic of Belarus

Table № 24

Housing construction									
	1975	1980	1985	1990	1991	1992	1993	1994	1995
Total floor space of new housing, per 1,000 citizens, square metres	465	446	513	517	527	433	371	330	177
Number of newly built flats per	9,0	8,4	8,9	8,4	8,2	6,9	5,7	4,9	2,5

Diagram № 24.1

Total floor space of new housing, per 1,000 citizens, square metres

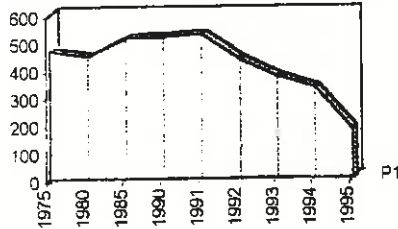
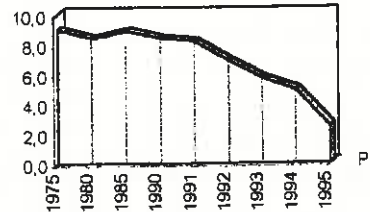


Diagram № 24.2

Number of newly built flats per 1,000 citizens



With the introducing in 1991 of the law on privatisation, a new category was formed that included government owned flats privatised by the public.

The breakdown of the housing by category and year is shown in table 18.

On average, 90 per cent of government and publicly owned flats, as well as urban housing owned by building co-operatives, are equipped with all types of modern conveniences (water and gas supply, sewage system, central heating, hot water, bathroom and/or shower and may be regarded as meeting the globally accepted standards. The percentage of such housing, by category and year, is shown in Table 23.

Between 1976 and 1992, the percentage of government and publically owned housing, as well as flats owned by building co-operatives was growing steadily, from 73% to 80.5%. Since 1992, the share of such housing has fallen sharply, to today's 70.3%, 2.7% below the 1976 figure. The fall can be attributed to the decline in housing construction and the relative increase in the percentage of private houses.

The table shows the amount of dwelling space built annually per every 1,000 citizens. The statistics show a gradual reduction throughout the 20 year period. The number of square metres per every 1,000 citizens had dropped 31% and of newly built flats by almost 45%.

Between 1975 and 1995, (see table 25), per capita dwelling space had increased by only 5.9 square metres,

mainly because of a sharp reduction in housing construction. A slight increase in per capita dwelling space over the last two years was caused by a stabilisation in the size of the urban population.

## 2.3.6. Housing market

The aggregate value of flats throughout the first ten months of 1995, was estimated at 12,602.2 million roubles. Of this amount, 598.3 million (5%) were covered by the housing quota. The price of a privatised flat or private house averaged 89,000 roubles in the city and 180,000 roubles in rural areas, in 1991 roubles or recalculated for the price levels that existed at the time of their construction.

Of the total number of flats privatised since the introduction in 1991 of the law on privatisation, 87% belong to city dwellers.

In addition, enterprises and organisations had sold, throughout 1994 and 1995, 1,178 flats and private houses with a total floor space of 84,000 square metres. Of this number, 472 had been sold throughout 1995. Of the total number of the flats sold, 367 (34%) were incomplete, 303 (28%) had been built for sale, 139 (13%) were out of use and 112 (10%) unoccupied. The average selling price of a flat or private house equalled 2.2 million roubles in 1994 and 7.8 million roubles in the first ten months of 1995.



## National report Republic of Belarus

Throughout 1994 and the first ten months of 1995, 25 flats and individual houses had been sold at

auctions. The average selling price was 26.5 million roubles in 1994 and 63.3 million in 1995.

### 2.4 Rural and urban infrastructure

#### 2.4.1. Urban transport system

Shortage of private cars (30 — 40 per every 1,000 in the mid-1980's) made 90% of the population fully dependent on public transport. Its development was considered a priority and an important element of state planning.

The system of public transport is directed mainly towards providing transportation from home to work for 85 — 90 per cent of the population within a limited amount of time, usually 30 — 45 minutes. Although the percentage of those relying on public transport has varied over the last 20 years, it never fell far below the above figures, despite the rapid growth of medium-sized and larger cities.

Transport fares are being extensively subsidised in order to keep them affordable to most.

One of the main weaknesses in such a system is the low level of comfort. The number of standing passengers during peak hours varies between five and seven per every square metre of floor space in the bus, trolley bus or tram.

Recently, the construction of new streets and transport facilities virtually stopped. Local budgets lack funds even for the maintenance of existing streets. 40 — 60% of all roads are in disrepair.

Even though the number of private cars per every 1,000 citizens has grown almost four times over the last 20 years, it still remains very low. Private cars account for only 7-12% of all trips within the city.

Therefore, the life of big cities and their multiple links with the adjacent rural areas are fully dependent on the work of public transport.

#### 2.4.2. Transport network

The development of the transport network was target based. This network was meant to provide passenger service between vast residential areas and newly built industrial enterprises or districts. This target was achieved mainly by building new streets, bridges, tram and trolley-bus lines using government funds provided by ministries and agencies in proportion to the significance of those objects. This approach was used in cities such as Mogilev, Bobruisk, Grodno, Mozyr and Novopolotsk.

This approach often affected key decisions in the field of city planning. Many of them run against the logic of normal city development by focusing entirely on the need to maintain the link between the enterprise and residential area, an approach characteristic of the era of socialist industrialisation.

Of all means of passenger transport, electric transport continues to develop the fastest. During the last 15 years, the length of trolley bus lines has grown from 277 to 442 kilometres in both directions, and tram lines from 60 to 100 kilometres. Two metro lines have been built in Minsk, with a total length of 16 kilometres.

The share of electric transport in the total number of passenger transport has grown, in bigger cities from 47 to 59%.

Public transport capacity has grown from 18.1 seats per every 1,000 residents to 28.7. However, transport still remains overcrowded in rush hours.

The number of passengers transported has fallen 20% over the last four years. 70% of all public transportation is almost fully worn

Table № 26

Equipment of urban housing with public amenities (as of 1 January 1995), by region																
Type of amenity	Region															
	Brest		Vitebsk		Gomel		Grodno		Mogilev		Minsk		Minsk City Total	nation-wide		
Ownership	GS	P	GS	P	GS	P	GS	P	GS	P	GS	P	GS	P		
Water supply	94.6	61.7	94.1	47.2	94.9	58.6	93.8	69.0	99.6	89.3	95.0	53.9	94.1	46.5	95.9	60.3
Sewage	93.8	61.6	93.0	46.6	93.3	54.0	75.3	3.0	69.5	2.3	84.0	2.7	94.4	1.5	70.0	3.3
Central heating	92.9	69.5	92.7	53.4	92.8	62.1	75.1	3.2	70.0	7.8	68.8	6.4	93.4	4.2	78.0	4.9
Hot water	88.6	50.5	89.7	40.9	86.1	1.3	61.5	1.0	57.5	0.7	54.8	0.6	91.2	0.8	87.1	0.7
Gas supply	88.0	94.7	90.1	94.1	91.6	27.4	69.5	1.3	69.8	2.0	67.8	19.2	61.0	5.1	66.8	22.4
Electric cookers	8.0	0.5	7.5	0.3	5.7	-	3.6	-	3.4	-	3.9	-	16.0	-	5.0	0.1

GS — Government or public private  
P — private

## National report Republic of Belarus

down. In 1994, the number of bus passengers dropped, in relation to 1990, by 28%, trolley bus passengers by 36%, and tram passengers by 30%. Over the same time period, the number of metro passengers had grown 47%.

The survival of the existing system of public transport in the new conditions of a market economy has become one of the most important priorities of today. Unless this system is preserved, there will inevitably be a negative public reaction to the ongoing reforms.

In view of a rapid growth in the number of private cars (from 60 to 100-110 per every 1,000 of the population over the last four years), it is necessary to resume investment in developing municipal road network and construction of car parks in the city centre, as well as industrial and business quarters. Without such activity, the existing streets and junctions will be unable to cope with the growing level of traffic.

### 2.4.3. Maintenance infrastructure

The basis for evaluating the development of the maintenance infrastructure is the access of residential buildings to such services as water, gas and electricity supply, heating, sewage and hot water. The relevant statistics by area and district are provided in the table below.

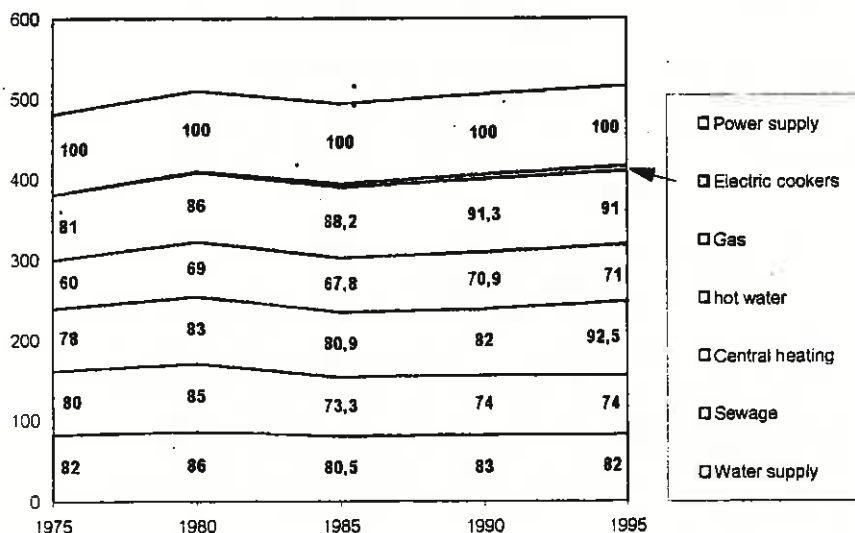
Access to each of these services varies greatly for different categories of housing. In public housing, it reaches 50 — 60%, and in private housing only 0.1 — 27.4%. Certain variations are also observed in different regions. At least 85% of all urban households have access to natural gas.

7% of all households are equipped with electric cookers. Up to 95% of natural gas is used for cooking. 100% of urban population are supplied with electricity. Electricity is used for lighting, exploitation of household appliances and, to a lesser extent, for cooking on electric stoves. In 1991, the annual per capita consumption of electricity exceeded 900 Kilowatt-Hours.

**Table № 27**

<b>Changes in the access of urban housing to public amenities, %, 1975 — 1995</b>					
Type of amenity	1975	1980	1985	1990	1995
<b>Water supply</b>	82	86	80,5	83	82
<b>Sewage</b>	80	85	73,3	74	74
<b>Central heating</b>	78	83	80,9	82	92,5
<b>hot water</b>	60	69	67,8	70,9	71
<b>Gas</b>	81	86	88,2	91,3	91
<b>Electric cookers</b>	0,1	1,5	3,2	5,1	6,1
<b>Power supply</b>	100	100	100	100	100

**Diagram № 27.1**



## National report Republic of Belarus

60% of all electricity is used in industry, 13 — 14% by communal services, and 8-10% in agriculture. Other users and waste accounted for 16 — 19%. The Belarusian energy system has experienced a deficit of energy ever since 1983, when the consumption of electricity first exceeded domestic production. By the end of 1995, energy deficit will total an estimated 4 million kilowatts. Of all thermal energy used for heating and ventilation, 45% were consumed in industry, 14% in agriculture, 17% by rural, and 20-14 by urban households.

Between 1990 and 1993, Belarus' cities and town were using 6.0 — 6.2 Gigacalories annually per resident. This figure varied in some districts between 3.5 to 10.0 Gigacalories, depending on the energy requirements of various industrial enterprises located in each of them.

Thermal power is supplied by 22 heat and electric power plants, two thermal power plants, and 28 district boiler houses. In addition, there are over 2,000 smaller boiler houses with a capacity of upto 3.0 Gigacalories per hour. Such boiler houses have low efficiency, require a large servicing staff and pollute the environment. Nevertheless, they still continue to be built.

Centralised water supply is available in big and medium-sized cities, as well as in smaller towns. Also in use are de-centralised water intakes from shallow wells. Water from such wells is often of substandard quality, which is the case with 45% of all wells in Belarus and 80% in Vitebsk region. Water from 35% of wells fails to meet the national standard for bacterial contamination.

The use of drinking water from centralised and de-centralised sources is shown in the table below.

The daily amount of water used by the public in the home has reached 230 litres per household. This figure varies in different areas from 330 litres daily in Minsk to 145 litres in Minsk region. Urban households' access to a centralised sewage system is 15-20% less than to a centralised water supply. Between 20 and 80% of used drinking water undergoes a purification process.

Biological purification of sewage is done artificially (in aeration tanks) or naturally (in filtration fields). 95% of private houses have outdoor toilets. Access to maintenance services decreases, as a rule, with the size of the city's population (see table 2.3).

Table № 29

<i>Use of potable water</i>		
<i>By region</i>	<i>Sources</i>	
	<i>Centralised</i>	<i>de-centralised</i>
<i>Brest</i>	20	80
<i>Vitebsk</i>	35	65
<i>Gomel</i>	30	70
<i>Grodno</i>	34	66
<i>Minsk</i>	48	52
<i>Mogilev</i>	44	56

Smaller towns, where 80 or more per cent of all buildings are low rise, have practically no maintenance infrastructure, and residents use water from wells or water pumps. Houses are frequently heated by stone furnaces or small boilers using solid fuel (wood, peat or coal). There are 80% of such cities in the Republic.

Urban maintenance infrastructure had been developing at a fast rate between 1976 and 1991. An increasing number of households were getting access to centralised water supply and sewage. Small low-power boiling houses were being eliminated and replaced by bigger heating stations and heat and power plants. Powerful local water supply and sewage systems were put into operation in a number of cities, such as Minsk, Bobruisk, Polotsk, Novopolotsk, and others. Intensive construction was in progress of secondary gas pipelines. Cities were increasingly using natural gas. An increasing number of private houses were given access to centralised gas supply. This contributed to a substantial improvement of living standards in the cities and the state of the environment.

Nearly all new construction financed by local governments, ministries and government agencies were provided with a maintenance network (see table). In private housing, maintenance infrastructure was still practically non-existent, and was improved chiefly, if at all, by introducing centralised gas and water supply.

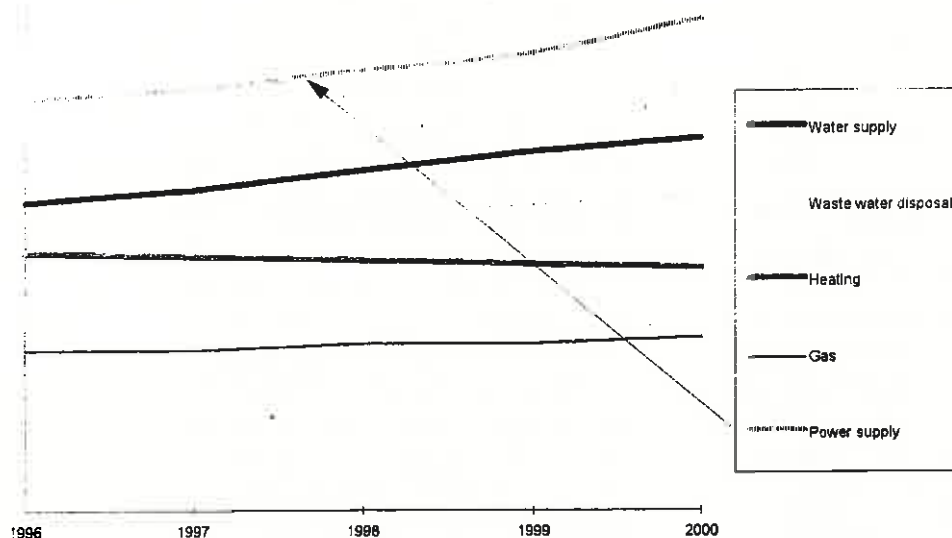
The development of maintenance infrastructure in most cities was negatively affected by the Chernobyl accident in 1986, which required additional material and financial resources to deal with its consequences. The development and renovation of urban infrastructure was also slowed down by the break-up of the USSR and the established economic links with former Soviet republics, followed by rising inflation

# National report Republic of Belarus

Table No 28

Estimated use of public amenities							
	Unit of measurement	1996	1997	1998	1999	2000	Times of growth in relation to 1996
Water supply	litre per person, daily	240	250	265	280	290	1,2
Waste water disposal	litre per person, daily	205	213	230	238	245	1,2
Heating	Gigacalories per person, annually	6,7	6,8	6,5	6,4	6,3	0,94
Gas	Cubic metres per person, annually	125	125	130	130	135	1,08
Power supply	Kilowatt Hour per person, annually	960	990	1030	1070	1150	1,21

Diagram No 28.1



and increasing fuel shortages. The use of types of energy dropped from 45.6 tonnes of standard fuel in 1990 to just 32.5 million tonnes in 1990. In the same time period, the use of electric power fell 22.6% and thermal energy 34%.

The increase in the number of privately owned flats from 24% in 1980 to 38% in 1994 resulted from the implementation of the law "On the privatisation of housing stock in the Republic of Belarus."

From 1991 to 1993, the use of electric power fell from 4.8 billion kilowatt-hours to 4.5 billion in the housing sector, 3.7 to 3.3 billion in the non-material sphere and public utilities and 27.0 to 19.0 billion in industry, including construction.

Throughout the last 3 — 4 years, maintenance infrastructure development has been effected by changes in policies favouring the constructing of low-rise buildings. However, no concept applicable to such construction has so far been developed. As a result, the approaches to their construction do not differ from those to high-rise buildings, bringing the cost of the

maintenance network and interior finishing up to 50-60% of the total cost of a private house.

In addition, most of the existing maintenance facilities were built 20 — 25 years ago. Since then, they have worn out, grown obsolete and are in need of urgent renovation. Such an effort, however, will require adequate financial resources, which the Republic does not have.

The 20 year period in the development of maintenance infrastructure can thus be divided into two stages. The first, lasting from 1976 to 1991, was a time of intensive growth. The second, from 1991 to 1995, is the period of decline and stabilisation. The relevant statistics are provided in table 3.2.

Between 1976 and 1990, the use of water per household had grown 1.45 times, the amount of sewage released 1.4 times, centralised heating 3 times, use of natural gas 3.1 times and electricity 1.6 times.

#### 2.4.4. School education

The Republic has formed a network of educational institutions, whose bulk is made up chiefly of schools. The



## National report Republic of Belarus

following types of schools are recognised within the school system: primary (grade 1-4), junior high (grade 5- 9), and secondary (grade 10-11). In the academic year of 1985-96, there were 4859 day schools. Of this number, 17% were primary, 23% basic, 56.6% secondary schools. Grammar schools constituted 1.2% and lycees and colleges 0.6% and specialised schools 2.1%.

The overwhelming majority of elementary and junior high schools is located in rural areas. Together, they account for 6.8% of all enrolments (1.43% and 5.37%, respectively).

Judging by these figures, most such schools have a low number of students. In the academic year of 1994-95, the number of students per school averaged 25 in elementary, and 70 in junior high schools.

The number of student seats and percentage of them used varies considerably from school to school. Along with the small village schools, some big city schools have up to 2,000 students. In 1994-95, the average number of students per school was 488. The number of students averaged 993 in city schools, 965 in grammar schools and 637 in lycees.

The maximum number of students in one class is determined by the national guidelines and is as follows:

grade 1 — 4 — 25 students, and grade 5-11 — 30 students.

Sometimes, however, especially when the number of students exceeds the number of student seats, there are up to 30 students in elementary and up to 35 in junior high grades. In smaller schools, especially in rural areas, the number of student per class may not exceed 5 — 10. In elementary schools, a teacher frequently works with 24 students from several different grades simultaneously.

In 1994-95, the number of classrooms in the Republic's schools totalled 78,108, insufficient to enable schools to operate in one shift and reduce the number of students per class.

The last 20 years have been marked by changes affecting the types and status of its educational institutions. Changes have also resulted in the creation of new types of educational institutions and affected the number of student seats per school and class. Certain improvements have been made to the architectural design of school buildings.

Changes to the school network have been the result of intensive demographic and socio-economic developments in the Republic.

Table № 30

<b>Access to public amenities in small towns and urban settlements</b>												
(по состоянию на 1.01.1995 года)												
	Water supply			sewage			heating			hot water		
	All housing	government housing	private housing	All housing	government housing	private housing	All housing	government housing	private housing	All housing	government housing	private housing
Population, 1000												
до 5,0	43,8	63,3	24,8	12,8	16,2	0,0	37,6	-	11,6	24,3	-	2,4
5-10	42,3	81,4	12,0	11,6	28,8	0,0	47,6	-	10,6	36,1	-	1,5
10-20	58,0	90,0	11,0	40,0	66,9	0,0	-	-	-	-	-	8,0
20-50	67,0	90,8	36,8	47,7	80,8	0,0	75,0	-	54,0	52,0	-	8,0

Table № 31

<b>Development of maintenance infrastructure</b>					
	Unit of measurement	1976	1985	1990	1995 (estimate)
Water use in the home	litres per person, daily	165	210	239	230-240
Waste water disposal	litres per person, daily	142	180	204	200-210
heating	gigacalories per person, annually	2,1	6,49	6,97	3 5-6,9
Gas	cubic metres per person, annually	39,1	113	121	125
Power supply	kilowatt hours per person, annually	611	877	990	920-990

## **National report Republic of Belarus**

Changes have been marked mainly by a reduction in the number of junior and junior high schools accompanied by an increase in the number of secondary schools. In contrast, secondary schools in some rural areas are being transformed into elementary or junior high following a reduction in the number of students. Lately, new types of educational institutions have appeared, such as grammar schools, lycees and colleges.

The number of student seats per class has changed, within the last 20 years, from 40 to 30 (25 in junior

grades) and to 12-24 in village schools. In village areas, the number of student seats per school has fallen from 192 — 640 to today's 108 — 320 and 40 in junior schools. In urban areas, the maximum number of student seats per school is set at 990, compared with 1680 in the 1970's.

New types of classrooms have appeared within schools, namely, playrooms for young children, recreation rooms, computer, professional training and crafts classes.

### **2.5. The state of the environment**

#### **2.5.1. Environmental situation**

**A**tmospheric pollution is one of the biggest environmental problems in urban areas. Atmospheric pollution is the worst in Mogilev, Novopolotsk, Gomel, Grodno, Vitebsk, Soligorsk, Mozyr, Svetlogorsk, Bobruisk, and Orsha. The main pollutants are carbon oxides, sulphur dioxide, hydrocarbons, nitrogen oxides and various toxic compounds containing lead and benzpyrene.

The problem of surface and underground water pollution stands out no less acutely (see table 32). According to their water pollution index, calculated separately for each section of every river and lake in Belarus, the following rivers belong to category four of the most polluted: Zapadnaya Dvina (Novopolotsk, Verkhnedvinsk), Berezina (Borisov, Bobruisk), Plissa (Zhodino), Uza (Gomel), Pripyat (Mozyr) and Osipovichskoye Reservoir. The river Svisloch has moderate degree of pollution below the sewage outlet of the Minsk water treatment plant. Elsewhere, the water is of a better quality, varying throughout the year. During industrial accidents, the concentration of some pollutants exceeds maximum permitted levels 20 — 30 times.

The state of this country's small rivers is causing special concern, where the concentrations of such elements as nitrogen, phosphorus, potassium, chlorine and sulphates have a dangerous tendency to grow. Rivers are polluted by waste water from agricultural farmland, animal farms, industrial enterprises, and household sewage.

Waste reduction, recycling and storage, along with sewage purification remain one of Belarus' biggest environmental problems. This

problem is felt most acutely in areas around the salt mines in Soligorsk, which produce more than 10 million tonnes of solid waste and 1 million cubic metres of slime. The landscapes around Soligorsk have undergone the biggest man-made change in the Republic. Special effort needs to be made to prevent further sagging and swamping of land, and minimise the pollution of the atmosphere, water and soils.

The present state of the environment is affecting the quality of life and poses an additional constraint to further economic development. Its improvement will require the development of advanced mechanisms of environmental control and new technologies, reducing the load on the environment.

#### **2.5.2. Environmental pollution in Minsk**

**A**pproximately 30% of Minsk (within its 1994 limits) lie within the area with a dangerous level of combined environmental pollution. This area includes parts of Zavodskoi district (particularly Shabany), Partizansky and Oktyabrsky districts, especially along busy roads.

More than 35% of the city's territory lie within the area with a high level of combined environmental pollution, including the central, southern and south eastern parts of the city.

Pollution levels in other parts of the city are moderate and can be considered normal for an industrial city such as Minsk.

In Minsk rural district, the areas with dangerous levels of environmental pollution lies East and West of Shabany, and with high levels of pollution South and South East of the city.



## **National report Republic of Belarus**

The above conclusions were based on a combined analysis of data on atmospheric, water and soil pollution, as well as radioactivity, vibration, noise and electromagnetic fields in different parts of the city and district.

Analysis of data on atmospheric pollution in 1985 and 1995 revealed a tendency for greater irregularity of such pollution. In 1985, atmospheric pollution was evenly spread throughout the city. By 1995, areas with extremely high levels of atmospheric pollution had appeared in parts of Zavodskoi and Partizansky districts.

The concentration of individual pollutants has changed as follows:

Reductions have been recorded in the amount of dust, sulphates, nitrogen oxides, phenol, ammonia and hydrogen chloride.

Nitrogen dioxide levels have remained unchanged, while the concentration of benzpyrene, formaldehyde and carbon monoxide have grown. Reductions in the release of pollutants throughout the last four years were caused by a general production fall.

### **2.5.3. Waste formation and accumulation**

In 1993, Belarus created a system that enabled it to keep a record of solid industrial waste being formed, accumulated and reduced. This system has since been using statistical reports from organisations involved in transporting the waste.

The amount of solid waste formed in Belarus in 1993 totalled 18,223,900 tonnes. Of this amount, 14,883,900 tonnes (81.6%) were formed in the industrial sector. The amount of household waste totalled 3,260,000 tonnes (18%) and sewage dregs 80,000 tonnes (0.4%). Only 12% of all waste was reused and 16,037,000 tonnes were accumulated.

Recently, the amount of solid waste has fallen somewhat, mainly because of a production decline. Industrial waste contains a total of more than 600 different substances. Of them, the stockpiles of halite waste and clay and salt slime produced at the potassium salt mining corporation are the highest. Only 9% of halite waste is reused annually. Clay and salt slimes are not reused at all and are stored in slime deposits. A total of 565 million tonnes of waste from potassium salt mines have been accumulated. Their deposits occupy a territory of 1,500 hectares.

More than 197,000 tonnes of phosphogypsum are produced annually at the Gomel Chemical Factory. Only 3% of this amount is reused, the rest is put into deposits which have already accumulated more than 13 million tonnes of waste. Together, they occupy an area of 60 hectares.

Another type of waste being produced in large quantities is lignite, released during the processing of organic material (mainly timber) at the hydrolysis plants in Rechitsa and Bobruisk. Approximately 104,000 tonnes of lignin are being produced annually. A quarter of this amount is composted, the rest is put into deposits, which have already accumulated more than 1.9 million tonnes.

In addition, there is also a high percentage of used moulding and core sand mixtures, domestic and industrial rubbish, wood and construction waste (see Table 33)

Other types of waste, produced in smaller amounts in various industries and constitute only 6.4% of all waste, are much more difficult to reuse or process because of their complex chemical composition. Chemical and machine building factories produce 100,000 tonnes of un reusable slime annually. Another 145 enterprises produce more than 10,000 tonnes of galvanic waste annually, containing highly toxic compounds of cadmium, cobalt, nickel, arsenic and other elements. Galvanic slime is not reused and is stockpiled in those enterprises or dumping ground. In addition to galvanic waste, dumping grounds also receive oil by-products, used solvents, paints or varnish, accumulator electrolytes and other dangerous chemicals.

The amount of domestic waste is comparable to that of industrial waste. Most solid domestic waste is deposited in 200 dumping grounds and numerous unregistered dumps. The area occupied by dumping grounds now exceeds 1,000 hectares. The Republic has two waste reduction plants, in Minsk and Mogilev, which process under 150,000 tonnes (4.6%) of solid domestic waste annually. Both waste reduction plants use a domestic technology to extract ferrous and non-ferrous metals, plastic and glass, and compost the remaining waste.

However, high concentrations of heavy metals prevent the product from being used in agriculture.

## **National report Republic of Belarus**

Therefore, most of the compost is used to re-cultivate dumping grounds and for growing decorative plants.

The amount of recycled sewage dregs remains insignificant. Because of a poorly developed drying technology and high content of toxic components of industrial origin, the dregs can only have a limited use in forestry and farming. The dregs are being accumulated in ponds and sludge deposits. A total of 1.2 million tonnes of sewage dregs have been accumulated in Belarus. A plan of their recycling has yet to be developed.

Most of the waste being produced is thus stored in the enterprises or deposited in dumping grounds,

registered or unregistered.

Unregistered dumps, as a rule, do not meet the existing sanitation and hygienic standards. Dumps occupy thousands of hectares of farmland. Accumulated in dumps and slime deposits, industrial waste becomes a permanent source of water, soil and atmospheric pollution. At the same time, such deposits contain valuable chemicals. The recycling of this waste could not only make it less dangerous to the environment but also make result in a substantial economy of the original raw materials.

### **2.6 Territorial resources of populated areas**

#### **2.6.1. The use of territorial resources**

**T**he existing network of human settlements reflects the interaction of several key factors affecting the location of industrial enterprises. They are on the one hand, the natural environment and resources and on the other, the cultural and historical background as well as factors determining the efficiency of individual enterprises and of production in general.

The use of urban territories is guided the document known as present-day and projected balance of territory. The balance of territory is included in the package of city planning documents and drafted in accordance with the layout, regulations and procedures laid out in the construction and urban planning guidelines approved by the local bureau of technical assessment.

For purposes of compiling a land inventory, territories are presently being allotted to users and owners residing in urban or other settlements. In accordance with the land code of Belarus, an inventory of such territories is being made listing their categories and use. This inventory is different from the balance of territory and related documents discussed above.

The inventory of urban territories prepared by the Committee for Land Reform lists the lands located within the urban limits, rather than separate parts of its territory. Urban land is divided into farmland, forestry land, and territories occupied by marshes, bushes, roads or trails, buildings and yards. Territories occupied by private houses with a garden plot are recorded as farmland (see Table A2.01).

The balances of territory prepared by the bureaus of technical accessioning, as well as the inventory of municipal permanent assets prepared by the ministry of housing and public utilities, record individual element of the city's territory differently. The updated by category structure of municipal lands is presented in Table A2.02

The capital of Belarus and five regional centres occupy the biggest share of urban territory (28.6%). Other cities with a population of over 100,000, 50,000 — 100,000 and cities under regional jurisdiction with less than 50,000 occupy around 12% of all urban territory in each group. Cities under district jurisdiction and other urban areas occupy 19.2% and 16%, respectively.

Public and residential buildings occupy, on average, 40.4% of the urban territory. This figure varies from 31.5% in cities with 50,000 to 100,000 residents to 48.8% in smaller towns.

A high percentage (16.7%) of territories occupied by industrial enterprises is typical of intensively developing industrial cities, with 50,000 — 100,000 residents.

Cities with a population of more than 100,000 have a relatively high percentage of restricted areas (13.6%).

Also noteworthy is the high percentage of farmland in smaller towns (17.3 — 20.0%) and of other territories in cities with more than 100,000 residents, regional capitals and Minsk (11.1 — 19%, with the national average of 11.0%).

# National report Republic of Belarus

Table No 32

## Role of different sectors of the economy in environmental pollution (1994)

Pollutants	Housing maintenance service	Industrial sector	agricultural sector
Sewage containing pollutants, million cubic metres	693	233,9	8,33
Organic substances, 1000 tonnes	13,46	2,58	0,49
Suspended substances, 1000 tonnes	13,35	3,62	1,25
Oil by-products	0,36	0,09	-
Phosphorus, tonnes	113,9	57,38	44,4
Ammonia nitrogen, tonnes	3355	2417	272
Nitrite nitrogen, tonnes	195	113	18,5

### 2.6.2 Urban development

Previously, residential areas were formed mainly out of high-rise buildings. Therefore, the approach to city planning and development was oriented for using free territories for residential construction. As a result of this approach, high-rise buildings with 5 — 9 stories were built in nearly all cities with a high degree of compactness.

However, vast areas in Belarusian cities still remain occupied by low-rise, mainly one-storied wooden houses. Therefore, the average degree of compactness has remained rather low. The table below shows the per capita size of the territory occupied by residential building (square metres per resident) in various cities, including Minsk.

Most of today's problems of city development have to do with the allocation of land for the construction of individual houses. The allotment of land for such construction is largely deregulated. Private houses are being built in areas previously designated for the construction of high-rise residential buildings; or in villages and territories adjacent to the city. As a result, cities are increasing in size.

The need to modernise and renovate the existing private houses and garden plots is being felt more acutely than before. In some cities, such as Minsk, Vitebsk, Mogilev, Minsk and others, garden plots have approached the city limits closer than areas under the newly built private houses.

Analysis of the existing layout of urban areas suggests that urban territories are being used inefficiently. Vast areas managed by the city are either empty or occupied by obsolete

private houses, taking up to 70% of all residential buildings. In most such areas, there is a strong need to update the transport system, and improve public amenities and services.

In most cities, there is also a need to renovate the houses built in the 1970's 1960's, 1950's and before. Such renovation may become an important focus of a state programme. Such a programme could contribute to resolving the unemployment problem, attracting investment and modernising the infrastructure. Considerable opportunities for increasing the compactness of cities lie in new types of business activity, such as the construction of flats to be rented out to dwellers, and others.

### 2.6.3. Land market

The right of private ownership for land was introduced by the law on private ownership for land which came into force on 1 September 1993.

Under the existing law, land can be owned exclusively by citizens of Belarus or persons with the status of permanent residents.

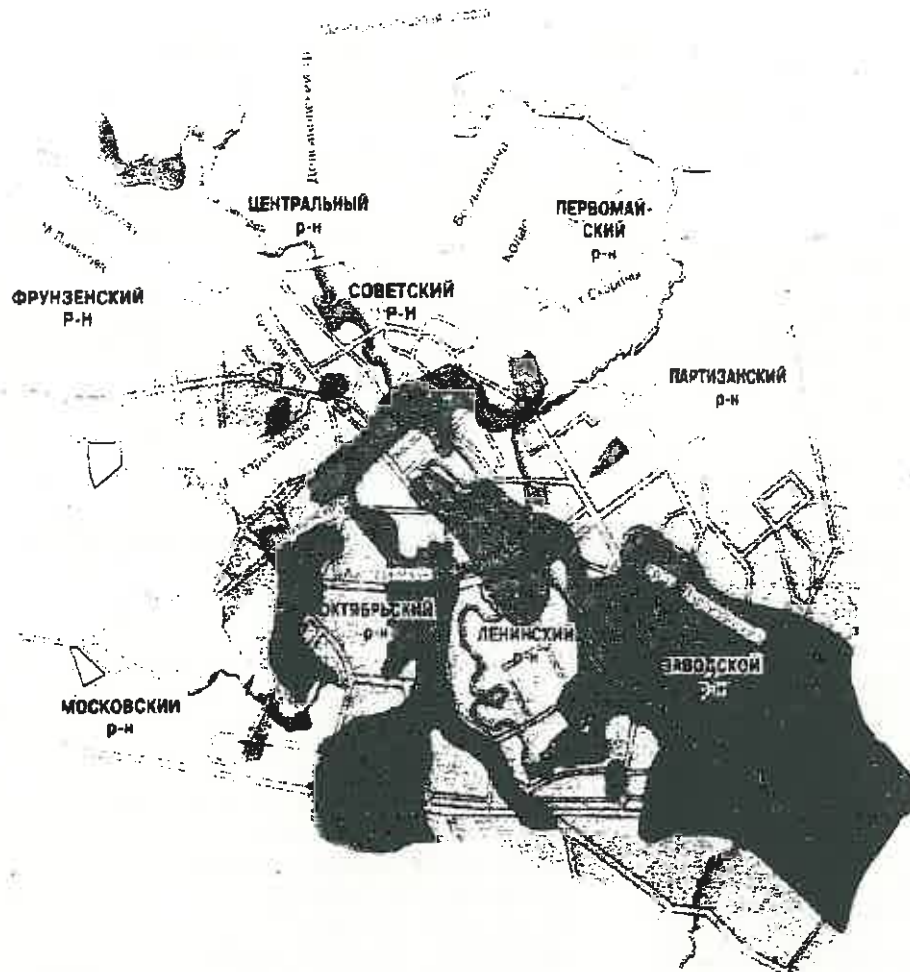
Citizens can own land which they have purchased for either of the following:

- private farming;
- construction and maintenance of a private house;
- private gardening.

The law sets the following limits on the size of a land plot owned by a citizen:

- up to one hectare in rural areas and small urban settlements for purposes of private farming;

## National report Republic of Belarus



- for purposes of individual housing construction, 0.15 — 0.5 hectares in urban, and 0.15 — 0.25 hectares in rural areas.

- for purposes of private gardening 0.1 hectares.

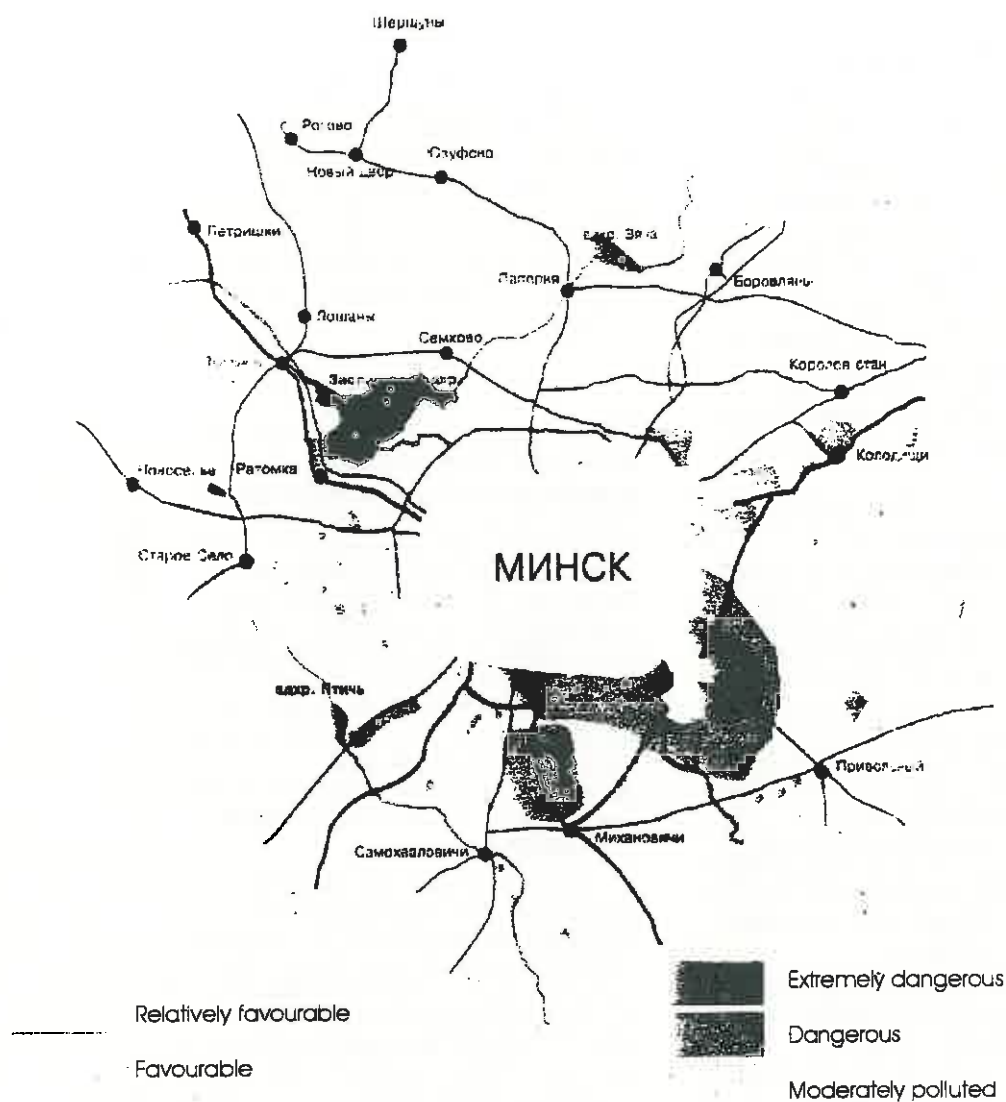
Citizens who owned or were using more than one land plot prior to the enactment of the Law on Land Ownership (16 July 1993) can buy one of them at a reduced price. The same conditions apply to persons recognised, in accordance with the housing legislation, as needing to improve their living conditions.

In all other cases, land plots must be bought at regular prices.

The law on private ownership for land defines territories that cannot be purchased by a private individual. these include territories in common use (e.g. squares, streets or roads), as well as land used by transport, communications, nature preserves, national parks, or occupied by forests, lakes and rivers, grazing land and other farmland in common use.

The draft Presidential decree "On the right of legal entities, including firms with foreign investment, to land ownership in Belarus" will provide more incentives for foreign investment in Belarus' economy. Legal entities, including companies with foreign capital, can acquire land when privatising state property objects, or for implementation of major investment projects.

## National report Republic of Belarus



### 2.6.4 Land assessment

Taken in the context of economic needs and interests the land within human settlements is a unique natural phenomenon and also the material base for any type of activity. Being a complex resource, it requires assessment, valuation and efficient use.

The economic significance of land as a natural, and, to a greater extent, an economic resource is immanent in every sphere of material and non-material production. The value of land emanates from its significance as the physical space of economic activity and from the entity of economic, industrial and spatial factors, as well as those dealing with the infrastructure and architectural

arrangement of the settlement. All these factors ultimately determine the life of the city and well-being of its people. Moreover, it is the quality of the urban environment that defines the role of the city's place in the social, economic, environmental, historical and cultural potential of the society.

Nevertheless, the counterproductive and careless use of this resource is continuing, accompanied by a sporadic growth of territories under construction, deregulated urban development, disproportions in the level of urbanisation and development of the social infrastructure, as well as deterioration of the environment.

## **National report Republic of Belarus**

Any human settlement, and big cities especially, were built with the efforts of several generations and are therefore a valuable resource to any county. Populated areas occupy only 8.78% of the Republic's territory, and cities occupy only 14% of this amount. However, it is namely the cities where all of the Republic's economy, with the exception of agriculture, is located. The use of urban land is a very complex issue, which cannot be resolved using the approach applicable to agricultural land. The new laws have also neglected specific issues related to the use of land within human settlements. This land must be approached as a developed territory fulfilling multiple economic and other functions.

The series of new laws guiding the use of territories has had a substantial positive effect, as it had increased the rights of the local authorities of power to managing the land, thereby increasing the amount of tax revenue in the budget. This process required the development of numerous guidelines for the economic valuation of municipal land. Two practical goals had emerged: firstly, to assess the territory occupied by populated areas of different sizes and their role in the Republic's settlement system and, secondly, to assess the territories within each settlement.

However, no accepted guidelines for such assessment have been developed so far. Territorial assessment is presently based on either the sum of all related expenses, often different in origin, nature, and methods of calculation, the size of all past and future investment in municipal infrastructure, or the economic condition of a land user.

After the coming into effect of the law "On land ownership", an effort was made to conduct a normative assessment of territories in urban and other settlements that could be purchased by private individuals and used for private farming, construction of individual housing or private gardening.

This assessment used a rent approach and was based on the assumption that the price of territories of different sizes and used for different purposes is determined by three factors: first, the natural property of land and its limited size,

second, government investment in the industrial and social infrastructure, and third, constant population growth, increasing the demand for land within human settlements.

In Minsk, the normative price of land stood at 51.8 million roubles per hectare. The price of undeveloped land was 3.8 roubles. The price of land equalled 14 million roubles, based on socio-economic factors and 34 million roubles based on its consumer value. The price resulting from all the above factors is shown in Table 4.

### **2.6.5. Land payments**

**U**nder Article 1 of the law "On Land Payments", such payments are directed primarily towards the social development of urban and rural territories. Under the same law, land users participate in the formation of the budget by paying for the land that they use, and local Soviets use these funds to support the social and economic development of the settlement. However, the share of such payments was only 8%, and the cost of maintenance and development of the infrastructure as high as 82% of the 1992 budgetary expenditure.

In accordance with the existing guidelines, the development of municipal territories can be covered exclusively out of local budgetary revenues with no funds being used for such development from the central budget. However, increases in the size of land payments are raising the share of the revenues from such payments in the central budget. In 1993, it equalled 34.6%, and reached 56.5% a year later.

In the provision of tax relieves, legal issues are not properly linked with the economic ones. Land duties are not paid on almost 66% of all territories in rural, and 40% in urban areas. Territories occupied by private houses and garden plots are taxed as agricultural land located outside the settlement.

The size of land payments does not depend on the way the territory is used. There are still no objective criteria enabling to determine whether the entity uses too much, or misuses its land. All those effects are caused by a lack of principles guarding the taxation of land within human settlements (Article 6 of the Law on Tax Duties).



## **National report Republic of Belarus**

### **2.7. Local administration and self-rule.**

2.7.1. The present period of this country's development is marked by the formation of a system of local government and self-rule.

The initial stages of this process have the following distinctive features:

the definition of rights and responsibilities of different authorities of power often lacks clarity and logic;

the legal basis for such definition is inadequate and incomplete, the financial and economic base is non-existent, and the public is largely not included in the process of decision making. In addition, the forms, method and organisation of local government and self rule have not been developed well enough.

Under the Constitution of Belarus, local self-rule is conducted through local Soviets and executives, dealing with local issues within their authority and guarded in their decision making by the interests of the state and inhabitants in their territories. Local governments are entirely responsible for the development of local economic and social development programmes, territorial planning, drafting and execution of local budgets, introduction of local taxes and duties and managing municipal property.

Belarus has a three level system of local government. The territory of the Republic is divided into regions, whose governments form the top level of local government and direct and manage the work of the district authorities of power within the region. District authorities, in their turn, direct and manage the work of rural and municipal governments. Depending on the size and importance of the town or city, municipal governments are accountable to the central (e.g. Minsk), regional or district governments.

#### **2.7.2. Revenues and expenditures of local governments**

The economic foundations of local government are laid out in the law "On Local Government and Self Rule in the Republic of Belarus." This law also determines the legal status of local governments.

The economic activity of local governments is enabled by the appropriate financial resources, of which the budget constitutes the biggest part. Local Soviets and

executives are independent in the drafting, approving and execution of their budgets in the interests of the population living in their territories. Intervention of any other institutions in the drafting, approval or execution of the local budgets, is illegal.

Municipal budgets are not included in the budgets of territories of the upper level of government.

Budgetary revenues derive from sources specified by the taxation legislation and the law "On Local Government and Self-Rule in the Republic of Belarus", which are as follows:

- **A percentage of proceeds of excise duties and VAT, set annually after the drafting of the central budget. In 1995, regional and Minsk municipal budgets received 30% of all revenues from excise duties. In addition, regional budgets were entitled to 50% of all proceeds of the VAT, and Minsk municipal budget to 25% of such proceeds.**
- **proceeds of the revenue tax on enterprises owned by local governments and co-operatives;**
- **income tax on individuals; property tax on enterprises and organisations owned by local governments, as well as on co-operatives and individuals; land payments, including duties and rent. Local budgets receive 75% of all revenues on land in rural territories and 60% in urban areas;**
- **50% of the environmental tax on oil extraction and salt mining, and full amount of taxes for the use of other natural resources and for environmental pollution;**
- **national duty and local fees.**

The biggest share in the revenues of local budgets is made up of state taxes, paid to the local budget either under the existing laws or the law on the state budget adopted annually. Revenues from local taxes and duties still remain low.

Local governments are independent in allocating budgetary means, with the exception of grants-in-aid from the budgets of an upper level.

Typical allocation of local budgetary means is reflected in the table below.

## National report Republic of Belarus

The biggest part of budgetary spending is directed towards the management of public and cultural services, as well as financing of free medical care and education.

Local governments provide support libraries, cultural centres, museums, medical institutions, and secondary schools. These institutions are involved in a number of additional programmes, such organisation of extra-curriculum activities, staff training, prevention of epidemics and environmental improvement.

Another substantial part of local budgetary expenditure is related to the maintenance of municipal housing and public utilities, such as water supply, heating, sewage system, waste reduction, etc.), as well as public transport and urban facilities.

Lately, share in the cost of public utilities and housing covered by residents, has had a tendency to grow. Nevertheless, the cost of such utilities to local budgets remains very high. In addition, local budgets participate in subsidising the agricultural sector.

Budgetary expenditures may also include payments into the reserve, specialised and other funds. Local governments are permitted to invest disposable budgetary funds in commercial projects shares or other securities, or use such funds to provide loans to enterprises or other legal subjects.

Under the existing law, the delimitation of expenses between local budgets is the responsibility of the higher organs of power.

At present, local budgets are made with no deficit. If the revenues and proceeds of state taxes are too small to cover the expenses, the difference is covered out of subsidies from a higher budget. There are two distinct types of such subsidies. One is generally related to the need of raising the per capita amount of budgetary revenues in

the regions and the capital to the national average.

Along with other social indicators, per capita budgetary is a guideline for determining the minimum size of the local budget. This minimum is set annually by the Supreme Soviet, the Parliament of Belarus and is specified in the approved state budget for the current year. The supreme Soviet also sets the amount of subsidies to paid to the local budgets.

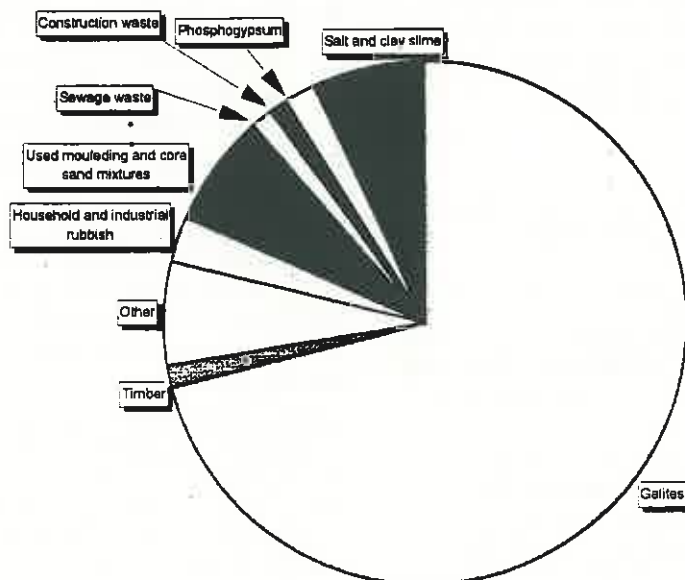
Also widespread is another type of subsidies, used for balancing local budgets on all levels. These subsidies are not normally linked to particular expenses and virtually supplement the subsidies of the former type. The law also enables local budgets to receive funds in grants or subsidies from the higher budgets.

Despite the above facts, the balance between the revenues and expenses of the local budgets still represents a

Table № 33

<b>Formation of solid industrial waste, by type, 1,000 tonnes per year</b>	
Galites	10659,1
Timber	222,2
Other	952,6
Household and industrial rubbish	397,2
Used moulding and core sand mixtures	1034,9
Sewage waste	218,1
Construction waste	167,1
Phosphogypsum	297,3
Salt and clay slime	1034,9

Diagram № 33.1



## National report Republic of Belarus

problem, which is felt quite acutely, especially on the medium level of local government. At present, the amount of tax proceeds and other revenues falls short of the amount of necessary local expenditures in more than two thirds of all local budgets. The amount of subsidies and grants received by such budgets sometimes exceeds 70% of their expenditure.

The solution to this problem lies in changing the mechanism of revenue collection by increasing the role of local taxes and duties.

Efficient use of budgetary means is encouraged by enabling local governments to keep the additional revenues obtained during the execution of local budgets, and the entire excess of revenues over spending. Local government are entitled to provide tax relieves to payers in their budgets.

Nevertheless, the high percentage of subsidies in the local budgets is creating difficulties in the work of local governments and puts considerable limitations on their initiative. In effect, this leaves the central government with the same load of responsibility from the support of the social sphere in various communities.

### 2.7.3. Organisation of local government

The rights and responsibilities for the promotion of economic and social development in its territory is vested in the local Soviet as an elected institution of local government. As a rule, each local Soviet forms, out of its members, several permanent commissions performing mainly the functions of control.

The executive and administrative functions are performed by the local executives. Under the existing law, the executive acts as part of a system of local government and the executive and administrative organ of the local Soviet with a general authority.

Since the enactment of a new Constitution and the introduction of Presidency, the system of local executives has been undergoing substantial change. The executives are becoming part of a centralised system of government by being included in an administrative structure accountable to the President. They are now assuming the functions that had once been within the authority of the local elected organs. Mergers of administrative units with a common centre are being carried out, along with the search for a better and more cost efficient form of government. The spending on local government staff remains relatively low, little over 2% of all local budgetary expenditures.

The economic difficulties experienced by Belarus demand full use of all its potential resources, including local government. This goal can be achieved only on condition that the local elected and executive institutions achieve a maximum degree of co-ordination in their activities, and work with greater initiative and responsibility. The role of the true local self-rule must also be increased. Therefore, the key factors in reaching those objectives are, firstly, the gradual increase of the autonomy of local government, conducted with due account of local conditions, and secondly, the legal division of responsibilities between the central and local governments, based on the principles of local self-rule.

### 2.7.4. Managing the development of human settlements

For decades, the management of urban development had been used to working within the administrative command system, in line with its organisation, legal and economic system, its policy, ideology and values. Despite the legal recognition of the importance of conserving and improving the habitat, this principle was never carried out in practice. As

Table No A2.01

Urban land resources by type									
	Total area	Agricultural land	Arable land	forests	bogs	under water	roads and lanes	streets and squares	territory under construction
Territory of human settlements	1803,3	1318,6	904,6	83,9	28,8	16,5	20,0	112,5	132,0
Including:									
Towns and cities	202,0	53,8	30,0	12,9	1,6	5,7	7,5	30,3	77,4
Other urban settlements	46,1	22,0	14,8	2,4	0,8	0,6	1,3	7,4	7,4
Rural settlements	1552,8	1240,8	858,3	68,7	26,4	10,2	11,2	74,8	47,3
% of the total									
Territory of human settlements	100	73,1	50,2	4,6	1,6	0,9	1,1	6,2	7,3
Including:									
Towns and cities	100	26,6	14,8	6,4	0,8	2,8	3,7	15,0	33,0
Other urban settlements	100	47,7	31,6	5,2	1,7	1,3	2,8	16,0	15,8
Rural settlements	100	79,9	55,3	4,4	1,7	0,6	0,7	4,8	3,4

## National report Republic of Belarus

a result, numerous objects and facilities were built to meet the needs of separate industries, rather than for the improvement of the human environment.

In conditions of rigid centralised planning, the use of economic mechanisms and incentives for managing the development of human settlements was even more limited than in any other area. Enterprises and organisations involved in the reproduction and improvement of the living environment were financed from the budget, with no efforts being made to assess the value of their work. Also non-existent were the economic incentives in the execution of city planning documents and proposals.

The existing economic and legal base of urban planning was centred on the narrow interests of separate industries and agencies. The reason for this situation lay in the economic mechanism in which the property rights for municipal land was realised. The allocation of land to individual industries put ministries and government agencies in the position of the actual owners of land, even within populated areas.

As a result, development decisions were often being taken in the interests of the industries and to the detriment of the local population and economy as a whole. In this

situation, the domination of industrial interests over the interests of territories is inevitable, particularly in the formulation of laws and economic policies was as inevitable as the use of preference for command methods of governance in the realisation of urban development programmes.

The democratic procedure of decision making was largely ignored in the making of city planning documents. A mechanism for monitoring the public opinion regarding the decisions being taken was virtually non-existent.

The present law continues to regulate only the procedural aspects of city planning. City planning documents still ignore the legal aspects of this process, reflecting the status of each part and section of the settlement as a subject of the exclusive right of the state to their ownership and the right of citizens for their use, at least by obtaining land within populated areas for purposes of housing construction. Nor does the law define the legal norms and relations guarding the recording and confiscation of land.

These and numerous other gaps are causing misunderstandings and unclarity in legal terminology and uncertainty in the legal status of human settlements and their integral parts, along with other unfavourable effects in the management of urban and rural development.

**Table № A2.02**

<b>Use of land in various types of urban areas, %</b>								
	Total	Minsk	regional	capitals Cities under regional jurisdiction with a population of:			other towns and cities	other
				over 100,000	50,000 — 100,000	under 50,000		
Total % of urban land	100,0	10,4	18,2	12,6	11,9	11,7	19,2	5,0
Including areas occupied by:	100,0	100,0	100,0	100,0	100,0	100,0	100,0	100,0
housing and office buildings	40,4	41,4	37,3	32,6	31,5	39,5	46,9	48,8
industrial sites	8,7	8,5	10,9	7,8	18,7	8,4	7,6	5,6
warehouses	1,4	0,7	1,7	1,1	2,0	2,1	1,1	0,9
transport facilities	3,4	2,2	4,4	4,0	5,7	4,4	2,0	1,7
public amenities facilities	1,5	1,5	2,3	2,0	1,1	1,9	0,9	1,0
special purpose sites	3,4	1,2	3,3	13,6	2,9	3,1	1,0	0,2
Streets, squares and by-streets	8,3	9,5	8,9	8,7	6,8	8,0	6,1	8,2
greens areas	7,3	12,3	9,3	8,2	12,3	4,8	3,3	4,3
of which:								
1. in common use	7,1	12,1	9,1	8,0	12,1	4,4	3,0	4,9
2. sports facilities	0,2	0,2	0,2	0,2	0,2	0,2	0,2	0,2
water reservoirs	2,4	1,7	2,7	3,4	3,0	1,6	2,6	1,4
agricultural land	12,2	4,0	7,5	3,9	9,8	17,3	18,6	10,0
other	11,0	19,0	11,7	14,7	8,4	11,3	7,9	7,9

**Table № A2.03**

<b>Urban development density, square metres per person, at the beginning of the year</b>				
	1976	1981	1986	1991
<b>All urban areas</b>				
Average number	384,0	351,1	322,8	311,8
residential areas	152,9	143,5	132,3	125,9
<b>Minsk</b>				
All urban areas	145,8	142,8	128,2	134,9
Average number	70,5	63,4	58,3	56,7



## **Chapter 2. National plan of human settlements development**

### **1. Strategic goals**

**U**rban development in Belarus is closely linked to the economic and social developments in this country and the process of reforms carried out on the national level. Urban development has been greatly affected by changes in the geopolitical situation of the Republic, the formation of a system of local self-rule, structural reform in the economy, development of new relations in the sphere of land ownership, mass privatisation of housing and the rise of a property market.

1.1 These changes are going especially fast in urban settlements, and especially in big cities and regional capitals, generating a score of problems which should be resolved quickly and efficiently with the assistance of both the central and local governments.

The legislation enacted over the past few years does not fully reflect the nature of urban development, affecting the scientific, technological, material and intellectual resources, concentrated mainly in urban areas.

1.2. The earlier methods of city planning, based almost entirely on a rough evaluation of the existing trends, can no longer be considered acceptable. The forecasts based on the formerly accepted practice of economic planning five years ahead, have lost their significance, and the planning documents suited for a centrally planned economy have grown obsolete. The country needs new strategic approaches, a deeper

analysis of the ongoing changes and a better appreciation of its cultural, historical, and national identity.

1.3. The key approaches to a plan of Belarus' urban development are based on the need to give all its citizens an equal opportunity of involvement in urban construction and development, providing that a fair balance is observed between the rights of the individual and society as a whole.

1.3.1. All citizens of Belarus, including the residents of urban areas, have equal rights for the fulfilment of their basic needs, a decent living standard, opportunities of employment, access to medical care, recreation and child rearing.

1.3.2. The urban environment must provide opportunities for the realisation of individual right to a degree that is determined by the country's cultural, historic and aesthetic tradition.

1.3.3. The rights of the individual and society realised in an urban environment should be defined and stipulated in the legislation, as well as educational and other sources, based on well-researched scientific data and meeting the European standards.

1.3.4. The work of power institutions on all levels, from central to local governments, should be directed at efficient decision making in the field of construction, investment in the urban investment, and preventing excessive disparities in the living standards of different social groups.

### **2. Priorities and problems of human settlements development**

#### **2.1. Social and economic problems**

2.1.1. Recent social, economic and political changes have affected primarily the Republic's demographic statistics. Between 1990 and 1994, the rate of population growth had

fallen more than 2.5 times below the level of the previous five year period. In 1993, the number of deaths exceeded the number of deaths in all areas of the Republic, except Minsk

## **National report Republic of Belarus**

and Brest Region. The growth of the urban population is caused mainly by external migration. Population growth in cities such as Minsk, Gomel, Mogilev, Grodno and Vitebsk has virtually stopped, while others, such as Brest, Lida, Pinsk, Polotsk, Soligorsk, Zhlobin and Molodechno have kept the same rates of growth. By the year 2,000, the Republic's population will decrease by total of 258,700. The reduction will mainly affect the rural areas. Urban population will grow by a slight 0.07%.

2.1.2. The republic's manufacturing sector is undergoing a process of restructuring. Population decline is accompanied by a reduction in the number of workers in the manufacturing sectors. Between 1990 and 1994, it had reduced by 270,000. Production decline has hit all sectors of the industry. Despite the fact that the public sector is far ahead of the private sector by the number of companies (72.4% versus 27.6%), both employ a roughly equal number of workers (52.5% and 47.5%, respectively). The share of the public sector in industrial output fell from 78.2% in 1990 to 60% in 1994. In the same time period, output in the private sector had doubled. Today, it accounts for 40% of all output.

2.1.3. The housing sector is undergoing radical change. The amount of new housing being put

into operation has been falling at a fast rate in both urban and rural areas. Since 1985, the construction of new housing has gone down 22% in cities and 68% in rural areas. The share of government owned enterprises in such construction had fallen from 71% in 1990 to only 56% in 1994. In the same time period, individuals had increased their share from 7.6 to 17.3%. 62% of all urban housing stock is owned by the state. Newly privatised flats constitute 8.3% of all private housing. However, the process of privatisation is rapidly losing its momentum. The share of capital investment directed towards housing construction has fallen 1.5 times since 1990.

The construction of private houses is accelerating against the background of growing income differentiation. Only a small part of society can provide itself with comfortable housing. To all the rest, housing remains completely unaffordable. With per capita dwelling space less than 18 square metres (1.5 — 2 times below the standards of the industrial world), falling housing construction signals a dangerous trend in Belarus' social development. This trend looks even more alarming considering the fact that per capita amount of housing is taken as one of the key indicators of social well being in a developed market economy.

### **2.2 Territorial distinctions**

2.2.1. Urban settlements in Belarus have had a long period of development and possess numerous distinctive features in their architectural and territorial environments. The formation of this environment is a continuous process affected by a multitude of historic, social, economic and environmental factors. Belarus has 211 urban areas. Of them, 168 are smaller towns. The biggest and most urbanised cities, such as Minsk have 50% of all urban population. Urban settlements occupy 1.1% of the Republic's territory. The specific development conditions of different cities are reflected in the city plans. Despite all changes, all Belarus' cities have kept their original territorial layout.

2.2.2. Most of Belarus' urban settlements have been put in new conditions of their development, forcing them to increase in size and move part of their facilities to the suburbs. Urbanised areas are forming around many urban settlements, particularly the bigger cities. The domination of the city in such areas

is reflected in the strengthening of the industrial, economic, social, demographic, environmental and other types of interaction between the city and its adjacent area.

2.2.3. Today, most urban development problems are related to the allocation of land for private housing construction. This process has become sporadic in most cities. Private houses are being built in the territories that had initially been allocated for the construction of high-rise housing, or in water protection zones (e.g. the forest and water belt around Minsk). Sometimes, such construction is going on in valuable territories in the central part of the city (e.g. Grodno or Mogilev). Additional problems arise with regard to the development of the garden plots, frequently approaching the city limit closer than areas of new private housing constructions, and the territorial needs of new farms and industries.



## **National report Republic of Belarus**

All these difficulties were caused by an absence of adequate legislation, lack of an accepted mechanism of territorial assessment for purposes of urban planning and of an urban development inventory, as well as the inadequacy of the law on land to the requirements of urban development.

2.2.4. The central part of the city, with the greatest number of public buildings, is the key object of city planning. Today, central areas are undergoing sporadic reorganisation, with parts of their territories being converted into trade outlets. The privatisation of services is the fastest in bigger cities. Hardly any new cultural or educational institutions are being opened. Imbalances are increasing in the territorial location of services outlets within the city.

2.2.5. The planting of cities with trees and gardens has practically stopped. The size of planted areas in common use per resident has reduced, over the last ten years, from 7.7 to 6.5 square metres in regional capitals and from 6.2 to 5.5 square metres in other cities. In Minsk alone, more

than 60 hectares of planted areas had been taken for housing construction.

2.2.6. Renovation of the old buildings is presently one of the biggest problems faced by the Belarusian cities. The housing stock and infrastructure built in the 1950's and 1960's, and occupying up to 20% of all urban territories, are in urgent need of major repairs. Production territories are used extremely inefficiently. Economic restructuring must lead to their transformation and considerable reduction. Areas occupied by private houses and taking up to 70% of the city's territory also require a centralised renovation effort. Thus, the transformation of the existing residential and production territories, enabling them to locate new companies and organisations involved in new types of commercial and social activities, such as the leasing of housing, may become an important resource for increasing employment and attracting investment in the urban environment.

### **2.3. The infrastructure**

2.3.1. Service sector has started to decline. The existing services network is narrowing down. Day care and cultural centres are ceasing to operate. Trade and public catering network has transformed. Personal services outlets, repair shops, laundromats, etc., are closing down.

2.3.2. Reduction in the number of passengers transported and in the general mobility of the population have contributed to the growth of the public transport problem. The amount of cargo transported has dropped 1.6 times. At the same time, the number of individual cars is growing rapidly. Since 1985, it has almost doubled. The number of cars per every 1,000 citizens has reached 90 — 100 in bigger cities. This number is expected to reach 130 — 140 per every 1,000 by the year 2,000. This growth will raise requirements to the republic's road system. Nevertheless, the construction offered and streets has almost stopped. Unable to complete

the new construction, road builders are putting it on hold until better times.

The construction of new roads is especially slow in new low-rise residential areas. More bus routes are shutting down. The number of areas with access to bus service has decreased by 25%.

2.3.3. The cities' maintenance infrastructure is poorly developed. Development levels are better in bigger cities, where 87% of all residential area have a maintenance infrastructure. In smaller towns, this percentage varies from 60 to 20. In future, effective solutions must be found to develop the infrastructure of low-rise housing areas, where the old centralised networks cannot be used. 60 to 70% of all maintenance networks in cities, built 30 to 40 years ago have deteriorated and must be replaced or repaired. Out of every 100 km of the heating pipes in Orsha, 35 km need to be replaced.

### **2.4. Environmental problems**

Radioactive contamination of approximately 20% of Belarus' territory has decreased its environmental potential and necessitated tremendous government spending to minimise its effects. Radioactive contamination is combine with a high degree of air, water and

soil pollution. Environmental pollution in many big cities has reached a level dangerous for public health. The main sources of environmental pollution are the chemical, machine building, energy, construction and other industries, as well as transport. The rates of environmental pollution

## **National report Republic of Belarus**

are the highest in Minsk, Mogilev, Polotsk, Novopolotsk, Orsha and other cities.

### **2.5. Preserving the cultural and historical identity of cities.**

Most problems are caused by difficulties in conducting the renovation of old buildings. Lately, the need has arisen to reconstruct old farmstead and wooden buildings.

The historic identity of the cities was damaged by large-scale construction of design housing.

The renovation of the historical and national features of Belarusian cities must become an important priority of

their future development. This will require new approaches to design and construction, as well as the development of a new legal mechanism guarding the architectural and urban development. City planning and architectural development must enable every citizen to live in a healthy environment and an attractive looking city.

## **3. Human settlements: development strategies**

3.1. The economic development, as well as features of its socio-economic environment and demographic situation, suggest that the regional and rural-urban disparities in Belarus' population will continue to grow.

The areas with the biggest chances of intensive development lie along borders and around big cities. Also favourably located are the industrial and transport junctions, such as Borisov, Bobruisk, Molodechno, Volkocysk, and Kobrin located along major transport gateways of regional and international significance, as well as such cities as Novogrudok, Pruzhany, Kamenets, Braslav and Mir with a high historic and recreational value.

3.2. Intensive development of Belarus implies a full use of the economic and geopolitical reserves of big cities. With an effective use of their unique environment and resources, these cities will can make a significant contribution to the technological, scientific and social progress of Belarus. The world experience of urbanisation suggest that centres of high technologies are formed in areas where population density reaches 300 — 350 persons per square kilometre, i.e. in large urban conglomerates. Hence, the development of high technologies in Belarus can proceed only in a very limited number of relatively small areas. Increase in the number and size of such areas should become an important part of a future urban development policy of the state.

3.3 Industrial restructuring in big urban areas and their conglomerates should be linked with changes in the profiles of many industries. Such

transformation should, above all, affect the enterprises which occupy large territories and use high amounts of energy resources. The conversion of military industries, especially in areas of their mass location, should receive extensive support from the state.

Proper co-ordination between industrial restructuring and development of big cities could ease social tension and improve the state of the environment in Belarus.

3.4. Belarus is a country with vast rural areas, most of which are structured around smaller towns. The development of the social and transport infrastructure within and between different districts is a key factor in the development of healthy economic activity in the agricultural sector. The most attractive in such areas is investment in the food, light, wood processing, construction and recreation industries. In conditions of growing urbanisation and market changes in the economy, small settlements are in need of organisational and financial support of the state to lay the foundation of their future development.

3.5. The development of legislation regarding urban development planning should be named a priority and be given state support. New laws and legal norms should guard architectural and development management and support state programmes promoting the development of big cities and their growth into urban conglomerates, as well as of small and medium-sized cities. Any such programme should

## National report Republic of Belarus

also address issues related to environmental protection and habitat improvement.

The primary tasks to be fulfilled in order to address those goals are as follows.

- **Legal support mechanisms should be developed to encourage efficient land use, establish and maintain records of property, and enable the management of urban development within local administrations. Also required is the legal base guarding the development of individual urban areas.**
- **City planning documents should be given legal status and used as a long-term basis of urban and suburban zoning, formation of the necessary infrastructure, introduction of construction limitations, the planning of roads and other urban and suburban infrastructure, and warranting the safety of the living environment.**
- **A continuous and flexible forecasting and planning effort should be made, based on the likely models of industrial and business development in each particular settlement and in liaison with the city planning strategies made on the government, regional and local levels.**
- **Different data systems must be developed and gradually put into use, in order create national, regional and local data bases and maintain a legally adequate computerised record of real estate and capable of monitoring changes and overseeing its compliance with city planning standards.**

3.6 The city and the territory around it should become a single subject of state regulation, local administration and development and construction management. To this end, the system of its administration must be upgraded in order to promote more efficient land use, formation of a healthy living environment and stop unnecessary territorial growth of the cities, undermining the existing planning system and causing conflicts with suburban residents.

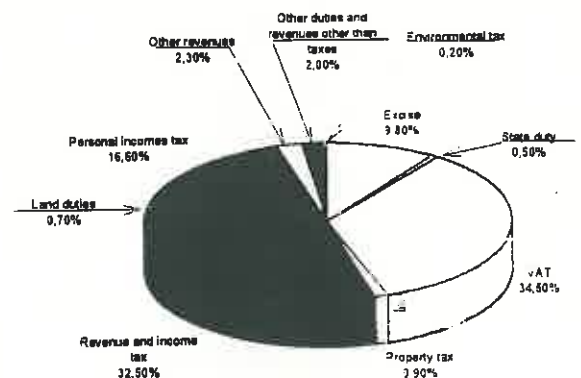
Provision of housing to all residents of Belarus meeting the world standards, as well as proper repair and maintenance of such housing, should become an immediate priority of city planning. Considering the fact that up a third of all the wealth produced by the nation is invested in housing construction, a stop to the decline in this sector can become a significant contribution to an overall economic improvement in this country. The guidelines for the development of housing construction, and their role in city planning and allocation of urban territories should be made public and reflected in the National Housing Programme.

3.7. The present structure of housing construction should be modified in order to ensure efficient use of territorial, technical and environmental resources. Such modification should become an important focus of the state city planning policy in the field of housing construction. The experience of advanced market economies speaks against the support of rural lifestyles in urbanised territories, especially in and around big cities. This understanding requires a revision of parts of the existing land legislation, determining the amount of land that can be allocated for the construction of individual housing. Approaches to such construction should be revised, with

Tabl № 34

<b>Revenues of local budgets in 1994</b>	
Excise	9,8
State duty	0,5
VAT	34,5
Property tax	0,9
Revenue and income tax	32,5
Land duties	0,7
Personal incomes tax	16,6
Other revenues	2,3
Other duties and revenues other than taxes	2
Environmental tax	0,2
<b>Total</b>	<b>100</b>

Diagram № 34.1



## National report Republic of Belarus

adequate amendments made to the Land Code.

3.8. In order to upgrade the financing, use and management of privatised housing in high-rise urban residential buildings, the legal and financial base of joint ownership of such houses must be formulated by the relevant legislation. The key element of such legislation, the law on a condominium, will define the rights and responsibility of both the present and future flat owners.

3.9. A system of financial and other institutions must be created in order to encourage housing construction by individuals, local administrations, private building societies.

Efforts of all economic entities should be directed towards resolving the existing problems of housing construction in the interests of the general public, and preventing extreme forms of income differentiation and further decline in the amount of available housing per individual.

Residential and public facilities equipped with a maintenance infrastructure, should remain under governmental control to ensure their primary use for the maintaining the living conditions of the underprivileged groups.

3.10. The management of urban development should be aimed at creating favourable conditions for the growth of the most profitable industries, providing such growth does not damage the historic and cultural heritage or the aesthetic environment. Urban development should be guided by the need for environmental reproduction and preserving the most useful and attractive characteristics of the urban environment. These requirements are met by accelerating the construction of maintenance facilities and networks, thereby concentrating activity in complexes of the city centre.

3.11. A modernisation programme must be developed in order to upgrade and improve the maintenance and supply networks of urban and rural settlements. The programme should prioritise the construction of a wide range of maintenance systems with different capacities, reflecting changes in urban development conditions and investment opportunities. New methods of energy saving should be introduced to the greatest possible extent, and the use of domestic fuel (peat, wood, and biogas) encouraged.

Table № 35

<b>Local budgetary expenditure</b>		
1	<b>maintenance and support of the social sphere, including:</b>	<b>61,7</b>
	education	24,6
	health care	24,3
	social support	2,7
	culture and sports	2,2
2	<b>improvement of the urban and rural infrastructure, including:</b>	<b>34,2</b>
	maintenance of the housing stock, public amenities sector and public transport	19,5
	renovation and maintenance of buildings and improvement of populated areas	2,2
3	<b>Wages to public servants</b>	<b>2,1</b>
4	<b>Other expenditure</b>	<b>2</b>
<b>Total</b>		<b>100%</b>

3.12. The role of cultural and historic heritage in the national identity and improving the aesthetic standards of the urban environment must be reviewed. Architectural design and decorations of constructed buildings, along with advertising and other parts of the information environment should be approached as important elements of city planning and with a high degree of professionalism.

3.13. Urban planning must ultimately create a safe and comfortable living environment and enable sustainable use and protection of environmental resources. An important goal of urban planning is to develop an integrated approach to preserving the biological and landscape variety, support the natural regeneration processes of a healthy environment, and ensure a sustainable use of environmental resources.

3.14. All environmental efforts should be directed towards maintaining a fair balance between natural and urbanised territories and minimising the effect of harmful environmental influences. This goal can be reached by introducing more stringent requirements with regard to environmental protection in the industrial legislation and laws that guard the use of natural resources, as well as the planning, installation and construction of industrial facilities which affect the environment.

A city's territorial expansion should reflect the state of the environment, and its territorial organisation should isolate incompatible functions from one another and facilitate an efficient and multi-purpose use of natural complexes.

3.15. At present, the targets of urban development are being formulated as a set of strategic guidelines, and long-term development, zoning, construction, improvement and renovation plans. Changes in the functions of urban territories,



# National report Republic of Belarus

Table № 36

Number of public servants employed by local administrations, at the beginning of 1994	
Rural Soviets	35
Soviets in larger rural settlements	4
District Soviets	25
Municipal district Soviets	11
Municipal Soviets	20
Regional Soviets	5

rebuilding of streets and squares and restructuring of the services network are done in the interests of every individual and the community as a whole. The main goal of urban development planning is to create a safe and comfortable living environment.

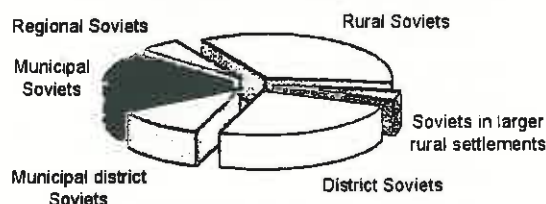
In contrast, the legislation on urban lands focuses on the definition of the an owner, rather than issues related to urban planning and development, hence the different approaches to the definition of land use, regulating land-related issues and assessment of land and municipal property. In future, these approaches should be integrated. The legislation which guards urban development and land use should compliment each other, thereby preventing misunderstandings and possible conflicts.

3.16. The renovation of urban settlements should become a priority in urban development. A large part of the housing stock is in a bad technical condition and in need of urgent repair. The existing maintenance and transport infrastructure needs to be modernised. In addition, urban

territories are being used inefficiently. The construction of private houses does increase the housing stock at a desired rate. Differences exist in providing the public with access to cultural facilities, personal services, public amenities and transport. All these conditions necessitate a government programme of urban development, restructuring and renovation.

Diagram № 33.1

Number of public servants employed by local administrations, at the beginning of 1994



## 4. Implementation measures and mechanisms

4.1. In order to be successfully carried out, a city development plan and individual decisions must not only be financed by the state, but also be based on the private initiative of all potential investors. This goal cannot be reached without the following measures being taken:

4.1.1. Activate all existing legal mechanisms:

Guarantee the stability of the government, a taxation system, and procedures for investors' participation in decision making, as well as the inalienability of property.

4.1.2 Mobilise non-budgetary means by encouraging all types of joint investment in the most promising sectors of the economy and housing construction; promote economic development of territories within and around the city thereby improving the urban environment;

4.1.3. Develop mechanisms for attracting co-ordinated investment in housing construction, including public savings, non-budgetary means, loans and mortgages;

4.1.4. Encourage greater use of domestic resources in urban development by introducing municipal land rent, mortgaging system,



## **National report Republic of Belarus**

taxation of property and property transactions, as well as payments into housing development funds.

4.2. All city planning decisions should be based, to the greatest possible extent, on the opinion of the general public, the biggest investor playing the key role in city development. Public opinion should modify urban development policies on the governmental, regional and local levels.

4.3. The existing social, economic and geopolitical conditions in urban development require the following measures:

4.3.1. Create new jobs in the construction and maintenance of the communication and other types of infrastructure, making use of the position of Belarus as a link between Russia and Europe;

4.3.2. Develop new industries using domestic resources, as well as new services and businesses in the border areas;

4.3.3. Initiate a large-scale programme of individual housing construction, building cheap low-rise houses affordable to medium income groups. Such construction can be done by small companies or residents themselves, thereby improving the employment situation.

4.3.4. Encourage manufacturers of construction materials to use local resources and materials widespread in Belarus.

4.4. The implementation mechanism of Belarus' architectural and urban development strategies could be defined in the Comprehensive Programme of Urban and Architectural Development for 2010 — 2015.

The purpose of the programme is to lay out comprehensive development strategies for the progress and modernisation of urban and rural

settlements in conditions of economic restructuring, changes in land ownership, rising property market and reforms in the housing policy. The programme could be carried out through completion of a number of technical projects encompassing the following fields:

4.4.1. Development of guidelines for modernising various types of urban settlement, depending on their resources and development priorities;

4.4.2. Definition of development patterns for the suburbs of bigger cities and the development of recommendations regarding the planning of suburban areas;

4.4.3. Definition of the criteria for the choice of territory for present and future residential construction, taking into account new land relations and the formation of a property market;

4.4.4. Development of recommendations for assessing the size, structure and changes in the demand for housing and of national housing norms and standards.

4.4.5. Development of guidelines for reforming the social, transport and maintenance infrastructure in Belarusian cities;

4.4.5. Development of strategies for transforming the natural environment in urbanised territories;

4.4.7. Definition of distinctive features of the architectural layout of Belarusian cities in different regions of the country, offering recommendations regarding their application in urban development and planning, and determination of the origins of such features.

Research in the above areas will provide the basis for further development, discussion and enactment of a state urban development policy for the year 2000 to 2010 and onwards.

## **Chapter 3**

# **International co-operation and assistance in the development of human settlements**

### **1. Priority**

**B**elarus has a relatively short record of involvement in international co-operation on human settlements. By 1995, only one technical aid project had been completed in Belarus, with the assistance of the UN Centre for Human Settlements. Nevertheless, this project has demonstrated that many problems of a state policy on human settlements can be successfully resolved using the rich practical experience of international organisations.

In 1991, HABITAT provided aid to the Belarus State Committee for Construction (Gosstroy) as part of the international relief effort following the Chernobyl accident. Later, an International Advisory Meeting, sponsored by EEC UNO convened international experts in urban environment, housing construction and population. Belarus has been visited by a HABITAT mission which offered advisory aid on ways of predicting change caused by such factors as migration and transition to the market. As part of the effort to provide advisory and technical aid to Belarus, the Belarusian Institute of Urban Development has received a computer complex which enabled it to start work on automated urban development data base. The UN advisory assistance was also used in the preparation of a national Strategy of Housing Construction, approved by the Government of Belarus in 1991.

In preparation for its admission as a full member of the Council of Europe, the Republic of Belarus is beginning work on a specialised co-operation programme in order to upgrade its legislation with the standards accepted within the Council of Europe.

In the period when Belarus is building a new economy and moving towards a market system, sustainable economic, social and environmental development of its human settlements becomes a primary task.

In view of growing difficulties in implementing policies on human settlements, it becomes extremely

important to increase co-ordination in international technical co-operation and focus on areas in which the best possible results can be achieved at the lowest possible cost.

Efficient use of international aid depends on the understanding that the beneficiary, the donor organisation and the donor country are acting as partners in co-operation. This evolution in international co-operation reflects substantial changes that have taken place over the last decade in the formulation of policies towards human settlements and the realisation of the scale and multitude of unsatisfied demands in the field of human settlements.

**A**s a country with a transitional economy, Belarus was declared by resolution 15/5 of the UN Commission for Human Settlements as needing further assistance. The resolution called for the provision of consultancies and technical assistance to Belarus in housing and human settlements development. The resolution also suggests that the Executive Director of Habitat include the specific needs of countries with transitional economies in the Global Action Plan and Habitat Activities Plan for 1996-97. The key role in co-ordinating the activities in Central and Eastern Europe and the CIS will be played by the Habitat Information Office for Central and Eastern Europe, located in Budapest, the Moscow Executive office of Habitat and national centres in different cities, capable of providing a professional contribution in fulfilling the above tasks. Co-operation of these offices with the United Nations Centre for Human Settlements (Habitat), and the UN European Economic Commission, as also described as important.

On the country level, the development of an implementation mechanism of policies on human settlements is becoming extremely important.

## **National report Republic of Belarus**

Experience shows that the best organisation in charge of this mechanism is an Intergovernmental Liaison Committee for Human Settlements headed by a Deputy Prime Minister or Minister of Architecture and construction. The action plan of such a committee should be agreed with the Global Activities Plan of the national, regional and international centres of HABITAT.

The implementation of the plan, as well as the need to promote co-ordination with the national authorities, requires the creation of a centre for human settlements with the functions of a secretariat and executive branch of the Committee, working as a permanent government agency affiliated to the Ministry of Architecture and Development.

It is also extremely important to establish co-operation between the national Centre and the academic and non-governmental organisations within Belarus, thereby increasing the efficiency of various programmes and international technical aid projects.

In order to assess the actual condition of human settlements and maintain control over the efficiency of policy decisions, it is necessary to introduce within Belarus a system of urban and housing indicators. Without such a system, it would be impossible to obtain a realistic picture of conditions within human settlements and monitor change.

The inter-ministerial co-ordination committee is also responsible for the development and approval of the key elements of the state policy towards human settlements.

The National Centre develops and suggests concrete measures within the agreed priority fields, requiring foreign technical aid, makes concrete proposals for technical co-operation, and monitors its results. The centre also co-ordinates international co-

operation programmes on human settlements and mobilises external resources for their implementation.

In addition, the Centre evaluates and analyses international experience and forwards recommendations to the Government regarding its use.

Due to financial constraints, efforts should be concentrated on priority issues where that would yield the best results and promote further development of the settlements system.

These areas include:

- **Reform of territorial planning and urban development legislation;**
- **Introduction of new energy and resource efficient technologies in construction;**
- **Development of the building materials industry using global technological achievements;**
- **Creation of a mechanism of control over the efficient use of territorial resources;**
- **Development of mechanisms enabling the effective work of the land and real estate markets;**
- **Development mechanisms of financial support for housing construction;**
- **Development of an adequate and cost-efficient administration system in human settlements.**

Also important for the development of human settlements is the education and training of the Belarusian managerial staff in the following fields:

- **urban development legislation;**
- **management of urban development;**
- **monitoring of development and inventories;**
- **territorial planning;**
- **latest technologies.**

International co-operation on human settlements can become a decisive factor in the sustainable development of Belarus.

## **2. Co-operation programmes**

**S**olution to most problems related to the development of human settlements and creation of a favourable human environment is contingent chiefly on domestic resources. Nevertheless, the achievement of many national priorities is facilitated by effective

international co-operation and interaction — bilateral as well as multilateral, with international governments and organisations. Also important are active international contacts between local administrations and non-governmental organisations in different countries.

## **National report Republic of Belarus**

As one of the founders of the UN, Belarus assumed a number of international obligations and part of the responsibility for the developing a strategy to minimise the negative effect of human influence on the environment and promote sustainable human development in different countries. In order to contribute to positive change in this field, Belarus

has been implementing a number of UN resolutions, including Resolution "On the Global Housing Strategy up until the year 2000", adopted at the 43rd Session of the General Assembly in 1988, as well as declarations of the 1992 Conference on Environmental protection, the environmental conference in Rio, and others.

**Basic intergovernmental programmes and initiatives suggested by the UN in the field of human settlements development and environmental protection:**

- 1. Urban Governments Programme
- 2. Joint programme of the UN, World Bank, UN Centre for Human Settlements and World Health Organisation started in 1986
- 3. Urban Indicators Programme
- 4. Joint Programme of the UN Centre for Human Settlements and World Bank begun in 1993 in continuation of the Indicators Programme, started in 1989.
- 5. Sustainable Cities Programme
- 6. Joint Programme of the UN Centre for Human Settlements and UNEP begun in 1990
- 8. Partnership against Urban Poverty
- 9. Joint Programme of the UNDP, UN Centre for Human Settlements, UNV and International Labour Organisation (ILO) begun in 1992
- 10. Healthy Cities Programme, suggested by the WHO. This programme could become intergovernmental, with the participation of the UN Centre for Human Settlements, UNEP and UNICEF
- 11. Community Development Programme
- 12. Joint Programme of the UNDP and DANIDA supported by the UNDP on the country level
- 13. Environmental Improvement in Capital Cities
- 14. Joint Initiative of the UNDP and World Bank in Asia
- 15. Partnership between the Government and Private Sector. This programme was due to start in 1994, with the participation of the UNDP, UN Centre for Human Settlements, UNEP in association with the Business Council for Sustainable Development
- 15. Environmental Technologies Consultancy Programme for Urban Areas. Preparation for this new programme, was scheduled to be done by the UN Centre for Human Settlements (UNHS) and UNEP in collaboration with regional committees and focus on construction technologies, development of the infrastructure, water supply, sanitation, and solid waste reduction.
- 16. Public Transport Consultancy Programme. This new initiative, prepared by the UNHS and World Bank, will focus on issues of energy use and environmental pollution and may be joined by the UNDP and regional commissions.
- 16. Joint Staff Training Programme for Local Administrations, based on long-standing co-operation between the UN Centre for Human Settlements and World Bank.
- 17. Land Utilisation Programme to be prepared by the UN centre for Human Settlements and FAO and addressing issues of land use

*Source: Review of National and International Contribution in the Field of Human Settlements into the implementation of Agenda 21 (Report by the Secretary General of the Conference, Document A/CONF.165/PC.2/8  
13 February 1995*



## **National report Republic of Belarus**

*In the course of preparation for the Second UN Conference on Human Settlements HABITAT 2 scheduled for mid-1996, amendments have been made to the Midterm Plan for 1992-1997, adopted by the 45th General Assembly. Considering the local conditions of human environment in Belarus, it has considerable interest in establishing and maintaining closer contacts with the UN Centre for Human Settlements and other organisations within the UN system. This co-operation could facilitate the implementation of Programme 22 of the Midterm Plan and its sub-programmes.*

### **Programme 22 of the Human Settlements**

#### **Midterm Plan for 1992-97**

- |   |   |
|---|---|
| ■ <b>Sub-Programme 1</b><br>Global Issues and Strategies  | Management of Efforts to Minimise the Consequences of Natural Disasters, and of Development and Restoration |
| ■ <b>Sub-Programme 2</b><br>National Policies and Mechanisms  | ■ <b>Sub-Programme 6.</b><br>Housing for Everybody  |
| ■ <b>Sub Programme 3</b><br>Management of Human Settlements Development, including financial and land resources | ■ <b>Sub-Programme 7.</b><br>Strengthening of Local Communities   |
| ■ <b>Sub-Programme 4</b><br>Improvement of the Infrastructure and Living Conditions                             | ■ <b>Sub-Programme 8.</b><br>Eradication of Poverty and Provision of Equal Opportunities                    |
| ■ <b>Sub-Programme 5.</b>   | ■ <b>Programme 22.</b><br>Human Settlements.  |

#### **Document A/49/6.(Prog. 22). 29 July 1994.**

In order to resolve a multitude of serious problems in the field of environmental protection and development of human settlements, Belarus is committed to promoting extensive co-operation between institutions of the central government, local administration and self rule, as well as its non-governmental organisations and private sector with the institutions and organisations of the UN. Such co-operation is implied by numerous intergovernmental programmes that have been approved over the last few years and a series of new initiatives put forward recently.

The Republic will equally appreciate international assistance in training personnel of central and local state institutions in either of the following five areas:

1. Management of urban finance and administration;
2. Management of the urban infrastructure;
3. Management of urban land;

4. Management of the environment in urban areas

5. Reduction of poverty in the cities.

Belarus regards as extremely useful its co-operation with the UN Centre for Human Settlements, the Danish International Development Agency (DANIDA) and the UNDP on the programme of community development. This co-operation will be helpful in the preparation and implementation of reforms within the local administration and self-rule. Belarus will also benefit from expanding its co-operation with the Council of Europe (on the LODE and other programmes), and the International Union of Local Administrations. The latter organisation has a vast experience of analysing the experience of different countries in reforming their local and regional administrations, and of providing technical assistance in all issues related to changes in the relevant legislation, as well as personnel training and formation of efficient fiscal systems on the local and regional levels.

## **National report Republic of Belarus**

In accordance with the Global Housing Strategy up until the year 2000 and the 21 Century Agenda, Belarus has used the recommended urban and housing indicators in preparing its national report on the problems of human settlements and housing in the Republic of Belarus. The Ministries of Statistics and Analysis and of Architecture and Development, as well as local administrations and institutions of local self-rule are interested in increasing their co-operation with the UN Centre for Human Settlements, the World Bank and UNSTAT issues related to the improvement in the methods of calculation, collection and analysis of the urban, housing and environmental statistics.

In the light of the problems of the human environment laid out in the National Report, co-operation on other programmes is also important. Two important factors should be kept in mind. First, co-operation is necessary not only with the UN institutions mentioned above, but also with donor countries, as well as various institutions in countries that have made the biggest progress in achieving sustainable human development by implementing the programmes.

Second, participation in those programmes should not be limited to the central government, but should also be extended to local administrations and institutions of the local self-rule, as well as various non-governmental and private organisations. In conditions of a transitional economy, the latter two have yet to develop, but will benefit the most from such co-operation in the future.

Belarus is particularly interested in working on the Urban Management Programme. As a country experiencing serious difficulties in its transition from a centrally planned to a market economy, Belarus relies on the support of 13 organisations which have initiated and continue to support the implementation of this programme (UNDP, the World Bank, Governments of Canada, Denmark, France, Germany, Italy, the Netherlands, Sweden, Switzerland, Great Britain, as well as the Ford Fund and the Lincoln Institute of Land Policies).

To name the most important of these eight sub-programmes is a very difficult task, as each of them focus on areas that are important for the development of Belarus' cities, towns and villages. In particular, elements of sub-programme 1 in global issues and strategies contain

recommendations of the world community concerning the development of human settlements, of interest to Belarus. These recommendations are based on an analysis of the global experience and can be used in this country, with consideration for its peculiar problems.

In its work on sub-programme 2, "National Policies and Mechanisms", Belarus relies on the support of the UN Centre for Human Settlements and other institutions of the United Nations in the use of an integrated approach to the development, implementation and, if necessary, modification of policies towards regions and human settlements, as well as the creation of data bases and development of a liaison mechanism between various institutions of the state, non-governmental organisations and the private sector.

Belarus also welcomes the support provided by the UN institutions within sub-programme 3, "management of human settlements development, including financial and land resources". The programme provides support for governments on the country and local levels in the following fields:

- **efficient administration of rural and urban settlements;**
- **mobilisation of financial resources for the development of human settlements, including sources of revenues and expenditure of local budgets, attracting government and private investment in the local economy, use of public savings, etc.);**
- **establishment of specialised institutions financing the infrastructure;**
- **structuring of the land market and widening public access to land resources, upgrading the procedure of land registration, monitoring of land transactions and property taxation.**

The existing international contacts within sub-programme 4, "Improvement of the infrastructure and living conditions", also offer considerable promise. The sub-Programme focuses on the following aspects:

- **management and sustainable work of the settlements infrastructure; maximising the efficiency of capital investment in it;**
- **making infrastructure-related services affordable;**

## **National report Republic of Belarus**

### ■ **Role of energy-efficient and environmentally safe technologies in the sustainable development of the infrastructure and improvement of living conditions.**

Natural and man-made disasters kill large numbers of people and cause many more to leave their homes. Belarus is a country that suffered tremendous losses caused by the Chernobyl accident. Therefore, it attaches great importance to participating in Sub-Programme 5, "Minimisation of the effects of natural disasters, rebuilding and development" and other related programmes. At the same time, Belarus has accumulated a unique experience of dealing with a global disaster, which could be useful to most countries. This experience can be used in dealing with consequences of not only man-made, but also the natural disasters.

Nearly all the elements of Programme 6, "Shelter For Everyone," are of importance to Belarus. The Republic is promoting international co-operation in such areas as providing cheaper and more affordable housing to people on low incomes, financing of housing construction, and technological improvements in the production of building materials and construction.

The reform of the central government, local administration and self-rule is facing numerous objective and subjective problems. Therefore, the Republic regards as useful its co-operation with different organisations under Sub-Programme 7 "Strengthening of Local Communities" in the following areas:

- Formulation of local strategies and programmes of comprehensive social and economic development;
- methods and instruments for a more efficient use of local resources in social development;
- Effective partnership between central and local authorities of power, the private sector, local and non-governmental organisations.

Unfortunately, the socio-economic crisis has worsened the problem of poverty in Belarus' cities, towns and villages. Therefore, the objectives of Sub-Programme 8 "Reduction of poverty and provision of equal opportunities" are also important to the nation. The central and local authorities of power, as well as the rapidly developing non-governmental organisations (the Union of Entrepreneurs, Union of Entrepreneurs and lessors, regional centres for support of private enterprise, etc.) will benefit tremendously from contacts with the UN Centre for Human Settlements and other international organisations in issues related to the development of small business in housing construction, public amenities and maintenance.

Local administrations and self-rule can rely on technical assistance coming within this sub-programme in areas such as increasing access to basic services (water supply and sewage, primary and secondary education, health care, maintaining law and order, environmental protection, etc.). Figures in the previous chapters suggest that rapid socio-economic change causes numerous new problems for the development of human settlements related to the operation of public transport, housing construction and other fields. Analysis reveals similar trends in all countries with transitional economies. Therefore, an additional area for international co-operation exists, encouraging a joint search of solutions to similar problems.

Speaking at the 49th session of the UN General Assembly, the Prime Minister of Belarus, Mikhail Chigir, proposed to hold in 1996 an international conference on countries with transitional economies. This proposal was repeated in late October during the visit to the United States of the Belarusian President, Alexander Lukashenko, where he took part in the celebrations of the 50th anniversary of the United Nations. Belarus expresses its hope that its proposals will find the support in UN institutions and other international organisations, as well as of the governments of the countries in transition.

### **References**

1. *UNCED (1992) Agenda 21 (United Nations publications, Sales No. E92.1.16).*
2. *UN. Proposed Amendments to the Mid-Term Plan for 1992 – 1997. Basic Programme 4 "International Co-operation for Development"; Programme 22 "Human Settlements": UN Document A/49/6.(Prog. 22), 29 July 1994.*
3. *Alexander Lukashenko. The UN Should Support Countries in Transition / Sovetskaya Belorussiya Newspaper, 27 October, 1995.*

## **Chapter 4. Key indicators**

# **Republic of Belarus**

DATE OF FORMATION 1 JANUARY..... 1919  
 DATE OF ADPTION  
 OF THE SOVEREIGNTY DECLARATION ..... 27 July 1990  
 CAPITAL..... Minsk (1,695,000 residents)  
 LAND AREA..... 207,000 square kilometres

<b>Population at the end of the year</b>				
	<b>1975</b>		<b>1995</b>	
	<b>1.000.000</b>	<b>%</b>	<b>1.000.000</b>	<b>%</b>
<b>Total population</b>	<b>9,4</b>	<b>100</b>	<b>10,3</b>	<b>100</b>
<b>Of whom:</b>	<b>4,8</b>	<b>51,2</b>	<b>7,1</b>	<b>68,6</b>
<b>Urban</b>	<b>4,8</b>	<b>51,2</b>	<b>7,1</b>	<b>68,6</b>
<b>Rural</b>	<b>4,6</b>	<b>48,8</b>	<b>3,2</b>	<b>31,4</b>

<b>Administrative Units</b>		
	<b>1975</b>	<b>1995</b>
<b>Local (districts)</b>	<b>6</b>	<b>6</b>
<b>Towns and cities</b>	<b>117</b>	<b>118</b>
<b>Other urban settlements</b>	<b>96</b>	<b>102</b>
<b>Rural Councils (Soviets)</b>	<b>109</b>	<b>109</b>
<b>Rural settlements, 1000</b>	<b>1518</b>	<b>1447</b>
<b>Efficient land use</b>	<b>27,4</b>	<b>24,6</b>

## National report Republic of Belarus

Indicator D1					
<i>Use of land resources (at the end of the year)</i>					
	1975	1985	1990	1994	1995
Total in urban areas					
Land within the city limits	1537,0	1681,3	1809,7	1959,3	
Developed areas	1145,7	1283,8	1383,1	1490,1	
Minsk					
Land within the city limits	167,1	193,5	223,7	229,0	
Developed areas	141,0	166,4	181,4	213,0	
<i>(permanents residents at the beginning of the year, 1000)</i>					
Indicator D2					
	1975	1985	1990	1994	1995
Belarus					
Total	9317,2	9929,0	10211,4	10319,4	10297,2
Men	4304,1	4628,5	4783,8	4848,8	4807,3
Women	5013,1	5300,5	5427,6	5470,6	5489,9
Urban population					
Total	4649,1	6077,4	6762,4	7036,7	7060,8
Men	2181,3	2864,6	3198,9	3334,8	3318,6
Women	2467,8	3212,8	3563,5	3701,9	3742,2
Minsk, including territories under the jurisdiction of the Minck City Council					
Total	1124,4	1472,2	1631,0	1687,4	1695,5
Men	526,7	693,7	768,7	796,7	787,7
Women	597,7	778,5	862,3	890,7	906,8

Indicator D3			
<i>Annual rates of population growth, %</i>			
	Year		
	1975	1985	1990
Belarus			
Total	0,65	0,45	0,20
Men	0,75	0,55	0,10
Women	0,55	0,35	0,30
Urban population			
Total	2,65	1,95	0,80
Men	2,65	2,05	0,60
Women	2,60	1,85	0,95
Minsk, including territories under the jurisdiction of the Minck City Council			
Total	2,60	1,85	0,65
Men	2,55	1,90	0,30
Women	2,60	1,85	0,95

<i>Family structure and types</i>		
Indicator D4		
<i>According to population censuses, 1000</i>		
	1979	1989
Number of families headed by the woman		
Belarus		
Urban areas		
Minsk and adjacent suburbs		
Total number of single women		
Belarus	483,7	556,4
Urban areas	198,9	268,0
Minsk and adjacent suburbs	43,7	62,8

Indicator D5		
<i>Average size of the family</i>		
	1979	1989
According to population censuses	3,3	3,2
Belarus	3,3	3,3
Minsk, with adjacent suburbs	3,3	3,3



## National report Republic of Belarus

Indicator D6	
<b>Family demands and incomes</b>	
3a 1979 - 1989 r.r.	
Belarus	1,0
urban areas	2,8
Minsk, with adjacent suburbs	3,0

<b>Family demands and incomes</b>			Indicator D7
<b>Ranking of families into 20% groups by the size of their income and available resources Average roubles per month, January — September 1995</b>			
20% groups	Per family		per member of the family
	Personal income	Available resources	Available resources
Lower	302913	524206	238042
Second	573347	937527	382510
Third	835430	1313548	508545
fourth	1194639	1783633	679926
Upper	2198862	3079422	1202728
Lower/ upper group ratio	7,26	5,87	5,05

<b>Family demands and incomes</b>			Indicator D7
<b>Ranking of urban families into 20% groups by the size of their income and available resources Average roubles per month, January — September 1995</b>			
20% groups	Per family		per member of the family
	Personal income	Available resources	Available resources
Lower	339607	527206	226693
Second	645742	966547	376750
Third	961485	1371938	504655
fourth	1375832	1880989	684240
Upper	2536222	3337870	1256050
Lower/ upper group ratio	7,47	6,33	5,54

<b>Family demands and incomes</b>			Indicator D7
<b>Ranking of families in Minsk into 20% groups by the size of their income and available resources Average roubles per month, January — September 1995</b>			
20% groups	Per family		per member of the family
	Personal income	Available resources	Available resources
Lower	416378	614527	260873
Second	835297	1126829	423250
Third	1210099	1596462	555462
fourth	1705236	2196144	760402
Upper	3029547	4328933	1514790
Lower/ upper group ratio	7,28	7,04	5,81

## National report Republic of Belarus

<i>Growth of employment opportunities</i>						Indicator D9
<i>Housing, by form of ownership</i>						
<i>(1000 square metres of total floor space)</i>						
	1975	1985	1990	1994	1995	
<i>Belarus</i>						
All housing	...	158739,4	182361,2	200409,4		
Including:						
government housing	...	67150,8	84778,6	68495,6		
public housing	...	6431,5	8881,6	13434,9		
property of the building cooperatives	...	8309,0	11545,4	11365,5		
private housing	...	76848,1	77155,6	107113,4		
<i>Urban areas</i>						
All housing	...	86523,6	106335,0	123862,5		
Including:						
government housing	...	57934,2	72876,7	60194,9		
public housing	...	1807,6	673,2	5869,2		
property of the building cooperatives	...	8276,1	11444,4	11268,1		
private housing	...	18505,4	21340,7	46530,3		
<i>Minsk and adjacent suburbs</i>						
All housing	...	20589,1	25002,6	28054,9		
Including:						
government housing	...	15498,8	18769,7	15712,7		
public housing	...	121,9	102,4	813,0		
property of the building cooperatives	...	3950,0	4977,4	4666,3		
private housing	...	1018,4	1153,1	6862,9		

<i>Growth of employment opportunities</i>						Indicator D2
	1985	1990	1994	1995		
% of informally employed						
Belarus	1,1	1,2	5,5			
Urban areas						
Minsk and adjacent suburbs						

<i>Number of hospital beds</i>						Indicator 3
	1975	1985	1990	1994	1995	
Citizens per hospital bed						
Belarus	87,0	77,0	76,0	80,0	...	

<i>Child mortality</i>						Indicator 4
% of children dying under the age of 5	1975	1985	1990	1994	1995	
<i>Belarus</i>						
Both sexes	0,5	0,4	0,3	0,3		
Boys	0,5	0,4	0,3	0,3		
Girls	0,4	0,3	0,2	0,3		
<i>Urban areas</i>						
Both sexes	0,5	0,3	0,3	0,3		
Boys	0,5	0,4	0,3	0,3		
Girls	0,4	0,3	0,2	0,2		
<i>Minsk and adjacent suburbs</i>						
Both sexes	0,4	0,3	0,02	0,03		
Boys	0,4	0,4	0,03	0,04		
Girls	0,4	0,3	0,02	0,03		

## National report Republic of Belarus

Indicator 5					
<b>School facilities</b>					
Number of students per school	1975	1985	1990	1994	1995
<i>Primary education</i>					
Belarus	17	14	15	25	27
Urban areas	56	68	93	235	257
Minsk and adjacent suburbs	-	20	-	273	273
<i>Secondary education</i>					
Belarus	521	498	505	499	504
Urban areas	907	995	1019	984	993
Minsk and adjacent suburbs	1087	1150	1187	1136	1150

<i>Promotion of social integration</i>					Indicator 6
<b>Уровень преступности</b>					
Annual number of recorded crimes per 100,000	1985	1990	1994	Jan.-Sept. 1995	
<i>Murders</i>					
Belarus	5	7	10	7*	
Minsk and adjacent suburbs	2	3	5	5*	
<i>Robberies</i>					
Belarus	16	31	55	40	
Minsk and adjacent suburbs	20	48	80	62	
*Pre-meditated murders only					

Indicator 7					
<b>Access to public amenities</b>					
	1975	1985	1990	1994	1995
<i>% of urban flats with access to:</i>					
Water supply					
Sewage					
Power supply					
<i>Minsk and adjacent suburbs:</i>					
Water supply					
Sewage					
Power supply					
<i>% of urban flats with access to:</i>					
Belarus					
Minsk					

Indicator 9					
<b>Use of water</b>					
	1975	1985	1990	1994	1995
<i>Average daily use of water, litres per person</i>					
Belarus		723	745	616	
Minsk		476	504	471	
<i>Use of water in the home</i>					
Belarus		155	184	188	
Minsk		328	376	370	

3. Transport

Indicator 14			
<b>Sustainable use of individual transport</b>			
	1985	1990	1994
<i>Number of private cars per 1000 residents, at the end of the year</i>			
Belarus	39	57	82
Minsk and adjacent suburbs	53	69	98

## National report Republic of Belarus

Indicator 15			
<i>Drinking water quality</i>			
	1985	1990	1994
<i>% of waste water undergoing purification</i>			
Belarus	89	90	90
Minsk	84	100	87

Indicator 16	
<i>Waste collection and reduction</i>	
	1994
<i>Amount of solid household waste per urban resident</i>	
Belarus	
Minsk	
<i>Amount of industrial and consumer waste per person, kilogrammes</i>	
Belarus	1763
Minsk	1149

Indicator 17	
<i>Reduction of industrial and consumer waste</i>	
	1994
Belarus	
Total amount of waste reduced, 1000 tonnes	15284
Of which:	
Dumps and slime deposits	13755
Dumps for solid domestic waste	891
Deposited in the enterprises	315
Other	303
Minsk	
Total amount of waste reduced, 1000 tonnes	540
Of which:	
Dumps and slime deposits	134
Dumps for solid domestic waste	404
Deposited in the enterprises	1
Other	1

Indicator 18	
<i>Collection of solid waste</i>	
	1994
% of urban families with access to the waste collection service	100
How often is the waste collected, times per month	

<i>Minimising the consequences of natural and other disasters</i>	
Indicator 19	
<i>Amount of housing destroyed</i>	
	Average for 1984 - 1994
<i>% of housing destroyed as a result of natural disasters (fires, floods, etc.)</i>	
Belarus	
Urban areas	
Minsk and adjacent suburbs	
<i>% of housing unused for reasons related to the Chernobyl accident*</i>	
Belarus	
Urban areas	

\*At the end of 1994

# National report Republic of Belarus

6. Adequate housing	<b>Access to adequate housing</b>	<b>Indicator H1</b>
<b>Relation of the price of housing to annual income</b>		
		1995
Relation of the price of a three room flat with a total floor space of 75 square metres to the annual income of a family of four (September 1995) 1995		9,4

<b>Adequate housing for all</b>					<b>Indicator H3</b>
<b>Floor space per resident, square metres (at the beginning of the year)</b>					
	1975	1985	1990	1994	
Belarus		15,9	17,9	19,5	
Urban areas		13,9	15,5	17,5	
Minsk and adjacent suburbs		14,0	15,1	16,6	

7. Access to housing						<b>Indicator H9</b>
<b>Housing construction</b>						
Number of flats built throughout the statistical year per 1,000 citizens	1975	1985	1990	1994	Jan. - Sept. 1995	
Belarus	9,0	8,9	8,4	4,9	1,1	
urban areas	12,6	10,3	9,8	6,3	1,4	
Minsk and adjacent suburbs	13,9	10,3	8,7	5,4	1,7	

<b>Investment in the housing sector</b>				<b>Indicator H10</b>
	1990	1994	Jan. - Sept. 1995	
Investment in housing as % of the GDP	3,7	6,3	3,5	