



INSTITUTE OF AGRICULTURAL  
AND FOOD ECONOMICS  
NATIONAL RESEARCH INSTITUTE

*The living standards  
of rural families  
one year  
after the EU accession*

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***Agnieszka Wrzochalska***



THE ECONOMIC AND SOCIAL CONDITIONS  
OF THE DEVELOPMENT OF THE POLISH FOOD  
ECONOMY FOLLOWING POLAND'S ACCESSION  
TO THE EUROPEAN UNION

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**Regional differentiation of agricultural development and its impact upon economic and social problems of rural areas** within the framework of the research task *The factors of marginalization and competitiveness in the socio-economic structure of the Polish rural areas following the EU accession*

The purpose of the study was to analyse the standards and quality of life of rural population by measuring the equipment of rural households with selected durable goods.

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## **Introduction**

In addition to income, the equipment of households with durable goods represents a significant indicator of living standards and the quality of life in the population in question. Their type and age, technical parameters and depreciation depend on a number of variables, both economic (income, prices) and non-economic factors (the number and age of family members, the number of children etc.).

Durable goods are consumer products characterised by a long service life. A product's lifetime depends on the need it is intended to satisfy and normal wear and tear. Equipment with such goods can also indicate household consumption. Therefore, equipment with durable goods can be seen as one measure of living standards and the quality of life, which in turn can be evaluated on the basis of owned durable goods and purchase plans. The purchase of household appliances is usually driven by diversified supply, the wish to have additional equipment, the intention to hedge against increasing prices or reduced income.

Due to technical and technological innovations, the equipment of households with durable goods is subject to continuous changes. As a rule, the improved quality of new products available in the market encourages consumers to replace previous appliances and devices. In recent years, products once indicating higher economic status have become common goods for nearly all households. Such goods include colour televisions, washing machines and refrigerators. In the past five years, the lists of durable goods published in statistical sources have also been extended to cover new products such as personal computers, microwave ovens, dishwashers and equipment for the reception of satellite television, once unavailable to consumers on account of insufficient income or limited market supply.

Increasing the well-being of individuals, improving the distribution of wealth in society are seen as the most important objectives to be achieved in socio-economic development. Therefore, the assumption is that studies of the equipment of rural households with durable goods have a significant information value and, indirectly, represent a basis for evaluating the ongoing socio-economic changes in Poland.

This report was prepared as part of an analysis of the continuing disparities between rural and urban areas in terms of civilisational advancement since the development of the whole rural population or specific groups hardly

corresponds to living conditions in towns and cities and fails to meet the needs of rural communities.

The study concerns the equipment of rural households with selected durable goods. The analysis also included certain factors affecting such equipment, i.e. not only family income, but also the condition of the residential building and installations as well as the family size measured by number of family members. In the case of families owning farms, an additional determinant of household equipment was the area of agricultural land.

Apart from the equipment of rural households with technical and sanitary installations, the survey also included various household goods: housekeeping facilities, leisure products and vehicles.

The analysis was mostly based on the survey conducted by the IERiGŻ-PIB in 2005<sup>1</sup> and GUS statistics (data from the 2002 Population and Housing Census and the 2002 Agricultural Census).

The report is aimed to evaluate rural households in the surveyed Polish villages, categorised as farming or landless families, in terms of the level of and differences in the equipment with durable goods. Such a comparison will allow to identify similarities and disparities as well as likely changes in the equipment of rural households which can be anticipated in the future.

## **1. Factors affecting the equipment of rural households**

### **1.1. Rural households**

According to the 2002 Population and Housing Census, there were 13,337,000 households in Poland<sup>2</sup>. In comparison with the previous census conducted in 1988, the number increased by 11.4%. Rural areas accounted for nearly one-third of all Polish households (4,372,500). Compared to 1988, the number of rural and urban households rose by approx. 6.5% and 14% respectively (Table 1). The increase in the number of rural households was observed in most voivodships. The highest growth rates (ranging from 11% to 16%) were found in the Pomorskie, Śląskie and Małopolskie voivodships.

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<sup>1</sup> The 2005 survey included 8,604 rural households, of which 4,899 represented households with agricultural land and 3,705 were landless families. The surveyed households were located in 76 villages across Poland.

<sup>2</sup> Population censuses define a household as a group of persons living together and sharing the cost of living. Single persons and those sharing the place of residence but not the cost of living represent separate, one-person households. Most surveys, including those carried out at the Social and Regional Policy Department of the IERiGŻ-PIB, identify a household with a family.



A slight fall in the number of rural households was only recorded in two voivodships, namely in the Podlaskie and Świętokrzyskie voivodships (down by 2.9% and 0.3% respectively). However, the growth in the number of rate households in specific voivodships was less robust than in urban areas. The number of urban households showed an increase in each voivodship. The highest growth rates (ranging from 20% to 25%) were found in the Podlaskie, Lubelskie and Warmińsko-Mazurskie voivodships.

Table 1. Households and population in 1988 and 2002

Specification	Number of households (thousand)	Population in households (thousand)	Average number of persons per household
Urban areas			
1988	7,864.1	22,518.1	2.86
2002	8,964.5	23,268.3	2.60
Rural areas			
1988	4,106.2	14,596.2	3.55
2002	4,372.5	14,544.4	3.33
1988=100			
Urban areas	114.0	103.3	x
Rural areas	106.5	99.6	x

*Source: Own study based on GUS data.*

## 1.2. The population living in rural households

In 2002, Polish households included 37,812,700 persons; compared to 1988, the urban population went up by 750,200, whereas there was a fall in the rural population by 51,800. The household size measured by the average number of household members declined in comparison with 1988, both in rural and urban areas. In 2002, there were an average of 330 persons per 100 rural households and 260 persons per 100 urban households. An increase was only observed in the case of farming households – in 2002 the average size of such households was 4 persons.

In terms of number of family members, the situation was different in rural and urban areas (Table 2). One-person households were more frequent, whereas five-person (or bigger) households were less numerous in the city than in the country.

Table 2. Households by number of persons in 1988 and 2002

Specification	Total, thousand	Number of household members (%)					
		1	2	3	4	5	6 or more
Urban areas							
1988	7,864.1	20.3	23.5	21.9	23.2	7.8	3.3
2002	8,964.5	27.7	24.7	21.1	17.5	6.2	2.8
Rural areas							
1988	4,106.2	14.5	20.0	17.1	19.8	13.6	15.0
2002	4,372.5	18.8	20.2	17.5	19.1	12.2	12.2

*Source: Own study based on GUS data.*

An analysis of the household size indicated a significant rise in the number of one-person households (up 7.4 percentage points in urban areas and 4.3 percentage points in rural areas). In the city, one-person households were mostly formed by young people (i.e. aged 30 or under). Putting off the decision to marry contributes to the formation of one-person households, it also concerns population groups such as university students and young workers who prefer to live alone. In the country, one-person households were mostly formed by single persons.

In terms of household size, significant differences were observed between voivodships. The biggest households, both in rural and urban areas, were found in the Podkarpackie voivodship (an average of 3 and 4 persons respectively). The smallest urban households were formed in the Łódzkie and Mazowieckie voivodships (2 persons), whereas in the case of rural households – in the Łódzkie voivodship (3 persons).

### 1.3. Types of rural families

Most Polish families are married couples with children, accounting for a total of 56% of all families in Poland. In 2002, the share of married couples with children was higher in rural areas than in urban areas (60.8% and 53.2% respectively). Compared to 1988, the total number of families with children showed a decline by ca. 7%. The fall was mostly observed in urban areas where the number of married couples with children decreased by approx. 362,600, down to 3,511,200 in 2002 (Table 3).

In terms of number, married couples without children represent the second largest group of rural families. They accounted for a 21.4% share in the structure of rural families. In urban areas the respective share was a little higher – 23.4%. Compared to 1988, the share of such families showed a slight decline in rural areas and a minor increase in urban areas. The group primarily includes elderly

people whose children have become self-dependent or started their own families as well as young married couples without children. Single parents, mostly single mothers, represented a significant share of rural families – 16.4% of the total number. The share of unmarried couples (partners) was marginal, a mere 1.3 % of all rural families.

Table 3. Types of urban and rural families in 1988 and 2002

Specification	Total	Married couples		Partners		Single parents	
		without children	with children	without children	with children	mothers	fathers
	thousand	%					
Urban areas							
1988	6,364.3	22.3	60.9	x	x	15.0	1.8
2002	6,596.9	23.4	53.2	1.1	1.2	18.8	2.3
Rural areas							
1988	3,861.8	23.6	63.4	x	x	11.3	1.7
2002	3,860.7	21.4	60.9	0.4	0.9	14.4	2.0

Source: Own study based on GUS data.

With regard to children in rural families, figures from the 2002 Population and Housing Census mostly concern dependent children between 0 and 24 years of age, living with both parents or a single parent. In 2002, they accounted for a total of 27.9% of Poland's population. Within the whole group of families with children, families with one child accounted for the highest share – 46.9%, followed by those with two children – 36.2% (Table 4).

Table 4. Types of rural families by number of dependent children up to 24 years of age in 2002

Specification	Families with children, total	Families by number of dependent children up to 24 years of age			
		total	1	2	3 or more
	thousand	%			
Rural areas, total	3,016.7	2,285.0	38.2	36.5	25.3
Married couples	2,349.1	1,953.5	34.8	38.1	27.1
Partners	32.6	29.6	45.8	29.2	25.0
Single mothers	557.0	270.9	59.3	26.9	13.8
Single fathers	78.0	31.1	62.0	25.1	12.8

Source: Own study based on GUS data.

Table 5. Average number of children up to 24 years of age in various types of families in 2002 (per 100 families)

Specification	Total	Urban areas	Rural areas
Total	178	164	201
Married couples	185	170	208
Partners	175	165	198
Single mothers	148	143	162
Single fathers	141	134	157

Source: Own study based on GUS data.

There are considerable differences in the number of children in the family between rural and urban areas. In the city, a family with one child represents the prevailing family model – 52.1%. The respective share is much lower in the countryside – 38.3%. At the same time, families with many (i.e. three or more) dependent children are more frequent in rural areas. Such families account for a 25.3% share of rural families and only for 11.8% of urban families. Similar differences between urban and rural areas are found in terms of average number of dependent children – 1.64 and 2.01 respectively (Table 5).

One-parent families had significantly fewer dependent children – most of them only supported one child – this was the case for 59.3% of single mothers and 62% of single fathers. Approx. one-fourth of single parents support two children, whereas almost every tenth has three or more dependent children. There were many more one-parent families in rural areas than in urban areas.

#### 1.4. The number of persons in the surveyed households

According to the survey, in 2005 most rural families were those with two, three or four household members. As regards the structure of farming families, the most numerous groups were families consisting of three, four or five persons (Table 6). The landless population was mostly concentrated in smaller families. Multi-person households were less frequent in this group than in families owning agricultural land.

Table 6. Surveyed rural households by number of family members in 2005 (%)

Specification	Total	Households by number of persons (%)						
		1	2	3	4	5	6	7 or more
Total	8,604	16.5	18.7	17.0	19.8	13.8	8.1	6.1
Farming families	4,899	7.8	13.8	18.1	21.5	17.1	12.0	9.7
Landless families	3,705	23.1	22.4	16.1	18.6	11.2	5.2	3.4

Source: 2005 survey by the IERiGŻ-PIB.

## 1.5. Main income sources of rural households

According to the Population and Housing Census, in 2002 as compared to 1988 there was a significant fall, from 72.9% to 51.6%, in the number of households whose main income source was employment. Furthermore, a dramatic (nearly threefold) decline was found in the case of households whose members worked in the public sector. In 1988, such families accounted for more than half of the total number of households, but in 2002 they represented a mere 20% of households. It was observed both in rural and urban areas. At the same time, the number of urban households whose members were private sector workers increased by 21.1%, whereas in the countryside the group of such families remained almost unchanged, their share only rose by a mere 1 percentage point.

In 2002, the most important income source for rural households was employment, with 37.2% of households obtaining income from off-farm jobs and 16.3% of households deriving income from agricultural activities. Households whose main income source was not gainful employment accounted for a significant share (44.6% in rural areas). For such families, pensions represented the most important source of income. In 2002, there was only a marginal group of households supported mostly or exclusively by persons not living in the household; those accounted for 1.5% in rural areas (Table 7).

Table 7. Households by income source in 2002

Specification	Total	Main income source					
		of which:					
		employment		other income sources			dependent
		off-farm jobs	in agriculture	old-age pensions	other pensions	other	
Thousand	%						
Urban areas	8,964	50.4	0.7	24.2	12.6	5.5	5.1
Rural areas	4,373	37.2	16.3	24.4	15.1	5.1	1.5

Source: Own study based on: "Raport z wyników Narodowego Spisu Powszechnego Ludności i Mieszkań 2002", GUS, Warsaw 2003, Table III.2, p. 84.

## 2. The housing stock in rural areas

### 2.1. The housing situation of the rural population

The housing stock covered by the 2002 Population and Housing Census represented a total of 12,523,600 dwellings<sup>3</sup>, 33.2% of which were rural homes. Most rural dwellings (3.8 million) were inhabited. As regards the group of uninhabited dwellings (349,700), most of them could be inhabited in the future. Those primarily included dwellings intended for permanent habitation or, a smaller share, for temporary accommodation (the so-called second residences or homes).

In general, rural dwellings included 16.7 million rooms with total usable area of 344.3 million sq metres (Table 8).

Table 8. Basic information on dwellings in 2002

Dwellings (thousand)		Rooms in dwellings (thousand)		Usable area of dwellings (thousand sq m)	
Total	Inhabited	Total	Inhabited	Total	Inhabited
Urban areas					
8,364.5	7,954.1	29,075.5	27,869.0	505,507.1	482,520.0
Rural areas					
4,159.1	3,809.4	16,645.0	15,540.8	344,320.3	322,095.6

*Source: Own study based on GUS data.*

In 2002, there were 3,757,200 permanently inhabited rural dwellings with total usable area of 318.8 million sq metres and 14.5 million dwellers.

Between 1988 and 2002, there was a greater increase in the number of dwellings in towns and cities compared to rural areas (Table 9), a result of not only building dwellings with more rooms and larger area, but also the development of existing housing stock. The highest growth rates were recorded in the Pomorskie, Zachodniopomorskie and Lubuskie voivodships (15.7%, 14.4% and 13.1% respectively).

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<sup>3</sup> According to the GUS definition, a dwelling is a room or suite of rooms and its accessories in a permanent building or structurally separated part thereof which by the way it has been built, rebuilt or converted is designed for habitation, having separate access to a common space within the building (staircase, passage, gallery etc.) or to the street (direct or via a garden or grounds). Accessories are understood as a lobby, a corridor, a bathroom, a toilet, a wardrobe, a pantry etc. in the dwelling, intended for residential and housekeeping purposes of the dwellers.

Table 9. Increase in the number of permanently inhabited dwellings

Specification	Increase between 1989 and 2002		1988=100	
	urban areas	rural areas	urban areas	rural areas
	thousand			
Dwellings	835.7	80.2	111.9	102.2
Rooms	4,487.0	2,230.8	119.4	117.0
Usable area in sq m	98,811.6	64,135.9	126.4	125.2
Dwellers	729.9	-57.8	103.2	99.6

Source: Own study based on GUS data.

Rural dwellings were mostly owned by natural persons – 92.4% of the total housing stock in rural areas (Table A.1). A mere 2.6% of dwellings were owned by local authorities, followed by a marginal share of those owned by the State Treasury and enterprises (1.6% each). In urban areas the ownership structure was more diversified than in the countryside. Natural persons owned 37.5% of the urban housing stock, owner-occupied dwellings represented 28.1%, tenant-occupied dwellings – 13.5%, local authorities owned 15.8% and enterprises – 2.5%.

In 2004, an average Polish dwelling consisted of 3.68 rooms (3.49 in the city and 4.07 in the country). The average usable area of urban dwellings was 61.3 sq m, i.e. 23.6 sq m less than in rural areas. As regards the total number of dwellings put into use in 2004, in urban areas it was nearly one-fourth lower than in 2003, whereas rural areas experienced a more dramatic drop (almost 50%). Compared to the previous year, worse performance was mostly observed in the case of private construction, with 64,900 dwellings put into use in 2004 (i.e. 45% fewer than in 2003). However, the usable area of such dwellings showed an increase (up from 137.5 sq m to 140.5 sq m). Due to the downturn in construction in 2004 as compared to 2003, there was a fall in certain housing indicators. For example, the number of dwellings put into use per 1,000 inhabitants declined from 4.7 to 2.4 in rural areas and from 4.0 to 3.1 in urban areas. The number of dwellings put into use per 1,000 new married couples decreased from 901 to 472 in the country (and from 788 to 623 in the city). Other population indicators were also higher in rural than urban areas, for example:

- the average number of dwellers was 3.53 (compared to 2.76 in the city),
- the average number of persons per room – 0.87 (compared to 0.78 in the city),
- the average usable area of a dwelling per person – 24.1 sq m (compared to 22.2 sq m in the city).

According to the household budget survey, in 2004 more than half of urban dwellings were smaller than 60 sq m (such dwellings accounted for one-

fourth of the rural housing stock). Nearly 60% of urban homes consisted of up to three rooms for habitation (approx. 60% of rural households declared having more than three rooms).

## 2.2. The age of rural dwellings

72.8% of the housing stock in rural areas was build after World War II (the respective share for urban areas is 78.0%). Dwellings in buildings erected before 1918 still represent 9.7% of the total housing stock in the country and 10.4% in the city (Table 10).

Table 10. Inhabited dwellings by age of the building

Total, thousand	Built before 1945	1945- -1970	1971- -1978	1979- -1988	1989-2002			Under construction	Undetermined age
					total	1989- -1995	1996- -2002		
%									
Urban areas									
7,954.1	21.4	25.5	19.8	20.1	12.1	7.0	4.5	0.5	0.6
Rural areas									
3,809.4	27.1	29.8	15.0	15.8	10.5	5.0	4.8	1.3	0.5

*Source: Own study based on GUS data.*

The newest buildings, i.e. those built after 1988, include ca. 401,200 dwellings in rural areas and 961,200 urban homes.

An analysis of regional differences in the housing stock by age reveals certain areas with relatively more old buildings (i.e. those erected before 1945). Such regions were mostly found in western and southern Poland, particularly in the Dolnośląskie, Lubuskie and Opolskie voivodships (included in the South-Western Macro-region in the survey conducted by the IERiGŻ-PIB). In those voivodships, the share of dwellings built before 1945 was more than 40%, significantly exceeding the national average of over 23%.

## 2.3. The equipment of dwellings with technical, sanitary and heating installations

Between the last censuses, there was also a significant improvement in the equipment of the housing stock with technical, sanitary and heating installations, observed primarily in rural areas. The growth rate of the number of dwellings equipped with such installations was higher than that of the total housing stock, which reflects the fact that the improvement resulted not only from putting new dwellings into use, but also from the modernisation of existing resources (observed particularly in the countryside). Despite those positive changes, however, the



equipment of rural homes continues to be much poorer compared to those located in urban areas.

Table 11. Equipment of rural dwellings with technical and sanitary installations

Specification	Total	of which dwellings equipped with					
		water supply	a toilet	a bathroom	hot running water	central heating	gas supply
%							
1988	100.0	63.8	45.9	50.7	49.7	39.6	5.5
1996	100.0	77.8	58.4	62.9	x	50.9	13.1
2002	100.0	87.8	72.6	74.0	70.6	62.5	17.1
2004	100.0	88.1	73.3	74.7	x	63.3	17.5

*Source: Own study based on GUS data.*

In 2002, the main installation, i.e. the water supply system, was found in 98.7% of urban dwellings and in 87.8% of rural homes. Lower shares concerned the gas supply system – used in 75% of inhabited dwellings in the city and 17.1% in the countryside (Table 11 and Table A.2).

In recent years, there has been a significant improvement in the equipment of dwellings with a set of installations, i.e. the water supply system, a toilet, a bathroom, central heating and the gas supply system. Central heating and gas supply were found in every second dwelling in Poland. Nevertheless, 4.3% of all Polish homes were not equipped with water supply systems and 3.9% had no installations. It particularly concerned rural buildings, where a mere 14.8% of the housing stock was equipped with all sanitary and technical installations, whereas every tenth dwelling had no installations (Table 12).

Even though the number of households equipped with various technical installations as well as sanitary and heating systems increases every year, the gap between rural and urban dwellings continues to be significant. According to the Population and Housing Census, in 2002 nearly two-thirds of urban dwellings were equipped with all the technical and sanitary installations (water supply, a toilet, a bathroom with hot running water, gas supply and central heating), whereas only every eighth rural dwelling had such installations. In the countryside 8% of dwellings had no running water (a mere 1% in the city). Approx. 20% of rural dwellings lacked bathrooms (compared to less than 7.0% in urban areas). Over four-fifths of rural homes had no gas supply (less than 25% in the city). Central heating was found in nearly 80% of urban dwellings, whereas every third rural dwelling was still equipped with stoves and other households had local (domestic) central heating systems. An even higher share of rural families had no gas supply.

Table 12. Urban and rural dwellings equipped with various technical and sanitary installations in 2002

Total	Dwellings equipped with <sup>a</sup>				Dwellings without water supply	
	water supply, a toilet, a bathroom		water supply <sup>b</sup>		total	of which: without any installations
	total	of which: those with central heating and gas supply	total	of which: those with central heating		
Urban areas						
7,954.1	91.8	67.0	6.6	1.1	1.3	1.1
Rural areas						
3,809.4	73.0	14.8	15.8	3.2	10.8	9.8

<sup>a</sup> excluding dwellings with undetermined installations

<sup>b</sup> with a toilet but no bathroom or with a bathroom but no toilet, or without such amenities

Source: Own study based on GUS data.

The highest levels of equipment with technical, sanitary and heating installations were found in rural dwellings located in the Podkarpackie, Małopolskie and Śląskie voivodships, where the share of such dwellings ranged from 40.6% to 25.8%. The least favourable situation in this respect was observed in rural areas in the Kujawsko-Pomorskie, Podlaskie and Warmińsko-Mazurskie voivodships, where the respective proportion ranged between 1.7% and 2.2%. The highest shares of rural dwellings without water supply systems were found in the Podlaskie, Lubelskie, Świętokrzyskie and Mazowieckie voivodships (ranging from 24.7% to 22.1%).

#### 2.4. The equipment of the surveyed rural families with technical, sanitary and heating installations

The survey conducted by IERiGŻ-PIB in 2005 indicated that a total of 80.0% of rural households had water supply systems (Table 13), whereas every fifth dwelling used a water pump. Thanks to such installations, a significant share of the surveyed households had a bathroom (a total of 84.8%) and a toilet (a total of 82.3%). Nearly one-fourth of rural households had sewage systems, whereas three-fourths were equipped with central heating. A minor group even declared having own waste water treatment facilities.

Table 13. Rural dwellings equipped with technical and sanitary installations according to the 2005 survey (%)

Specification	Households		
	total	farming	landless
Water supply system	80.0	77.2	82.1
Water pump	21.6	25.7	18.5
Bathroom	84.8	87.9	82.5
Boiler	74.4	79.4	70.7
Toilet	82.3	84.3	80.8
Sewage system	22.5	18.1	25.9
Own waste water treatment facility	1.9	1.7	2.1
Central heating	73.7	78.6	70.0

Source: 2005 survey by IERiGŻ-PIB.

Compared to 2000, there was an increase in the share of households equipped with all the installations specified in the survey (Table 14). It was stronger in landless families.

The equipment of rural households in water supply and sewage systems significantly varied across regions. The least favourable situation was observed in the Northern Macro-region, where only 67.9% of households reported having water supply systems, 69.8% had bathrooms and 56.1% were equipped with central heating (Table 15).

The above-mentioned systems, including water supply and sewerage, were mostly installed before 2000 (Table 16). The relatively new installation was the sewage system (one-third of such equipment had been installed less than five years before).

Table 14. Dwellings equipped with selected technical and sanitary installations in 2000 and 2005 (%)

Specification	Households					
	total		farming		landless	
	2000	2005	2000	2005	2000	2005
Water supply and sewage systems	12.5	20.0	10.6	16.0	13.8	22.9
Water supply and sewage systems, central heating	11.0	17.3	9.5	14.7	12.0	19.2
Water supply and sewage systems, bathroom	12.1	19.2	10.4	15.7	13.3	21.8
Bathroom, boiler and toilet	65.1	71.8	71.1	76.6	60.5	68.2

Source: 2005 survey by IERiGŻ-PIB.

Some of the surveyed rural households were planning investment concerning such installations between 2005 and 2009. It should be emphasised that those were very modest plans, only made by a minor share of families. Such projects mostly included the provision of sewage systems – 11.3% of landless families and 10.3% of farming families (Table 17), installing water supply systems (7.1% of farming families) and central heating (4.5% of farming families). Such intentions were declared primarily by families of 4-7 persons (Table 18 and Table A.4) as well as by farming families living on farms of 1-5 ha of agricultural land (Table 19).

Table 15. Surveyed rural dwellings by equipment with technical and sanitary installations in 2005

Specification	Surveyed rural households					
	total	of which: macro-regions*				
		I	II	III	IV	V
Water supply system	80.0	93.5	72.6	73.3	92.8	67.9
Water pump	21.6	8.7	23.8	32.8	14.6	10.7
Bathroom	84.8	84.6	79.6	89.0	86.4	69.8
Boiler	74.4	75.0	69.3	85.9	76.0	49.4
Toilet	82.3	81.1	75.0	88.1	85.8	67.7
Sewage system	22.5	31.2	17.0	25.2	17.9	21.5
Own waste water treatment facility	1.9	2.2	1.6	2.5	1.6	1.1
Central heating	73.7	71.7	70.4	81.4	71.8	56.1

\*I. Central Western Macro-region – the Kujawsko-Pomorskie, Wielkopolskie voivodships;  
 II. Central Eastern Macro-region – the Łódzkie, Mazowieckie, Lubelskie, Podlaskie voivodships;  
 III. South-Eastern Macro-region – the Świętokrzyskie, Małopolskie, Podkarpackie, Śląskie voivodships;  
 IV. South-Western Macro-region – the Opolskie, Lubuskie, Dolnośląskie voivodships;  
 V. Northern Macro-region – the Zachodniopomorskie, Pomorskie, Warmińsko-Mazurskie voivodships.

Source: 2005 survey by IERiGŻ-PIB.

Table 16. Installations provided before 2000 in the households surveyed in 2005 (%)

Specification	Households		
	total	farming	landless
Water supply system	86.3	90.9	83.1
Water pump	97.5	97.8	97.2
Bathroom	92.9	94.6	91.5
Boiler	91.5	93.5	89.9
Toilet	92.4	94.5	90.8
Sewage system	66.8	70.0	65.1
Own waste water treatment facility	85.4	76.2	91.1
Central heating	92.0	93.6	90.6

*Source: 2005 survey by IERiGŽ-PIB.*

Table 17. Households by investment planned for 2005-2009 (%)

Specification	Households		
	total	farming	landless
Water supply system	5.4	7.1	4.0
Water pump	0.3	0.5	0.2
Bathroom	3.0	3.3	2.8
Boiler	2.8	2.9	2.7
Toilet	3.0	3.3	2.8
Sewage system	10.8	10.3	11.3
Own waste water treatment facility	0.6	1.1	0.3
Central heating	3.6	4.5	2.9

*Source: 2005 survey by IERiGŽ-PIB.*

Table 18. Households by investment planned for 2005-2009 and family size (%)

Specification	total	Number of household members:						
		1	2	3	4	5	6	7 or more
Water supply system	5.4	3.7	5.6	3.9	6.0	4.9	5.7	6.8
Water pump	0.3	0.1	0.2	0.4	0.4	0.4	0.1	0.6
Bathroom	3.0	2.0	3.4	3.6	3.5	3.1	2.1	2.7
Boiler	2.8	2.2	2.7	2.9	2.6	3.8	2.3	2.1
Toilet	3.0	2.1	3.1	3.1	3.2	3.6	3.1	2.3
Sewage system	10.8	5.9	10.0	11.6	12.4	13.0	11.5	13.9
Own waste water treatment facility	0.6	0.2	0.6	0.5	0.5	0.9	0.9	0.8
Central heating	3.6	2.7	3.7	2.9	4.8	3.9	3.9	2.8

Source: 2005 survey by IERiGŻ-PIB.

Table 19. Households by investment planned for 2005-2009 and farm size (%)

Specification	Farm size (ha)								
	total	1-2	2-5	5-10	10-15	15-20	20-30	30-50	50 or more
Water supply system	7.1	4.6	6.9	9.7	7.8	5.0	9.0	4.6	5.8
Water pump	0.5	0.3	1.2	0.3	0.0	0.0	0.5	0.0	0.0
Bathroom	3.3	2.4	4.0	4.8	1.3	2.7	3.5	0.0	0.0
Boiler	2.9	2.0	3.0	4.1	2.2	3.2	3.0	0.0	0.0
Toilet	3.3	2.0	3.5	4.4	3.4	3.2	3.0	1.0	0.0
Sewage system	10.3	16.0	11.5	8.3	7.2	7.5	6.5	8.3	1.9
Own waste water treatment facility	1.1	0.7	0.7	1.0	0.9	2.2	2.0	2.8	1.9
Central heating	4.5	4.4	4.8	4.9	5.2	4.3	3.5	1.8	0.0

Source: 2005 survey by IERiGŻ-PIB.

### 3. The equipment of dwellings with selected durable goods

#### 3.1. Devices providing access to information and culture

The analysed equipment includes devices used in households primarily for recreation as well as for information access and processing. Most of those represent high-technology goods (Table 20).

Table 20. Equipment of urban and rural dwellings with selected durable goods (%)

Specification	Urban areas		Rural areas	
	2001	2004	2001	2004
Television set	98.7	97.6	98.2	97.7
Equipment for the reception of satellite or cable television	62.1	59.2	27.2	27.9
Equipment for the reception, recording and reproduction of sound (stereo)	44.6	46.3	27.7	34.1
Radio cassette recorder with CD player	no data	21.4	no data	15.2
Radio cassette recorder	50.6	36.9	46.2	38.1
CD player	12.7	9.3	6.7	4.9
Radio set	53.2	52.9	62.2	59.9
Video cassette recorder	59.8	51.2	44.2	40.0
DVD player	no data	13.9	no data	7.2
Personal computer	23.1	37.8	9.7	22.8
With Internet access	no data	21.3	no data	7.8
Without Internet access	no data	17.2	no data	15.2
Printer	15.3	26.5	5.9	14.9
Mobile phone	no data	58.2	no data	45.2

*Source: Own study based on GUS data.*

According to GUS data, between 2001 and 2004 there was a marked improvement in the equipment of households, particularly with regard to the possession of personal computers, Internet access and mobile phones. The situation continues to be more favourable year by year. For example, in 2004 as compared to 2003 the equipment of rural families with computers, computers with Internet access and mobile phones increased by 34.9%, 35.7% and 30.3% respectively. At the same time, urban households purchased 20% more

computers, Internet access was found in 8.9% more families and the possession of mobile phones increased by 18.3%.

Within this group of devices, both in urban and rural areas, the most popular equipment was a television set. On average, all socio-economic groups had more than one television set in the household (Table 21 and Table A.5). As regards other durable goods, the least favourable situation was found in pensioners' households with the highest number of radio sets and the lowest number of personal computers. Nevertheless, every fifth pensioners' household in rural areas owned equipment for the reception of satellite or cable television.

Table 21. Equipment of rural households with selected durable goods by socio-economic group in 2004

Specification	Households of			
	paid employees	paid employees owning a farm	farmers	pensioners
	per 100 households (units)			
Television set	121.3	124.2	118.6	106.1
Equipment for the reception of satellite or cable television	42.5	30.4	21.2	19.2
Equipment for the reception, recording and reproduction of sound (stereo)	55.9	49.5	34.8	14.9
Radio set	49.5	58.0	62.9	70.8
Personal computer	38.7	34.3	23.6	7.5
Internet access	15.1	10.0	5.3	2.4

Source: *Rocznik Statystyczny Rolnictwa i Obszarów Wiejskich, GUS, Warsaw 2005.*

### 3.2. The equipment of the surveyed households with devices providing access to information and culture

According to the survey of rural households, in 2005 farming families owned more devices providing access to information and culture than landless households (Table 22). Almost every household possessed a television receiver and a radio cassette recorder, three-fourths of households had a wired telephone, whereas nearly 50% also owned a mobile phone. It should be emphasised that almost one-third of households with agricultural land used a personal computer. In terms of possession of such equipment, relatively the most favourable situation was observed in farms of more than 15 ha of agricultural land (Table 23). The share of holdings equipped with all the selected devices increased with the farm size.

The possession of such devices was also related to the household size measured by number of family members. Families of three or more persons used



more of the selected devices than families of two persons or one-person households. Farming families of three or more persons were characterised by similar equipment with such devices, whereas landless families showed a marked decline in equipment in families of six or seven persons as compared to those of three or four persons. However, it should be emphasised that such families owned more of the selected devices than one-person households and families of two persons (Table 24).

A significant share of such equipment was purchased before 2000, mostly television sets, radio cassette recorders, video cassette recorders and for the reception of satellite or cable television. In general, slightly older devices were owned by farming families (Table 25). Between 2000 and 2005, increased availability of such equipment primarily concerned mobile phones and personal computers. The survey also indicated a significant interest in digital cameras, planned to be purchased as replacement for video cameras.

In general, however, only a minor share of households were planning to purchase such equipment within the following five years (Table 26). The surveyed rural households were mostly planning to buy personal computers (8.6% of farming families declared the intention to make such purchases) and mobile phones as well as equipment for the reception of satellite (or cable) television. According to the survey, such purchases were mostly planned by households of several persons (Table 27), whether farming or landless families. The farm size had no major effect on the plans to purchase such equipment (Table 28).

Table 22. Surveyed households by equipment with selected durable goods in 2005 (%)

Specification	Households		
	total	farming	landless
Radio cassette recorder	81.2	85.0	78.3
Television set	96.9	97.4	96.4
Video camera	5.4	6.1	4.9
Video cassette recorder	36.6	41.8	32.6
Personal computer	26.7	31.5	23.0
Equipment for the reception of satellite or cable television	27.5	28.7	26.6
Wired telephone	71.0	79.7	64.4
Mobile phone	47.2	54.4	41.7

Source: 2005 survey by IERiGŻ-PIB.

Table 23. Surveyed households by equipment with selected durable goods and farm size in 2005 (%)

Specification	Farm size in hectares							
	1-2	2-5	5-10	10-15	15-20	20-30	30-50	50 or more
Radio cassette recorder	82.8	85.7	82.9	86.3	86.7	87.5	90.8	94.2
Television set	96.3	97.3	97.3	98.2	98.6	99.5	95.4	100.0
Video camera	3.9	5.4	4.9	7.0	5.7	6.5	16.5	38.5
Video cassette recorder	36.8	38.9	37.7	41.7	52.3	52.5	69.7	84.6
Personal computer	26.8	28.8	27.0	32.1	38.4	44.0	60.6	78.9
Equipment for the reception of satellite or cable television	30.1	25.1	23.3	23.5	39.1	38.0	55.1	73.1
Wired telephone	77.2	77.3	76.3	81.8	87.1	89.0	90.8	96.2
Mobile phone	48.2	52.6	52.9	53.6	59.1	67.0	78.0	86.5

Source: 2005 survey by IERiGZ-PIB.

Table 24. Surveyed households by equipment with selected durable goods (by number of persons) in 2005 (%)

Farming families

Specification	total	Number of household members						
		1	2	3	4	5	6	7 or more
Radio cassette recorder	85.0	70.2	74.7	83.3	89.8	90.1	90.3	88.3
Television set	97.5	90.0	96.3	98.7	98.1	98.1	98.6	98.9
Video camera	6.1	2.8	2.9	5.8	8.7	7.4	6.5	5.0
Video cassette recorder	41.8	16.3	23.7	40.0	49.7	50.4	50.3	48.3
Personal computer	31.6	6.9	9.0	26.0	40.6	44.4	39.5	41.1
Equipment for the reception of satellite or cable television	28.7	11.4	17.8	28.9	35.3	33.7	32.5	29.7
Wired telephone	79.8	48.4	72.4	81.7	83.7	85.7	86.2	84.7
Mobile phone	54.4	29.4	30.8	51.9	63.7	64.3	64.6	62.5

## Landless families

Specification	total	Number of household members						
		1	2	3	4	5	6	7 or more
Radio cassette recorder	78.3	60.3	70.5	88.6	90.9	89.6	86.7	83.8
Television set	96.4	90.7	97.5	97.2	99.1	98.9	99.6	95.8
Video camera	4.9	1.1	2.6	6.7	9.4	6.5	7.0	4.2
Video cassette recorder	32.6	7.3	18.9	44.7	52.7	51.3	46.9	42.5
Personal computer	23.0	3.5	8.7	28.8	43.3	41.3	37.5	28.7
Equipment for the reception of satellite or cable television	26.6	8.0	17.5	34.2	42.8	40.9	34.4	29.9
Wired telephone	64.4	44.3	65.8	68.9	74.9	75.3	69.9	67.7
Mobile phone	41.7	11.4	23.8	55.9	65.6	65.6	63.7	55.7

Source: 2005 survey by IERiGŻ-PIB.

Table 25. Surveyed households by equipment owned in 2005 but purchased before 2000 (%)

Specification	Households		
	total	farming	landless
Radio cassette recorder	92.5	92.7	92.3
Television set	91.6	93.2	90.5
Video camera	72.0	74.2	69.9
Video cassette recorder	90.4	91.5	89.4
Personal computer	47.8	49.8	45.8
Equipment for the reception of satellite or cable television	82.3	83.2	81.5
Wired telephone	89.3	91.6	87.1
Mobile phone	32.3	33.3	31.4

Source: 2005 survey by IERiGŻ-PIB.

Table 26. Surveyed households planning to purchase selected durable goods between 2005 and 2009 (%)

Specification	Households		
	total	farming	landless
Radio cassette recorder	0.6	0.6	0.6
Television set	1.7	2.1	1.4
Video camera	0.9	1.1	0.8
Video cassette recorder	1.0	1.3	0.9
Personal computer	6.4	8.6	4.7
Equipment for the reception of satellite or cable television	2.5	2.9	2.1
Wired telephone	0.7	0.7	0.8
Mobile phone	4.6	4.3	4.8

Source: 2005 survey by IERiGŻ-PIB.

Table 27. Surveyed households by investment planned for 2005-2009 and family size (%)

Specification	total	Number of household members						
		1	2	3	4	5	6	7 or more
Radio cassette recorder	0.6	0.4	0.8	0.6	0.9	0.3	0.9	0.2
Television set	1.7	1.5	1.7	1.2	1.8	1.9	1.7	2.3
Video camera	0.9	0.1	0.3	1.0	1.8	1.4	1.1	0.8
Video cassette recorder	1.0	0.5	0.7	1.0	1.5	1.0	1.3	1.9
Personal computer	6.4	0.8	1.9	7.7	9.6	9.6	10.9	8.2
Equipment for the reception of satellite or cable television	2.5	0.6	1.6	3.3	3.3	3.2	2.9	3.0
Wired telephone	0.7	0.9	0.9	1.0	0.7	0.3	0.4	0.4
Mobile phone	4.6	2.0	3.3	6.3	5.6	6.2	4.3	4.4

Source: 2005 survey by IERiGŻ-PIB.

Table 28. Surveyed households by investment planned for 2005-2009 and farm size (%)

Specification	Farm size in hectares								
	total	1-2	2-5	5-10	10-15	15-20	20-30	30-50	50 or more
Radio cassette recorder	0.6	0.4	0.7	0.6	0.9	0.4	0.0	0.9	0.0
Television set	2.1	2.0	1.8	2.3	3.6	1.1	0.5	2.8	0.0
Video camera	1.1	1.0	0.7	0.7	1.6	2.2	1.5	1.8	1.9
Video cassette recorder	1.3	1.4	1.1	1.3	0.7	3.2	1.0	0.0	0.0
Personal computer	8.6	8.1	7.9	9.2	10.1	9.0	8.5	8.3	3.9
Equipment for the reception of satellite or cable television	2.9	4.4	3.7	2.0	2.5	0.4	2.0	1.8	3.9
Wired telephone	0.7	0.9	1.0	0.9	0.5	0.0	0.0	0.0	0.0
Mobile phone	4.3	5.3	3.4	4.2	3.6	6.5	2.5	9.2	3.9

Source: 2005 survey by IERiGŻ-PIB.

### 3.3. Facilities for personal hygiene in households

This group comprised goods facilitating proper and efficient functioning of the household, e.g. a washing machine (including an automatic one), a vacuum cleaner and a dishwasher. In 2004 as compared to 2001, the equipment of rural households with the above-mentioned products showed a considerable improvement, whereas it remained practically unchanged in urban areas. The most common device in this group of goods was a vacuum cleaner, found in almost every family, both in rural and urban areas (Table 29). Washing machines represent goods which have been used in households for years; considering the present economic well-being of Polish households, it might seem that there is no substitute for such an appliance. However, a number of rural households still do not have washing machines. The most favourable situation in this respect was found in households of paid employees or paid employees owning agricultural land, i.e. those combining on-farm and off-farm work (Table 30). As regards microwave ovens and dishwashers, those represented less established goods in the consumption structure. Even very wealthy Polish households did not consider such appliances indispensable. However, in recent years they have been increasingly popular also in rural families.

Table 29. Equipment of urban and rural dwellings with selected durable goods (%)

Specification	Urban areas		Rural areas	
	2001	2004	2001	2004
Electric washing machine and spin-dryer	27.6	20.6	63.0	52.7
Automatic washing machine	83.3	84.3	56.4	62.8
Electric vacuum cleaner	95.7	94.7	87.5	88.7
Dishwasher	2.9	4.9	1.4	2.3

Source: 2005 survey by IERiGŻ-PIB.

Table 30. Equipment of rural households with selected durable goods by socio-economic group in 2004

Specification	Households of			
	paid employees	paid employees owning a farm	farmers	pensioners
	per 100 households in units			
Electric washing machine and spin-dryer	37.1	57.8	68.3	63.5
Automatic washing machine	79.1	72.0	59.7	49.3
Electric vacuum cleaner	95.0	96.5	91.0	82.8
Dishwasher	4.1	1.8	2.4	0.7

Source: Rocznik Statystyczny Rolnictwa i Obszarów Wiejskich, GUS, Warsaw 2005.

### 3.4. Equipment owned by the surveyed families

As in the case of the group of goods discussed above, farming households possessed more appliances included in this category than landless families (Table 31). Furthermore, a growing farm size in farming families was accompanied by improved equipment with such devices. Although, as has already been mentioned, automatic washing machines have been increasingly popular in rural households, the survey indicated that a significant share of rural families only had impeller-type washing machines (Table 32 and Table 33). Those were mostly families living in holdings of up to 15 ha of agricultural land, with as many as one-third using such appliances. Furthermore, nearly half of one-person and two-person (both farming and landless) households were equipped only with such washing machines.

According to the survey, an increasing farm size and number of household members were accompanied by improved equipment with all the selected goods. Even families of seven or more persons owned more appliances than one-person or two-person households.

The analysis also demonstrated that such goods had been mostly purchased before 2000 (Table 34). Only one-fifth of automatic washing machines had been bought in the previous five years. A minor share of families were planning to purchase new equipment in the following years, primarily automatic washing machines and dishwashers. Investment plans were mainly declared by families of 2-6 persons. As regards farming families, plans to purchase an automatic washing machine were made in holdings of up to 30 ha of agricultural land. At the same time, it was more frequent for families owning the largest farms to include a dishwasher in their purchase plans (Tables 35-37).

Table 31. Surveyed households by equipment with selected durable goods in 2005 (%)

Specification	Households		
	total	farming	landless
Automatic washing machine	64.2	67.5	61.0
Electric washing machine and spin-dryer	45.0	47.2	43.3
Only electric washing machine and spin-dryer	32.2	29.3	34.4
Electric vacuum cleaner	83.7	86.8	81.3
Dishwasher	4.3	4.6	4.0

Source: 2005 survey by IERiGŻ-PIB.

Table 32. Surveyed households by equipment with selected durable goods and farm size in 2005 (%)

Specification	Farm size (ha)							
	1-2	2-5	5-10	10-15	15-20	20-30	30-50	50 or more
Automatic washing machine	66.2	64.2	63.4	68.4	78.9	85.5	91.7	98.1
Electric washing machine and spin-dryer	46.0	47.9	54.3	50.9	40.5	34.0	28.4	21.2
Only electric washing machine and spin-dryer	30.9	32.6	34.3	31.2	20.8	12.5	5.5	2.0
Electric vacuum cleaner	83.9	84.2	85.6	89.9	93.5	95.0	91.7	96.2
Dishwasher	2.9	3.9	2.7	3.6	5.0	7.5	16.5	42.3

Source: 2005 survey by IERiGŻ-PIB.

Table 33. Surveyed households by equipment with selected durable goods and number of household members in 2005 (%)

Farming families

Specification	Total	Number of household members						
		1	2	3	4	5	6	7 or more
Automatic washing machine	67.5	33.9	49.4	69.6	76.9	76.4	76.3	68.9
Electric washing machine and spin-dryer	47.2	57.1	60.2	45.2	41.8	42.4	49.0	43.1
Only electric washing machine and spin-dryer	29.3	52.3	47.8	29.0	22.3	22.4	23.7	20.0
Electric vacuum cleaner	86.8	62.3	80.8	87.8	90.8	92.4	91.6	88.9
Dishwasher	4.6	2.1	2.2	4.6	5.4	5.7	5.0	5.6

Landless families

Specification	Total	Number of household members						
		1	2	3	4	5	6	7 or more
Automatic washing machine	61.0	26.7	53.0	74.3	82.5	82.2	75.0	73.7
Electric washing machine and spin-dryer	43.3	62.7	51.1	32.3	27.4	31.6	39.8	41.9
Only electric washing machine and spin-dryer	34.4	59.1	43.4	23.5	16.8	17.4	24.6	24.8
Electric vacuum cleaner	81.3	62.0	81.0	88.0	91.6	91.5	87.1	85.0
Dishwasher	4.0	0.5	2.4	4.8	7.6	6.4	5.1	6.0

Source: 2005 survey by IERiGŻ-PIB.



Table 34. Surveyed households by equipment owned in 2005 but purchased before 2000 (%)

Specification	Households		
	total	farming	landless
Automatic washing machine	81.7	81.9	81.6
Electric washing machine and spin-dryer	99.1	99.1	99.2
Electric vacuum cleaner	92.6	92.4	92.7
Dishwasher	67.5	68.0	67.0

Source: 2005 survey by IERiGŻ-PIB.

Table 35. Households planning to purchase selected durable goods between 2005 and 2009

Specification	Households		
	total	farming	landless
Automatic washing machine	6.4	7.9	5.3
Electric washing machine and spin-dryer	0.2	0.2	0.1
Electric vacuum cleaner	2.5	3.4	1.8
Dishwasher	2.9	3.9	2.1

Source: 2005 survey by IERiGŻ-PIB.

Table 36. Households by investment planned for 2005-2009 and family size

Rural families, total

Specification	total	Number of household members						
		1	2	3	4	5	6	7 or more
Automatic washing machine	6.4	3.5	6.4	7.1	6.9	8.1	7.3	6.1
Electric washing machine and spin-dryer	0.2	0.3	0.1	0.1	0.1	0.3	0.0	0.0
Electric vacuum cleaner	2.5	1.7	2.3	4.0	3.6	2.0	3.6	2.9
Dishwasher	2.9	0.4	0.2	2.7	3.6	4.5	3.9	6.1

Source: 2005 survey by IERiGŻ-PIB.

Table 37. Households by investment planned for 2005-2009 and farm size

Specification	Farm size in hectares								
	total	1-2	2-5	5-10	10-15	15-20	20-30	30-50	50 or more
Automatic washing machine	7.9	8.0	7.6	9.0	8.5	7.2	8.5	2.8	1.9
Electric washing machine and spin-dryer	0.2	0.6	0.2	0.1	0.0	0.0	0.0	0.0	0.0
Electric vacuum cleaner	3.4	4.1	4.2	2.9	2.2	3.9	3.0	1.8	0.0
Dishwasher	3.9	2.4	2.7	3.8	4.7	6.8	6.5	5.5	11.5

Source: 2005 survey by IERiGŻ-PIB.

### 3.5. Cooking and food storage facilities

This group represents another set of goods facilitating proper and efficient functioning of the household, primarily equipment for cooking and food storage. Compared to urban households, relatively more rural households owned deep freezers (primarily in farming families), whereas the opposite was the case for modern kitchen appliances (e.g. microwave ovens). In recent years, the equipment of rural families with such devices has significantly improved (Table 38). As regards the possession of other durable goods in question, it was similar in rural and urban areas across the surveyed socio-economic groups (Table 39 and Table A.5).

Table 38. Urban and rural dwellings by equipment with selected durable goods (%)

Specification	Urban areas		Rural areas	
	2001	2004	2001	2004
Refrigerator	98.1	97.8	97.1	97.3
Deep freezer	29.3	24.0	54.3	51.6
Microwave oven	24.7	30.9	15.4	23.8
Food processor	no data	54.8	no data	53.0
Sewing machine	42.9	38.6	46.8	41.7

Source: Own study based on GUS data.

Table 39. Rural households by equipment with selected durable goods and socio-economic group in 2004

Specification	Households of:			
	paid employees	paid employees owning a farm	farmers	pensioners
	per 100 households in units			
Refrigerator	98.3	101.3	99.6	97.4
Deep freezer	43.0	71.2	81.0	44.4
Microwave oven	36.2	29.2	22.5	12.9
Sewing machine	37.8	51.9	47.6	39.5

Source: *Rocznik Statystyczny Rolnictwa i Obszarów Wiejskich, GUS, Warsaw 2005.*

### 3.6. The equipment of the surveyed families with cooking and food storage facilities

According to the conducted survey, nearly all the rural families owned refrigerators and used gas or electric cookers (Table 40). At the same time, almost 50% of the surveyed one-person households did not possess such appliances (Table 42). Presumably, those were mostly households of the least wealthy, frequently elderly and single persons. More than half of the surveyed families used deep freezers. Such facilities were more popular in farming families than in landless households as they enabled to store own crop production. Every fourth surveyed rural household possessed a food processor and a microwave oven. A considerable share of (mostly farming) families owned sewing machines, whereas few households declared having an electric press (primarily those owning larger farms) (Table 41). To a significant extent, the equipment of rural households with the above-mentioned appliances compensated for poorer availability of services compared to urban areas.

As in the case of the product group discussed above, better equipment was observed in households owning larger farms and in families with children. No major differences were found in families of three or more persons in terms of possession of such durable goods or in households categorised as farming/landless families.

Almost all the equipment in the product group had been purchased at least five years before; e.g. only one-third of microwave ovens had been bought between 2000 and 2005 (Table 43). According to the conducted survey, such appliances have been increasingly popular in rural areas, which was reflected in purchase plans for the coming years. 6.6% of the surveyed farming families intended to buy microwave ovens. Such plans were made primarily by families owning the largest agricultural holdings (Table 44 and Table 46) as well as by households of several persons (Table 45).

Table 40. Surveyed households by equipment with selected durable goods in 2005 (%)

Specification	Households		
	total	farming	landless
Gas or electric cooker	92.5	93.8	91.5
Refrigerator	97.8	98.4	97.4
Deep freezer	52.4	66.4	41.8
Food processor	24.9	27.5	23.0
Microwave oven	19.9	23.1	17.5
Sewing machine	39.6	45.9	34.8
Electric press	2.4	3.6	1.6

Source: 2005 survey by IERiGŻ-PIB.

Table 41. Surveyed households by equipment with selected durable goods and farm size in 2005 (%)

Specification	Farm size in hectares							
	1-2	2-5	5-10	10-15	15-20	20-30	30-50	50 or more
Gas or electric cooker	91.9	93.6	93.2	94.4	96.4	96.5	97.3	96.2
Refrigerator	97.9	98.1	98.3	99.8	99.6	99.0	97.2	100.0
Deep freezer	55.7	63.0	66.3	68.4	78.5	86.5	80.7	92.3
Food processor	22.4	22.6	27.6	28.3	38.7	33.5	45.9	61.5
Microwave oven	19.9	17.5	22.9	20.4	33.3	34.5	45.0	55.8
Sewing machine	42.5	43.4	46.0	46.4	53.1	53.5	49.5	57.7
Electric press	2.6	2.3	2.7	3.1	6.1	7.0	10.1	25.0

Source: 2005 survey by IERiGŻ-PIB.

Table 42. Surveyed households by equipment with selected durable goods and number of persons in 2005 (%)

Farming families

Specification	Total	Number of household members:						
		1	2	3	4	5	6	7 or more
Gas or electric cooker	93.8	47.0	90.0	92.9	97.5	97.2	98.0	97.8
Refrigerator	98.4	93.1	97.8	98.4	99.4	98.9	99.5	99.4
Deep freezer	66.4	32.2	53.7	66.1	71.2	76.2	75.2	74.2
Food processor	27.5	8.7	14.7	26.2	31.7	34.8	33.4	33.6
Microwave oven	23.1	8.7	14.1	21.3	29.0	27.6	27.5	24.2
Sewing machine	45.9	18.7	37.8	48.5	47.9	53.2	51.5	50.0
Electric press	3.6	1.8	2.8	5.0	5.2	3.4	3.6	3.6

Landless families

Specification	Total	Number of household members:						
		1	2	3	4	5	6	7 or more
Gas or electric cooker	91.5	81.2	91.5	94.9	97.2	97.6	93.4	91.0
Refrigerator	97.4	93.6	97.1	98.5	99.4	99.1	99.6	98.8
Deep freezer	41.8	20.7	41.3	46.0	54.7	55.3	47.3	46.7
Food processor	23.0	5.4	14.8	29.5	37.4	36.4	30.5	30.5
Microwave oven	17.5	4.2	11.8	24.6	27.8	26.7	22.3	17.4
Sewing machine	34.8	27.5	37.5	35.0	36.7	37.6	40.2	38.3
Electric press	1.6	0.4	1.1	2.2	2.5	1.5	2.3	3.6

Source: 2005 survey by IERiGZ-PIB.

Table 43. Surveyed households by equipment owned in 2005 but purchased before 2000 (%)

Specification	Households		
	total	farming	landless
Gas or electric cooker	93.4	94.0	93.0
Refrigerator	91.9	92.2	91.6
Deep freezer	91.8	92.2	91.4
Food processor	88.3	89.2	87.6
Microwave oven	62.0	64.8	59.2
Sewing machine	99.0	99.2	98.8
Electric press	77.5	46.2	88.2

*Source: 2005 survey by IERiGŻ-PIB.*

Table 44. Surveyed households planning to purchase selected durable goods between 2005 and 2009 (%)

Specification	Households		
	total	farming	landless
Gas or electric cooker	2.3	2.2	2.3
Refrigerator	3.5	4.1	3.0
Deep freezer	2.9	3.3	2.5
Food processor	2.0	2.4	1.7
Microwave oven	5.1	6.6	3.9
Sewing machine	0.4	0.4	0.4
Electric press	0.2	0.4	0.1

*Source: 2005 survey by IERiGŻ-PIB.*

Table 45. Households by investment planned for 2005-2009 and family size (%)

Rural families, total								
Specification	total	Number of household members						
		1	2	3	4	5	6	7 or more
Gas or electric cooker	2.3	1.6	2.4	2.9	2.4	2.4	1.7	1.7
Refrigerator	3.5	1.3	4.0	4.0	3.2	4.3	4.3	3.8
Deep freezer	2.9	1.2	2.7	3.1	3.6	2.9	4.3	2.3
Food processor	2.0	0.2	1.4	2.1	3.2	3.2	2.3	1.1
Microwave oven	5.1	1.1	3.7	6.2	7.3	6.3	6.2	5.9
Sewing machine	0.4	0.0	0.2	0.5	0.5	0.4	0.4	0.6
Electric press	0.2	0.0	0.1	0.3	0.3	0.3	0.1	0.6

Source: 2005 survey by IERiGŽ-PIB.

Table 46. Households by investment planned for 2005-2009 and farm size (%)

Specification	Farm size in hectares								
	total	1-2	2-5	5-10	10-15	15-20	20-30	30-50	50 or more
Gas or electric cooker	2.2	2.0	2.4	2.6	1.8	3.2	1.0	2.8	0.0
Refrigerator	4.1	4.8	4.9	3.0	4.0	3.6	5.0	1.0	1.9
Deep freezer	3.3	3.3	3.6	2.7	4.0	3.9	3.0	2.8	1.9
Food processor	2.4	1.7	2.8	2.4	3.1	1.4	2.5	2.8	1.9
Microwave oven	6.6	5.8	5.5	6.2	8.5	7.2	8.1	11.0	11.5
Sewing machine	0.4	0.3	0.5	0.1	0.9	0.4	0.0	0.0	0.0
Electric press	0.4	0.1	0.3	0.0	0.9	0.7	0.5	0.9	1.9

Source: 2005 survey by IERiGŽ-PIB.

### 3.7. Vehicles

In every family a passenger car plays a prominent role among durable goods. It is frequently necessary for household members who commute to work, but it can also be seen as a product of prestige.

According to general statistics, the rural population owned more vehicles than the urban population (Table 47). In addition to passenger cars, in rural areas there were also more motorcycles and bicycles. During the whole period in question, the equipment of households with vehicles remained at a high level. In 2004, as many as 88.7% of families owning a farm had a passenger car. Bicycles represented another group of vehicles popular in the countryside. Each family in all the specified socio-economic groups owned at least one bicycle (Table 48).

### 3.8. Vehicles in the surveyed rural families

According to the survey, in 2005 a total of 54% of rural families owned a passenger car; the respective shares for farming and landless families were 69.5% and 42.3% (Table 49). Every tenth agricultural holding also had a second car in the family, whereas every twentieth possessed a motorcycle. The possession of cars increased with the growing farm size and number of family members (regardless of farm type). For example, every fifth farm of 30-50 ha of agricultural land (and 50% of larger holdings) had a second passenger car. Motorcycles were less popular in rural areas. Presumably, such vehicles ceased to be treated only as a means of transport. A high share of more wealthy families (living in farms of over 30 ha – Table 50) owning motorcycles may suggest that those were mostly luxury motorcycles, primarily used for leisure activities.

Vehicles owned by the surveyed families had been purchased mainly five years before or earlier. Second cars in the family were usually newer, frequently purchased between 2000 and 2005 (Table 52). It should be emphasised, however, that only a minor share of households were planning to buy a new car, a mere 3.7% of farming families and 1.5% of landless families (Table 53). Hardly any surveyed family was planning to purchase a motorcycle or a second car within the following five years. Vehicle purchases were primarily declared by families of many persons (Tables 54-55).



Table 47. Urban and rural families by possession of vehicles (%)

Specification	Urban areas		Rural areas	
	2001	2004	2001	2004
Passenger car	44.7	42.8	52.8	52.5
Motorcycle, motor scooter, moped	2.0	1.6	6.8	6.1
Bicycle	51.0	52.1	80.3	81.5

*Source: Own study based on GUS data.*

Table 48. Rural families owning vehicles by socio-economic group in 2004

Specification	Households of:			
	paid employees	paid employees owning a farm	farmers	pensioners
	per 100 households in units			
Passenger car	71.0	88.7	78.9	31.2
Motorcycle, motor scooter, moped	6.7	1.9	10.3	3.3
Bicycle	151.7	170.8	167.4	99.6

*Source: Rocznik Statystyczny Rolnictwa i Obszarów Wiejskich, GUS, Warsaw 2005*

Table 49. Surveyed rural families owning vehicles in 2005 (%)

Specification	Households		
	total	farming	landless
Passenger car	54.0	69.5	42.3
Second car in the family	6.4	9.5	4.0
Motorcycle	4.0	5.3	3.0

*Source: 2005 survey by IERiGŻ-PIB.*

Table 50. Surveyed households by possession of selected vehicles and farm size in 2005 (%)

Specification	Farm size in hectares							
	1-2	2-5	5-10	10-15	15-20	20-30	30-50	50 or more
Passenger car	62.3	63.7	66.7	74.4	85.7	84.5	91.7	94.2
Second car in the family	5.7	6.7	8.6	9.9	15.4	16.5	22.0	46.2
Motorcycle	4.1	3.1	4.9	7.2	8.6	7.5	10.1	19.2

Source: 2005 survey by IERiGŻ-PIB.

Table 51. Surveyed households by possession of selected vehicles and number of persons in 2005 (%)

Farming families

Specification	total	Number of household members						
		1	2	3	4	5	6	7 or more
Passenger car	69.5	35.3	50.2	66.7	76.6	80.0	80.1	81.9
Second car in the family	9.5	3.8	4.3	7.6	11.4	11.5	13.3	12.8
Motorcycle	5.3	1.4	2.9	5.2	5.8	5.7	8.1	6.7

Landless families

Specification	total	Number of household members						
		1	2	3	4	5	6	7 or more
Passenger car	42.3	9.7	28.1	55.3	67.5	68.7	54.3	51.5
Second car in the family	4.0	0.5	1.9	5.8	6.3	5.8	5.5	10.8
Motorcycle	3.0	1.4	1.9	3.2	4.6	4.0	5.1	5.4

Source: 2005 survey by IERiGŻ-PIB.

Table 52. Surveyed households by vehicles owned in 2005 but purchased before 2000 (%)

Specification	Households		
	total	farming	landless
Passenger car	78.0	79.7	75.9
Second car in the family	68.2	69.4	66.0
Motorcycle	94.2	94.4	93.9

Source: 2005 survey by IERiGŻ-PIB.

Table 53. Households planning to purchase selected vehicles between 2005 and 2009 (%)

Specification	Households		
	total	farming	landless
Passenger car	2.4	3.7	1.5
Second car in the family	0.1	0.1	0.1
Motorcycle	0.1	0.2	0.1

Source: 2005 survey by IERiGŻ-PIB.

Table 54. Households by investment planned for 2005-2009 and family size (%)

Specification	total	Number of household members						
		1	2	3	4	5	6	7 or more
Passenger car	2.4	0.7	2.3	2.5	2.8	2.5	3.9	4.0
Second car in the family	0.1	0.0	0.0	0.2	0.1	0.3	0.0	0.2
Motorcycle	0.1	0.0	0.1	0.1	0.4	0.1	0.1	0.0

Source: 2005 survey by IERiGŻ-PIB.

Table 55. Households by investment planned for 2005-2009 and farm size (%)

Specification	Farm size in hectares								
	total	1-2	2-5	5-10	10-15	15-20	20-30	30-50	50 or more
Passenger car	3.7	2.6	4.0	3.4	3.6	6.3	2.5	5.5	5.8
Second car in the family	0.1	0.1	0.1	0.1	0.0	0.4	0.0	0.0	0.0
Motorcycle	0.2	0.3	0.2	0.2	0.2	0.4	0.5	0.0	0.0

Source: 2005 survey by IERiGŻ-PIB.

#### 4. Categories of owned devices and households broken down by equipment with selected durable goods

##### 4.1. Categories of devices included in the survey

The conducted survey only allows to determine the number of equipment units, it fails to answer the question about the quality which is another important characteristic of living standards. Nevertheless, the date of purchase (before 2000 and in 2000-2005) may indicate, on the one hand, the wear and tear of owned devices and appliances, but on the other hand it shows that such products have been popular and accessible to the rural population for years. It primarily concerns modern durable goods such as automatic washing machines, microwave ovens and dishwashers.

Table 56. Durable goods in the surveyed households in 2005

Product category	Households		
	Total	Farming	Landless
<b>Common</b>	refrigerator television set gas or electric cooker	refrigerator television set gas or electric cooker	refrigerator television set gas or electric cooker
<b>Standard</b>	vacuum cleaner radio cassette recorder wired telephone automatic washing machine passenger car deep freezer	vacuum cleaner radio cassette recorder wired telephone automatic washing machine passenger car deep freezer mobile phone	vacuum cleaner radio cassette recorder wired telephone automatic washing machine
<b>Higher standard</b>	mobile phone video cassette recorder equipment for the reception of satellite or cable television personal computer food processor microwave oven	video cassette recorder equipment for the reception of satellite or cable television personal computer food processor microwave oven	passenger car mobile phone video cassette recorder equipment for the reception of satellite or cable television personal computer food processor microwave oven
<b>Luxury</b>	second car video camera dishwasher motorcycle electric press	second car video camera dishwasher motorcycle electric press	second car video camera dishwasher motorcycle electric press

Source: 2005 survey by IERiGŻ-PIB.

Durable goods owned by households can be divided into four categories<sup>4</sup>:

- **common goods**, basically accessible to every household if necessary (and owned by over 90% of the surveyed households);
- **standard goods** found in more than half of the surveyed group;
- **higher standard goods**, possessed by 10-50% of the households;
- **luxury goods**, observed in fewer than 10% of the surveyed households.

In the group of rural households surveyed in 2005 the set of commonly available goods included a refrigerator, a television set and a gas or electric cooker (Table 56). Standard goods comprised a vacuum cleaner, a radio cassette recorder, a wired telephone, an automatic washing machine, a passenger car and a deep freezer. According to the figures presented in the Table above, appliances considered to be standard goods significantly varied in rural areas. Farming families owned many more devices and appliances than households of landless families. The group of higher standard goods included a mobile phone, a video cassette recorder, equipment for the reception of satellite (or cable) television, a personal computer, food processor and a microwave oven.

Based on the assumptions discussed above, products regarded as luxury goods comprised the following: another (second) car in the family, a video camera, a dishwasher, a motorcycle and an electric press.

However, it should be noted that the classification of certain durable goods under specific categories results not only from their standard or the financial standing of households, but also from the composition of the analysed product groups. The possession of good hi-fi equipment or a radio cassette recorder makes CD or cassette players redundant. The group of higher standard goods should also include an electric washing machine and spin-dryer, but considering the fact that an automatic washing machine represents a substitute good they can hardly be regarded as higher standard goods. Furthermore, it is open to question whether a sewing machine should be classified under this group as the possession of such equipment is not always a clear indication of a higher (i.e. better) level of household equipment.

The above breakdown suggests that in rural areas farming families owned relatively better equipment than landless families, particularly with regard to devices and appliances defined as standard and higher standard goods, which is

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<sup>4</sup> Cf. J. Kramer, *Konsumpcja. Prawidłowości, struktura, przyszłość*, PWE, Warsaw 1993, pp. 161 and 164. This reference distinguishes three product groups: standard goods owned by more than 50% of households, higher standard goods – found in 10-50% of households and luxury goods – possessed by less than 10% of households.

also reflected in previous observations concerning the equipment of the surveyed households with certain groups of durable goods.

#### 4.2. Selected types of rural households

Based on the possession of durable goods specified in survey, it was possible to distinguish certain types of the surveyed rural households.

The number of owned goods reflects the degree of modernity of the household. It represents a ladder in which the lowest step is the situation where the household has no devices or appliances listed in the questionnaire. The survey revealed a high level of equipment with durable goods, which allowed to determine the relative wealth of the surveyed households.

According to the conducted survey (Table 57), in 2005 all the devices defined as common goods (i.e. a refrigerator, a television set and a gas or electric cooker) were owned by 89.3% of rural households (91.4% of farming families and 87.6% of landless households). Nearly two-thirds of rural families had such equipment plus an automatic washing machine. A similar number of households owned a refrigerator, a television set, a washing machine and a vacuum cleaner at the same time. Devices and appliances which can be described as “once luxury goods” (i.e. a video cassette recorder, an automatic washing machine, a wired telephone, a television set) were found in almost one-third of rural families. Nearly every tenth family used a refrigerator, a microwave oven, a food processor and a washing machine. In significantly fewer households (a total of 2.2%) the kitchen was equipped with all the modern devices and appliances: a refrigerator, a dishwasher, a microwave oven and a food processor.

A similar number of the surveyed rural families owned modern equipment enabling wider contact with the world and popular leisure activities. Such devices included a satellite dish, a personal computer, a mobile phone and a video camera.

The group of higher standard and luxury goods comprised a dishwasher, a microwave oven, a satellite dish and a second car in the family. Even though all the above-mentioned items were found in a mere 1% of the surveyed rural households, the findings revealed that there were also rural families with a significant share of less common products. The role of such goods in the functioning of rural households has markedly increased in recent years, primarily as a result of the copying of urban lifestyle and the convergence of consumption patterns in Poland and in other EU Member States.

Table 57. Surveyed households by equipment with selected groups of durable goods (%)

Specification	Surveyed households					
	total		farming		landless	
	2000	2005	2000	2005	2000	2005
refrigerator, television set, gas or electric cooker	73.7	89.3	75.4	91.4	71.7	87.6
refrigerator, television set, gas or electric cooker, automatic washing machine	43.7	61.5	44.7	66.1	42.8	58.1
refrigerator, television set, gas or electric cooker, automatic washing machine, vacuum cleaner	42.0	59.4	43.0	64.0	41.2	55.9
video cassette recorder, automatic washing machine, wired telephone, television set	18.2	28.4	21.0	33.6	15.9	24.4
refrigerator, microwave oven, food processor, automatic washing machine	4.9	9.0	5.9	10.8	4.1	7.6
refrigerator, microwave oven, food processor, dishwasher	1.1	2.2	1.0	2.5	1.0	1.9
satellite dish, personal computer, mobile phone, video camera	0.6	2.6	0.6	2.9	0.6	2.4
dishwasher, microwave oven, satellite dish, second car	0.3	0.9	0.3	1.1	0.3	0.6

Source: 2005 survey by IERiGZ-PIB.

Analyses of the findings from the survey have shown both improved equipment of rural households with durable goods in 2000-2005 and a marked advantage of farming families over the landless rural population in this respect. Considering the above-mentioned indicators of equipment with durable goods and changes in this respect, it can be concluded that aspirations of the surveyed rural families reflect changing consumption patterns towards higher-order values.

## Summary and conclusions

- The equipment of households with durable goods should be seen as an important indicator of rural household wealth in Poland (in addition to purchasing power parity, savings, expenditure structure).
- The results can also be interpreted in terms of civilisational advancement (in areas such as the number of telephone lines, computerisation, access to Internet).
- First of all, it should be emphasised that equipment significantly varied between specific types of households and within the surveyed groups.
- Even though the equipment of dwellings with technical and sanitary installations as well as with heating systems improves every year, the gap between rural and urban areas continues to be significant.
- The survey conducted by IERiGŻ-PIB in 2005 indicated that a total of 80.0% of rural households had water supply systems (whereas every fifth agricultural holding used a water pump). Thanks to such installations, a significant share of the surveyed households had a bathroom (a total of 84.8%) and a toilet (a total of 82.3%). Nearly one-fourth of rural households had sewage systems, whereas three-fourths were equipped with central heating. A minor group even declared having own waste water treatment facilities.
- Households of farming families were characterised by better equipment with durable goods than landless families.
- The level of equipment with the specified devices and appliances increased with the farm size. It largely results from the fact that the farm size shows strong positive correlation with the profitability of the holding and the economic well-being of the family.
- The surveyed households intended to replace owned equipment or wished to buy more devices, particularly less common goods.
- Only a minor share of the households, mostly families of several persons, had purchase plans for the following five years.
- In the group of rural households surveyed in 2005, the set of common goods comprised a refrigerator, a television set and a gas (or electric) cooker.
- Standard goods for the whole rural population included a vacuum cleaner, a radio cassette recorder, a wired telephone, an automatic washing machine, a passenger car and a deep freezer.
- Products classified under the category of higher standard goods were as follows: a mobile phone, a video cassette recorder, equipment for the



reception of satellite (or cable) television, a personal computer, a food processor and a microwave oven.

- According to the conducted survey, in 2005 all the devices defined as common goods (i.e. a refrigerator, a television set and a gas or electric cooker) were owned by 89.3% of rural households (91.4% of farming families and 87.6% of landless households).
- Nearly two-thirds of rural families had such equipment plus an automatic washing machine. A similar number of households owned a refrigerator, a television set, a washing machine and a vacuum cleaner at the same time.
- Devices and appliances which can be described as “once luxury goods” (i.e. a video cassette recorder, an automatic washing machine, a wired telephone, a television set) were found in almost one-third of rural families.
- Nearly every tenth family used a refrigerator, a microwave oven, a food processor and a washing machine. In significantly fewer households (a total of 2.2%) the kitchen was equipped with all the modern devices and appliances: a refrigerator, a dishwasher, a microwave oven and a food processor.
- Only a minor share of the surveyed rural families (approx. 2%) owned modern equipment enabling wider contact with the world and popular leisure activities. Such devices included a satellite dish, a personal computer, a mobile phone and a video camera.
- The findings revealed that there were also rural families with a significant share of less common products (defined as luxury goods), and the role of such devices and appliances in the functioning of rural households has markedly increased in recent years.
- Considering the discussed indicators of equipment with durable goods and changes in this respect, it should be emphasised that aspirations of the surveyed rural families reflect changing consumption patterns towards higher-order values.
- In general, it should be recognised that the period in question witnessed positive changes in the living standards of the rural population. As for rural household equipment, a significant improvement was observed with regard to technical installations as well as specific durable goods and their categories. It is particularly important that a growing number of rural families own personal computers and have Internet access since the rapid development of this medium in all areas of social and economic life also makes it possible to modernise the organisation and information spheres of agriculture and to activate rural areas.

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## **Statistical annex**



Table A.1. Dwellings by form of use in 2002

Total (thousand)	Dwellings (as a percentage share of the total number) owned by							
	natural persons	housing cooperatives		local authorities	State Treasury	enterprises	social housing companies	other
		owner- occupied	tenant- occupied					
Urban areas								
7,954.1	37.5	28.1	13.5	15.8	1.8	2.5	0.4	0.4
Rural areas								
3,809.4	92.4	0.9	0.6	2.6	1.6	1.6	0.0	0.3

*Source: Own study based on GUS data.*

Table A.2. Equipment of urban dwellings with technical and sanitary installations in 2002

Specification	Total	of which: dwellings equipped with					
		water supply system	toilet	bathroom	hot running water	central heating	gas supply
thousand							
1988	7,039.8	6,678.9	5,976.4	5,797.6	5,641.2	5,123.4	4,994.2
2002	7,954.1	7,851.2	7,527.0	7,342.4	7,069.9	6,702.5	5,964.9
%							
1988	100.0	94.9	84.9	82.4	80.1	72.8	70.9
2002	100.0	98.7	94.6	92.3	88.9	84.3	75.0
1988 = 100							
x	113.00	117.6	125.9	126.6	125.3	130.8	119.4

*Source: Own study based on GUS data.*

Table A.3. Equipment of urban households with selected durable goods  
by socio-economic group in 2004

Specification	Households of			
	paid employees	paid employees owning a farm	farmers	pensioners
	per 100 households in units			
Television set	129.8	132.7	136.6	116.4
Equipment for the reception of satellite or cable television	66.9	52.5	51.0	53.7
Equipment for the reception, recording and reproduction of sound (stereo)	67.4	60.3	53.4	23.1
Radio set	48.4	56.8	68.4	68.4
Personal computer	56.9	58.7	51.8	14.6
With Internet access	31.8	26.5	29.6	7.5
Electric washing machine and spin-dryer	16.2	36.1	37.3	27.6
Automatic washing machine	90.4	87.5	82.1	79.0
Electric vacuum cleaner	97.1	98.6	94.9	95.4
Dishwasher	6.1	5.2	14.7	2.1
Refrigerator	98.9	99.7	104.9	98.6
Deep freezer	26.2	56.6	73.9	20.6
Microwave oven	40.3	42.2	46.6	17.9
Passenger car	59.2	93.3	102.7	27.3
Motorcycle, motor scooter, moped	1.9	9.2	13.1	1.0
Bicycle	104.4	154.7	164.7	48.3
Sewing machine	36.6	58.5	41.1	43.4
Video camera	8.7	10.7	7.9	2.3

Source: Rocznik Statystyczny Rolnictwa i Obszarów Wiejskich, GUS, Warsaw 2005.

Table A.4. Dwellings of the surveyed rural households by equipment with technical and sanitary installations and macro-region in 2005

Farming families

	Households equipped with					
	total	of which macro-regions*				
		I	II	III	IV	V
Water supply system	77.2	93.3	70.5	75.1	94.3	73.7
Water pump	25.7	11.2	28.4	29.5	22.0	24.6
Bathroom	87.9	89.1	83.5	90.8	94.3	88.6
Boiler	79.4	83.6	71.8	86.2	87.0	73.7
Toilet	84.3	84.8	78.7	88.8	91.0	85.5
Sewage system	18.1	29.5	12.9	21.7	10.2	19.5
Own waste water treatment facility	1.7	2.5	1.6	2.0	0.6	0.7
Central heating	78.6	78.9	74.3	81.5	82.5	82.8

Landless families

	Households equipped with					
	total	of which macro-regions*				
		I	II	III	IV	V
Water supply system	82.1	93.7	75.0	71.7	92.3	87.4
Water pump	18.5	6.7	18.4	35.9	12.1	9.7
Bathroom	82.5	80.8	74.9	87.3	83.6	86.0
Boiler	70.7	67.6	66.3	85.7	72.1	57.4
Toilet	80.8	77.9	70.7	87.5	84.0	83.5
Sewage system	25.9	32.7	21.8	28.6	20.5	28.8
Own waste water treatment facility	2.1	2.0	1.6	3.0	1.9	1.6
Central heating	70.0	65.5	65.8	81.3	68.1	65.4

- \*I. Central Western Macro-region – the Kujawsko-Pomorskie, Wielkopolskie voivodships;  
 II. Central Eastern Macro-region – the Łódzkie, Mazowieckie, Lubelskie, Podlaskie voivodships;  
 III. South-Eastern Macro-region – the Świętokrzyskie, Małopolskie, Podkarpackie, Śląskie voivodships;  
 IV. South-Western Macro-region – the Opolskie, Lubuskie, Dolnośląskie voivodships;  
 V. Northern Macro-region – the Zachodniopomorskie, Pomorskie, Warmińsko-Mazurskie voivodships.

Source: 2005 survey by IERiGŻ-PIB.