

II. HOUSING STOCK AND CONSTRUCTION

A. The existing housing stock

Size of the stock

At the end of 1999, the Romanian population of 22.46 million relied on a total housing stock of 7.88 million units - an average of 351 dwellings per 1,000 people (see **table 3**). Compared with other countries in transition (**table 4 and fig. IX**), the size of Romania's housing stock might appear adequate. In the 1992 census, the total number of dwellings exceeded the number of households by over 378,000 (just under 5%). Another factor appearing to point to a favourable volume of housing is the continued increase in the stock (with an average annual rate of 0.4% - see **fig. VIII**), at a time when the population has been decreasing (1.3% over the 1993-99 period). Even over a longer period of 15 years (between the last two censuses in 1977 and 1992), the stock expanded more rapidly than the population - by 21% and 5.3%, respectively.

Table 3. Housing stock, population and household size, 1995-99

	1995	1996	1997	1998	1999
Population (thousands)					
Romania	22,681	22,607	22,545	22,502	22,458
Bucharest	2,054	2,037	2,027	2,016	2,011
Housing stock (thousands)					
Romania	7,782	7,811	7,837	7,861	7,883
Bucharest	776	778	780	784	788
Household size					
Romania	3.0	3.0	3.0	3.0	2.9
Bucharest	2.8	2.7	2.7	2.7	2.6
Units/1000 people					
Romania	343	346	348	349	351
Bucharest	378	382	385	389	392

Source: National Commission for Statistics.

Figure VIII. Dwelling/population ratio, 1995-99

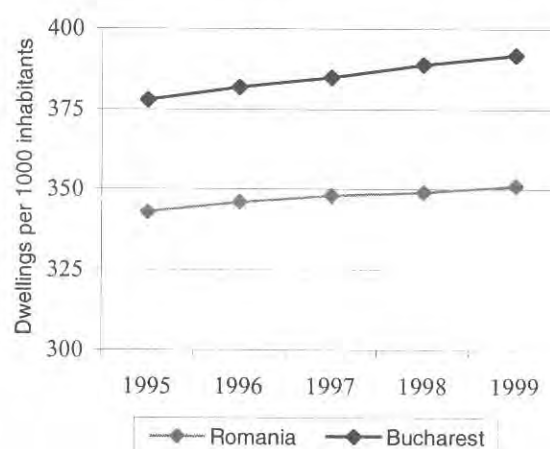
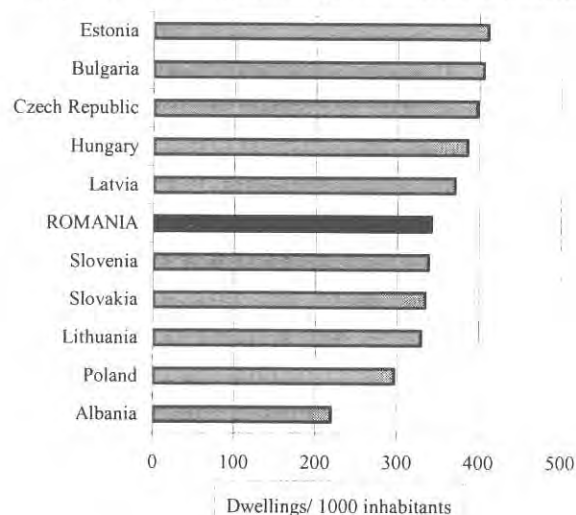


Table 4. Housing consumption in 11 countries in transition, 1994

	Dwellings/ 1000 inhabitants	Households/ dwelling	Persons/ room	Living space/ person (m ²)
Albania	219	1.00	2.70	8.0
Poland	296	1.06	1.02	18.2
Lithuania	329	1.06	1.30	19.7
Slovakia	334	1.00	1.14	21.9
Slovenia	338	0.95	1.33	19.0
ROMANIA	341	0.95	1.19	17.4
Latvia	370	1.13	1.21	20.9
Hungary	385	0.99	0.92	32.1
Czech Republic	397	1.01	1.04	25.5
Bulgaria	405	0.88	1.00	16.7
Estonia	410	1.03	1.18	32.0

Source: Hegeduz J., Mayo S., Tosics I., Transition of the Housing Sector in the East-Central European Countries, MRI, Budapest, 1996.

Figure IX. Housing consumption in selected countries



Nonetheless, this apparent aggregate fit between housing supply and demand may hide a possible mismatch in terms of potential households or geographical distribution. For example, observation and reports received during the study would appear to confirm the possibility of a real housing shortage in Bucharest and some other urban areas. The available data⁵ give only a rough idea of the variation in dwelling and floorspace-per-person ratios by county and region. The number of dwellings per 1,000 people varies from 369 in Bucharest to 300 in Bistrita Nasaud (>12% difference). Floorspace per person varies even more (>50%) between 11.5 m² in Iasi and 17.7 m² in Arad.

The only reliable detailed data on dwelling occupancy are found in the 1992 census. These give an occupancy rate of 94%, with 6% (472,200) unoccupied units. In a fully operating market economy, such a figure might be considered desirable to facilitate housing mobility. However, this is not the case in Romania, since most of those units are either rural leisure houses (second homes) or simply located in places where the housing market is not functioning, and in many cases the vacant housing is substandard.

Though statistically correct, the above picture can be misleading for both researchers and politicians. It may imply that Romania does not need much new construction. However, real needs should be assessed only after all aspects of the housing system have been analysed.

Condition and life expectancy of the stock

When assessing stock condition, the key factors are the age of the stock, its construction type, and the management and maintenance that it has received.

Romania's dwelling stock is relatively new in comparison to that of western Europe, and quite similar in age to that of many countries in transition. The oldest part of the stock, pre-1930, constitutes roughly 14% of the total, and only some 22% has been added since 1970 (table 5). The 52% share from 1945-1970 is higher than in both western Europe (33%) and comparable countries in transition (about 28%) (fig. X). Only Bulgaria has a similar share of about 49%. This is evidence of the extremely high rates of new construction during the first half of the socialist era.

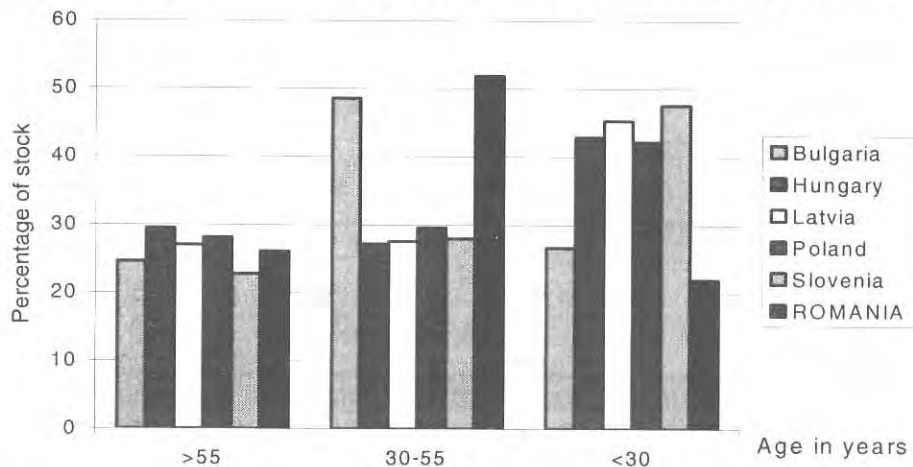
Table 5. Age of the housing stock, 1992

Period of construction	<1915	1915-29	1930-44	1945-60	1961-70	1971-80	1981-90	Illegal
Romania	8.8%	5.6%	11.6%	28.7%	23.2%	14.5%	6.7%	0.1%
Municipalities	13.1%	7.0%	13.6%	23.8%	19.5%	14.6%	7.6%	0.1%
Villages	7.5%	5.2%	11.0%	30.2%	24.4%	14.5%	6.4%	0.0%
Bucharest	11.3%	10.1%	25.3%	29.4%	11.3%	7.6%	4.4%	0.4%
Age of buildings (years)	>85	>70	>55	>40	>30			
Romania	9%	14%	26%	55%	78%			

Source: National Commission for Statistics, 1992 Census data.

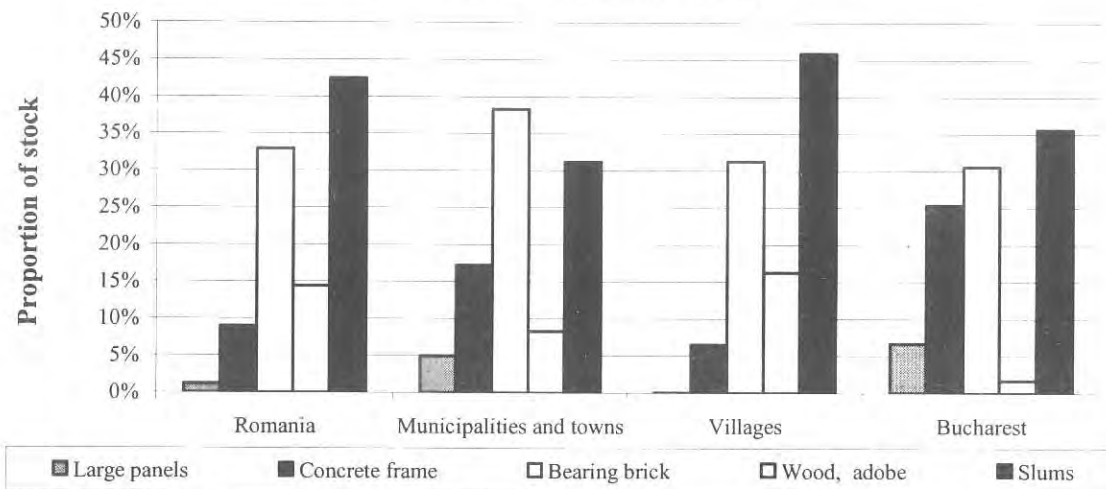
⁵ 1992 census

Figure X: Age of the housing stock in selected countries in transition



Source: Housing and Building Statistics for Europe and North America, UNECE, 1998.

Figure XI. Construction quality



Source: National Commission for Statistics, Population and Housing Census, 1992.

The mass introduction of large panel construction at the end of the 60s, and its large-scale use over a quarter of a century, now contribute to a lowering of the general quality of the stock. According to the Romanian classification, there are six types of buildings defined by the material of their external walls (see fig. XI):

1. Reinforced or prefabricated concrete;
2. Brick, stone (in a reinforced concrete skeleton);
3. Brick, stone (in a wooden skeleton);
4. Wood (beams);
5. Adobe, similar materials;
6. Non-standard materials (slums).

Table 6. Technically amortized buildings

ROMANIA	TOTAL	Amortized buildings				Remaining life <20 years	
		>30 years	(%)	>50 years	(%)	number	(%)
Total residential buildings	4,463,971						
From reinforced concrete or prefabs	53,637					342	0.01%
Brick, stone (reinforced concrete skeleton)	401,909					24,224	0.54%
Brick, stone (wooden skeleton)	1,470,093			388,646	8.71%	753,775	16.89%
From wood (beams)	642,320	534,991	11.98%			107,329	2.40%
From adobe, similar materials	1,843,012	1,551,723	34.76%			291,289	6.53%
From non standard materials	53,000	20,329	0.46%			32,671	0.73%
Total amortized		2,107,043	47.2%	388,646	8.71%	1,209,630	27.1%

Source: National Commission for Statistics, 1992 Census data, expert estimates.

The effective life (technical amortization periods) of different structures can be prolonged or shortened depending on the adequacy of their management and maintenance. If the effective life of buildings of the first two material types is assumed to be 100 years, for the third type 50 years, and for the last three 30 years, a disturbing picture emerges (**table 6**). This calculation suggests that 56% of all residential buildings in Romania are fully amortized – i.e. they have theoretically come to the end of their effective life. The amount of robust housing available 20 years from now – i.e. with over 20 years of the assumed amortization period left – would decline by a further 27.1%. So only 17% of the 1992 stock would still be able to provide reliable shelter in 2020.

This does not mean that over half the housing stock is in imminent danger of collapse. Fortunately, the theoretical amortization period is not the only – nor the most important – factor determining the useful life of buildings. It is, however, based entirely on the reality of construction materials and methods, and it is therefore a very effective tool to draw attention to the other factors which need to be addressed if this scenario is to be avoided.

Good-quality construction followed by proper maintenance can prolong the life of almost any type of structure for centuries, and certainly significantly longer than any theoretical amortization periods. Yet what is the case in Romania? There are no statistics available to answer this question. According to Romanian experts from Urban Project (see chapter III), poor construction and long-deferred maintenance account for the qualitative shortcomings of the existing stock. The most critical problems are in multi-family structures: 2.5 million units (35% of all occupied units) are in need of infrastructure upgrading; a large number of units were left unconsolidated after the last three earthquakes⁶⁶. So the picture is bleak. Even if the housing may still be able to provide minimal shelter in 20 years, it is unlikely to meet the needs of a decent standard of housing, unless considerable efforts and resources are devoted to repair and renovation to counteract the effects of poor construction and the lack of maintenance over many years.

Types of dwellings

A particular feature of Romania's housing stock is the highly dominant share of single-family houses. They total 95.1 % of all residential buildings and 55.7% of all dwelling units (see table 7 and fig. XII). The proportion of dwellings in apartment buildings, only 39.2%, is smaller

⁶⁶ The Transition of the Housing System in Romania, Urbanproject report for the workshop on Housing Finance, Timisoara 2000.

than in other countries in transition. The remaining 5.2% are non-detached houses (semi-detached or rows/terraces).

In rural areas, single-family houses dominate by 98.5%, providing the potential for ecologically sound living conditions and easy maintenance and management. However, the problem in Romania is that this will remain just a potential and not reality for most of the rural stock, until the requisite knowledge and resources are fully available.

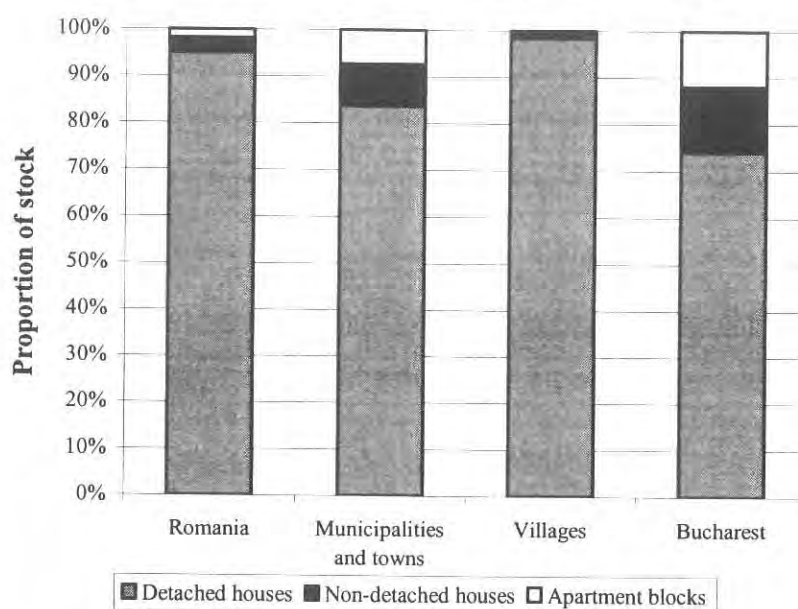
Apartment buildings make up 71.7% of the urban stock. It is this part of the stock (about 2.9 million units in 76,000 buildings) which has the greatest need for urgent improvements.

Table 7. Housing stock by type of building

	Detached houses	Non-detached houses	Apartment blocks	All buildings	All dwellings
Romania	4,244,187	139,152	80,632	4,463,971	7,659,003
Municipalities and towns	869,613	92,730	76,151	1,038,494	4,076,335
Villages	3,374,574	46,422	4,481	3,425,477	3,582,668
Bucharest	80,073	15,190	12,753	108,016	761,156

Source: National Office for Statistics, 1992 Census data.

Figure XII. Housing stock by type of building, 1992



The size of dwellings can be analysed by number of rooms and living space. These characteristics relate directly not only to current consumption standards and the adequacy of distribution, but also to the ability of the stock to meet future household needs. Table 8 and figure XIII illustrate the general picture.

Figure XIII. Dwellings by size, 1999

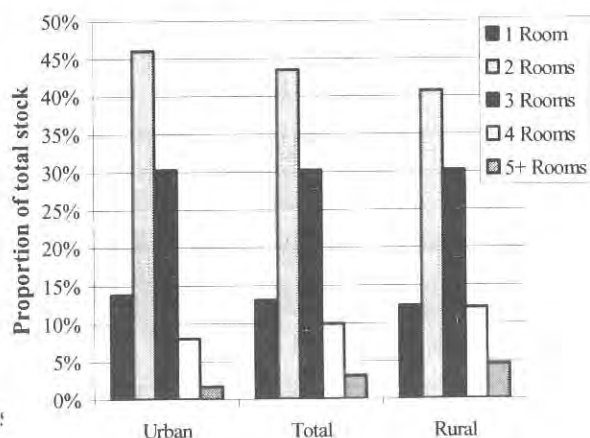


Table 8. Dwellings by size, 1999

	Number ('000s)	Dwellings by number of rooms				
		1	2	3	4	5+
Urban	4176	580	1922	1264	338	72
Rural	3707	457	1509	1119	449	173
Total	7883	1037	3431	2383	787	245

Source: National Commission for Statistics.

When looking closely at size, a more disturbing picture emerges. A comparison of the stock's structure in 1992 according to number of rooms with that of household size is provided in table 9 and illustrated in figure XIV. These show a mismatch between the rooms available and those needed for different sizes of household: for example 56.3% of dwellings with one or two rooms against 42.3% of households with one or two persons. This would indicate that over 1.7 million small dwellings (24% of the total) were occupied by households with three persons or more. In fact, as table 9 shows, more than 10% of all dwellings had more than two persons per room in 1992. The scale of the problem was so great in 1992, that it is unlikely that it has now been completely solved.

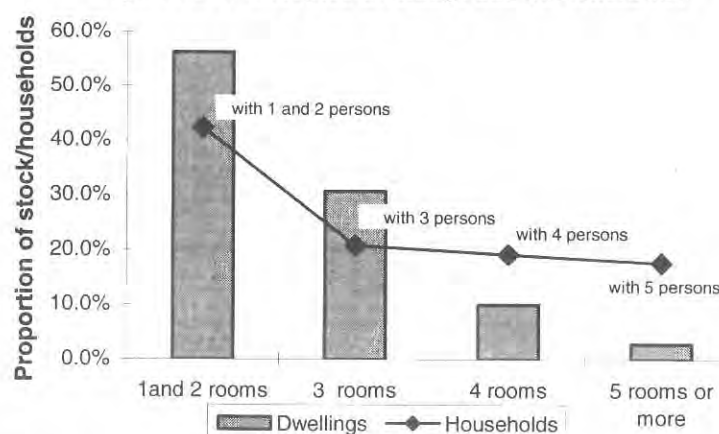
Table 9. Occupied dwellings by household size and number of rooms, 1992

Households size	Size of dwelling by number of rooms					Total
	1	2	3	4	5+	
1 person	401,059	563,475	193,650	44,815	11,240	1,214,239
2	236,320	933,602	486,455	131,565	33,914	1,821,856
3	122,319	699,161	500,452	134,463	34,866	1,491,261
4	67,373	550,160	548,062	169,555	42,175	1,377,325
5	31,971	215,351	258,852	116,908	37,657	660,739
6	17,724	99,736	129,461	73,347	28,352	348,620
7	10,395	49,456	55,887	32,124	13,182	161,044
8	4,501	19,103	19,520	11,557	5,479	60,160
9	2,098	8,517	8,175	4,978	2,424	26,192
10+	1,990	8,116	7,670	4,825	2,710	25,311
Total (number)	895,750	3,146,677	2,208,184	724,137	211,999	7,186,747
Total (%)	12.5%	43.8%	30.7%	10.1%	2.9%	100.0%
Overcrowded dwellings = >2 persons/room						
Total (number)	258,371	400,279	91,252	9,803	0	759,705
Total (%)	28.8%	12.7%	4.1%	1.4%	0.0%	10.6%

Source: 1992 Census.

The size of dwellings is not merely judged by number of rooms, but also by floorspace. The average living space in 1992 was 41.2 m², but only 14.1 m² for one-room apartments and 25.3 m² for two-rooms, and it is in these that so many households live with more than three persons per room. The assumption is that most of these extremely small units result from the reduced space standards and the priority of output in industrialized construction during the pre-transition period.

Figure XIV. Occupied dwellings and household size



Infrastructure and building services

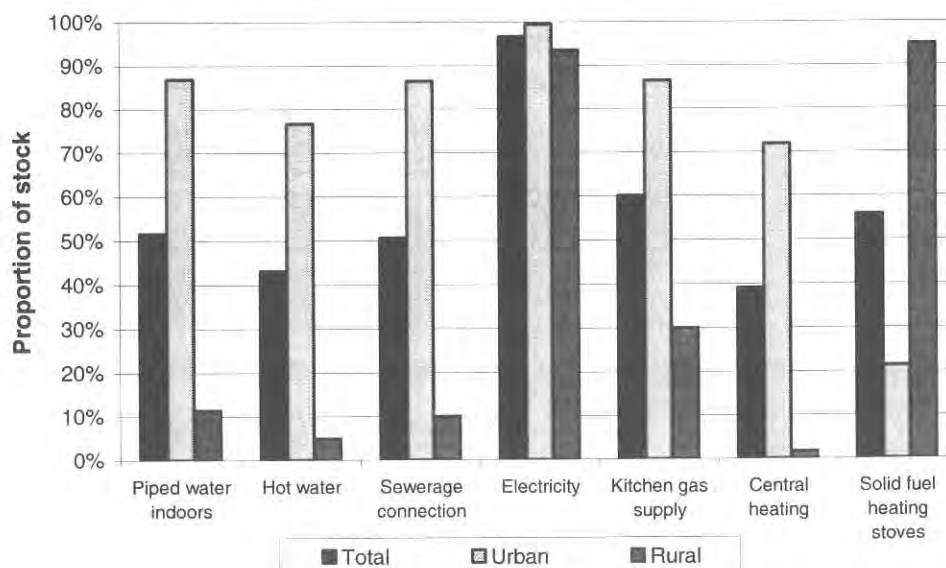
The lack of basic amenities seems to be one of the most disturbing aspects of housing quality in Romania. With only 53.1% access to piped water, Romania rates last among the 14 European countries in transition⁷. The picture is even worse if only piped water inside dwellings is considered (51.6%).

Table 10. Amenities in urban and rural areas, 1992

	Total		Urban		Rural	
	Dwellings	Households	Dwellings	Households	Dwellings	Households
All occupied dwellings	7,659,003	7,281,441	4,076,335	3,967,201	3,582,668	3,314,240
Dwellings with:						
Piped water indoors	3,950,731	3,843,865	3,542,749	3,456,611	407,982	387,254
Hot water	3,302,013	3,214,427	3,126,594	3,048,955	175,419	165,472
Sewerage connection	3,882,079	3,777,057	3,522,809	3,437,049	359,270	340,008
Electricity	7,406,891	7,100,387	4,054,902	3,951,402	3,351,989	3,148,985
Kitchen gas supply	4,603,262	4,554,991	3,527,546	3,481,887	1,075,716	1,073,104
Central heating	2,992,057	2,908,851	2,931,243	2,855,121	60,814	53,730
Solid fuel heating stoves	4,270,810	3,990,966	871,136	844,283	3,399,674	3,146,683

Source: The National Commission for Statistics, 1992 Census data.

⁷ Country Profiles on the Housing Sector - Poland, UNECE 1998.

Figure XV. Amenities in urban and rural areas

In terms of regional disparities, **figure XV** shows how rural areas lag far behind urban ones in access to piped water, sewerage systems and gas. Only one in ten rural homes has piped water indoors and a sewerage installation. The development of rural areas has obviously been neglected over a long period of time. Large-scale investment programmes for infrastructure are being considered by the Government, but the task of catching up with other countries will be considerable.

However, disparities in service levels exist among cities too. Bucharest is in a better position than other towns with respect to most basic utilities. As outlined in the Urban Project report⁸, obsolete infrastructure in the old parts of most cities should be addressed as a top priority. Mass replacement and upgrading are urgently needed.

Statistics on availability provide only a partial picture of the situation. Far more significant is the quality, reliability and cost of the services provided to residents. Informal interviews support personal observations during the study that the price, the poor management and reliability of some networks (water supply and district heating in particular) aggravate the poor living conditions in much of the housing stock.

Probably the most significant issue is heating. This topic is important for two reasons: the cost of energy, which places a heavy burden on households, and the energy efficiency problem in the context of the sustainable development aspirations of the country as a whole. Consideration here is restricted to the type of heating used in residential buildings:

- District heating from local heating stations is used in 39.1% of all occupied dwellings, in 71.9% of those in urban areas;
- Natural gas is used for heating (local stations or domestic stoves) in only 10.1% overall (urban 16.4%);
- Gas installations for cooking only are found in 60.1% (86.5% urban and 30% rural);
- Solid-fuel stoves are used in 94.9% of rural and 21.4% of urban dwellings.

⁸ The Transition of the Housing System in Romania, Urbanproject report for the workshop on Housing Finance, Timisoara 2000.

Heating represents the greatest share of household energy consumption and spending on utilities. This raises several issues:

- The monopoly of district heating companies, blamed for high prices and poor services;
- The lack of individual metering of energy consumption, which discourages households from pursuing efficiency;
- Poor insulation standards, particularly in prefabricated apartment blocks (losses of 30-35% to judge by Bulgaria's experience);
- Huge energy losses from district heating systems before dwellings are reached (Romanian experts estimate losses of more than 50%);
- Very considerable debts in the form of unpaid utility bills for both individual consumers and owners' associations;
- The reduction of solid fuel resources, leading to price increases;
- Ecological problems associated with the continued, widespread use of wood as a fuel.

The issue of energy efficiency received political attention in Government Ordinance 29/2000 (see chapter IV) but since this is a recent measure, there are as yet no specific results. The Ordinance is nonetheless a first concrete step in addressing this complex issue. The importing of know-how and best practice, together with the education of local energy consumers and providers, should accelerate the achievement of practical and sustainable results.

B. Housing markets – dwellings and land

The housing market in Romania started to emerge immediately after the start of transition to a full market economy in 1990. It received a strong impetus from the mass privatization of housing and the restitution of urban land. It has continued to develop rapidly until recently; it is a fluid market offering a wide range of prices and amenities. The number of residential sales rose from about 39,000 in 1990 to a peak of about 226,000 in 1993, before dropping to an annual rate of fewer than 180,000 by the mid-1990s. The 100,000 sales reported in 1999 were expected to be followed by even fewer in 2000: evidence of the continuing stagnation of housing markets after 1996. Most transactions involved the privatization of existing dwellings, or their resale, and not newly constructed units. For example, only about 36,000 new units were finished in 1995, yet there were approximately 170,000 transactions during that year (representing about 2% of the total stock)⁹.

The boom in sales was facilitated by an emerging broker industry. By 1996, 500 (out of 2,000) real estate companies in Bucharest listed brokerage as their main activity. The National Romanian Association of Realtors (ARAI) was established in 1994 and has become a leader in the real estate industry (see chapter III). Brokers represent both buyers and sellers, and typically receive commissions from each. While commissions are negotiable, a broker might receive 6% on an average sale, and perhaps 3% on a larger sale (paid 50/50 by buyer and seller). For land sales, the commission ranges from 4% to 6% (again 50/50).

⁹ The Prospects for Housing Finance in Romania, the Urban Institute report, Washington D.C. Dec. 2000.

Rental market

A rental market has also developed, although it is difficult to gauge its size. It is widely believed that much of the market is hidden because of tax evasion. One survey suggests that about 3% of households in Bucharest rent units from private owners¹⁰. Figures for other urban areas and rural areas are thought to be lower (according to the 1999 Institute for Quality of Life survey). An additional 1.8% of households are "rent-free tenants".¹¹

Brokers tend to view the rental market as two segments: a small, high-end luxury market catering to the international community, and a second, larger market for Romanians. The former tends to operate in hard currencies (US\$ and DM) exclusively, while the latter accepts payments in hard currencies or lei. The luxury market has been responsible for some investment in new construction; but it has been hard hit in recent years, and rents have apparently fallen as the level of direct foreign activity has declined. In contrast, the mass market primarily consists of existing flats, mostly on the outskirts of cities, and it offers a range of options. Young people who want to live apart from their parents can share apartments. Some families share with others or move to a second home outside the city so they can earn cash income by renting out their flats. Brokers participate in the rental market, and typically receive a month's rent as a commission (paid 50/50 by tenant and landlord).

The rental market faces some constraints, but their impact on prices and supply is not clear. For example, an ARAI report notes that renting both residential and commercial properties is hindered by a lack of telephone lines - although presumably this would affect sales as well. Also, the tax on rental income has now been reduced from 40% to 15%, but it is unclear to what extent this reduction has stimulated supply, if at all.

The developing market is proving able to support greater flexibility in providing numerous options for households wishing to improve or adjust their housing situation. For example, households can trade up by selling or exchanging their existing home and paying the difference between its value and that of a better one. Others can keep some of their home equity by trading down to less expensive dwellings. A household with a high-value dwelling seeking more space and privacy can sell its home and use the proceeds to help purchase two less expensive dwellings. Finally, those who wish to buy newly constructed homes can finance their purchase by paying the developer in instalments as the work proceeds.

Prices and affordability

The price of new construction is prohibitive for most households. The price of a new minimum-standard, two-room flat is about \$18,000 to \$21,000. This is well above the approximately \$12,000 that the newly-created National Housing Agency (see later chapters) plans to charge for a comparable unit - a price that excludes charges for land, infrastructure, profit, taxes and financing costs.

In contrast, the prices of existing dwellings cater for a wide range of household budgets. Rough estimates of the price-to-income ratio for existing housing appear to fall within the same

¹⁰ The same figure is suggested for the country-wide share of private rentals in the UN/ECE- CHF Practical workshop on housing privatization, Cracow 1999.

¹¹ National Human Development Report, UNDP, Romania 1999, table 36.

range as in a number of other industrialized countries (2.4 to 6.6). For example, a household can purchase an existing two-room flat in Bucharest for as little as \$7,000, or as much as \$60,000. There is no general rule for the price of a single-family home (known locally as a villa). In urban areas, a relatively small number of villas have been built recently, many by high-income households. While prices for luxury units can exceed \$100,000, it is possible to buy a modest villa with services on the outskirts of Bucharest for around \$25,000 to \$30,000.

The concept of housing affordability takes on a different meaning in a country with widespread free-and-clear ownership (over 94%). In principle, any homeowner can trade his or her present home for another one of at least similar value, provided he or she can cover the transaction costs. Thus, there is a very high degree of potential effective demand among homeowners. However, it remains merely potential when the income of so many proves to be insufficient even to meet normal expenditure on food and utilities, and where the financial mechanisms are not properly developed (see chapter V). Therefore, notwithstanding the high level of private ownership, housing mobility is very low for most people. Moving to rural areas, where prices are several times lower, cannot be an option for most of the active urban population, because employment opportunities are few. Thus the real market develops within the thin layer of the highest income group's demand.

The economic downturn of the past few years has slowed overall demand for housing. While this has hit the construction industry hard, it has helped to keep prices in line with incomes, which have not grown in real terms. The price difference between existing and newly constructed units has made newly constructed units unattractive to buyers. This is illustrated by the fact that nearly all of the 11,000 beneficiaries of a recent government-subsidized loan programme chose to purchase existing units rather than new ones. The decline in new housing construction has contributed to heavy job losses in the construction industry; the number of construction workers in 1999 (342,600) was only half of what it was a decade earlier.¹²

The main constraints on the further development of housing markets have been:

- Limited purchasing power;
- Unclear title to much urban land;
- A lack of explicit legal provision for obligations regarding utilities;
- The lack of an effective strategy for the provision of infrastructure to development sites;
- Construction costs too high (due to the still monopolistic position of construction material companies, according to some private builders);
- The continued and widespread use of traditional building technologies (with low-paid, relatively unskilled labour) and resistance to change from consumers and some developers, making construction slow and unresponsive;
 - The lack of, or resistance to, public/private partnerships;
 - The inadequate understanding of markets among many players – education and training are needed;¹³
- Considerable black market/illegal construction;¹⁴

¹² UNECE Annual Bulletin of Housing and Building Statistics and National Commission for Statistics.

¹³ The Romanian Union of Real Estate Agencies.

¹⁴ The State Inspectorate for Building and Urban Planning, MLPTL, admits it – 20%, according to a sample survey in 1993 and according to an expert estimate 10% since 1994.

- Inadequate conditions for “fair” market competition, making the risk too high for investors;
- Financial obstacles (see **chapter V**).

Some attempts at tackling these factors are described in the following chapters. However, they will continue to affect housing in Romania for a long time, limiting the ability of market mechanisms alone to meet the challenges.

C. Apartment blocks: the big challenge

The management and maintenance of the housing stock as a national as well as a private asset is a widespread issue; but it is of primary concern in the condominiums of Romania, because of:

- Their considerable share of the stock in urban areas;
- The prevailing use of prefabrication; and
- Their recent administrative (and not market) transfer from public rental to homeownership.

The problems facing management and maintenance in condominiums are:

Institutional (see chapter 3)

Physical:

- Defects of design, construction, structure and material in many buildings;
- Worn-out utility infrastructure;
- Mass leakage from roofs and baths;
- No rooms for social contact;
- Unequipped and neglected spaces around buildings;
- Extremely high densities in many large housing estates (especially in bucharest);

Social:

- Systematic breaking of the internal rules;
- Lack of neighbourhood/community spirit in some cases;
- Crime
- Ongoing social and spatial segregation – leading to social ghettos;

Political:

- Housing is not a political priority;
- The state is not committed to the future success of condominiums;

Economic:

- Market recession;
- Low incomes;
- High inflation, low savings;
- High unemployment;

Urban planning:

- Lack of a concept or models for the restructuring of condominium buildings;
- Piecemeal approach.

The rehabilitation of housing can be seen in the larger context of urban renewal:

- The general replacement of buildings as they reach the end of their effective life (see sect. A above);
- The renewal/regeneration of historic city centres; and
- Earthquake consolidation and the diminishing of future risks.

However, Romania faces the need to restructure and renew large estates of multi-storey apartment housing where management and maintenance have been inadequate and the long-term continued use of the buildings is in question.

Having been neglected, these housing estates are likely to produce increasing social problems to add to the physical and economic ones:

- Underdeveloped social services;
- Declining trade, services and other small businesses when the average spending power of residents declines;
- Alienation of occupants from their immediate environment as it deteriorates, particularly neglected public spaces;
- Declining community ties, especially if household turnover increases as newcomers view their homes as only temporary before moving on to somewhere more desirable;
- Stress and poor health due to poor thermal and sound insulation and aesthetic qualities of residential blocks; and
- Continuously higher crime rates.

All of these issues imply the need for permanent and continuous activity, to deal not only with the housing environment and technical aspects, but also with the economic, cultural and psychological factors. Overcoming the psychological and actual alienation of residents from their environment is very complex, and it is therefore more effective to avoid them in the first place. Residents need a focus of interest, a feeling of stability, of ownership, of security and opportunities for future generations. Residents' identification with their environment in all aspects - from cultural and psychological to economic and legal - will motivate them to accept, support or even initiate positive measures for change.

It is necessary to promote the establishment of support functions for neighbourhood social structures, for an active community life, for civil initiatives and participation in the renewal, maintenance and, eventually, the construction of a new housing environment. Current legal provisions and the formal existence of owners' associations (see the next two chapters) are proving insufficient.

Urban planning

It might be expected that urban planning could provide some solutions for the future of the large multi-storey apartment block estates.

Former urban renewal development practice used to rely on two general conditions:

- The right of compulsory purchase (expropriation) of private property for public purposes (including new housing construction); and
- The availability of public subsidies in the form of direct investments.

Now, both are absent. Moreover, investment in the construction of public buildings has been reduced to the bare minimum, so that urban renewal projects relying on public finance are now virtually impossible. The application of public-private partnership has not spread enough to public investment, and this is unlikely to happen until public subsidies are available again. (All housing renewal projects of the past few decades have taken place only within the public stock or in architectural conservation areas.)

There is currently no clear statutory basis for large-scale renewal projects in owner-occupied stock – i.e. in the large estates. Nonetheless, this could be organised on a voluntary and contractual basis, provided there is public initiative, private willingness and affordability, and some public subsidies.

Romania has been lucky to inherit a large housing stock of architectural/cultural/historic value. Most listed buildings have suffered from insufficient maintenance and they now require considerable investment in repairs and renewal. Restitution and private initiatives have started the renewal and conversion of residential into commercial premises, but it is still insignificant in scale, and not planned. Public attention has recently been attracted to about 100 listed buildings in Bucharest damaged by the last earthquake. Scarce resources have been sufficient for surveys alone and not for the needed consolidation and refurbishment.

D. New housing construction

After a sharp drop in 1989-1990, the total yearly production of new housing fluctuated around 30,000 units until 1999. This makes an average increase of 0.3-0.4% per year and a rate of 1.3 units per 1,000 people.

Significant features of this period are the fact that:

- New construction shifted from urban to rural areas (the urban/rural ratio in 1990 was 85.4:14.6, and in 1999 35:65);
- The basic amenity standards of new housing worsened (in 1998 only 33% of all new units were connected to sewerage systems compared with 89.7% in 1990; the trend for piped water connections was similar – from 91.4% in 1990 down to 43.2% in 1998).

This last negative trend can be partially explained by the dominant share of new construction taking place in rural areas, where water-supply networks are insufficient and cesspools are traditional. Apart from addressing basic infrastructure supply, the above trends require a revision of building regulations and their application.

Figure XVI. Urban/rural housing construction, 1990-99

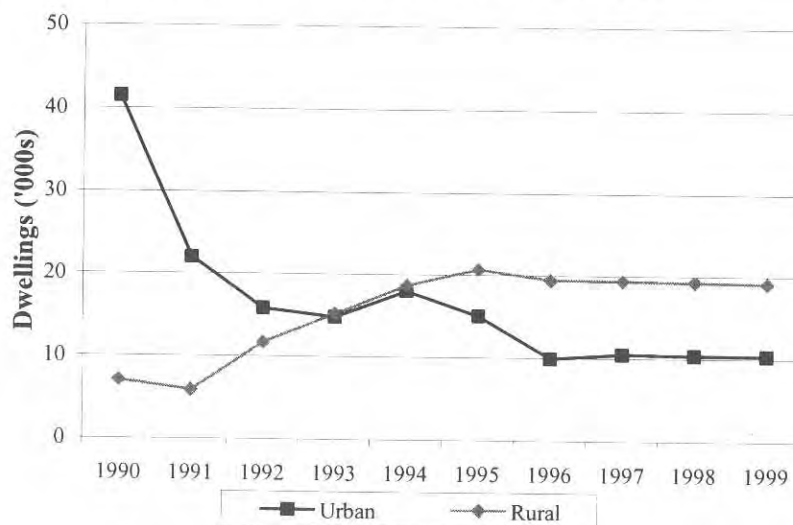


Figure XVIII. Amenities in new housing, 1990-98

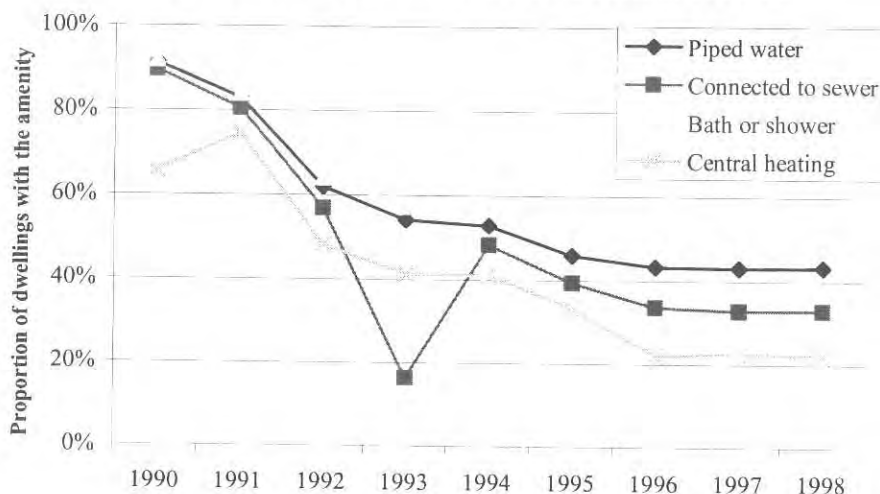
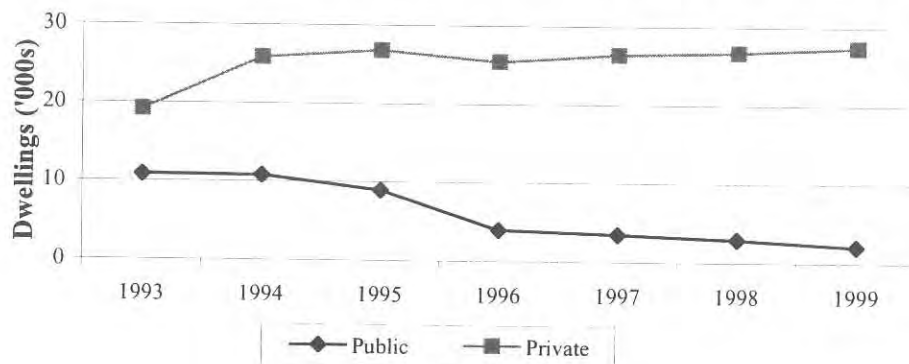


Figure XVII. New public and private housing construction, 1993-99



There are conflicting views as to whether land prices hinder production by contributing to higher costs. Realtors point to the sharply rising land prices in prime locations such as downtown Bucharest (where prices per square metre can exceed US\$ 500), but they often overlook the availability of land in surrounding neighbourhoods and on the periphery which sells for as little as US\$ 10-50 per m². Another constraint is the difficulty of consolidating large parcels of land. Specifically, larger projects have a higher risk of property claim disputes.

The problems of the housing construction industry are likely to remain so long as there is a relatively soft market for cheap existing dwellings. The survival of some firms may depend on their ability to adapt to the market for renovation and upgrading – something which would help solve the apartment block problems mentioned above. In the meantime, many builders (particularly some of the larger firms) face an even bigger threat to their existence in the form of overdue payments from State organizations.

Private land for residential construction can be acquired through market transfers, restitution (pursuant to Law 18/1990, and provided the land is not built up or re-zoned by the master plan), and the restitution of former property rights on plots of up to 300 m² in rural and 150 m² in urban areas. A major problem, however, is to identify the landowner – or, more precisely, to identify him with any degree of certainty: about 70% of all titles issued since 1990 are being contested in court. Titles issued up to 1999 do not contain information on precise location and tax payments. Cadastre registering is incomplete, since there is no legal obligation to register land transfers and 50 years ago private land was transferred to the public domain and most of the registers lost. Therefore new claims to a piece of land cannot be ruled out, and buying land involves risks.¹⁵

Public land can be obtained only from the State or local administrations:

- Through public tender, in accordance with the provisions of the urban development plans and Law 50/1991 (for authorizing construction) and Law 219/1998 on leasing ;
- *Without tendering*, where the land is leased for public purposes (including social housing) and for extensions to existing constructions.

The minimum price for leasing is decreed by the local council, to recover the market price of the land and the infrastructure costs over 25 years.

Land leased for housing purposes should not exceed:

- In urban areas: 300 m² for a single family house ; 200 m² for a house with two storeys and two apartments ; 150 m² for a collective housing unit with maximum 6 dwellings.
- In rural areas: 1000 m² ; or, for second homes, 250 m² .

Local authorities do not know the full extent of their assets (especially in Bucharest). There is no clear land status, hence the many conflicting claims. Each time a piece of land is singled out for construction, a great number of claims emerge. There is no data bank for land.¹⁶

¹⁵ This description and opinion is provided by the local team.

¹⁶ This description and opinion is provided by the local team.

Building permits require the provision of infrastructure for every construction project. The General Urban Plan for each area contains clear provisions for each case of undeveloped land, entailing:

- An obligation to connect to the existing networks;
- Individual solutions (for water, sewerage) where there are no networks (with the obligation to connect later if such are built);
- An obligation on the developer to extend or to increase the capacity of existing public networks (in the case of larger developments).

The General Urban Plan of Bucharest provides zoning for residential uses and identifies vacant land for housing construction. The regulations that will accompany the Plan will provide detailed provisions for the type of housing construction to be built (density, height, etc.).

Conclusions

After 20 years about 80 % of all dwellings will probably come to the end of their life unless serious measures are taken to reverse current trends and considerable efforts and resources are applied to renewal and maintenance along with replacement and new construction. Even if still in use, most housing will provide just shelter and not a decent standard of housing. Multi-family structures (35% of the stock) are in particular need of upgrading.

The average dwelling is too small. New construction should focus on larger units; the existing housing market provides enough small dwellings. Given the market context the reverse correlation between affordability and household size will hinder the achievement of adequacy in housing size for a long time.

Poor basic amenities and insulation seem to be the most disturbing aspect of Romania's housing stock, compounded by poor management and the low reliability of some utility networks.

The massive material problems in multi-storey apartment blocks are compounded by the social and economic circumstances of their residents, particularly where condominiums are concerned.

The enormous obstacles facing the fledgling markets in land and housing prevent them from adequately addressing the above issues.