

HOUSING QUALITY IN THE REPUBLIC OF MOLDOVA

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ABSTRACT

Motives: The term “housing quality” is very complex and refers to all qualitative aspects of housing. In this context, the present study based on an extensive analysis of the literature that addresses various aspects of housing quality (monographs, landmark publications, international reports, methodological guides, normative and legislative acts, and statistical data) was developed. The particular case of the housing quality in the Republic of Moldova consists in the degree of comfort that the population benefits from the level of localities’ utility infrastructure.

Aim: The study aims to provide an overview of the housing quality in the Republic of Moldova at national, regional, and local levels. Therefore, the main factors which influence the territorial distribution of structural indicators and their outstanding effects in the researched area were analysed.

Results: The research results showed that the quality of housing in the Republic of Moldova depends on technical and economic development, thus major discrepancies between different categories of Administrative Territorial Units and Development Regions are registered.

Keywords: Housing Quality, Housing Index, Technical Comfort Index of the Habitat, The Index of Housing Density

INTRODUCTION

One of the central problems of modern society is the housing quality, which means both the house (home) and its degree of comfort (Antonescu, 2014). As a result, the Global Housing Index was developed worldwide, which is a tool to assess the policies and practices under which housing in a country is – or is not – owned, rented, financed, subsidized, serviced, regulated, planned, and built (Katz, 2012). Governments around the world have

formally recognized universal rights to adequate housing and living standards, according to United Nations Human Settlements Program (UN-Habitat, 2004, 2012). Back at the 1996 United Nations Habitat II Conference, it was established that adequate shelter means much more than just a roof. It also means adequate privacy, space and security and a place to thrive. Furthermore, poor housing can lead to many health problems, which can lead to different infectious diseases, such as tuberculosis, stress, and depression. Everyone should therefore have access to good

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quality housing and a pleasant home environment that makes them happy and content (WHO, 2002). Social and economic measures implemented at the local level should aim to improve the inhabitants' welfare, living standards and quality of life. These goals are achieved primarily by promoting house building, protecting the environment, improving the availability of technical and social infrastructure, designing policy frameworks that support investment, and promoting social and economic mobilization of local communities (Pawlewicz & Flasińska, 2021).

The housing quality can be understood in many ways (Vâlceanu & Zulaica, 2012), for example, studies on the issue may have many interpretations and implementations through government housing policies, academic research, etc., and usually may achieve one or more of the following goals (Lawrence, 1995):

- the assessment of aesthetic and/or use values of residential buildings;
- the identification targets for upgrading or replacing the existing housing stock;
- the allocation of housing loans and subsidies by consideration of effective occupancy conditions, household income, and expenditure;
- concern about health and wellbeing of residents in relation to the internal and external conditions of housing neighborhood.

According to *The Right to Adequate Housing Toolkit* (OHCHR & UN-Habitat 2009, 2012) an adequate home should meet several criteria, such as:

- security of tenure;
- availability of services, materials, facilities and infrastructure;
- affordability;
- habitability;
- accessibility;
- location;
- cultural adequacy.

Trudel (1989) considers the housing quality the primary aspect of people's quality of life. At the same time, quality of life is an imperative goal of sustainable human development (Streimikiene, 2015; Janusz, 2020). According to Apłopi (2008) the existence

of the human population is based on living conditions. Thus, housing is the defining element of human development, increasing the quality of life, a measure of social welfare but also a motivating factor for the economy and investment.

Castro (1999) entails in his analysis on housing quality the psychological, social, and environmental factors that define mental, physical, and biological health; whereas housing is the ability of a habitat to meet the objective and subjective needs of a person or group to which it belongs. Thus, according to the World Health Organization, good housing quality is a key element in ensuring a healthy village. The understanding of housing quality among the actors reveals there are rich and various meanings and interpretations of housing quality (Maimon, 2018).

In the Republic of Moldova, until the adoption of the Law regarding the housing (2015), housing policy was regulated by the Housing Code (1983) which was the functional legislative document during the USSR. The main aspects mentioned in this code had established the basic principles of the population register which aimed to improve the living conditions, the use, and the maintenance of the housing stock in good condition and solve disputes in the housing field.

Some aspects regarding the quality of the dwelling were reflected in the methodology for evaluating the dwellings, subject to the privatization process embodied in Law on the privatization of housing, here being established the correlation between the quality indicators and the consumption indicators of the dwelling. Currently, the legislation of the Republic of Moldova on housing is based on the principles of the Constitution of the Republic of Moldova, the Civil Code, international treaties which the Republic of Moldova signed, and other normative acts related to housing.

MATERIALS AND METHODS

Information regarding housing quality in the Republic of Moldova is provided by the National Bureau of Statistics. The data collection is delivered by the statistical research "About the housing stock" which includes two basic indicators:

Provision of housing for the population / in square meters per inhabitant;

$$A_L = S_T / N_p \quad (1)$$

where:

- A_L – provision of housing for the population;
- S_T – total area;
- N_p – average number of resident population.

The share of the total area of dwellings equipped with various types of utilities;

$$S_{T(i)} = S_{T(i)} / S_{Ti} * 100\%, \quad (2)$$

where:

- $S_{T(i)}$ – the share of the total area, equipped with various types of utilities;
- S_{Ti} – the total area, equipped with certain types of utility;
- S_T – total area.

The data obtained from the statistical survey “On housing” are disjointed into:

- total per country;
- by regions (Chișinău, North, Center, South and Territorial Administrative Unit Găgăuzia);
- by districts;
- by urban and rural localities.

In the present study, two synthetic indicators were used to assess the housing quality: the Technical Comfort Index of the Habitat and the Index of Housing Density, which are the basis for determining the Housing Index.

When calculating the Technical Comfort Index of the Habitat, 5 variables were used: equipped houses with a centralized water supply system, sewerage, central heating system, natural gas, and bathroom (shower). The most important element among these 5 is the sewerage infrastructure, which is the least common in both rural and urban areas due to high implementation and maintenance costs. This is followed by access to running drinking water, which is deficient in most rural localities, then the supply of bath/shower installations, gas, and central heating. Each variable will be set according to its importance. The Index was calculated according to the following formula (Manolache, 2017):

$$TCIH = 0.30 * Es + 0.25 * Ew + 0.20 * Eb + 0.15 * Eg + 0.10 * Eh \quad (3)$$

where:

- Es – provision of houses with sewage;
- Ew – provision of houses with drinking water;
- Eb – provision of houses with bathroom (shower);
- Eg – provision of houses with gas;
- Eh – provision with central heating.

To calculate the Housing Index, the ratio between the Technical Comfort Index of the Habitat and the Housing Density Index was elucidate. The Index was calculated according to the following formula:

$$HI = TCIH / HDI \quad (4)$$

where;

- HI – Housing Index;
- $TCIH$ – Technical Comfort Index of the Habitat;
- HDI – Housing Density Index.

RESULTS

The housing stock represents the totality of the habitable rooms, regardless of the ownership form, including houses, specialized houses, flats, service rooms and other residential rooms in other buildings used for living. In 2020, the housing stock of the Republic of Moldova constituted 1302.1 thousand dwellings with a total area of 89187.7 sq. m. As for resident areas, in urban localities, 560.2 thousand houses with a total area of 39921.3 sq. m. were registered, which is 44.8% of the total. Rural localities have 749.7 thousand houses with a total area of 49266.4 sq. m. or 55.2% of the total. The average share of living space was 71.3% of the total area, in rural areas, this indicator is 72%, and in urban areas, it is 70.5%.

Based on the data of the Population and Housing Census from 2014, it was estimated that the average age of the flats stock in the Republic of Moldova is \approx 38.1 years, this value being close to the one recorded in the urban area, therewith it was 31.5 years in rural areas (Cujbă & Șirbu, 2020).

During the transition period (after 1990), 157.970 houses were put into operation in the Republic

of Moldova, which is ≈13% of the housing stock. In just three administrative units, the share of housing built in the last 20 years is on the edge of 20% – Criuleni (19.9%), Chişinău (20%), and Ialoveni (20.9%). The districts in the North of the country are at the opposite pole – Donduşeni (4.2%), Ocniţa (5.1%), Edineţ (7.3%), Floreşti (7.5%) greatly affected by the depopulation process in rural localities.

Living conditions are an important indicator of the well-being of the country’s population (Cujbă & Sîrbu, 2018), providing the person with biological, psychological, social, and family needs. The houses equipped with the main amenities express the comfort level of the housing stock and obviously, the quality of housing.

Although there has been a steady increase in the level of technical endowment of the housing stock, at the beginning of 2020 in localities of the Republic of Moldova, 38.8% of houses were not connected to the drinking water network, 41% had no sewerage, 52.7% had no central heating, and 9.5% had no gas (Table 1).

Table 1. Degree of housing stock of the Republic of Moldova equipped with the main amenities in 2010–2020 period

Year	Drinking water (%)	Sewerage (%)	Central heating (%)	Natural and liquefied gases (%)
2010	44.2	43.8	35.1	87.8
2011	46.3	46.3	36.3	88.7
2012	47.5	47.5	37.6	89.0
2013	50.1	49.9	39.3	89.4
2014	51.7	51.5	40.4	90.0
2015	53.5	53.2	41.5	90.2
2016	58.2	55.8	46.0	90.4
2017	58.7	56.3	46.1	90.1
2018	59.6	57.5	46.4	90.2
2019	60.4	58.3	46.9	90.3
2020	61.2	59.0	47.3	90.5

Source: own elaboration based on data <https://statistica.gov.md/>.

Therefore the role of the Housing Density Index is to show the concentration of inhabited space. Analysing the distribution of the Housing Density Index in the Republic of Moldova, whose calculations

is based on data collected in the 2014 Population and Housing Census, we can identify that the highest values are in the Central, Southern, and South-Western districts of the Republic of Moldova. The maximum values were registered in the districts of Hînceşti, Ialoveni, Străşeni, Taraclia, Cahul and Cantemir, with an index between 3.4 and 3.6. Over time, these regions experienced a positive demographic evolution because of a larger number of family members.

In the districts in the South-West of the Republic of Moldova, the maximum values are registered in the townships: Andruşul de Jos (Cahul district) – 4.2, Tartaul (Cantemir district)– 4.4, and Cotovscoe (Territorial Administrative Unit Găgăuzia) – 5.2. The minimum values of the Housing Density Index, below the national average, are registered in the districts located further North of the Bălţi municipality – Donduşeni (2.4), Ocniţa (2.7), Soroca (2.7), Drochia (2.8), Floreşti (2.9), Briceni (2.9), etc. For these districts, the increase in the demographic aging process and the pronounced decrease in the birth rate are specific. At local level, the absolute minimum values were registered in the townships: Naslavcea (Ocniţa district) – 1.7, Briceni (Donduşeni district) – 1.9, and Iarova (Soroca district) – 2.0.

The Technical Comfort Index of the Habitat considers the services of superior rank – sewerage, drinking water, central heating, gas, and bath (shower). Providing technical and utility infrastructure, the Republic of Moldova faces pronounced intra-regional discrepancies. Thus, according to the Technical Comfort Index of the Habitat, except for TAU Găgăuzia, the following major differences can be observed between districts within each Development Region, for the years 2011 and 2020 (Figures 1. a and b):

1. The average value of the Technical Comfort Index of the Habitat increased from 51.0 in 2011 to 57.9 in 2020. If in 2011, only the municipalities of Bălţi (82.4) and Chişinău (96.7) had a value higher than 65, then according to the data from 2020, this category also includes Taraclia district (66.9) and TAU Găgăuzia (71.3).
2. In the Center Development Region, the most equipped districts with technical infrastructure:

- Ialoveni (54.0), Strășeni (55.2), and Anenii Noi (64.9) – all located at the border of Chișinău municipality. At the same time, we can identify districts with a worse situation: Șoldănești (25.2), Telenești (25.9), Criuleni (33.4).
3. In the North Development Region, the administrative units within Bălți-Soroca-Edineț triangle can be mentioned, which, according to the Technical Comfort Index of the Habitat, in 2020, registered values >35 and a deeper decline for the rest of the districts.
 4. In the South Development Region, the Technical Comfort Index of the Habitat is lower only in 2 administrative districts, Cantemir and Leova. It should be mentioned that the situation has improved significantly compared to 2011.
 5. The Găgăuzia Development Region, over the last decades has become one of the most dynamic regions in the Republic of Moldova. This region

benefits from the advantages offered by the special autonomy and more advanced degree of fiscal and administrative decentralization.

To better understand the distribution of municipal services on the territory of the Republic of Moldova, the maps were developed (Figures 2 and 3). From the concerned map, it can be noticed that the index value is higher in the areas around Chișinău and in the towns in the valley of Dniester and Prut rivers. Also, the influence of the cities of over 20 thousand inhabitants like Bălți, Ungheni, Cahul, Orhei, Soroca and Comrat ensures a higher degree of technical equipment for the surrounding localities. These cities are the main centers which extend municipal services to the nearby regions. The highest values of the Technical Comfort Index of the Habitat are reached in the following urban localities: Chișinău, Cimișlia, Frunză, Strășeni, etc. with an index of over 95. For the rural localities, the highest index values are recorded in Stăuceni

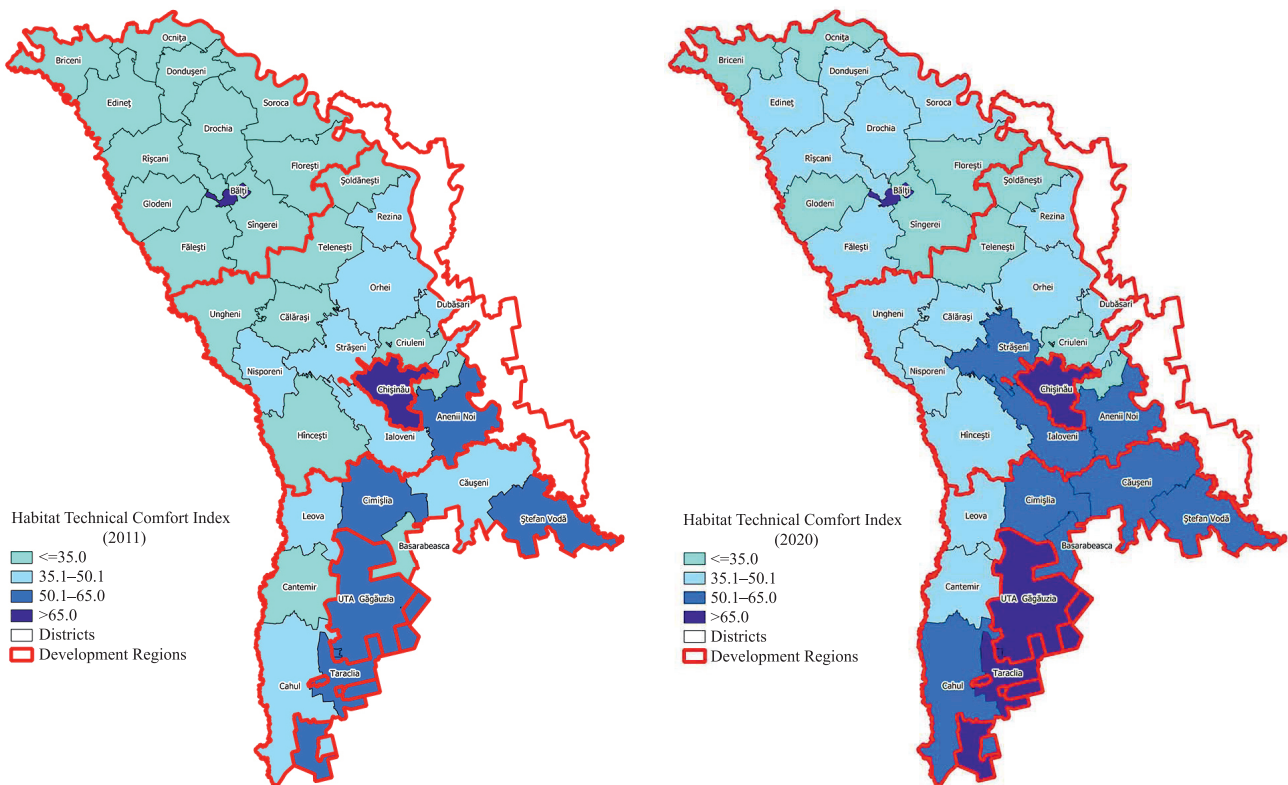


Fig. 1. The Technical Comfort Index of the Habitat spatially represented by Development Regions of the Republic of Moldova: a. 2011, b. 2020

Source: own elaboration based on the data of National Bureau of Statistics.

commune, Chişinău municipality. At the same time, the lowest values are registered in townships from the Şoldaneşti district (Hlingenii and Salcia), where are identified a series of localities which lack housing facilities, such as Poiana, Alcedar, Cuşmirca, and Fuzăuca.

All these differences have complex causes, from the implementation of innovations to the physical-geographical conditions of landscape, influenced obviously by human being. Many of the localities with a low share of utilities are affected by accentuated rural environment and population with very low incomes.

At the same time, the Republic of Moldova is characterized by excessive administrative-territorial fragmentation (898 mayoralties), which creates very great impediments to the development and operation of technical and municipal infrastructure. Thus, for example, the National Strategy for water supply and sanitation (2014–2028) claims that there are conditions for the development of centralized sewerage systems only for townships with more than 5000 inhabitants, which means that over 90% of all rural LPAs in the country do not fulfil the requirement and should work with neighbouring Local Public Authorities.

Table 2. Synthesis of the results obtained in the actions implementation concerning centralized water supply and sewerage in localities of the Republic of Moldova in the period 2016–2020

Areas of intervention	Planned	Accomplished	Progress in implementation
Centralized water supply and sewerage	318 km of water supply network	297.8 m of water supply network	93.6%
	147 km of sewerage network	99.3 km of sewerage network	67.5%

Source: own research based on MARDE reports on the implementation of National Strategy for water supply and sanitation 2016–2020.

According to the National Strategy for Regional Development (2016–2020), the efforts to implement the regional development policy in practice must be directed towards identifying the development needs

of the regions. Among the main needs at the regional level is the provision of water and sanitation to the population. In the reference period 2016–2020, 93.6% of the design for the water supply and only 67.5% for sewerage was reached (Table 2). This gap is explained by the predominant focus of interventions on less technically complex works, which implies relatively smaller investments, while works related to sewerage network development require very high costs.

In this context, the Housing Index is a result that aims to provide an overview of the communities, relating the Technical Comfort Index of the Habitat with that of Housing Density Index. Analysing and comparing the maps of the Housing Index from 2020 with the Technical Comfort Index of the Habitat for the Republic of Moldova, we can observe a similarity in the distribution of the two indicators, thus the same areas being problematic and having high values. In one hand, the highest values of the Habitat Index are found in the main cities of Chişinău, Bălţi, and in other hand in the localities Soroca, Donduşeni, Leova, Cantemir, Frunză (Ocniţa), Cneazevca (Leova), Index’s values are low (Figures 2 and 3).

The values of the Habitat Index are numerically changed compared to those of the Technical Comfort Index of the Habitat, but qualitatively the localities keep the tendency. Overall, the two indicators overlap in terms of quality, with the Housing Density Index not significantly changing housing comfort, the density having high values where the Habitat Index is low, and the opposite, having low values where comfort is high. The Habitat Index, just accentuates the differences between the localities of higher rank and those of lower rank.

For the objective and systemic assessment of the distribution of the Housing Index at territorial level, the statistical indicators of the central trend (mean, median and mode) and the distribution indicators (dispersion and standard deviation) were researched (Table 3).

The arithmetic mean (\bar{X}) is the indicator which usually shows where the data tends to grow. The simple arithmetic average of the Housing Index for the Republic of Moldova was 11.7. Values higher than

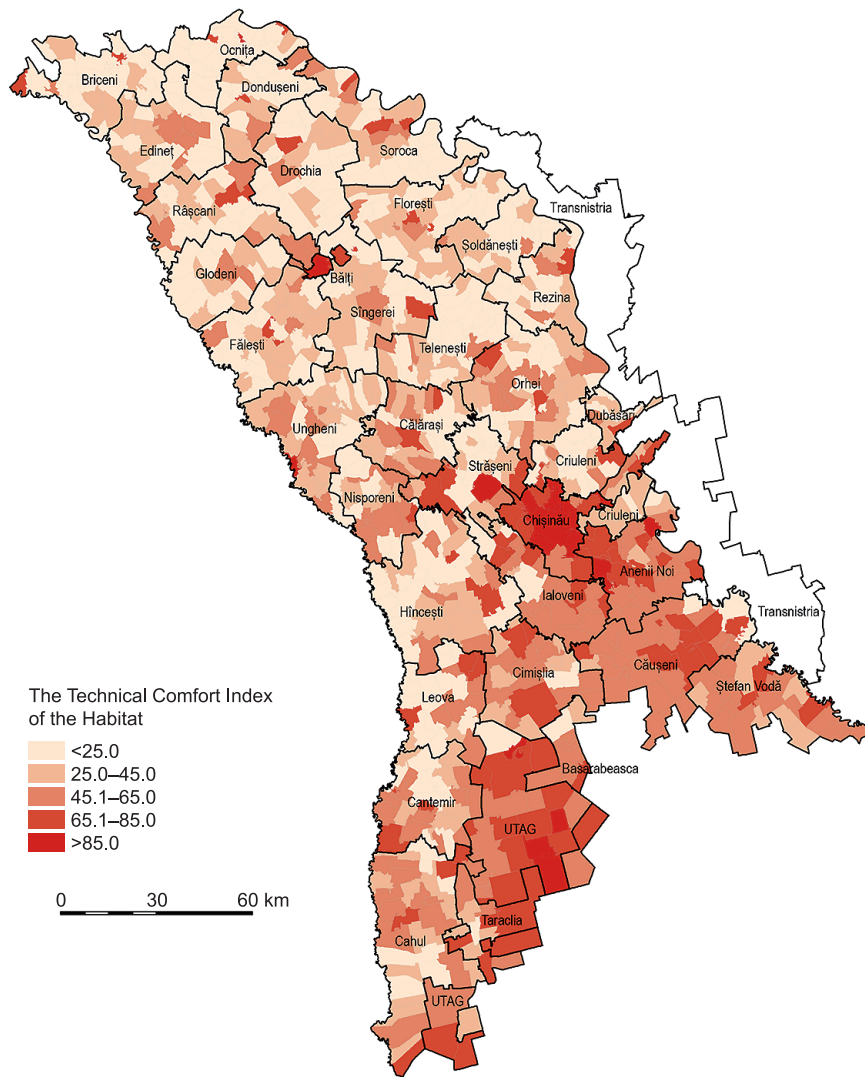


Fig. 2. The Technical Comfort Index of the Habitat, at the commune level (Republic of Moldova, 2020)

Source: own elaboration based on the data of National Bureau of Statistics.

the national average were recorded in $\approx 30\%$ from the number of administrative-territorial units of level II, namely: Ștefan Vodă (16.9), Anenii Noi (18.9), TAU Găgăuzia (19.0), Chișinău (23.3), Bălți (25.3), etc.

Median or quartile of 50% (Q2). The median value of the statistical elements surveyed is 9.9, meaning that in 18 districts the Housing Index is lower than the reference value, and in 17 districts the value is higher. Also, the calculations reveal that the median is close

to the average, so we can conclude that in this case we have a normal theoretical distribution with a tendency towards symmetry. Asymmetric or exocentric distribution of the median was registered only for Ocnîța and Leova districts.

Mode (Mo) is a useful indicator in the analysis of large series in which we are interested. The following data series were established for distinct statistical units (districts) according to the most frequently

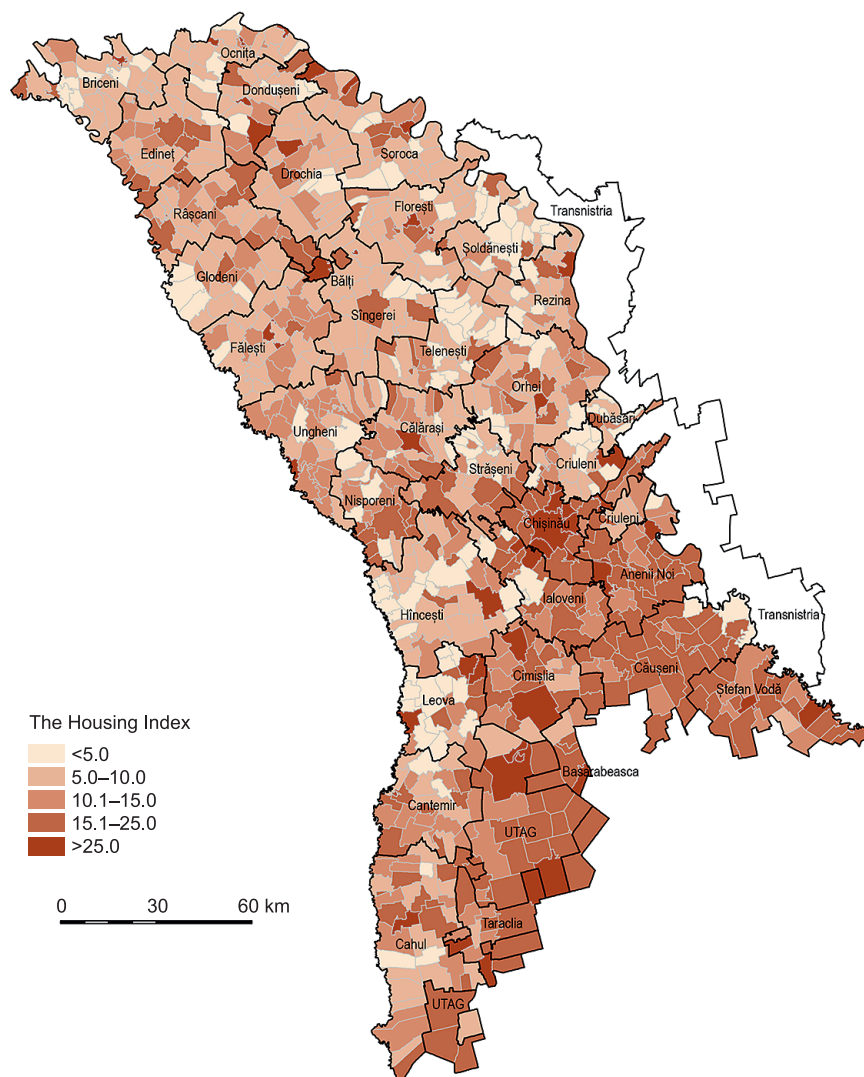


Fig. 3. The Housing Index, at the localities level (Republic of Moldova, 2020)
 Source: own elaboration based on the data of National Bureau of Statistics.

encountered value: *multi-modal* (10 districts), *bimodal* (7 districts), *unimodal* (10 districts), and *amodal* (8 districts). $Mo = 5.6$ in the data sequence of all statistical elements. In the case of multimodal series, the mode loses its quality as an indicator of the central trend. Thus, in just 30% of the administrative units, the mode (Mo) is significant.

The extreme values of the characteristics of the Housing Index for the Republic of Moldova constitute $X_{min.} = 0$ and $X_{max} = 51.5$, having a wide range

of variation. Although, in statistical research, extreme values have little significance, for the present study, the main advantage of these indices is the presentation of the existing differences within a statistical community (administrative-territorial units).

The differences between the maximum and minimum of the series of values give us information about the range width of values on which the data in the series extends (amplitude of variation). The highest values of amplitude (A) were recorded in the

Table 3. Statistical interpretation of the Housing Index, for districts of the Republic of Moldova (2020)

No.	District	<i>N</i>	\bar{x}	Q_2	<i>Mo</i>	<i>Min</i>	<i>Max</i>	<i>A</i>	σ	<i>CV</i>
1.	Chişinău	19	23.3	22.2	22.2	9.5	40.1	30.6	6.9	29.6
2.	Bălţi	3	25.3	24.0	0	18.7	33.3	14.6	6.0	23.7
3.	Anenii Noi	26	18.9	19.4	0	3.8	30.1	26.3	5.6	29.6
4.	Basarabeasca	7	15.8	15.2	0	6.0	26.9	20.9	6.2	39.2
5.	Briceni	28	8.3	6.5	5.2, 5.5, 6.5	4.0	25.8	21.8	5.3	63.9
6.	Cahul	37	11.7	10.3	8.0, 9.3, 12.6	4.4	26.0	21.6	5.2	44.4
7.	Cantemir	27	12.4	12.6	0	4.4	32.6	28.2	6.3	50.8
8.	Călăraş	28	11.2	10.9	0	3.4	29.7	26.3	5.8	51.8
9.	Căuşeni	27	17.8	17.2	16.5, 17.0	12.3	24.0	12.1	2.8	15.7
10.	Cimişlia	23	15.4	15.1	0	5.8	26.2	20.7	5.1	33.1
11.	Criuleni	25	9.8	8.6	5.0	3.2	25.8	22.6	5.9	60.2
12.	Donduşeni	22	10.0	7.0	5.9, 10.0	4.1	32.1	28.0	7.5	75.0
13.	Drochia	28	9.8	7.0	6.8, 7.7, 7.9, 8.8	4.5	29.9	25.4	5.5	56.1
14.	Dubăsari	10	9.8	9.8	0	0	20.7	20.7	6.6	67.3
15.	Edineţ	32	10.5	8.4	6.8, 7.8, 8.2, 8.6	3.6	22.7	19.1	5.1	48.6
16.	Făleşti	33	9.3	7.3	7.1	4.4	27.9	23.5	4.4	47.3
17.	Floreşti	40	9.9	7.6	4.5, 5.9, 6.9, 7.6, 9.0, 9.1	1.6	27.2	26.2	6.3	63.6
18.	Glodeni	19	9.1	8.5	4.7	4.1	24.0	19.9	4.7	51.6
19.	Hînceşti	39	8.5	6.2	3.7, 4.5, 4.7, 5.4, 6.2	2.5	27.2	24.7	5.5	64.7
20.	Ialoveni	25	14.5	15.4	26.4	2.8	26.4	23.6	6.6	45.5
21.	Leova	25	11.1	4.6	3.7, 3.9, 4.5	3.4	34.7	31.3	9.7	87.4
22.	Nisporeni	23	11.5	11.8	15.8	3.7	24.1	20.4	6.5	56.5
23.	Ocnîţa	21	10.5	6.6	5.4, 7.7	3.4	51.5	48.1	11.4	108.6
24.	Orhei	38	11.1	10.0	4.4, 5.6, 7.0, 14.7, 14.9	2.8	30.6	27.8	6.1	55.0
25.	Rezina	25	9.0	8.2	4.0, 5.0, 6.2, 8.2	4.0	27.5	23.5	5.0	55.6
26.	Rîşcani	28	11.3	10.4	5.7, 7.2	5.3	24.7	19.4	5.0	44.2
27.	Sîngerei	26	8.8	7.2	5.9, 7.2	4.4	27.0	22.6	5.0	56.8
28.	Soroca	35	10.6	7.1	9.9	4.4	32.8	28.4	7.6	71.7
29.	Străşeni	27	10.6	7.6	3.5, 5.6, 11.7	2.0	24.9	22.9	6.9	65.1
30.	Şoldăneşti	23	6.5	5.1	1.4, 2.8	1.4	21.4	20.0	4.7	72.3
31.	Ştefan Vodă	23	16.9	17.1	18.3	8.9	27.6	18.7	4.6	27.2
32.	Taraclia	15	15	17.8	0	5.9	27.7	21.8	6.1	40.7
33.	Teleneşti	31	7.5	5.4	4.9	3.5	18.7	15.2	4.3	57.3
34.	Ungheni	33	10.3	10.9	11.2	3.1	27.2	24.1	4.5	43.7
35.	UTA Găgăuzia	26	19.4	20.3	18.8, 20.3	5.0	28.3	23.3	5.0	25.8
	R.Moldova	898	11.7	9.9	5.6	0	51.5	51.5	6.9	59.0

Source: own preparation.

following districts Cantemir (28.2), Soroca (28.4), Dondușeni (28.0), Chișinău (30.6) and Ocnița (48.1).

The mean square deviation (σ) is the most important indicator of variation, which highlights the value range, around the average in which the individual values of the studied characteristic were distributed. The value of the Housing Index for the Republic of Moldova has (σ) = 6.9. The maximum (σ) was registered for the Ocnița district – 11.4 and the minimum (σ) in the Căușeni district – 2.8.

The coefficient of variation was used to compare the degree of variation of the characteristics (CV). The closer the level of the variation coefficient is to zero, the lower the variation, the more homogeneous the community will be, and the average will have a high degree of representativeness. The average value of the CV for the Housing Index of the Republic of Moldova was 59%, therefore, the average of 11.7 is not representative for all statistical units (35 TAU), and the data cannot be generalized. Thus, for the

administrative-territorial units with CV >35% of the Housing Index, it is recommended separating the data on grouping characteristics.

The intensity of the dependence between the Technical Comfort Index of the Habitat and the Housing Index was measured using the correlation coefficient and simple linear regression (Apetrei et al., 1996). To determine the regression parameters, 100 pairs of values were randomly selected for the analyzed indicators, being represented in the correlation graph (Figure 4).

For the values considered, the normal equations are as follows:

$$\begin{aligned} 9988 \cdot a + 5106.329 \cdot b &= 1552.698 \\ 5106.329 \cdot a + 333882.298 \cdot b &= 100508.699 \end{aligned}$$

where:

$$\begin{aligned} b &= 0.2897 \\ a &= 0.7433 \end{aligned}$$

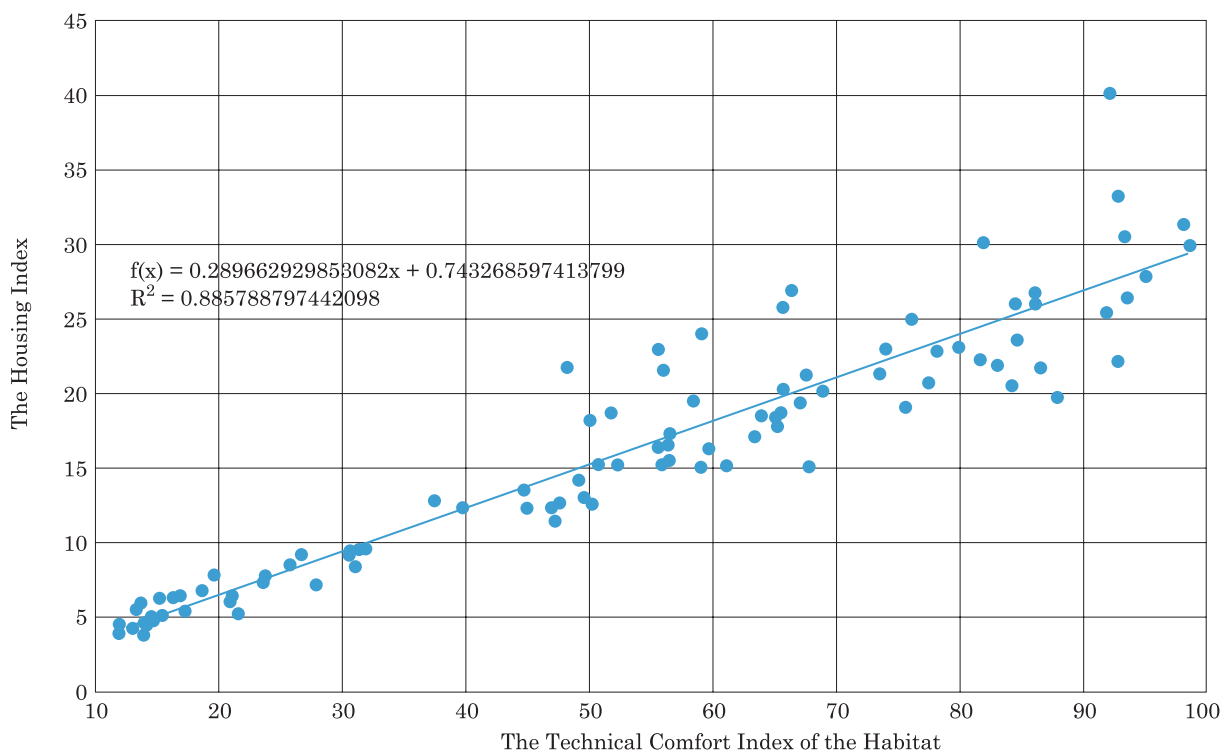


Fig. 4. The correlation between the Housing Index and the Technical Comfort Index of the Republic of Moldova 2020
Source: own preparation.

Thus, we obtain the empirical regression coefficients:

$b = 0.2897$; $a = 0.7433 \Rightarrow$ the form of the regression equation:

$$y = 0.2897 x + 0.7433$$

The regression coefficient $b = 0.29$ shows the average variation of the effective indicator (in units of measurement y) with an increase or decrease of the value of the factor x per its unit of measurement. Therefore, with an increase of 1 unit, y increases on average by 0.29 units. The coefficient $a = 0.743$ shows the predicted level of y , only if $x = 0$ is close to the sample values.

The coefficient of determination (correlation) $R^2 = 0,8858$. So, in 88.58% of cases, changes in x lead to a change in y . The high value of the coefficient of determination shows that the level of accuracy of the regression equation is high. The remaining 11.42% of cases are due to the influence of factors that cannot be considered by the model (specification errors).

Verification of the significance of the regression model was performed using the F-Fisher Criterion test. The real value of the criterion $F_{\text{calc.}} = 752.304$. The value of the Fisher criterion by degrees of freedom $k_1 = 1$ și $k_2 = 97$, $F_{\text{tab.}} = 3,92$. Because $F_{\text{calc.}} > F_{\text{tab.}}$, it turns out that the coefficient of determination is statistically significant.

CONCLUSIONS

Housing quality is a multidimensional concept assessed by examining a number of physical and social characteristics of the housing environment. At the same time, international practice shows that the quality of housing is also influenced by the environmental conditions in the neighbourhood, which are the basis of housing quality.

In the Republic of Moldova, the housing quality, traditionally, is approached in terms of territorial and functional relations established with the network of public facilities necessary to ensure minimum living

conditions. This fact is explained by the high rate of poverty and social inequality among the population, formed during the transition period, without financial possibilities to connect to the technical-utilities infrastructure, which is very deficient especially in rural areas.

Tracing the research results on the Republic of Moldova, there is inequitable distribution of Housing Quality Indices with major discrepancies between urban and rural areas. On one hand, peri-urban localities and those crossed by national roads are experiencing technical development and an increase in housing quality, while on the other hand, isolated areas due to demographic instability and depopulation experience stagnation in the development of technical infrastructure.

The current housing situation in rural areas decisively influences the quality of living conditions and, implicitly, the quality of life in the Republic of Moldova. Households in rural areas and in areas bordering administrative units (districts) are deficient in terms of access to utilities (running drinking water, sewerage, natural gas, sanitation services, lack of access infrastructure, etc.). The great variety of living situations determines the precariousness of the living conditions, against the background of poverty generating social phenomena with a special impact on the population.

In order to improve living conditions, it is necessary to develop and implement several action plans at the national level, such as: transforming the housing sector into a basic sector of the economy interconnected with other economic sectors, primarily with infrastructure; the adoption of housing insurance programs for vulnerable groups and the correlation of total housing costs with household income; stopping the degradation of the housing stock and increasing the quality of housing both in urban areas and especially in rural areas.

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Rodica collected the data, analysed and interpreted the data, prepared draft of article.

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