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Demand for communal and social dwellings in Poland – spatial analysis

Zapotrzebowanie na mieszkania komunalne i socjalne w Polsce
– analiza przestrzenna w języku polskim

Keywords: surveys, communal, social dwellings, demand, spatial diversity

Słowa kluczowe: ankiety, mieszkania komunalne, socjalne, zapotrzebowanie, zróżnicowanie przestrzenne

INTRODUCTION

Own tasks of communes cover issues of municipal residential housing (art. 7 par. 1 point 7 of the act on the communal self-government – Ustawa z dnia 8 marca 1990 r.), and from 1 January 1999 communal residential housing (art. 10 point 3 of the act on the amendment of certain acts in relation to the implementation of the state's political reform – Ustawa z dnia 2 lipca 1994 r.). Art. 4 of the act on renting dwellings and housing allowances stipulates meeting the housing needs of inhabitants of the commune as its own task. Pursuant to art. 4 of the act on the protection of rights of tenants, the housing stock of the commune, and on the amendment of the Civil Code (Ustawa z dnia 21 czerwca 2001 r.), the task of the commune is to provide conditions for meeting the housing needs of inhabitants. This particularly refers to households with low income, and provision by the commune of social and replacement housing based on rules stipulated in the act.

Some communes renovate and construct communal housing, whereas others dispose of it on a mass scale. The sale of communal dwellings is particularly connected with their bad technical state. Communal housing stock mostly require

renovation, whereas part of tenants do not pay rent, which reduces the financial resources of communes for renovations and modernisation of communal buildings (Muczyński 2008; Myna 2015). Privatisation of communal dwelling stock was supposed to enable passing the costs of renovation and modernisation of flats to natural persons purchasing them (Markowski 1999; Muczyński 2009). It did not solve the problem, however. New owners of formerly communal flats, usually not wealthy, often pensioners, are not able to finance this type of costs (Jędraszko 2005; Majchrzak 2006; Billert 2012). In the conditions of reduction of the resources of communal housing through its privatisation, and degradation of the existing dwelling stock of communes, households still create demand for it.

This paper focuses on the sale of communal flats, changes in their resources and demand for communal and social housing which is subject to estimations. The primary objective of the paper is therefore the development of a method to calculate demand for communal and social flats which can be of low standard and are stand out among total communal dwelling stock. A hypothesis is formulated that the sale of communal flats did not change their spatial structure and spatial variability of demand for such flats. The starting point and one of the objectives of the study is therefore the identification of the sources of actual (not estimated) data on demand for communal dwellings. The objective of the paper is also the determination of the degree of provision of basic technical and sanitary installations in communal and social housing stock, namely water supply, sewage system, and central heating. This will enable the determination of the needs for modernisation of the existing communal dwelling stock. The paper, prepared at the Centre for Research and Statistical Education of the Central Statistical Office in the scope of project “Support of the system of monitoring of the cohesion policy in the financial perspective 2007–2013 and programming and monitoring of the cohesion policy in the financial perspective 2014–2020”, has applicative importance. Measures of demand for communal and social dwellings can be applied in the calculation of costs of the renovation and modernisation of the existing communal dwelling stock, and in the estimation of costs related to the construction of this type of housing.

SOURCE MATERIALS AND METHODS

The determination of the demand for communal dwellings and necessary investments requires the collection of information on inhabited, uninhabited, sold, and completed communal dwellings. In this paper, necessary information was obtained from the “Local Data Bank” of the Central Statistical Office (stat.gov.pl) and from report M-01 on dwelling stock. For the purpose of the assessment of the existing registers of communes concerning communal and social dwelling stock,

including lists of households waiting for this type of flats, a questionnaire was sent to 2,479 communes. It was completed and sent back by 1,510 communes. The number was equivalent to approximately 61% of the communes, to which the questionnaire was sent (Tab. 1). The communes which completed the questionnaire represented all voivodships, and were relatively evenly distributed in the territory of Poland.

Tab. 1. Surveyed communes

Tab. 1. Gminy objęte badaniem ankietowym

Specification	Communes	Communes which completed questionnaire	
	total	number	%
Dolnośląskie	169	100	59,2
Kujawsko-pomorskie	144	77	53,4
Lubelskie	213	125	58,7
Lubuskie	83	45	54,2
Łódzkie	177	103	58,2
Małopolskie	182	111	61
Mazowieckie	314	195	62,1
Opolskie	71	47	66,2
Podkarpackie	160	92	57,5
Podlaskie	118	62	52,5
Pomorskie	123	76	61,8
Śląskie	167	105	62,9
Świętokrzyskie	102	62	60,8
Warmińsko-mazurskie	116	75	64,7
Wielkopolskie	226	150	66,4
Zachodniopomorskie	114	85	74,6
Polska	2479	1510	60,9

Source: Prepared by the authors on the basis of own survey (n = 1510)

Źródło: Opracowane przez autorów na podstawie własnych badań ankietowych (n = 1510)

Based on the analysis of the collected data as at 31 December 2014, evident variability of the scope and form of communal registers of demand for communal and social dwellings was observed. Out of 1,510 communes which answered the questions in the survey, only 966 (64.0%) had lists of households waiting for communal dwellings, and 832 (55.1%) had lists of inhabitants waiting for social

dwellings (Tab. 2). This type of communes were evidently more numerous in western than eastern voivodships. In more than every tenth analysed commune which completed the questionnaire, temporary premises were rented for persons waiting for a communal or social dwelling (Tab. 2). It was also found that almost one fifth of the surveyed communes (17%) had inhabited communal flats in its dwelling stock, and every tenth commune, social flats which due to their bad technical state were not suitable for habitation.

Tab. 2. Communes having lists of households waiting for communal and social dwellings, and renting temporary premises in 2014

Tab. 2. Gminy posiadające listy gospodarstw oczekujących na mieszkania komunalne i socjalne oraz wynajmujące pomieszczenia tymczasowe w 2014 roku

Specification	Lists of households waiting for flats		Communes renting temporary premises
	communal	social	
	% of surveyed communes		
Dolnośląskie	90.0	78.0	17.0
Kujawsko-pomorskie	67.5	54.5	18.2
Lubelskie	35.2	31.2	9.6
Lubuskie	95.6	84.4	8.9
Łódzkie	67.0	52.4	10.7
Małopolskie	47.7	45.9	7.2
Mazowieckie	53.3	83.0	10.8
Opolskie	83.0	83.0	4.3
Podkarpackie	37.0	37.1	8.7
Podlaskie	27.4	22.6	6.5
Pomorskie	82.9	67.1	10.5
Śląskie	75.2	67.6	7.6
Świętokrzyskie	41.9	38.7	8.1
Warmińsko-mazurskie	74.7	60.0	14.7
Wielkopolskie	80.0	59.3	6.7
Zachodniopomorskie	90.6	77.6	17.6
Polska	64.0	55.1	10.5

Source: Prepared by the authors on the basis of own survey (n = 1510)

Źródło: Opracowane przez autorów na podstawie własnych badań ankietowych (n = 1510)

In 69.1% of the surveyed communes, an electronic register of communal dwellings not suitable for habitation was run (Tab. 3). This type of register concerning social dwellings was recorded in 73.7% communes covered by the survey (Tab. 3). In the remaining communes, such information took form of paper documentation concerning particular buildings from which data cannot be imported but have to be searched for manually. More than 90% of the communes which completed the questionnaire (1,366 entities) ran registers including information on technical and sanitary installations provided in communal dwellings. However, only in 68.7% of the analysed communes (939 entities), the register was run in the electronic form allowing for direct obtaining of data. In the remaining communes, it was run in paper form (Tab. 3). An electronic register of provision of social dwellings with technical and sanitary installations was run in 69% (727) of the surveyed communes (Tab. 3).

Tab. 3. Electronic registers of communal and social dwellings equipped in installations and stock not suitable for use as a dwelling

Tab. 3. Elektroniczne rejestry mieszkań komunalnych i socjalnych wyposażonych w instalacje oraz mieszkań nienadających się do zamieszkania

Specification	Registers of communal and social dwellings			
	not suitable for use as a dwelling due to their bad technical state		equipped in technical and sanitary installations	
	communal	social	communal	social
	in % of districts			
Dolnośląskie	61.5	57,1	65.6	67.5
Kujawsko-pomorskie	83.3	83.3	62.7	63.6
Lubelskie	58.8	69.2	70.3	68.4
Lubuskie	70.0	100.0	71.4	75.7
Łódzkie	85.0	69.2	72.9	76.5
Małopolskie	69.2	60.0	72.3	70.8
Mazowieckie	83.3	84.9	70.8	74.1
Opolskie	61.5	85.7	64.4	69.0
Podkarpackie	80.0	100.0	69.6	63.9
Podlaskie	66.7	66.7	79.6	73.5
Pomorskie	81.8	66.7	68.5	63.3
Śląskie	81.3	100.0	79.2	79.3
Świętokrzyskie	57.1	71.4	72.3	70.3
Warmińsko-mazurskie	55.6	55.6	60.3	59.3

Wielkopolskie	56.0	55.6	63.3	65.4
Zachodniopomorskie	54.5	60.0	56.4	59.4
Polska	69.1	73.7	68.7	69.0

Source: Prepared by the authors on the basis of own survey (n = 1510)

Źródło: Opracowane przez autorów na podstawie własnych badań ankietowych (n = 1510)

The survey showed that registers of the communes referring to the state of dwelling stock and demand for new communal and social housing do not include complete data. Failure to run electronic registers by a large part of the communes caused no possibility of obtaining necessary data from the administrative resources. Therefore, a form “Information on communal and social dwelling stock” was prepared and sent to the communes. It was filled by the managing entities or entities administering communal dwelling stock, particularly communes. Data in the form concerned: rented temporary premises for residential purposes, inhabited communal and social dwellings in bad technical state, households waiting for communal and social dwellings, and communal and social flats provided with water supply and sewage disposal system. The term of the study covered years 2012 and 2013.

The study involved the development of an original algorithm enabling the calculation of demand for communal and social dwellings. It was assumed that it constitutes the sum of: (1) number of households waiting for communal and social flats, (2) number of temporary premises rented by the commune from other entities for the purpose of habitation, (3) number of communal and social dwellings which due to their bad technical state do not meet the required standards. The proposed algorithm enables continuous, complete analysis by means of the calculation of indices of demand for communal dwellings based on actual data instead of estimates which involve substantial errors.

The study covered units of the territorial self-government in possession of dwelling stock. Data were obtained from a form prepared and sent to 2,479 communes. A total of 2,272 forms were completed and sent back from 289 (95%) cities, 570 (93%) urban-rural communes, and 1,413 (91%) rural communes. The share of communes in possession of communal dwelling stock but providing no answers in the form amounted to less than 5%. The collected data were subject to analysis and verification. They were compared with source materials of public statistics, reports: M-01 and SG-01 (“Statistics of communes: housing and communal management”). Corrections concerned 2.9% of forms in the scope of information on rented temporary premises, 5.1% forms regarding the number of households waiting for renting of flats from the commune, and 1% of forms in the

scope of the number of dwellings not meeting technical standards. It was found that data collected in the forms provide the basis for the determination of demand for communal and social flats.

Tab. 4. Communal and social dwellings and demand for them

Tab. 4. Mieszkania komunalne i socjalne i zapotrzebowanie na nie

Specification	Communal and social dwellings						
	total		uninhabited	sold	completed	demand for	
	1998	2013				communal	social
	per 1,000 inhabitants						
Dolnośląskie	85.1	44.4	1.9	49.3	1.9	3.4	3.2
Kujawsko-pomorskie	34.6	21.4	0.6	15.1	1.9	1.8	2.7
Lubelskie	10.9	10.1	0.3	8.8	1.1	1.0	1.0
Lubuskie	56.0	29.0	0.5	35.1	1.6	2.0	3.1
Łódzkie	53.0	37.1	2.5	22.6	1.2	2.1	3.2
Małopolskie	20.5	10.5	0.3	12.9	0.6	0.6	1.4
Mazowieckie	38.6	24.1	1.8	14.7	1.4	1.6	1.4
Opolskie	44.9	23.6	0.9	30.2	1.2	1.7	1.9
Podkarpackie	14.7	8.1	0.2	8.5	0.5	1.1	0.7
Podlaskie	20.2	13.7	0.4	8.6	1.5	0.8	0.4
Pomorskie	47.8	24.4	0.8	23.9	1.5	2.0	2.3
Śląskie	51.1	39.5	1.5	25.0	0.9	5.4	4.0
Świętokrzyskie	20.1	10.4	0.3	12.5	0.9	1.5	2.2
Warmińsko-mazurskie	44.1	22.9	0.6	26.5	1.5	2.1	1.7
Wielkopolskie	26.0	16.0	0.5	12.6	0.8	1.2	1.7
Zachodniopomorskie	58.2	32.7	0.8	29.4	1.8	4.5	3.7
Polska	40.0	24.3	1.0	20.4	1.2	2.2	2.2

Source: Own calculations on the basis of Local Data Bank and report: *Pozyskanie nowych wskaźników z zakresu planowania przestrzennego i budownictwa mieszkaniowego przydatnych do oceny dostępności i jakości usług publicznych*, 2015: Centrum Badań i Edukacji Statystycznej GUS, Jachranka (n = 2272)

Źródło: Obliczenia własne na podstawie Lokalnego Banku Danych oraz raportu: *Pozyskanie nowych wskaźników z zakresu planowania przestrzennego i budownictwa mieszkaniowego przydatnych do oceny dostępności i jakości usług publicznych*, 2015: Centrum Badań i Edukacji Statystycznej GUS, Jachranka (n = 2272)

RESULTS

Communal dwellings were characterised by largely uneven spatial distribution. In 1998, high density of this type of flats per 1 thousand inhabitants, exceeding the average value for Poland, concerned highly urbanised voivodships of western Poland: Dolnośląskie, Zachodniopomorskie, Lubuskie, Opolskie, and highly urbanised Śląskie voivodship, as well as the Warmińsko-Mazurskie voivodship (Tab. 4). In the voivodships of eastern and central Poland, particularly in the Lubelskie, Podkarpackie, Podlaskie, and Świętokrzyskie voivodships, the index of the number of communal dwellings per 1 thousand inhabitants was considerably lower than the national average. The Łódzkie voivodship was an exception. Its relatively high index was determined by the city of Łódź.

The sale of communal flats in the conditions of a low abundance of this type of completed dwellings did not change the spatial distribution of communal dwelling stock. In the years 1998–2013, as many as 784.9 thousand of such flats were sold, whereas in the same period only 46.8 thousand of new communal flats were completed. Therefore, their stocks considerably decreased (Tab. 4). Communal dwellings were particularly sold in voivodships where this type of stock were abundant per 1 thousand inhabitants (Tab. 4). In the period of economic transformation, dwellings became market goods. Therefore, demand for communal and social dwellings remained relatively high. It particularly occurred in voivodships: Śląskie, Zachodniopomorskie, and Dolnośląskie, where in 1998 the number of communal flats per 1 thousand inhabitants was high (Tab. 4). Although high demand for communal and social dwellings clearly characterised poviats of western and southern Poland (mainly the Śląskie voivodship), it was also recorded in south-eastern poviats (Fig. 1). Based on the conducted survey it was found that in the condition of lack of resources for communal and social housing construction, in some communes, particularly those located in eastern Poland, no lists of households waiting for communal and social housing were maintained. This type of housing was usually not built in rural areas, characterised by a low level of urbanisation.

Demand for communal dwellings particularly concerned households waiting for their renting (Tab. 5). In 2013 in Poland, lists of waiting for communal and social dwellings included more than 162 thousand households, whereas in comparison to 2012 their number increased by 2.4%. In 2013, the highest number of households registered on lists of inhabitants waiting for communal and social dwellings was recorded in the Śląskie voivodship (approximately 43 thousand), and the lowest (more than 1.4 thousand) in the Podlaskie voivodship (somewhat more in the Opolskie voivodship, more than 3.6 thousand).

Bad technical state and failure to meet habitation standards constituted further causes of demand for communal and social dwellings (Tab. 5). Information

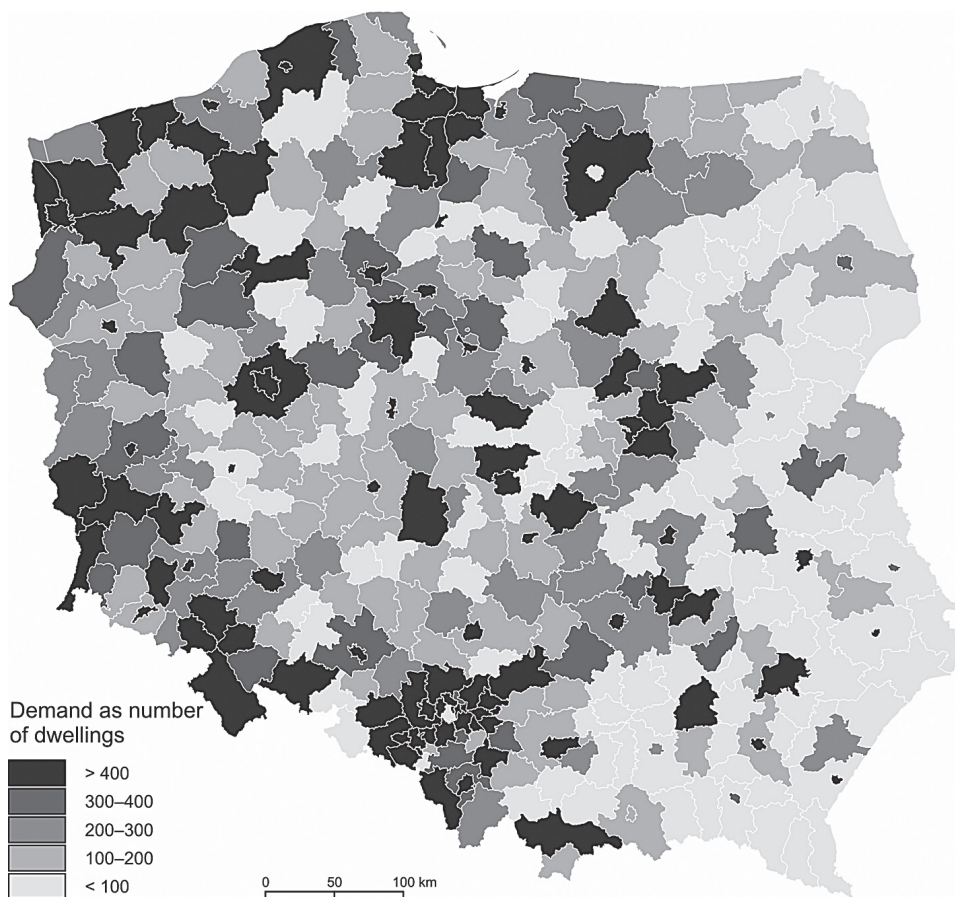


Fig. 1. Demand for communal and social dwellings in 2013

Source: *Pozyskanie nowych wskaźników z zakresu planowania przestrzennego i budownictwa mieszkaniowego przydatnych do oceny dostępności i jakości usług publicznych*, 2015: Centrum Badań i Edukacji Statystycznej GUS, Jachranka

Ryc. 1. Zapotrzebowanie na mieszkania komunalne i socjalne w 2013 roku

Źródło: *Pozyskanie nowych wskaźników z zakresu planowania przestrzennego i budownictwa mieszkaniowego przydatnych do oceny dostępności i jakości usług publicznych*, 2015: Centrum Badań i Edukacji Statystycznej GUS, Jachranka

obtained from communes showed that in 2013 in Poland, the dwelling stock of communes covered 6,785 flats not suitable for habitation, including 819 social flats (12.1%). Their highest number was recorded in the communes of the Mazowieckie voivodship (2037, corresponding to 30.0% of this type of flats in the country) and Śląskie voivodship (1752, with the share of 25.8%). This particularly concerned dwellings in Warsaw and Bytom. The lowest number of communal flats not suitable for habitation occurred in the communes of the Podlaskie voivod-

Tab. 5. Typology of the conditions of demand for communal dwellings in 2013
 Tab. 5. Typologia uwarunkowań zapotrzebowania na mieszkania komunalne w 2013 roku

Specification	Total	Waiting for a communal dwelling	Bad technical state of a dwelling	Renting temporary premises
Dolnośląskie	100	93.0	1.4	5.6
Kujawsko-pomorskie	100	93.0	1.8	5.2
Lubelskie	100	92.7	2.3	5.0
Lubuskie	100	91.7	2.7	5.6
Łódzkie	100	90.8	4.8	4.4
Małopolskie	100	96.6	1.4	2.0
Mazowieckie	100	77.5	11.5	11.0
Opolskie	100	87.7	3.8	8.5
Podkarpackie	100	87.4	2.2	10.4
Podlaskie	100	83.4	3.8	12.8
Pomorskie	100	83.7	3.4	12.9
Śląskie	100	86.7	3.7	9.6
Świętokrzyskie	100	87.2	1.7	11.1
Warmińsko-mazurskie	100	86.5	1.6	11.9
Wielkopolskie	100	82.4	3.3	14.3
Zachodniopomorskie	100	87.1	0.9	12.0

Source/Źródło: *Pozyskanie nowych wskaźników z zakresu planowania przestrzennego i budownictwa mieszkaniowego przydatnych do oceny dostępności i jakości usług publicznych*, 2015: Centrum Badań i Edukacji Statystycznej GUS, Jachranka (n = 2272)

ship (61, with a contribution of 0.9%), and somewhat more in the Podkarpackie voivodship (89, with the share of 1.3%).

The development of the demand for communal flats was to the lowest extent determined by the number of rented temporary premises from other entities (Tab. 5). Communes only rented them as residences for evicted persons or victims to natural disasters and other catastrophes resulting in the destruction of their dwellings. Based on the information obtained from the communes it was found that in 2013, 219 communes rented 770 temporary premises from other entities, i.e. 48 more than in 2012. The highest number of temporary premises was rented by communes in the Dolnośląskie voivodship (11), somewhat less in the Warmińsko-Mazurskie (6) and Wielkopolskie voivodship (6). They were rented

in 106 cities, including 32 cities with poviát status, 76 urban-rural communes, and 37 rural communes. The average surface area of rented premises amounted to 20.2 m².

The analysis also covered the level of provision of technical and sanitary installation in communal flats. Based on information obtained in the questionnaire it was found that in 2013 in Poland, more than 96.9% of communal flats were provided with water supply, 92.0% with sewage system, and only 41.7% with central heating. At the level of voivodships, considerable differences occurred in the provision of central heating in communal flats. The lowest index was recorded for the Dolnośląskie voivodship, where only 20.1% of communal dwellings were provided with central heating, and the highest (71.8%) in the Świętokrzyskie voivodship.

At the level of communes, considerable variability of the index of provision of communal flats with technical and sanitary installations occurred. In 91 communes, particularly those located in the Mazowieckie, Lubelskie, and Małopolskie voivodships, more than half of communal flats had no water supply system. In 524 communes, more than half of communal flats was not provided with sewage system, particularly in the Mazowieckie and Lubelskie voivodships. The low index of provision of communal flats with central heating, not exceeding 50%, was recorded in as many as 1,290 communes. The current provision of technical and sanitary installations in communal stocks was determined by their privatisation which mainly covered dwellings relatively well equipped with technical and sanitary installations, whereas dwellings weakly equipped with such installations often remained communal property (Myna 2014). Therefore, they require modernisation.

The level of provision of the basic technical and sanitary installations in social dwellings is considerably worse than in communal dwellings. In 2013, 89.8% of social flats had water supply, 84.3% sewage system, and only 26.0% central heating. The disproportions in the provision of the basic technical and sanitary installations in social dwellings were also recorded at the level of voivodships. For example, in the Dolnośląskie voivodship, less than three fourth of dwellings were provided with water supply, whereas in the Pomorskie voivodship, this type of installation was provided in almost 98.2% of social dwellings. The index of provision of the sanitary installation in social flats varied from 66.4% in the Dolnośląskie voivodship to 94.2% in the Kujawsko-Pomorskie voivodship. The greatest disproportions occurred in the provision of central heating in social flats. In the Łódzkie voivodship, only 4.4% of this type of flats had central heating, whereas in the Małopolskie voivodship, it was provided in more than half (51.4%) of social flats. A total of 93 communes (6%) in possession of social flats was not

provided with water supply. In more than every fifth commune, they were not provided with a sewage system, and in 891 communes (61%), they had no central heating (information collected on the form completed by the communes).

CONCLUSIONS AND RECOMMENDATIONS

The research hypothesis was positively verified that the sale of communal flats changed neither the spatial structure of communal dwelling stock, nor the spatial variability of demand for it. Communal dwellings were built in low numbers. Therefore, in the conditions of mass privatisation, their resources evidently decreased. Simultaneously, in the period of economic transformation, demand for communal and social dwellings remained high. Own dwelling has become a commodity inaccessible to persons with no credit worthiness or own resources for its purchase or construction (Matacz et. al. 2015). In terms of demand for communal and social dwellings, the poviats of western and southern Poland stood out, although it was also recorded in some south-eastern poviats.

The study confirmed the possibility of collection of data necessary for the determination of demand for communal and social dwellings. It is recommended to obtain them every two years in the form of a statistical form from entities managing or administering this type of dwellings. Information on the state of communal dwelling stock is obtained in report M-01, whereas part of data concerning the number of social flats and number of households waiting for communal and social dwellings are provided in report SG-01. It is therefore proposed to remove such information from SG-01 and introduce it to the new survey, if it is conducted every year. If it takes place every two years, it is possible to extend report M-01. Recipients of data would be: the Ministry of Infrastructure and Development, central units of territorial self-government, and the Association of Polish Cities. The costs of the new survey, with the assumption of its integration with report SG-01, would be comparable with the costs of the current survey which, however, does not provide information necessary for the assessment of communal and social housing management.

STRESZCZENIE

W pracy przedstawiono autorską metodę określania zapotrzebowania na mieszkania komunalne i socjalne. Zweryfikowano hipotezę, że sprzedaż mieszkań komunalnych nie zmieniła ich przestrzennej struktury i przestrzennego zróżnicowania zapotrzebowania na nie. Wysokie zapotrzebowanie na mieszkania komunalne i socjalne odnotowano w powiatach zachodniej i południowej Polski. W pracy potwierdzono możliwość gromadzenia danych niezbędnych do określenia zapotrzebowania na mieszkania komunalne i socjalne. Rekomenduje się ich pozyskiwanie co dwa lata na formularzu statystycznym od jednostek zarządzających bądź administrujących tego typu mieszkaniem.

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