LAND PROPERTIES IN METROPOLITAN CITIES

Abstrakt. The paper discusses land property management within the areas of three metropolitan cities of Poland (Kraków, Poznań and Szczecin) in 2001-2008, utilization of urban space and changes in functional and spatial structure of land use. The goal of the paper was to discuss the condition and directions of changes in municipal land properties, the structure of their distribution, and management of municipal land stock in order to secure it for public investment projects and for social, transport and technical infrastructure projects, as well as possibilities of preparing land for metropolitan projects, as well as land offers for those investors whom the municipality wants to attract. Also, the main problems which impede the implementation of spatial policies in communes are shown here.

Key Words: land properties, municipal assets, municipal land stock, area development plans, spatial policy of communes, revenues gained by communes from land property management

1. Introduction

The main task entrusted to municipalities is the attainment of public objectives. For that to be possible, the municipality (the Polish urban or rural commune) has been equipped with municipal assets.

On 27 May 1990, a new organization of the Polish municipalities was implemented under the so-called local government laws:

- Law of Territorial Government of 8 march 1990¹,

The municipalities became public-law entities and obtained the rights to own assets. Real estates are some of the municipalities' assets. Equipping the municipalities with real estates occurred by the transfer of State Treasury (central government) properties to municipalities. The types and quantities of real estates depended on direct relationships between real estates and the municipalities' tasks.

The majority of real estates were transferred to the municipalities by the operation of law. Municipal assets include the following:

- real estates transferred for perpetual usufruct to housing cooperatives and natural persons for house building purposes,
- real estates transferred the Polish Allotment Owners' Association,
- real estates transferred for use by cooperatives and their associations,
- assets of municipal businesses and other municipal legal entities, primary schools,

¹ Dz.U. 1996, No. 13, Item 74, Consolidated Text.
² Dz.U. 1990, No. 32, Item 191, as later amended.
associations and foundations,
- non-disposed of real estates owned by the State Treasury and the so-called municipal property.

According to the classification used in municipalities for stock taking purposes, real estates can be distinguished as follows:
- type (land, buildings, structures, technical infrastructure objects),
- method of management (residential, commercial, office, government agencies', industrial, agricultural and public use properties),
- type of ownership and use (municipalities' real estates possessed by them, municipalities' lands in perpetual usufruct, leased municipal premises, buildings belonging to condomini- ums, with shares owned by municipalities, non-residential buildings co-owned by municipalities, real estates owned by the State Treasury but used by municipalities or managed by them).\(^3\)

In the light of the Law of Accounting\(^4\), municipal assets can include e.g. substantive and equivalent fixed-asset components (groups 0-2 of fixed assets):
- real estates: lands, buildings and premises (owned land, land under the right of perpetual usufruct, and other substantive rights, including cooperative ownership rights to flats),
- water and land engineering objects.

According to Art. 4 of the Law of the Real Estate Economy, "land real estates mean
land, with its components, excluding buildings and premises if those are owned separately."\(^5\)

The municipality appearing on the market as a legal entity is the owner of assets whose significant part includes **municipal real estate stock**. According to Art. 24 of the Law of the Real Estate Economy, the municipal real estate stock includes real estates, owned by the municipality and not surrendered for perpetual usufruct, and real estates that are used by the municipalities under perpetual usufruct. Municipal real estate stock can be used for the developmental purposes of the municipality and for organized capital investment activities, in particular for house building and the related technical infrastructure, as well as the attainment of other public projects.

The basis of the creation of municipal real estate stock are the Studies of Spatial Development Conditions and Directions, approved under the planning and spatial development regulations. A town should possess land stocks that allow for effective implementation of its spatial and capital investment policies. Real estate stocks of fundamental significance for land management are equivalent to municipal real estate stocks. Although the State Treasury is the owner of a considerable proportion of lands in towns, such lands are mainly developed or transferred for perpetual usufruct or long-term management.

Legal regulations relating to appropriation of state entities are contained in the earlier mentioned Law of Real Estate Economy of 21.08.1997 and in the Regulation of the Council of Ministers of 10.02.1998\(^6\). Appropriation is not a new matter, and legal regulations cover

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\(^3\) W. Brzeski, Zarządzanie miением komunalnym w miastach polskich, Świat Nieruchomości, 2005, nr 52-53.


\(^6\) The Executive Orders concerning granting property rights to real estates previously managed or used (Dz.U. 1998, No. 23, Item 120).
the legal issues in the Law of 29.09.1990\(^7\), or the so-called Appropriation Law, replaced by the previously quoted Law. We can say, therefore, that the national operation of appropriating legal entities by transferring of real estates to municipalities was very significant and its scope could be compared to that of the transfer of state-owned properties to the municipalities. That operation has been necessary because, without it, it would be impossible to carry out privatisation processes and other ownership transformations, allowing to manage the real estate stocks owned by the municipalities.

2. Functional and Spatial Structure of Metropolitan Cities
As it was mentioned in the introduction above, our analysis referred to three metropolitan cities in various Polish regions (Szczecin, Poznań and Kraków), representing various functional and spatial structures. Table 1 shows basic information characterising those municipalities.

Szczecin is a typical port city originating from early Middle Ages. The city's structure shows a bipolar system of central components: Right and Left Banks. The Left Bank centre is characterized by concentration of services that are significant for the whole city, the region, the country and internationally, located mainly on the Downtown and the Western Borough. The Right Bank developed its centre with local and suburban significance, serving direct surroundings of the city.

<table>
<thead>
<tr>
<th>Specification</th>
<th>Region</th>
<th>Population, in thousands</th>
<th>Surface Area, in km(^2)</th>
<th>Population Density, in persons/km(^2)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Szczecin</td>
<td>Zachodniopomorskie</td>
<td>406.9/674.0a</td>
<td>300.8</td>
<td>1,355</td>
</tr>
<tr>
<td>Poznań</td>
<td>Wielkopolskie</td>
<td>557.2/943.7a</td>
<td>261.3</td>
<td>2,128</td>
</tr>
<tr>
<td>Kraków</td>
<td>Małopolskie</td>
<td>754.6/1467.0a</td>
<td>325.0</td>
<td>2,315</td>
</tr>
</tbody>
</table>

* Agglomeration/Metropolitan Area

The functional and spatial structure of the city developed historically in reference to the natural conditions of the Oder River mouth:
- Medieval Old Town, 19th century centre and ca. 60% of the present-day city's structure are located on the left bank of the Oder River;
- Right Bank Borough, incorporated in Szczecin only in mid-20th century and intensively developed in the 1970's, concentrates ca. 25% of the city's potential; both parts of the city are separated by the broad Oder River Valley (called the Międzyodrze), with two main river branches: the West Oder and the Regalia;
- The huge Dąbie Lake is located within the north-eastern city borders;
- Szczecin is surrounded from north, east and south with moraine hills, mostly covered by woods, which constitute a natural boundary of the urban suburbs and, together with the Dąbie Lake provide valuable recreational grounds for the city's residents.

Present-day urbanization processes cause uncontrolled sprawl of the city in the western and south-western directions, primarily outside the administrative boundaries

of Szczecin. The administrative structure of the city is composed of four Boroughs: Downtown (with Międzyodrze), North, West and West Bank.

The surface area of Szczecin and its land use structure are characterized by a clearly dominating shares of natural complexes composed of various forms of greenery, woods, parks, allotments, ponds, streams and ravines. The main element of the hydrographic network within the city's boundaries is the Oder River which influences the water relationships on the whole area. Arable land in Szczecin composes three large complexes: Sadliskie Łąki meadows on the Dąbie Lake (ca. 580 ha), Skolwin area (arable land, with the surface area of ca. 160 ha) and the Wielgów areas (green farm lands and arable land, with the surface area of ca. 200 ha). The development of the city and its structures, mainly residential estates, led to the limitation of agricultural activities which caused that the majority of arable lands lying within the development areas have been covered by the decisions of transformation for non-farming purposes close to such development areas. Woods and forested lands are located mainly in the northern, southern and south-eastern parts of the city.

Poznań is considered to be a fair and exhibition city. The city has a clear, structured layout created by natural components (parks and greenery wedges) and anthropogenic ones: traces of development thresholds originating from various periods of the city's development. That structure has a radial and concentric layout, determined primarily by the existence of four greenery wedges in the Warta, Bogdanka, Cybina and Główna River valleys, i.e. western, northern (Naramowice), eastern and southern (Dębno and part of Marcelin) and two fort greenery rings. The greenery complexes play not only important natural roles, but also constitute important places for relax and recreation for the residents of Poznań, in particular for bikers.

The spatial and functional structure of Poznań is presently characterized by the following:

- Domination of administrative and business serving agencies in the Left Bank area,
- Location of the largest Polish fair and exhibition grounds (International Poznań Fair) in the central borough, with modern commercial and service facilities on the rim of the city, in particular in Franów which is the Right Bank area,
- Concentration of academic, scientific and cultural centre functions, in particular in the Downtown (with the universities, research and development institutes and cultural centres),
- Equal distribution of residential functions: in the area of the Right Bank Rataje and Żegrze and the Left Bank Piątkowo and Winogrady,
- Concentration of the industrial potential, mainly in the southern and north-eastern belts of the city area.

The city is subdivided into five Boroughs: the Left Bank Grunwald, Jeżyce, Stare Miasto and Wilda and the Right Bank Nowe Miasto. The spatial and functional structure of the city was shaped according to natural conditions of the Warta and Cybiny River catchment areas.

Kraków is perceived as a unique city, both on national and European scales. That was confirmed by entering the oldest part of Kraków on the UNESCO World Heritage List.
The spatial structure and capital investments are composed of the following components in the city:

- An historical area of the city centre and the surrounding downtown buildings with well-ordered urban design, concentrating the most valuable complexes and landmarks; we find there the largest and constantly growing concentration of services and administrative institutions; the area attracts the facilities associated with the metropolitan function of the city: universities, diplomatic offices, government agencies and cultural institutions;

- The area of "old" Nowa Huta is a residential and services borough, with highly concentrated buildings; all the related urban elements are found here: streets, squares, compact frontages, malls and square interiors filled with greenery; The Central Square and subsequent square interiors and places, executed along the symmetrical axes of the layout, create public spaces;

- Multi-family residential estates are dominating components of the town tissue by territory and size; within those complexes, we can distinguish the groups of structures that concentrate the largest numbers of residents, clearly multi-functional, such as Bieńczyce, Mistrzejowice, Wzgórza Krzesławickie, Wola Duchacka, Piaski Nowe, Kozłówek, Nowy Prokocim, or Nowy Bieżanów; they are usually large-panel multi-family houses of the 1960's and 1980's;

- Single-family houses constitute presently 70% of all residential buildings in Kraków, although there are only 10% of all flats in them; a well-ordered spatial image is presented by inter-war single-family house estates: Osiedle Oficerskie, Salwator garden-town, Cichy Kaćik and the surroundings of the Axentowicz Square;

- The suburban area of Kraków preserves the old systems of small villages built along single streets, supplemented with present-day single-family house complexes; they were incorporated into the city boundaries, together with large arable land areas; that is also where spread construction was preserved, with excessive diversity of architectural solutions, very low intensity of land use and scarce public spaces;

- The areas of industrial concentration are the main job centres for the residents of the city and its environs; they occupy considerable surfaces, with the capital investments starting there late in the 19th and early in the 20th centuries by constructions in the Zablocie borough; the majority of those locations were designated in previous Local Physical Plans as industrial and warehousing areas placed on large extensively used lands; these presently constitute post-industrial areas of the Sendzimir Steelworks (HTS), with their surroundings and such complexes as Zablocie, Płaszów, Łagiewniki, Łęg, Czyżyny and Grzegórzki; they are primarily degraded areas which will be subjected to restructuring and revitalization projects;

- The transportation system of the city is characterized by the radial and ring-road layout for the basic street network, with a strip layout in the Boroughs of Podgórze and Nowa Huta; full or partial ring roads are developed around the city's centre, in accordance with the historical development; the ring roads interconnect the radial roads;

- The Vistula River valley constitutes the main greenery and open area axis; the valley creates the major direction of external connections for the natural habitats; city parks are
important for the green land system, especially on the areas of intensive development.

The surface area of the city of Szczecin is 30,083 ha. The city has a rich and diverse water network and a considerable surface is covered by water, constituting 23.9% of the city surface according to the 2007 data.

Table 2. Use of metropolitan city areas, in accordance with basic surveying groups

<table>
<thead>
<tr>
<th>Types of Land Use</th>
<th>Surface area, in ha</th>
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</thead>
<tbody>
<tr>
<td></td>
<td>Szczecin</td>
</tr>
<tr>
<td>Arable lands</td>
<td>6736</td>
</tr>
<tr>
<td>Woods and forested lands</td>
<td>5719</td>
</tr>
<tr>
<td>Water</td>
<td>7204</td>
</tr>
<tr>
<td>Residential areas (developed, undeveloped, greenery)</td>
<td>6286</td>
</tr>
<tr>
<td>Transportation</td>
<td>2507</td>
</tr>
<tr>
<td>Mining areas</td>
<td>43</td>
</tr>
<tr>
<td>Wastelands</td>
<td>811</td>
</tr>
<tr>
<td>Other lands</td>
<td>777</td>
</tr>
<tr>
<td>Total</td>
<td>30083</td>
</tr>
</tbody>
</table>

Source: BiP UM Szczecin, Poznań, Kraków.

The city's spatial structure is dominated by green areas. Arable land within Szczecin occupy 6,736 ha, or ca. 22.4% of the whole city surface. Woods and forested lands within the city occupy 5,719 ha (19.0%), residential areas: 6,286 ha (20.9%) and roads: 2,507 ha (8.3%). There are scarce green areas in the strict centre. They are managed and used in various ways, without creating a continuous or integrated spatial system. The process of greenery reduction is still progressing, together with the increase of the development intensity. Arable lands are currently present barriers to the dynamic urbanization of the neighbouring municipalities and reserves for future ecological grounds. A considerable portion of the city enjoys the status of protected areas. They are e.g. the fragments of the Szczecin Landscape Park, the Puszcza Bukowa (Beech Forest), with its environs, and the Lower Oder River Landscape Park. The legally protected areas, located within the administrative borders of Szczecin occupy 1,680.13 ha, or 5.6% of the whole city surface.

The surface area of Poznań is 26,131 ha. Residential areas of 38.1% of the total city surface area constitute the largest proportion of the city's land structure. The second place in respect of the surface area is occupied by arable land: 26.3%, the third one by forests and forested lands: 13.6%, and the fourth by transportation systems: 11.0%. In the current Study of Spatial Development Conditions and Directions for Poznań, the lands excluded from development constituted 40.8% of the surface area, partly excluded: 17.4% and those designated for development and transportation: 41.7% of the total city's surface area.

The city represents a high developmental potential. Reserves for further development can be found on the arable lands located on hardly fertile areas that are not fully used for agricultural purposes. The majority of those lands represent soil classes IV-VI. Altogether, arable lands, forests and green areas constitute 48.6% of the city's surface area.

The city of Kraków occupies 32,502 ha. According to the 2006 data, the largest proportion of lands is occupied by arable lands and green areas excluded from development in Kraków. They occupy 52.4% of the total city's surface area. The second largest proportion
belongs to residential estates: 31.9%, the third one to transportation systems: 10.9%, and the fourth to forests and forested lands: 4.7%. The areas with low development constitute 9.8% of the city's surface area. An analysis of the land development structure shows that the existing development, transportation infrastructure and recreational facilities essentially limit real estate trading.

![Fig. 1. Land use in metropolitan cities](image)

Source: own calculations

Land use structure analysis applied to metropolitan cities in 2000-2005 allowed us to make an important remark that the urban investment areas are increasing to the largest extent (developed and undeveloped residential estates and green areas). The same about transportation areas. The largest increase of such lands was found in Poznań (30% increase), in comparison to Kraków (7%) and Szczecin (12%). The land surface under transportation systems increased by 5% in Szczecin and Poznań and by 8% in Kraków.

![Fig. 2. Changes in the land use structure in 2000-2005](image)

Source: own calculations
A considerable increase of residential areas happened in Poznań mainly owing to the establishment of new city parks and transformations in the green areas management structure: changing municipal woods into parks.

The lowest proportion of residential and transportation areas in the total city surface area in Szczecin results from its natural spatial conditions (waterways and water networks covering 23.9%). The development of the cities, mainly of residential nature, is limited by agricultural activities and, consequently, the majority of arable lands are transferred to non-farming purposes in the development areas.

3. Municipal Lands of the Metropolitan Cities

Lands are basic component of municipal assets. Public land management is particularly important for the following, especially in cities:

- protection of open areas,
- conducting housing policy,
- economic development of the city,
- ensuring influence on spatial shaping of the city and real estate market balance.

It is a task of a municipality to provide lands for carrying out public, social infrastructure, transportation and technical projects, as well as for the purpose of compensating (land replacement) the land owners who may have been restricted in their land use or disposal by the Local Physical Plans. It is also essential to prepare lands for the capital projects of metropolitan importance and as land offers for those investors the municipalities want to attract.

In respect of the ownership status, a considerable proportion of the lands of the cities under discussion are privately owned lands (ca. 11% in Szczecin, ca. 30% in Poznań and ca. 46% in Kraków).

![Fig. 3. Proportions of municipal lands in the total surface areas of the municipalities in 2008](source: own calculations)
In the municipalities presented here, the largest proportion of municipal lands within the total city surface area is found in Szczecin: 46.8% and Poznań (41.1%) in 2008. That proportion is more than twice lower in Kraków: 19.8%. Municipal lands managed by the municipalities are rather scarce.

The lowest proportions were recorded in Poznań in 2008, where the municipal land stock constitutes only 8.1% of the total municipality's surface area, with Kraków holding 9.6%, respectively. The analogous proportion in Szczecin amounts to 23.4%.

Table 3. Municipal land surfaces and land values in 2001-2008

<table>
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<tr>
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<tbody>
<tr>
<td>Szczecin</td>
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<td></td>
<td></td>
</tr>
<tr>
<td>Municipal land stock (ha)</td>
<td>6676</td>
<td>6658</td>
<td>6658</td>
<td>6859</td>
<td>7245</td>
<td>7156</td>
<td>7126</td>
<td>7032</td>
</tr>
<tr>
<td>Total municipal lands (ha)</td>
<td>13049</td>
<td>13006</td>
<td>13088</td>
<td>13328</td>
<td>14194</td>
<td>14249</td>
<td>14201</td>
<td>14091</td>
</tr>
<tr>
<td>Value (PLN million)</td>
<td>8122.4</td>
<td>8223.8</td>
<td>8329.4</td>
<td>8437.4</td>
<td>8977.7</td>
<td>9127.7</td>
<td>16256.1</td>
<td>16151.1</td>
</tr>
<tr>
<td>Poznań</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Municipal land stock (ha)</td>
<td>2216</td>
<td>2102</td>
<td>1898</td>
<td>2019</td>
<td>2103</td>
<td>2101</td>
<td>2115</td>
<td>2121</td>
</tr>
<tr>
<td>Total municipal lands (ha)</td>
<td>9812</td>
<td>10327</td>
<td>10456</td>
<td>10677</td>
<td>10697</td>
<td>10705</td>
<td>10741</td>
<td>10747</td>
</tr>
<tr>
<td>Value (PLN million)</td>
<td>14660.0</td>
<td>15470.0</td>
<td>19552.6</td>
<td>10186.3</td>
<td>10673</td>
<td>10654</td>
<td>10635</td>
<td>10523</td>
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<tr>
<td>Kraków</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
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</tr>
<tr>
<td>Municipal land stock (ha)</td>
<td>3480</td>
<td>3275</td>
<td>3019</td>
<td>3062</td>
<td>2988</td>
<td>3068</td>
<td>3062</td>
<td>3134</td>
</tr>
<tr>
<td>Total municipal lands (ha)</td>
<td>6538</td>
<td>6584</td>
<td>6583</td>
<td>6533</td>
<td>6756</td>
<td>6848</td>
<td>6677</td>
<td>6567</td>
</tr>
<tr>
<td>Value (PLN million)</td>
<td>5138.8</td>
<td>5993.9</td>
<td>7895.7</td>
<td>9734.3</td>
<td>12933.9</td>
<td>21159.1</td>
<td>27879.8</td>
<td>48034.6</td>
</tr>
</tbody>
</table>

* Land prices in Poznań until the end of 2003 are not comparable to the figures recorded in the present ledgers. Source: GUS Regional Data Bank, Reports on Szczecin, Poznań and Kraków.

According to the 2008 data, the Urban Municipality of Szczecin owned 14,086 ha of lands for the value of PLN 16.1 billion of which 775 ha were subjected to the perpetual usufruct rights belonging to legal entities and natural persons. 1200 ha of lands were under long-term management or use, and 3,846 ha either remained under other forms of holding or qualified as other (piLOT programmes, arable land, or lands held by the State Land Fund). Municipal lands under roads constitute 1,039 ha and those under housing stock: 646 ha. The Municipal land stock in Szczecin includes development plots and land for capital projects occupying 7,032 ha.

The Urban Municipality of Poznań, as at 30.06.2008, owned 32,352 of plots, with the total surface area of 10,747 ha and the value of PLN 10.5 billion, including 1,456 ha of the lands transferred for perpetual usufruct, 897 ha transferred for long-term management, 646 ha under leases and 5,627 ha transferred for use by legal entities or natural persons. The lands owned by the Municipality of Poznań and belonging to the municipal land stock occupied the area of 2,121 ha.

The Urban Municipality of Kraków, as at 30.06.2008, owned land with the surface area of 6,398 ha and co-owned 48 ha of land for the value of PLN 48.0 billion, including 1,146 ha charged with the perpetual usufruct rights belonging to legal entities or natural persons (214 ha). Lands with the surface area of 1,065 ha were managed by the Municipality and lands with the total surface area of 839 ha remained under other forms of holding.
(use by legal entities or natural persons). Roads occupied 1,004 ha of municipal lands and residential areas: 960 ha. In total, residential estates owned by the Municipality of Kraków occupied 2,614 ha. Lands belonging to the municipal stock covered 3,134 ha.

An important spatial policy element of the urban municipality is shaping and directing local real estate economy. Fig. 4 presents the municipal land structure in the studied municipalities. The municipal development strategies provide for the creation of the municipal land stock designated for sale (arable lands and development lands) and execution of own capital projects. In the metropolitan cities, the municipal land stock constitutes from 19.7% of the total land surface owned by the municipalities (in Poznań) to 49% (in Kraków and Szczecin).

![Municipal land use structure in 2008](image)

**Fig. 4. Municipal land use structure in 2008**
Source: own calculations

The proportion of other forms of municipal land use, e.g. lease or use, is from 13.8% in Kraków to 58.4% in Poznań. The rarest forms of land management are perpetual usufruct and long-term management.

In Szczecin until 2006, the municipal surface area was gradually increasing from 13,049 ha in 2001 to 14,249 ha, or by 9.1%, and the stock increased from 6,676 ha in 2001 to 7,245 ha in 2005 (by 8.5%). However, in 2006-2008, total municipal land surface area was reduced to 14,091 ha, or by ca. 1.2%. The municipal land stock was reduced even more since 2006 to 7,032 ha in 2008, or by ca. 3%. Consequently, the proportion of municipal lands in the total city's surface area dropped from 24.1% in 2005 to 23.4% in 2008, and respectively in the area of all the lands owned by municipalities, from 51.0% to 49.9%.

In the whole period under analysis of 2001-2008 the land area in Szczecin:
- increased by 1,042 ha, or 8.0% of total municipal lands,
- increased by 356 ha, or 5.3% of the municipal land stock.
In Poznań in 2001-2004, total municipal surface area increased every year by 2-5% (from 9,812 ha to 10,677 ha). Since 2005, the rate of increase of the municipal surface area has dropped considerably and amounted to only 0.1-0.3% a year. In 2008, municipal land surface area was 10,747 ha. A similar trend also concerned municipal land stock. In 2004-2005, the land surface area increased by 4-6% a year (from 1,898 ha in 2003 to 2,019 ha in 2005), and, since 2006, only by 0.3%-0.7%. Municipal land stock increased in 2006-2008 only by 20 ha and amounted to 2,121 ha in the last year of that period.

In the whole studied period of 2001-2008, the surface areas in Poznań:
- total municipal lands: increased by 935 ha, or by 9.5%,
- municipal land stock: decreased by 356 ha, or by 4.3%.
In Kraków, in the last eight years, a small rate of increase of the total municipal land surface was recorded by only 0.7-3.4% (2002-2005). Since 2007, the total municipal land surface area decreased by 281 ha (from 6,848 ha in 2006 to 6,567 ha in 2008). Also the surface area municipal land stock increased slightly by 1.4-2.7% in 2004, 2006 and 2008.

In the whole studied period of 2001-2008, the surface areas in Kraków:

- total municipal lands: increased only by 29 ha, or by 0.4%,
- municipal land stock: decreased by 346 ha, or by 10.0%.

![Fig. 7. Changes in the municipal land use in Kraków in 2002-2008 (ha)](source: own calculations)

Since 2005, the numbers and surface areas of the real estates transferred for perpetual usufruct have been decreasing in all the studied municipalities. That resulted from the transformations of perpetual usufruct into ownership rights⁸. In 2001-2008, the surface area of leased and leased out land, as well as of lands under other forms of use was gradually increasing. Such trends resulted from the municipalities’ policies designed for investors, consisting in the sales of real estates mainly for single-family and multi-family housing purposes, as well as to increase incomes from real estate management.

The changes of the municipal land stock areas owned by the municipalities were influenced by the following:

- Increase of land areas owing to:
  - transfers of lands to municipalities by operation of law,
  - transfers of lands to municipalities by request,
  - purchases and transfers of ownership (under notarial deeds);
- Decrease of land areas owing to:
  - transformation of perpetual usufruct rights into ownership rights,
  - sales and transfers of ownership (under notarial deeds).

⁸ According to the Law of Transformation of Perpetual Usufruct Rights into Ownership Rights of 29.072005 (Dz.U. No. 175, Item 1459, as later amended).
Incomes from the assets, composed of e.g. perpetual usufruct fees, income from land sales, leases and transformations of perpetual usufruct rights into ownership rights constitute considerable items in the cities’ budgets. However, large decreases of the numbers and surface areas of municipal lands in Szczecin and Kraków have not caused municipal income reductions. Consequently, the improvement of real estate market trends in 2005-2007 was also observed in municipal land transactions.

In Szczecin, the proceeds from real estate management in 2007, in comparison to the previous year, increased by 58.2% and amounted to PLN 59.0 million, while those from the transformations of perpetual usufruct rights into ownership rights increased more than twice. Such incomes constituted 20% of all the municipal proceeds in 2007. The municipality sold to perpetual usufructors 225 plots, with the surface area of 122.9 ha in 2006 and 133 plots, with the surface area of 7.8 ha in 2007. Income from the sales of plots to legal entities and natural persons increased in 2007 by 36.9% and constituted more than 28% of income originating from land management. Altogether, 60 plots, with the surface area of 9 ha were sold in 2006 and 73 plots, with the surface area of 23.1 ha, mainly for single-family house building in 2007.

In Poznań, the proceeds from real estate management in 2007, in comparison to the previous year, increased by nearly 30% and amounted to PLN 62.7 million, while those from the transformations of perpetual usufruct rights into ownership rights increased nearly three times. Such incomes constituted more than 5% of all the municipal proceeds in 2007. The proceeds from the fees for perpetual usufruct and long-term management constituted the largest items in the municipal incomes. They amounted to more than 40% of all proceeds from land in 2007. The sold land value increased by 22% and constituted nearly 30% of proceeds in 2007. The municipality sold, under bidding and non-bidding procedures, 15 plots, with the surface area of 2.2 ha in 2006, and 15 plots, with the surface area of 4.6 ha in 2007.

![Fig. 8. Income from real estate management in 2006-2007](image_url)

Source: Reports on Szczecin, Poznań and Kraków
In Kraków, the proceeds from real estate management in 2007, in comparison to the previous year, increased by 30.9% and amounted to PLN 51.1 million, while those from the perpetual usufruct fees and land management increased by 4.1%. They constituted nearly 50% of all the municipality’s proceeds from real estates in 2007. The sales of land real estates increased nearly twice. They constituted 44% of income in 2007. The municipality sold, under bidding and non-bidding procedures, plots with the surface area of 3.9 ha in 2006, and plots with the surface area of 101.7 ha in 2007. Altogether, the Municipality of Kraków regulated the legal status of 479 real estates, with the total surface area of 145.2 ha in 2007.

One of the elements of shaping the spatial order is the preparation of land owned by the urban municipalities for sale. In the event that no Local Physical Plans have been provided for such lands, it is necessary to prepare each time a Land Development Conditions Decision (Planning Permit). The lands that are not required by the municipality for its own projects and can be developed as separate real estates, are offered for sale under a bidding procedure based on respective Land Development Conditions Decisions.

In 2004-2007, a considerable increase of the number and surface area of sold municipal real estates was recorded, in comparison to previous years, especially in Szczecin. That resulted from the revival of the housing market, in particular in individual house building, initiated in 2005. For a comparison sake: in 2002-2005, 180 plots, with the surface area of 30.1 ha, were sold, and in 2005-2007 223, plots, with the surface area of 54.8 ha, were sold9. That process was initiated on the real estate market in Szczecin in 2005 when the number of the plots sold to private investors increased more than twice. The interest in real estates for multi-family house building has been maintained at a similar level for a number of years. What changed, however, were the preferences of the future tenants and the quality of living standards.

Although the number of plots sold in Szczecin in 2006-2007 is similar and much lower in Poznań (in 2005, the sales increased much in comparison to the previous year, but the number dropped from 79 to 15 plots in later years), the average surface area increased considerably, on the one hand, owing to a large expansion of the developers who were not afraid to invest in large housing estates, and, on the other hand, due to the allocation of larger lands for accompanying infrastructure (green areas, parks, playgrounds etc.). The situation in Kraków is quite different: the number of sold plots decreased from 84 in 2005 to 70 in the next year. Also, the average plot surface area has decreased twice since 2006.

Presently, the main problem which makes the implementation of the municipalities’ spatial policies is lack of Local Physical Plans for the whole municipality area, which often leads to accidental development and creates threats to the process of spatial and urban order shaping. 13% of the surface areas of Kraków and Poznań and nearly 20% of Szczecin are entailed by the Local Physical Plans, according to the end of 2007 data. The situation of Lublin, Gdańsk and Wrocław is much better, with their Plans covering 44, 57 and 32% of the cities, respectively.

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9 Without transfers of ownership due to the transformation of perpetual usufruct into ownership (freehold).
Fig. 9. Sales of municipal lands for capital projects in 2002-2007
Source: Reports on Szczecin, Poznań and Kraków

Fig. 10. Sales of municipal lands for capital projects in 2002-2007 (ha)
Source: Reports on Szczecin, Poznań and Kraków

In Szczecin, with the surface area of 30,083 ha, there are 181 Local Physical Plans. They entail 5,989.7 ha, or 19.9% of the city's surface area. The current Study of Spatial Development Conditions and Directions for Szczecin determines the necessity to cover the whole city with Plans, without determining specific areas or sequence of Plan implementation. The schedule of Plan development is determined by the Mayor, depending on the capital investment needs of residents' petitions. In 2007, 108 new Plans were prepared in Szczecin.

Poznań occupies 26,131 ha, and 3,574.47 ha, or 13.7% are entailed by the Local Physical Plans. If we include the Plans that have been submitted for approval, the proportion is 36.9%. We can assume, however, that the Plans are not required for the lands that are
almost completely developed, because the respective plots require ordering only, while spatial solutions can be resolved on the basis of other regulations.

Kraków, with the surface area of 32,502 ha, has 44 Local Physical Plans in place, covering 4,269 ha, or 13.0% of the total city’s surface area.

![Diagram showing the degrees of municipal surface area coverage by Local Physical Plans (%)](image)

**Fig. 11. The degrees of municipal surface area coverage by Local Physical Plans (%)**

Source: www.rp.pl[artykul]

According to the data obtained from the City Office of Szczecin, the majority of lands located on the areas allocated for development have been used. It is estimated that available lands constitute ca. 35% of land stock, or ca. 2500 ha, or 8.3% of the city's surface area. We need to mention that the majority of the lands are already possessed by the investors or persons who are waiting for further land price increases.

The lands allocated for house building in the Urban Municipality of Poznań include ca. 1,242.7 ha, or ca. 4.8% of the city's surface area. 1,197 ha (4.5% of the city's area) are undeveloped lands, while those undeveloped and owned or co-owned by the municipality cover only 386 ha. Those lands are dispersed mainly on the intensely developed areas. The balance specified above does not contain smaller lands suitable for gap filling. Undeveloped or temporarily developed lands are only apparently free. Main problems are posed by difficult structures (gardens or garages), unregulated property ownership, social protests or high capital investment costs, resulting e.g. from the costs of infrastructure and transportation system renovation.

Surface areas of the lands in respect of which the Urban Municipality of Kraków can implement the activities associated with sale amount to ca. 1,300 ha, or only 4% of the Kraków city areas, within its administrative borders. Our analysis of the land development in the Municipality of Kraków indicates that the structures, transportation and recreational systems essentially limit the sale of real estates owned by the municipality.

Since 1990, regulation processes are conducted in the area of transfers of State Treasury's lands to the municipalities, counties and regions for management. In the early years of such transfers, the surface area of the plots taken over by the Municipality
of Kraków in one year was ca. 1,000 ha, followed by ca. 700 ha, 300 ha, 150 ha, 100 ha, down to ca. 85 ha. The reduction of the plot surfaces taken over in particular years was caused by the fact that the majority of real estates of unregulated legal status had been taken over before. What remained to be transferred were mostly the real estates of unregulated legal status and small surface areas.

The amendment of the Law of the Arable Land and Forest Protection\textsuperscript{10} may facilitate the increase of the municipal land stock. The Law became effective on 1 January 2009. It provides for simplified procedure to change the arable land designation for other uses. Until then, the respective decisions were made by the Regional Marshal or the Minister of Agriculture acting through the Regional Marshal in respect to the lands belonging to soil classes I-III, with a uniform area exceeding 0.5 ha. The use of such lands for development purposes may be effected, however, only upon issuance of the Land Development Conditions Decision (Planning Permit) by the County manager. The implementation of that amendment means that all arable lands located within administrative borders of cities or town will be bereaved of the arable land status by operation of law. The soil classes will not be important in that respect. Similarly, the law will decide about the change of the arable land status outside town boundaries. In that case, however, not all lands will be transferred without application. The simplified procedure will concern exclusively plots of arable land, with the soil classes IV-VI. Those who want to use an arable land plot for development purposes will be able to do so, without any formalities. Automatic arable land status change does not mean, however, that all the municipality lands will be able to be used automatically for development purposes; the municipalities will be obligated to ensure roads, sewer systems, water pipelines, power lines and other infrastructure for the plots on such lands. Still, house building will require the preparation of the Local Physical Plan to provide for such development, and wherever Plans are not available, the Land Development Conditions Decisions (Planning Permits) will have to be issued.

\textbf{Conclusions}

Based on the data presented here, we can observe the following general trends developing on the areas of the studied metropolitan cities.

As regards \textbf{functional and spatial structure}:

- Reduction of undeveloped arable lands; the development of the city, in particular its residential estates, limits agricultural activities, which leads to arable land redesignation for non-farming purposes in the development areas;

- Increase of the areas of estates, greenery, parks and developed areas; two main trends are developing: single-family house building on green areas and multi-family house building in free space on the areas of the existing urban structures;

- Increase of the transportation system areas (roads, railways and fast tramways), caused by the construction of new streets in new estates and the modernization (expansion) of the existing streets and intersections; the increase of the transportation space was also

affected by the increase of parking lots, especially in the large-panel housing estates, as well as the development of transportation and logistic businesses.

The surface area of the urban and transportation investments was as follows in 2007:

- in Szczecin: 9,062 ha, or 30% of the city's surface area,
- in Poznań: 12,953 ha, or 49% of the city's surface area,
- in Kraków: 13,904 ha, or 42% of the city's surface area.

As regards the condition and directions of the changes in municipal lands:

- Since 2005, a gradual increase of municipal surface areas and municipality land stocks, resulting from the arable land status, appropriation for municipalities and purchase transactions were recorded; since 2006, we have clearly observed the trend of selling municipal lands and land stock reduction (Szczecin) or a small rate of increase in comparison to 2001-2005 (Poznań and Kraków); the largest proportion of municipal lands within municipality surface area exists in Szczecin (46.8%) and Poznań (41.1%); in Kraków, the proportion is more than twice lower: 19.8%; much lower surface area is occupied by municipal land stocks possessed by municipalities; the lowest index was recorded in 2008 in Poznań (8.1%) and Kraków (9.6%), while that in Szczecin was 23.4% of the city's surface area;

- The assumed municipality development strategy is to create municipal land stock designated for sale (arable lands and development lands) and for the development of own projects; municipal land stock amounts to 19.7% of the total land surface owned by the municipality in Poznań and 49% in Kraków and Szczecin; the proportions of other forms of municipal land use, e.g. lease, transfer for use, are from 13.8% in Kraków to 58.4% in Poznań; the rarest forms of land management are perpetual usufruct and long-term management;

- Since 2005, the number and surface areas of land transferred for perpetual usufruct in all the studied municipalities is decreasing; that results from the transformations of the perpetual usufruct rights into ownership rights\(^{11}\); in 2001-2008, gradually increased the surface area of leased and leased out lands or other forms of land use; those trends resulted from the municipalities' policies towards investors, consisting in the sale of lands mainly for single- and multi-family house building and the increase of proceeds from land management;

- The decrease of the number and surface area of lands has not caused any reduction of the municipalities' incomes under that title, while the increase of the real estate market trends in 2005-2007 was also observed in the case of the transactions related to municipal lands; in Szczecin, the proceeds from land management increased by 58.2% in 2007 in comparison to the previous year, and by ca. 30% in Poznań and Kraków;

- The sale of plots to legal entities and natural persons constituted considerable items in the municipalities' incomes. The sales brought 20% of proceeds from land management in Szczecin, 30% in Poznań and 44% in Kraków in 2007. The sales increased in those municipalities by 37%, 22% and 94%, respectively, in comparison to 2006.

\(^{11}\) According to the Law of Transformation of the Perpetual Usufruct Rights into Ownership Rights of 29.07.2005 (Dz.U. No. 175, Item 1459, as later amended).
The main problems that make the implementation of the municipalities' special policy difficult are as follows:

- Lack of Local Physical Plans for the whole municipality area; 13% of Kraków and Poznań and almost 20% of Szczecin are covered by the Plans, according to the end of 2007 data; the situation in Lublin, Gdańsk and Wrocław is much better with 44, 57 and 32% of the city area coverage;
- The majority of lands located on the areas designated for house building have been used to a large degree; it is estimated that presently the lands that have not been developed, and in respect of which the municipalities can start activities related to land sales, constitute ca. 35% of land stock in Szczecin, ca. 70% in Poznań and ca. 40% in Kraków;
- the existing structures and transportation and recreational lands essentially limit municipal land sales;
- difficult structures (gardens or garages), unregulated property ownership, social protests or high capital investment costs, resulting e.g. from the costs of infrastructure and transportation system renovation.

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