

Chapter 8

Socialist Ideals and Physical Reality: Large Housing Estates in Riga, Latvia



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Abstract Large housing estates represent a significant part of the existing housing stock in many Eastern European cities including Riga, the capital of Latvia. A considerable number of large housing estates were developed within the Soviet housing expansion plans in Riga. Based on social ideals and planned economic strategies for urban development, large housing estates seek their place in the context of other political and economic formations. Socialist ideals and a command economy influenced the principles of town planning and determined the pace and scale of construction. Large housing estates are a troublesome legacy of the previous period, which has become a reality in the housing situation of a significant part of the population of Riga. There are certain problems in this type of housing that are related both to the ageing of the housing fund and to the new social and economic conditions. Various processes that have occurred in recent decades—housing reform, land reform, etc.—have produced significant changes in the way large-scale residential districts are managed and maintained. Despite the differences in spatial and structural solutions of housing estates constructed in various decades, they shared some common features according to the common planning principles used in their development. The study is focused on the spatial organisation of the estates—original ideas, development stages, current conditions and challenges for future redevelopment. Effective planning, financing, management and legal instruments are necessary for executing complex reconstruction projects. Finding solutions among parties with different interests is a complicated task due to changes that will directly affect real estate property rights.

Keywords Large housing estates · Social ideals · Spatial organisation · Riga, Latvia

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8.1 Introduction

A significant number of large housing estates were developed within the Soviet housing expansion plans in Latvia between the late 1950s and early 1990s. As the leading paradigm of residential development after World War II, large-scale housing underwent certain transformations throughout the decades differing considerably in size, number, development density and urban layout. Despite the differences in spatial and structural solutions of housing estates constructed in various decades, they shared some common features according to the common planning principles used in their development. Large residential areas are mainly located in the outer perimeter of the city within easy-to-reach distances from the city centre. They usually have well-developed educational and service facilities as well as good recreation opportunities. Thus, large-scale housing estates remain popular urban areas which appeal to a very large number of inhabitants.

Transition from a state regulated to a free market economy in the last decade of the twentieth century fundamentally transformed property owner relationships in the region and the subsequent governmental reforms affected the real estate sector, social classes, etc. Large-scale housing estates still actively participate in the real estate market; small apartments have regained their popularity and are again in high demand. This is driving the modernisation of these buildings and living spaces while at the same time creating new issues such as shared responsibility for maintenance of the buildings and common areas.

This chapter provides an overview of the development of large housing estates in Riga. The study is focused on the physical organisation of the estates—original ideas, development stages, current conditions and challenges for future redevelopment. It describes the social and economic background, indicates the differences in spatial concepts of the estates and defines contemporary problems based on the process of housing reforms.

8.2 Social and Economic Context of Housing Development in the USSR

Large housing estates are a typical feature of many European cities. It is a post-World War II development which was carefully planned in view of the expected increase in population (Van Kempen et al. 2005). Although the motives leading to the construction of residential complexes were similar in many European countries—housing shortages, ongoing technological progress, new lifestyles, governmental support, functional zoning in urban planning—not all motives were equally important in all European countries (Krantz 1999; Turkington et al. 2004). Since Latvia was a member republic of the Soviet Union, a large socio-economic and political structure, these prerequisites and motives for construction were largely dictated by the policies of the USSR (Lejnicks 2005).

In Western European countries, the housing problem was largely addressed by an economic recovery which allowed people to become more creditworthy and capable of choosing a higher standard of housing (Wallace et al. 2012). The situation was different in Eastern Europe where the construction of large housing estates continued until the beginning of the 1990s, thus becoming a significant portion of the housing stock (Palacin and Shelburne 2005). During this period in Riga, about 70% of the existing housing areas were built using prefabricated housing construction methods (Marana and Treija 2002).

Political ideology was the primary driver behind the impressive development of housing capacity in the USSR—the Soviet government had declared the goal of improving the housing conditions for a large number of people (Rubīns 2004). Ideological considerations were accompanied by technical ones, that is, development of new construction technologies. Implementing these political directives required extensive construction. The most advanced form of construction to satisfy this demand was erection of prefabricated large-slab residential buildings (Rubīns 2004).

The strict state-controlled system of housing in the USSR, including Latvia, functioned until 1991. The system was based on the centralised planned construction process and low cost of housing. The major share of housing stock belonged to the state or municipalities and the apartments were rented to residents for an indefinite period. Residents had to cover only a symbolic part of the actual dwelling and service fees, while the remaining part was subsidised by the state or municipalities. Since the provisioning of housing was a politically defined priority and given intensive subsidies, apartments were affordable to a wide range of the population (Tsenkova and Turner 2004; Treija 2009).

The decision on industrialisation, quality improvement and cost reduction in the construction sector was adopted by the Communist Party and the Soviet Council of Ministers in 1956. It was followed by the resolution ‘On the housing development in the USSR’ in 1957. The resolution set a goal to make apartments available to a great majority of the population with the aim to provide each family with a separate apartment by the year 1980. The goal was not limited to quantity only; improvement of the quality of life was another important aspect. Providing bright and well-equipped buildings surrounded by green areas with services and facilities available nearby such as kindergartens, schools and retail stores were important steps towards implementing the vision of comfortable and high-quality living environments (Caldenby 2010).

Technological advances allowed the implementation of the ideological directive to proceed quickly and on a grand scale. Industrialisation and prefabrication in construction reached a high level; new working methods and building materials were introduced as well as new architectural designs of the buildings (Švidkovskis 1967). The occupant density and structural solutions of the buildings reflected new social requirements, and employed new construction techniques and new finishing materials (Šusts 1966).

According to historical data on the population distribution in Latvia during the considered period, most of the population was concentrated in Riga and its

Table 8.1 Population and housing fund in Riga

Year	Population in Riga	Housing fund (thousand m ²)	Floor space per resident (m ²)
1940	353 800	6 800	19,20
1945	228 200	6 100	26,70
1950	482 300	6 500	13,50
1960	588 000	7 333	12,50
1970	731 800	9 970	13,60
1980	843 000	13 477	16,00
1990	909 135	16 419	18,00

Source Rubīns (2004), Centrālā Statistikas pārvalde (2017)

surrounding area. The ongoing process of urban migration resulted in 70% of the population living in cities. In the 1980s, Riga was not only the administrative, political, industrial and cultural centre of the Latvian SSR but also the centre of many inter-republic functions of the entire Baltic economic area.

Such terms as ‘minimal’, ‘normative’ and ‘average provision with residential space’ were in use for a long time within the housing policy of the USSR. The minimum provision was set to 4 m² per person while the normative one was 9–12 m² per person in different decades (Table 8.1). The concept of a ‘housing standard’ as a figure characterising the number of rooms per household member came into use in the Soviet urban planning and housing programmes only in the 1980s after the slogan ‘a separate apartment or private house for each Soviet family by the year 2000’ was introduced. Standard ‘n’ was accepted as the preferred one—the total number of persons in the household should correspond to the number of rooms occupied (Melbergs 1989).

8.3 The Development of Riga

In accordance with urban development forecasts, territorial master plans (*general plans*) were developed in the cities and towns where rapid growth was predicted in both industrial and residential areas. Three territorial plans were developed in Riga in 1955, 1968 and 1984.

The *Riga Master Plan of 1955* (architect Vasiljev, J. et al.) envisioned creating relatively independent residential areas in the peripheral parts of Riga connected to the city centre by modern motorways. The city had to find new territories for mass housing construction. The first areas to be built up were the areas where city utilities such as water supply, sewage, drainage, etc. could be provided without much additional investment. The territory on the left bank of the River Daugava was set as an important development area since the development potential of the territory on the right bank was considered to be limited due to the location of industrial zones and topographical conditions. Jugla District (254,000 m² of living space),

Dreilini (164,000 m²), Moscow Street area (102,000 m²) and Agenskalna Priedes (52,000 m²) are examples of the larger residential areas developed in that period (Валескалн and Васильев 1969).

The vicinities surrounding the city's peripheral industrial centres were intended for further expansion as residential areas. Development of the city was encumbered there because of the widespread construction of individual residential houses during the early post-war years which, on the one hand, helped to replenish the Riga housing stock destroyed during World War II but, on the other hand, blocked the development of the city in several important directions—westwards, south-westwards and south-eastwards.

The most important feature of this plan was that it simultaneously solved architectural, technical and social problems. This caused changes in the structure of the entire city. The use of standard projects in large-scale residential area development, a characteristic feature of that period, resulted in an approach which no longer emphasised only the expressiveness of the architectural design of a single building but also considered the expressiveness of an entire urban development complex. However, the limited number of standard projects did not provide sufficient means of expression to achieve good results in the creation of large-scale physical compositions.

In the *Riga Master Plan of 1969* (architect Melbergs, G. et al.), preconditions were set for strict functional zoning of the city territory. For the first time, it also involved planning of the suburban areas in a radius of 50–70 km surrounding Riga.

The Riga city planning structure was based on ensuring the balanced and continuous development of all functional elements of the city, preserving the connection between work, residential and recreational areas. An important role in the territorial organisation was ascribed to functional zoning aimed at creation of preconditions for the development of complete industrial, management or residential units. Certain industrial zones were formed based on existing industrial enterprises, combining and developing them up to a certain natural or urban border. Further development of industrial enterprises in these zones was limited and could be implemented only by removing any building units which were inadequate to the zoning requirements. Four new industrial zones were planned for future development, envisioning mainly the construction of new facilities (Melbergs and Pučiņš 1969).

The construction of apartments in the future was planned mainly in the areas built up with low-rise buildings. The plan was to completely or partially demolish them and replace them with new prefabricated residential blocks. In each planning area, extra space was reserved for the construction of apartments. This approach had to ensure normal development of the city and improve the living conditions. Existing residential blocks in the central part of the city were reserved for the development of the public centre. Composition of the city centre was based on a wide range skyline visible from multiple locations along the River Daugava or from the city's main motorways, while the composition of residential areas focused on the spaces of inner courtyards (Kraštinš et al. 1998).

In the *Riga Master Plan of 1984* (architect Melbergs, G. et al.), Riga was defined as an important urban centre of the USSR. Considering the estimated number of employed persons in all sectors of economy as well as the expected natural growth and migration of the population and its demographic structure, the number of Riga inhabitants for the first stage of construction until 1990 was set at 920,000 people increasing to 1 million by 2005. According to the new Master Plan, the volume of housing construction was determined by considering an average increase of the provided living space per person up to 19–20 m² of the total area, or by 23.4%. Thus, by 2005, the intention was to build apartments with a total area of more than 8,000,000 m². With regards to the environmental planning of the city, it should be noted that the modern territory of Riga with an area of 30,700 hectares allowed for the construction of apartments as well as cultural and communal buildings. To preserve the basic organisation principle of the social infrastructure of the city, ‘work–life–rest’, eight administrative planning districts were proposed which would combine social and administrative functions. This would facilitate creation of a unified, architecturally planned structure and facilitate control over execution of the Master Plan. Functional zoning of the city was based on the functional zones defined by the previous Master Plan without making any significant alterations. It was planned to complete construction in the residential areas under development by the end of the planning period and reacquire residential areas in several other districts (Krastiņš et al. 1998). It should be noted that the accommodation of inhabitants and the locations of residential areas were linked to optimisation indicators based on the availability of jobs, public centres and recreation areas. Also considered were building costs in the territory and the comparative free-time cost factor.

The new Master Plan of Riga city development was approved by the Riga Executive Committee (City Council) in 1984. However, approval was not granted by the Cabinet of Ministers of the Latvian SSR because the development plan for the city with a population potentially exceeding 1 million inhabitants did not envision the construction of an underground railway system which was required by provisions of the State Plan of the USSR (Melbergs 1993).

Implementation of the grand Riga city development plans required significant territorial resources. Some of the new construction projects were planned in the former built-up areas and envisioned the demolition of existing buildings while other projects were planned in areas close to Riga’s administrative border (Fig. 8.1).

8.4 Physical Organisation of Large Housing Estates

Urban growth emphasising residential construction set the stage for contemporary urban development solutions. Architects focused mainly on entire building complexes rather than on separate buildings (Šusts 1966). Architect Švidkovskis stated the new concept: ‘The notion of habitation begins to embody the concepts of both

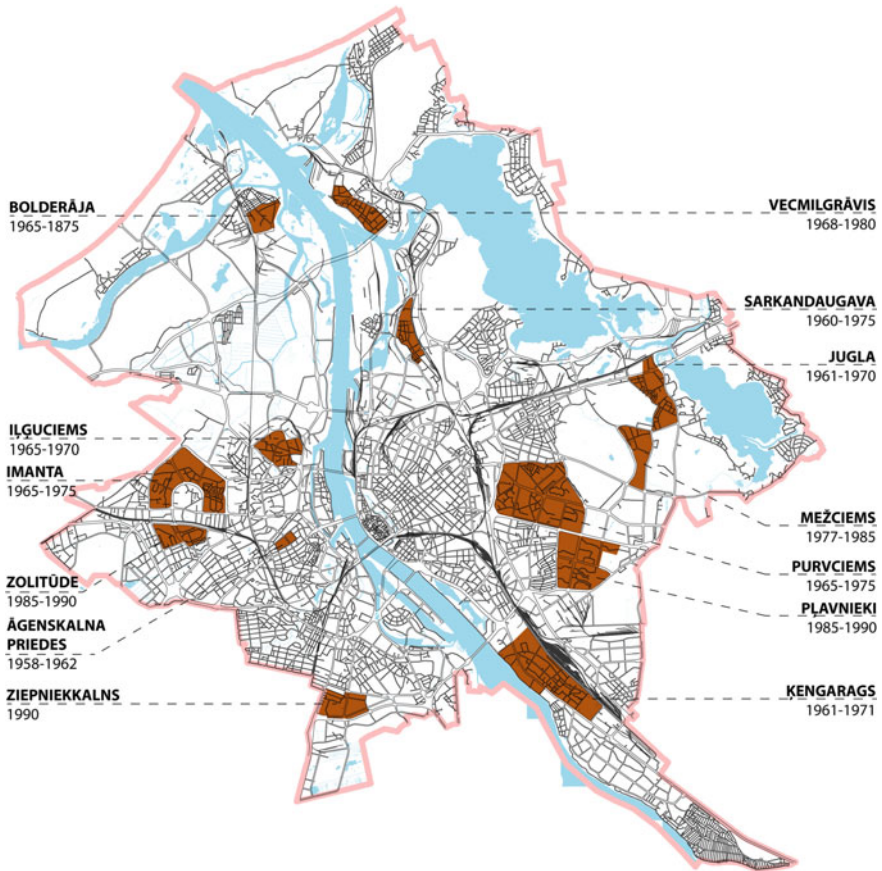


Fig. 8.1 Location of large housing estates in Riga. Source Sandra Treija

function and design of the entire building unit. For the first time, each separate building no longer represents a single decorative or compositional piece but becomes an element of the physical composition. Careful design of the layout of housing groups creates diversity and feelings of spaciousness while at the same time maintaining human scale in the surroundings’ (Švidkovskis 1967).

The *Microrayon* (micro-neighbourhood) became the basic unit of the new large housing estate. It was a housing complex which also included essential services for the residents. Schools, kindergartens, grocery shops and other public services located in the *microrayon* expanded the concept of a habitat which exceeded the borders of a single apartment. An urban structure new in its content and shape emerged in the new complexes. Each inhabitant was provided with the access to all necessary everyday public services within the borders of the *microrayon*. The physical organisation of building groups in large housing estates was significantly influenced by the requirement to provide an optimal microclimate and hygienic

regime in the apartments as well as sufficient outdoor recreation space near the housing. The traditional development with the lines of side-by-side buildings stretching along the corridor-shaped streets was replaced by freestanding buildings surrounded by plenty of green spaces which became an important element of the residential area (Švidkovskis 1967). Planted spaces were needed to create a good microclimate, ensure decent hygienic conditions and provide relaxation space while together forming an expressive urban landscape.

Open spaces in the planned courtyards were reserved for important household functions—drying laundry, beating carpets, access to waste containers, etc. Next to the entrance doors, several parking lots (about 6 to 10) were arranged. The rest of the courtyard area was landscaped to provide playgrounds for children and small rest areas equipped with benches (Treija et al. 2012).

Since green space in housing estates usually occupied 40–45% of the entirety, planning authorities wanted to find out how intensively they were used for the daily recreation needs and whether people were satisfied with the quality of the planted spaces and their facilities. A survey of inhabitants carried out as early as 1967 and 1968 showed that the inhabitants of the new *microrayon* did not fully utilise the green areas because they were not satisfied with the available facilities. It was concluded that large urban spaces which required considerable investment were not being used to full capacity (Lūse 1971).

As the leading paradigm of urban development for several decades, the spatial concept of large housing estates has undergone several transformations. Although the main setting remained unchanged, quick and inexpensive provisioning of the population with a high-quality residential environment, housing estates differed significantly in terms of size, occupant density and physical organisation (Treija and Bratuškis 2013). The development of large housing estates can be divided into several stages.

During the first decade after World War II, the first standard residential housing projects were developed in Riga and the first villages for factory workers were built. However, design and construction techniques did not keep pace with the rapid growth rate of the city which was stimulated by industrial development. Locating new villages for factory workers next to the industrial areas was a characteristic feature of the early stage of this period, which could be observed not only in Riga but also in many cities in the Soviet Union (Валескалн and Васильев 1969). By 1955, two-storey brick buildings dominated in the construction of residential buildings in Riga. Custom designed standard projects were created for this building type. The introduction of standard low-rise residential buildings created the necessary conditions for the development of housing construction methods on an industrial scale. This experience of planning and building residential complexes had an impact on the development of large-scale housing estates designed in subsequent years.

From the mid-1950s until the end of the 1960s, the principle of the free layout plan became the leading trend in the composition of residential areas. Large-scale residential areas in Riga generally followed this principle. The concept of ‘free layout’ in contrast to traditional building development along the streets includes

various types of planning systems, the structure of which is determined by natural conditions (orientation, terrain, green areas, watercourses and water bodies) and the urban environment (street network and basic utilities). These practical factors were often combined with geometric ornamental schemes designed by architects. This period was characterised by a simplified architectural shape and layout of buildings limited by the requirements and needs of prefabrication, an excessive passion for ornamental arrangement of groups of buildings, and little attention paid to the use of different planning and vertical composition techniques for courtyard and motorway spaces. The development of large-slab manufacturing was the main characteristic during this period. Compared to brick house construction technology, large-slab technology made it possible to double productivity of the building industry (Rubīns 2004).

The next decade from 1965 to 1975 introduced more detailed techniques in the composition of *microrayons* or micro-neighbourhoods—their spaces became more intimate, as if focusing inwards. The main elements of the physical plan included green space in which residential buildings, public centres and boulevard corridors were combined into a coherent system. The unrestricted approach to nature and the maximum use of natural features were the main principles in the organisation of residential areas (Kraštinš et al. 1998). During this period, the principles of international modernism were developed and mastered by interpreting them in accordance with the available technical capabilities of industrialisation. Area plans gradually became more differentiated and intricate depending on social demand and location (Пиешиньш 1969).

During the last period of Soviet development, from 1975 to 1990, the rigidities of micro-neighbourhood planning gave way to more sophisticated solutions. Considering the flat terrain typical of Riga, much more attention was paid to the perception possibilities of the city's skyline (Strautmanis 1977). The importance of infrastructure was realised by developing such components as service facilities, street networks and equipment elements up to levels determined by the spatial structure of the area (Figs. 8.2 and 8.3). The role of colourful solutions in creating area identity was also emphasised.

Despite the differences in the physical and structural solutions in the large housing estates, there are also several common features that define their development principles. Examples include a wide spectrum of free layout structures used in area planning, the consideration of building location and height along main thoroughfares, and taking advantage of primary streets by the placement of public utilities and commercial areas along their routes. Other similarities of typical large housing estates are their inner courtyards and pedestrian paths separated from the street, large landscaped recreation spaces and vertically dominating elements that accentuate the intersections of main streets and residential centres.

Decades after their implementation, large housing estates have been criticised by different locals: architects, planners and even officials. The most common arguments against the approach of physical organisation are related to the excessive geometric structure which is not adaptable from a human perspective; the generic layout which causes orientation problems and the road structures which seem



Fig. 8.2 Main inner street with pedestrian priority and services in *mikrorayon* Zolitūde I (arch. Berķe et al.). *Source* Sandra Treija



Fig. 8.3 Spatial organisation of *mikrorayon* Zolitūde II (arch. Berķe et al.) with school and kindergarten at the core. *Source* Sandra Treija

chaotic (Strautmanis 1977). The courtyards were evaluated as hypertrophic and were not being fully utilised and the architecture was defined as an inexpressible, impoverished means of expression (Melbergs 1979; Piešiņš 1982).

8.5 Eras of Residential Development

For 50 years until the beginning of the 1990s, large-slab buildings were erected in Riga according to a set of 11 standardised projects that differed in terms of exterior wall material, number of floors, number of apartments and useful floor area. Elements of the buildings were produced in many large-slab construction factories in Riga as well as in other major towns in Latvia (Brinkis 1996).

Separate stages in the development of residential buildings can be distinguished when older projects were replaced with newer ones. Housing types used immediately after World War II belong to the first generation of residential projects. The weak economic environment of the first post-war years was undoubtedly the major factor that had a considerable impact on the construction practices of that time. The first pre-industrial residential buildings were characterised by clear and simple multi-storey designs using white silicate brick construction. Flat wall surfaces were interrupted by regular window patterns in the living spaces alternated by different layouts of the staircases. As a design element, red bricks were used along windows and elsewhere in the otherwise light-coloured wall surfaces. The slopes of the gable roofs were covered with wavy slate plates.

Nevertheless, this generation of buildings provided a comparatively higher level of comfort with regard to basic utilities. Each apartment was equipped with running water and sewage mains, toilet and bath, and, where possible, access to central heating and hot water. Post-war housing ideology implied construction of small-sized apartments based on 'economic' standard projects with small living rooms and minimum auxiliary space. The hallway was designed as a narrow corridor, the kitchen area was around 6.0 m² or less, the bathroom and toilet were installed in a single space taking up 2.0–2.5 m² in which a bathtub just 1.5 m long could be placed. Integrated bathrooms were not equipped with sinks; those were available only in buildings with separate bathrooms. The kitchen and bathroom pipes were connected in one block. This saved plumbing costs but did not allow for making changes to the apartment layout. Many apartments consisted only of adjoining rooms. There were no outdoor spaces or they appeared in the form of very small balconies (Fig. 8.4).

The second phase, which began in the mid-1960s, can be considered as the period of residential building modernisation. Prior to that, only standard projects developed in the central offices of the USSR were allowed for construction. Starting with 1965, Latvian architects could adapt the USSR standard projects to local conditions which effectively allowed updates in many instances. This process started with five-storey large-slab buildings and was followed by those of nine storeys. A group of architects and civil engineers was awarded with a State Award of the Latvian SSR for their modernisations of the standard building project. Compared to the first generation, there were wider entrance halls and, in some designs, a built-in wardrobe. The kitchen area was increased and the toilet was removed from the bathroom and placed into a separate room; however, the short



Fig. 8.4 Typical Khrushchëv-period dwelling house in Āgenskalna Priedes (1958–62). *Source* Uģis Bratuškins

bathtubs still remained. In some apartments, the number of adjoining rooms decreased. Loggias were erected instead of balconies (Piešiņš 1982).

In 1972, a second large-slab manufacturer was launched, the Riga Large-Slab Construction Plant. It produced building blocks for the standard nine-storey large-slab houses. Its capacity, 240,000 m² per year, was about twice as large as the output of the first standard construction plant (Asaris 1976).

The third phase commenced in the mid-1970s. While work on future projects continued during the second-generation construction phase, it was necessary to wait several years until construction of the new generation of standard buildings could start. The initial third-generation buildings without construction difficulties appeared in the beginning of the 1970s. Third-generation apartments were about 5% more spacious than those of the second generation. An important feature appeared in the apartment layout. Larger apartments were equipped with separate guest toilet near the entrance while the bathroom and family toilet were placed in the private area of the apartment. The bathroom had a 1.7 m long bathtub and a place for a washing machine. The entrance was equipped with a double door to minimise heat loss and provide better sound insulation (Kazāks 1982). The buildings higher than five floors were equipped with garbage containers and buildings higher than six floors had an elevator. The buildings erected according to the latest standards had enlarged apartment spaces, entrance halls with daylight and strict apartment layouts. These qualities were included in the typical project series 119, developed by Latvian architects (arch. L. Plakane et al.), who received a gold medal at the USSR National Economic Achievement Exhibition (Piešiņš 1982) (Fig. 8.5).



Fig. 8.5 Large 1980s apartment building (typical project series 119th, arch. Plakane, L. et al.) in Pļavnieki (1985–90). *Source* Uģis Bratuškins

Although most of the residential buildings were built according to a series of standard projects, individually designed residential buildings were also constructed. These were usually separate buildings but occasionally were built in groups as well. Some of them were designed as experiments to test some of the project's improvements or spatial or technological innovations (Fig. 8.6). Often an individual



Fig. 8.6 Individually designed residential building in Brīvības street (arch. Staņa, M., Jākobsons, I., Kandars, H. 1967–1970). Scientific Collection of Latvian Museum of Architecture, S11–84. *Source* The Archive of Museum of Latvian Architecture

design was for a special customer or the result of a collaboration of several creative associations.

Approximately 200,000 apartments were built in Riga from 1958 to 1990. Despite the remarkable growth of construction volume that culminated in 1987, the demand for separate living space for each household was not satisfied (Rubīns 2004). Riga had a significant apartment deficit at the time because the increase in construction speed and volume did not keep up with the increasing number of inhabitants. As a result, the average provision of residential living space did not increase. In 1940, the provision of useful living space per person in Riga was 19.2 m² but at the end of the Soviet era at the beginning of the 1990s it was only 18 m².

8.6 Current Tendencies and Future Challenges

The processes of the last decades, housing reform (denationalisation and privatisation of the housing stock), land reform, etc., have caused significant changes in the way large-scale residential districts are managed and maintained.

In Latvia, denationalisation of the apartment houses and privatisation of flats by their owners began in 1991. Almost 99% of the municipal and state-owned buildings were offered for privatisation. These buildings were divided into apartment properties, where each property contained parts and infrastructure common to the entire building, e.g. residential communal space, outside walls, roof, foundation, communal engineering and communications and the attached land plot (Tsenkova 2002). As a result of denationalisation and privatisation of real estate, the ownership structure of the housing stock has considerably changed in Latvia. In Riga, more than 80% of the housing stock is privately owned (Centrālā Statistikas pārvalde 2006) (Table 8.2).

This has led to a broad and complex structure of multiple stakeholders which significantly delays defining common interests, setting goals and collective decision-making (Saferagic 2002; Tsenkova and Turner 2004). Because most of the buildings have high energy consumption and low heat resistance that significantly affect the costs for each apartment owner (Berglund 2002), the gradual renovation of these buildings is a topical question.

Significant influence regarding the possibilities for any improvement projects in large housing estates depends on land reform. Following the privatisation of real estate and denationalisation of residential buildings when land was tied to each building, the current land ownership structure is complex and fragmented. The logic of establishing a *microrayons* is not compatible with the current configuration where majority of buildings cross land boundaries (Fig. 8.7).

Table 8.2 Privatisation of apartments in Riga

	1996	2000	2006
Privatised apartments	2 547	156 232	192 856
% of total number of apartments	1.2%	68%	85%

Source Centrālā Statistikas pārvalde (2006)

account the specific socio-demographics of large housing estates such as the elderly with specific interests and financial resources, the lack of active progress from the inhabitants is concerning.

Despite these significant problems, Riga's large housing estates are active parts of the city where most of the inhabitants live. Apartments are in active demand in the real estate market; their price is about 50–70% of the price of new apartments in the same district (Latio 2017).



Fig. 8.8 New infill in large housing estate Purvciems. *Source* Sandra Treija



Fig. 8.9 New complex of high-rises in large housing estate Imanta. *Source* Sandra Treija

Unused land plots that are not attached to privatised buildings are viewed by property owners as potential new building sites. Since the year 2000, around 60 new residential buildings have been built on the territories of large housing estates as well as a large number of buildings near their borders (Figs. 8.8 and 8.9).

Population surveys also show a high level of satisfaction. In various surveys, 70–90% of the population report that they are satisfied with the residential area (Iedzīvotāju aptauja par dzīvi apkaimē, Purvciems, Aptauju Centrs 2013; Imantas iedzīvotāju vērtējums dzīvei apkaimē, SKDS 2013; Zolitūdes iedzīvotāju vērtējums dzīvei apkaimē, SKDS 2013). However, it is important to consider the stability of this satisfaction. Public perception and the supply of alternative housing in the real estate market can strongly impact residents' opinion (Herfert et al. 2013).

8.7 Conclusion

The design and construction of new residential areas and separate buildings in Riga during the Soviet period strictly adhered to the prevailing housing construction ideology. The main essence of it was a strong, almost totalitarian centralisation of the development and implementation of this ideology in Moscow for the entire USSR. That led to designs of standard residential buildings that were approved and constructed in accordance with the requirements of the central authority. Since the official goal was to build more and more square metres of residential space, standard apartment buildings were the best solution. This resulted in mass implementation of prefabricated reinforced concrete products, large-slab structures and spatial elements in the construction of apartments. The adaptation of these dwellings to the needs and requirements of today's communities is a challenge for the development of many cities.

There are questions that should be discussed among a wider professional audience related to the future of functional and physical organisation of large housing estates. Are the original spatial organisation and architecture of buildings in large housing estates considered to have an architectural value as a piece of the Modernism period and, in this context, respected? Assuming that the original structures are to be respected and that new buildings must fit in, it can be concluded that it would be difficult to attain a harmonious environment; each courtyard is a self-contained, wholly sealed composition. The original architects did not anticipate the need to accommodate further additions and modifications.

Previous studies have shown that the causes of degradation in large-scale residential areas are related to shared land ownership and management problems as well as economic and social situations. In order to carry out complex reconstruction projects, effective planning, financing, management and legal instruments must be developed. Finding solutions among parties with different interests is a complicated task due to changes that will directly affect real estate property rights.

So far, the balance between the quality of residential space in large housing estates and their market prices as well as the reputation and quality of the local educational institutions have kept the inhabitants in these areas. The limited financial capacity of the population, the lack of alternative residential areas and established social ties have been the main reasons which have allowed the large housing estates to remain an attractive choice for residents of the city. The main challenge is to maintain the attractiveness of these areas in the future. Improvements such as increasing energy efficiency, using renewable energy sources, changes in waste management and enhancing accessibility among other measures cannot be carried out without the support of all stakeholders.

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