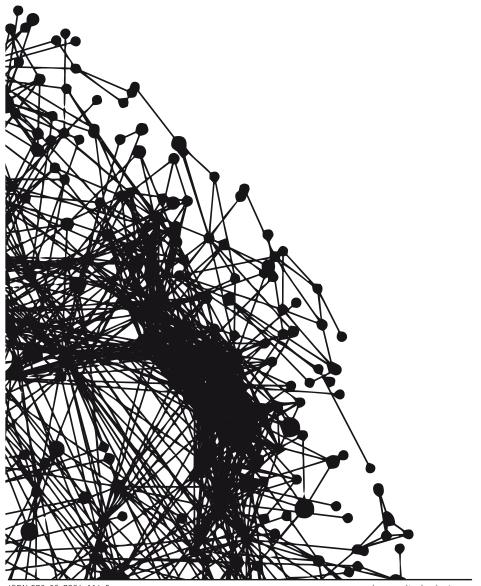
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BELGRADE, 3-4. APRIL 2014 KEEPING UP WITH TECHNOLOGIES TO IMPROVE PLACES

Eva Vaništa Lazarević, Aleksandra Krstić - Furundžić, Milena Vukmirović

Aleksandra Đukić,

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THE ILLEGAL SETTLEMENTS IN BELGRADE VS. TAMING CITY GROWTH: CASE STUDY OF BELGRADE

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ABSTRACT

The paper will explore the genesis and growth of illegal settlements in Serbian capital, with the aim to present the specificity of informal housing areas and to offer a possible approach for taming its further growth. Serbia is, like some other Balkan countries, facing the problems of incoherent urban and regional development, of tackling the urban growth and of deficit of integrated urban strategies. On the other hand, specific problems of Serbia are related to the possibilities of integration of special socio-economic groups, such as low income citizens. This pressure of these problems is most visible in Belgrade since it deals with the demographic pressure and growth for a long time. As a consequence of this pressure many previously agriculture areas at the fringes of the city have become illegal settlements.

On one hand, the paper will discuss spatial distribution and overall impact of illegal housing settlements in Belgrade territory, related to the sustainable urban growth and sustainable urban land use. One the other hand, it will offer the methodological framework given as the choice of aspects that should be treated in the process of integration of illegal settlements, while regulatory framework will point out the issues related to the shaping of settlements as liveable places. Conclusion remarks will emphasize the benefits and constraints of the chosen path for the integration process.⁷

Keywords: illegal settlements, sustainable urban growth, impact, distribution, methodological framework

⁷ This paper is done as a part of research project "Research and systematization of housing development in Serbia, in the context of globalization and European integrations, with the aim of housing quality and standard improvement" (TR 036034), financed by Ministry of education and science of Serbia.

PROBLEMS OF INCOHERENT LIBRAN AND REGIONAL DEVELOPMENT IN BELGRADE

The economic profile of Belgrade is both oriented to the inner market as well as to the wider scene, aiming to be competitive in the country and region. Being by far the most vibrant city in Serbia over a long period, due to its diversity of economic activities, Belgrade has been and still is a great demographic magnet. According to the official statistical data, 22.5% of the country's population lives in the city, but unofficially there are more than 25% of country population. Such trends have never been positive neither for Belgrade, making an enormous pressure about employment and housing, nor for the rest of Serbia, leaving many towns without adequate workforce and creating negative demographic situation.

Though city development policy is not oriented to and is not officially supporting the informal housing and economy, it is estimated that informal economy takes as much as 30% of economic activities, mostly in the field of retail, services, catering, manufacture and even construction industry (supporting building of informal settlements). At the same time, informal housing takes almost 44% of housing areas in Belgrade. Furthermore, the city growth has unwillingly turned to the agriculture land at the outskirts of the city. Some of the main issues related to the land use and city growth in Belgrade are:

- Inadequate use of the most attractive areas and locations in the city, especially in the river coastal areas:
- Unfinished and insufficient traffic network, mostly manifested in lack of transit roads, bridges and mass public transport;
- Illegal and unplanned settlements, which have grown and spread intensively over the Belgrade territory, with the exception of historical centre of Belgrade;
- Chaotic growth along the main traffic corridors;
- Generally insufficient and /or weak infrastructure equipment in metropolitan Belgrade area, with the exception of core area and New Belgrade;
- Unequally dispersed greenery and the lack of real green network.

Such negative trends have shaped the incoherent urban development of Belgrade and affected its relations and connection to the tributary areas.

GROWTH OF INFORMAL SETTLEMENTS IN BELGRADE

There is no unanimous opinion about the key causes of the genesis and growth of informal settlements in Belgrade, though the issue has been researched a great deal. Many authors (Hirt, 2009; Petovar, 2005; etc.) claim that the most important illegal growth in Belgrade has happened during the 90s, though it goes way back to the 80', even 70', when one of the largest informal settlements in the Europe, Kaludjerica (at the North eastern periphery of the city) has started its expansion. The causes for the initiation of the informal growth of the city as well as its further

unexpected spread of many settlements at Belgrade outskirts are different and are related to the specific socio-political context.

The very start of the informal settlements in Belgrade, according to our research, happened during the socialistic period, in late 70' and continued in 80', during the demographic pressure on Belgrade, as the capital of former Yugoslavia. Since the politics supported the idea of concentration and centralization of industrial, business, administrative and other activities, Belgrade had to cope with a huge number of new citizens. At one point, Belgrade took as much as 27% of total population in Serbia. Having that in mind, it is understandable that the city and its institutions could not enable decent habitation for such great number of people in short time. Great share of the new population has resolved the housing problems by getting an apartment in typical socialistic multi-family units in New Belgrade and other new settlements out of the city core. But also a great deal of new workforce was still in urgent search for place to live, so the pressure on the outskirts of Belgrade has begun, in the new form and typology of private, mostly one-family houses. During the 90's, the transition brought about fundamental changes in the sphere of housing ownership and planning regulation, encouraging private ownership, as well as the real estate market. Furthermore, the 90's was marked by extreme economic crises and high poverty of most of its inhabitants and had the negative effect on the city development (Simeuncevic, Mitrovic, 2012). Public sector has stopped investment in housing production and maintenance, so the number of dwellings built per year dramatically declined (Vujovic, Petrovic, 2007). On the other hand, market prices of the housing in the city were too big for most citizens and new migrants to the city, economically exhausted by sanctions, inflation and unemployment. As a result, for many Belgrade's immigrants the only chance for acquiring accommodation was private building of modest huts on the periphery of Belgrade (Zegarac, 1999). The continuing trends of demographic growth after 2000 (to 1.6 million officially, and even 2 million unofficially) has encouraged the informal sprawls of Belgrade.

Most of the illegal construction was erected on agricultural land on the fringes of the city, as well as in the areas inside city borders on the land designated for public use. Although the overall metropolitan area of the city has remained mostly the same, the percentage of non-built land (agricultural land, green and protected areas) has drastically decreased (Simeuncevic, Mitrovic, 2012). The informal construction became dominant form of housing development in Belgrade, ignoring the urban plans and legal frame. After 2000, the share of single-family housing building decreased compared to the total number of new housing, but the informal one-family housing remained significant.

Since the overall study of the informal growth in Belgrade has never been made, there are no exact data about it, so the estimations vary. For example Janic (1998) estimated there were about 150.000 illegal housing units in Belgrade, while others say that only 20% of the buildings in the peripheral areas were actually regulated by some urban plan (Djukic, Stupar, 2009). Third approximation is based on the number of applications for the legalization - 147000 illegal buildings (Petovar, 2005).

On the other hand our overall spatial analysis of the area and the approximate density increases the figures for more than 25%.

Table 2: Share of informal settlements in total Belgrade territory8

Surface	Share in housing areas in Belgrade	Share in Belgrade Master plan for 2021.
5,521 ha	43.9% of total housing areas (12,575 ha)	7.1% of total surface treated by MP (77,602 ha)

The largest informal housing settlements of Belgrade are situated at the North Eastern and Southern Belgrade outskirts, as well as on the left Danube riverbank, expanding deeply to the north. There are other smaller settlements and scattered informal housing groups all over the city borders and within the city structure. In most settlements relatively convenient terrain for building prevails, with the exception of left Danube river bank. Surprisingly, there is still a decent share of green areas. The concentration of buildings is the highest along the main traffic corridors.

Dominant land use is for residential areas – approximately 90% of total surface, but there is significant share of non-residential land use, such as retail, services and other commercial activities, mostly concentrated along the main traffic corridors. Traffic network is irregular and insufficient. Except the electrical network the infrastructure mostly does not exist. Some parts of the settlements are provided with water supply. Streets are narrow, without drainage and often are lined with large slope. There are almost no sidewalks for pedestrians. Since all kinds of transport overlap in a narrow corridor, safety is low. In the future, street regulation could be very difficult since it would cause massive demolishing of houses facing such streets in order to provide safe width of streets and sufficient place for infrastructure equipment.

Urban structure of such housing areas is irregular and spontaneous. There is no firm urban matrix with defined size of blocks or parcels. Parcels are often irregular and of insufficient size, not enabling good orientation and position of a house towards neighbouring houses. Therefore, privacy is often threatened since the space between houses is very narrow. Architectural design shows the spontaneous nature of building – houses are simply designed and in most cases without any particular characteristic of style. Decorations are rare and often inappropriately applied. The interior organization also lacks good architectural design but housing units are functional in its simplest meaning. One of the main problems about informal settlements' land use structure is lack of public spaces and services, such as schools, health and children day care facilities, which are a direct effect of illegal building process and absence of regulatory plans.

⁸ According to the research of authors of the paper (2012), as mentioned above.

Informal housing areas in Belgrade are mostly perceived as impersonal and disharmonized residential area, being neither quite urban, nor rural settlements, instead of being respective residential area, with high quality of life, great green areas and good urban pattern.

POSSIBLE APPROACH FOR TAMING INFORMAL GROWTH

The situation worldwide shows the negative trends of land conversion and city growth globally and as a consequence, the shrinking of agricultural and forest land. Managing peri-urban growth and improving living conditions in peri-urban areas contribute to socioeconomic equity in the city as whole. The document "Sustainable Land Use Planning – Peri Urban Growth" (World Bank Institute, 2012) names key interventions which include facilitating land tenure and management, increasing access to basic services which bring along environmental benefits, followed by service provision and regulatory coordination across jurisdictions. Cities in developing countries need to make realistic, minimal plans for urban expansion. The key areas for land use in those countries are: designation of adequate areas for accommodating projected expansion, investing in basic infrastructure to serve this expansion and protecting sensitive land from intrusion by new urban growth.

The lack of positive effects of urban policies about informal settlements made us question most of the conventional approaches to solve the problems of illegal settlements and informal urban growth in Belgrade. The sectorial policies and regulatory framework, as well as international strategies and instructions for overcoming the stressed problems of a contemporary city in developing countries seem to have been made to be implemented separately, not integrated with other aspects, problems and possible solutions. Each trying to function on its own, they fail to acknowledge the 'bigger picture'. What we propose is observing the problems overlapped in spatial, social, financial, environmental and other context. Therefore, it is necessary to change the prospective and conventional way of thinking of the problem. First of all, instead of thinking of informal sector as of the outlaws and invisible, let us try to treat it as reality. The social structure of the inhabitants and owners of the informal housing sector leads us to conclusion that this form of habitat has certainly gained some qualifications of the social housing as well. Furthermore, the informal settlements and their inhabitants, by self-making process of their homes, have surely lessened the pressure of the population that would require a habitation in the field of social/affordable housing sector.

In order to make the idea more feasible, some future steps are proposed:

- The change in the perception of informal settlements as of undesirable, nonappropriate form of housing, far from legal framework and professional standards, that has only to be exterminated;
- The change in the social housing sector legislation as well as in the planning and building sector legislation in the way they become more comprehensive and integrative, embracing each other; furthermore, the legislative and regulatory

framework of social housing should be more open to the public and private sector partnerships, as opposed to the actual practice of leaving it solely to the public sector; this could be the opening of the possibilities to include informal sector housing owners into the legal framework;

- The change in social housing typology so that it accepts and further develops other spatial and physical forms of social housing than it was the case in past, leading to greater diversification of types, including the transformed types of informal buildings;
- Acknowledging the values of the informal sector when possible, as opposed to
 the prevailing absolute criticism towards it; possible qualities of informal
 settlements, having in mind the spontaneously formed types in Belgrade, could
 be related to the relatively good quality of applied building materials in many
 cases, the size of the dwellings and its plots and most of all recognizing the
 amount of the greenery in the settlements. In order to recognize these values it
 is necessary to undertake a comprehensive research about the informal
 settlements and provide a reliable information data;
- Redefining the possibilities of upgrading the informal settlements so that they
 achieve newly defined standards of social/affordable housing.
- Institutional support in the form of new body assigned to assist upgrading informal sector/settlements, providing adequate services, traffic and infrastructure network:
- Specific education process (e.g. short term courses) for local communities with the aim to train them to assist in implementation of these ideas.

CONCLUDING REMARKS

Bringing new ideas, as opposed to the formal and conventional approach to the problem of informal settlements could make a step forward in the process of the integration of these 'orphans' of the city territory. By adopting positive policy towards existing informal settlements, by treating it as a valuable capital investment and by contributing to the integration of the local population instead of rejecting it as a city growth reality, Belgrade could become a pilot area for such alternative institutional arrangements and cooperative forms, supported by university research.

The developing countries, including Serbia, could acknowledge the need for balance between formal and informal sector. The presence of informal sector might be stimulating and encouraging for formal sector, as opposed to the common and prevailing opinion that they have to exclude each other. Though there are similarities about informal sector worldwide, it is not possible and not useful to define one pattern applicable all over the world. The treatment of informal sector should be related to the local characteristics and cultural and social background and other relevant aspects.

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