

GREEN SURGE

LODZ, POLAND

*Case Study City Portrait;
part of a GREEN SURGE study on urban green
infrastructure planning and governance in 20
European cities*

In cooperation with:

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INTRODUCTION

This case study portrait is part of a series of 20 case studies on urban green infrastructure planning and governance in European cities, undertaken in the course of the GREEN SURGE project. GREEN SURGE is a trans-national research project funded through the European Union's 7th Framework Programme. GREEN SURGE is an acronym for "Green Infrastructure and Urban Biodiversity for Sustainable Urban Development and the Green Economy". The project is identifying, developing and testing ways of connecting green spaces, biodiversity, people and the green economy, in order to meet the major urban challenges related to, e.g., climate change adaptation, demographic changes, human health and well-being.

Each portraits has the following content:

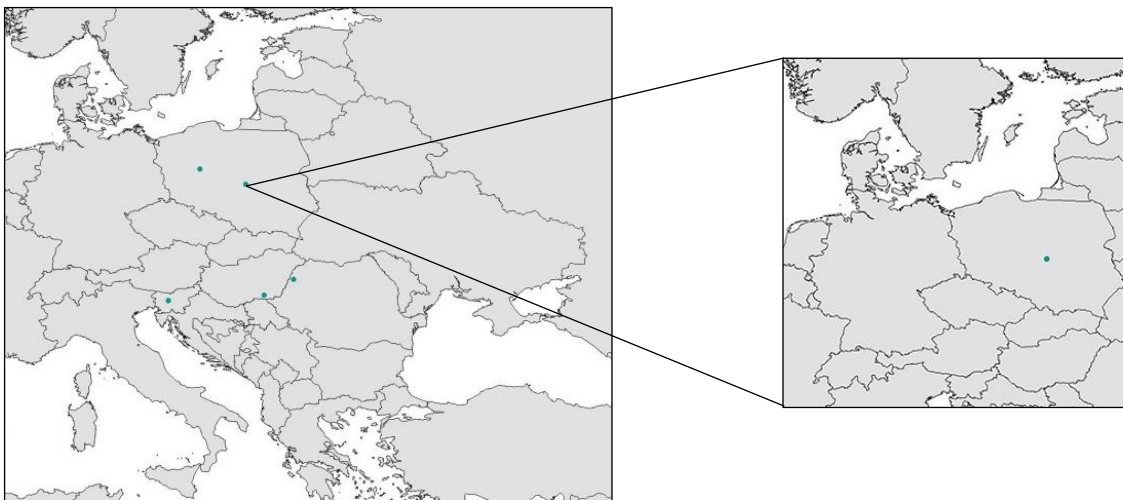
- **INTRODUCTION** – which contains location and green structure maps as well as basic information on the city-region (core city and larger urban zone).
- **URBAN AND REGIONAL PLANNING CHARACTERISTICS** – which describes the main characteristics of the planning system including instruments for the protection and enhancement of green space and objectives, achievements and challenges in urban green space planning
- **EXPERIENCES WITH INNOVATIVE GOVERNANCE PRACTICES** – which outlines how, in the views of selected actors, 'traditional' government-driven steering of green space planning and management on the one hand, and emerging forms of governance with a greater role for non-government actors on the other, play out in different cities.
- **URBAN GREEN INFRASTRUCTURE (UGI) THEMES AND STRATEGIES** – which considers the main themes about planning and how this relates to the concept of UGI as well as policy concepts. Furthermore, implementation and evaluation of planning instruments are discussed
- **URBAN GREEN SPACES: LINKAGES BETWEEN BIODIVERSITY AND CULTURE** – which is about the linkages between cultural diversity and biological diversity and how these impact on urban green spaces and urban green structures. Urban biocultural diversity is a recent concept emphasizing the links between biological diversity and cultural diversity. Research and policy directed at biocultural diversity can focus on the roles of ethnic or other groups, the role of a great range of cultural practices (which may or may not be connected to certain groups), and to physical objects or species bearing a relationship with specific cultural-historical practices.
- **CONCLUSION** to wrap up the main findings

A report with all case studies and more detailed background information can be found on the project's website <http://greensurge.eu>.

1) INTRODUCTION: Facts and Figures

Core city	Lodz	Biogeographic region	Continental
Region	Lodz Region	Planning family	New Member States
Area <ul style="list-style-type: none"> ▪ Core city ▪ Larger urban zone 	29 428 ha 285 834 ha	Population (2012) <ul style="list-style-type: none"> ▪ Core city ▪ Larger urban zone 	718 960 935 124
Average annual population change (1991–2012; Core city)	-0.75	Public recreational green space per capita (2006, Core city; m² per inhabitants)	11.81

Location Map

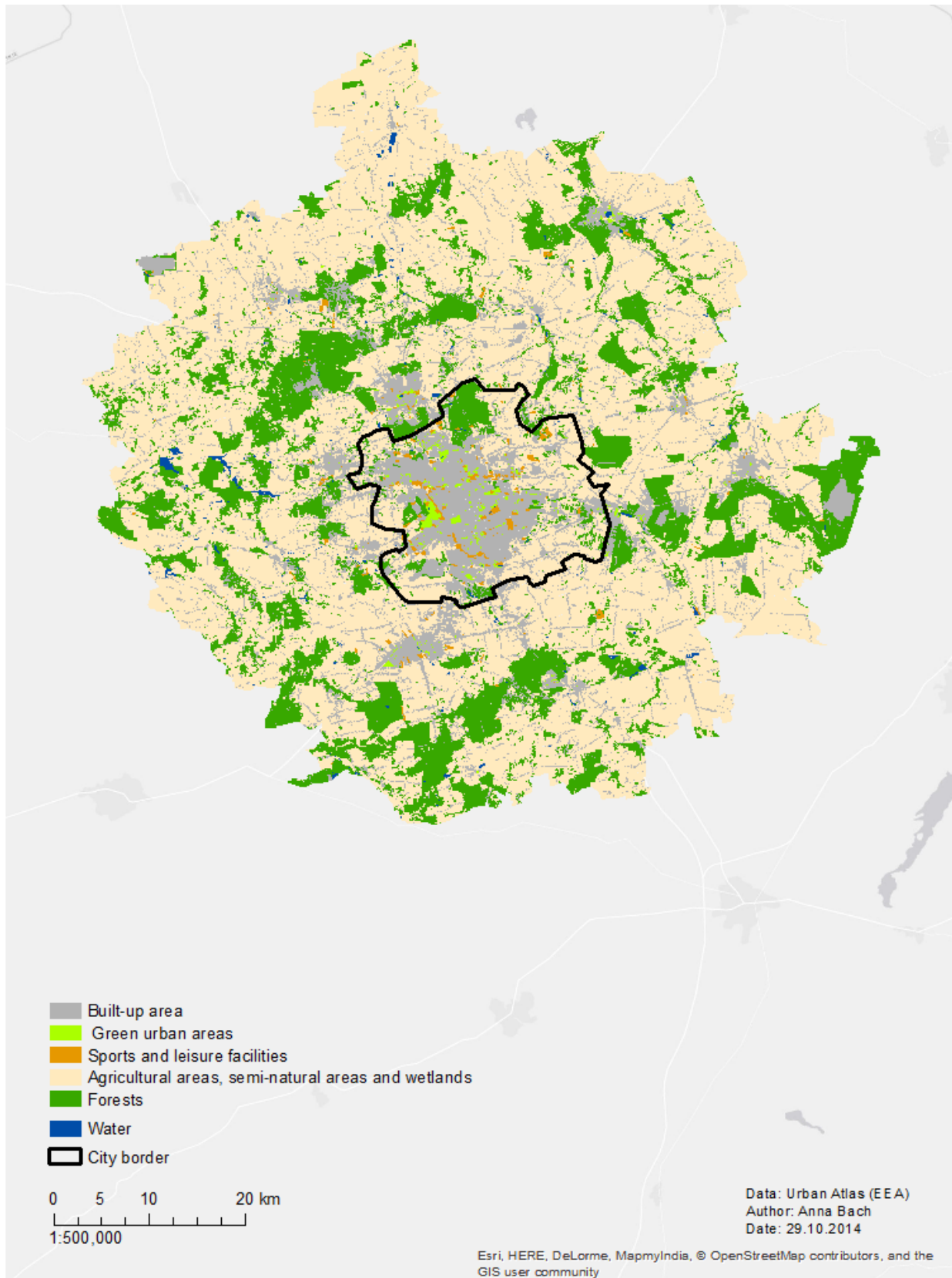


Lodz (Łódź in Polish) is the third largest city in Poland. It is the capital of the region, and is located approximately 135 kilometres southwest of Warsaw. It lies on the border between the catchment areas of the Vistula and Odra rivers. There are also some smaller rivers and brooks that are usually hidden underground. Lodz has got a diversity of parks and woods in its vicinity.

Having obtained city rights in the 15th century, its greatest development and later boom occurred in the 19th century, when Lodz became a centre of the textile industry. Since then, the city has struggled with many difficulties and contradictions. In the last 20 years the city has faced constant population decline (with 816 000 inhabitants registered in 1995).

Today, Lodz is a good example of an ongoing revitalization process, with large-scale infrastructure development programmes and new initiatives undertaken to renovate central areas in the city. These activities and broader strategies also aim at reurbanization, making the city more attractive and liveable. The traditionally important sectors of design, fashion, film and other audiovisual arts maintain their importance and enhance the image of Lodz as a creative city. Post-industrial areas are turned into spaces for new festival centres, ateliers, boutiques, studios and clubs. Lodz is also an important educational and cultural centre in Poland.

Map of Larger Urban Zone



2) URBAN AND REGIONAL PLANNING CHARACTERISTICS

General description of the planning system

In principle, spatial planning in Poland is organized hierarchically; at the national level general guidelines are introduced, which are then passed on to the regional and local municipal level. At the regional level there are spatial planning offices, such as the Spatial Planning Office of Lodz Region. The municipal administration has to comply with overarching regional level decisions, but to some extent it is autonomous in its spatial planning policies, and it can devise many solutions on its own. At the city level, the Lodz City Office's Bureau for Spatial Planning is the administrative body in charge. Representatives at the local municipal level take active part in discussions on regional plans.

The most important instrument that guides land use at the regional level is the Spatial Management Plan for the Lodz Region. Another relevant document that is still being drafted is the Spatial Management Plan of the Lodz Metropolitan Region. At the city level, the Masterplan – called the “Study of determinants and directions of spatial development” – is the most comprehensive document which covers the whole city and all aspects of spatial planning. Formally it is not legally binding, although it is often treated as such. The last version of the Masterplan was adopted in 2010 and a new version is being developed. For specific areas, quarters or districts, the city prepares local spatial management plans. However, only about 5% of the city's territory is covered by such plans and a vast majority of new developments are evaluated on an ad-hoc basis, using only the rule of good neighbourhood (fitting new structures into what is in the neighbourhood, which is sometimes roughly interpreted).

Instruments for the protection and enhancement of urban green space

The most important documents that focus on environment at regional level are the Environmental Protection Programme and Spatial Management Plan for the Lodz Region. Although both of these documents are not legally binding, they set the most important objectives in the area of environmental protection and spatial planning, including green space. The regional level state administration (Voivodship Authority) is responsible for the former document and focuses on meeting important national environmental objectives at the regional level. Regional level autonomous authorities are responsible for the latter through the Spatial Planning Office of the Lodz Region. Both documents highlight the importance of a consistent network of green areas in the region.

The Regional Directorate for Environmental Protection is the most important institution that oversees environmental issues and the protection of green spaces in the region. It represents national authorities at regional level. With regard to green spaces, it concentrates on Natura 2000 sites and other protected areas; these include landscape parks, which are collectively managed by the Group of Landscape Parks of the Lodz Region.

At city level two departments within the Lodz City Office are responsible for urban green space management (Urban Greenery Maintenance Authority) and another for environmental protection (Department for Environmental Protection and Agriculture). Instruments used at local level are the Environmental Protection and Municipal Management Policy 2020+, one of the sectoral policies accompanying the Integrated Development Strategy of Lodz 2020+. This strategy is not binding, but it guides all other documents and decisions made in the city. Another instrument is the Environmental Protection Programme for the city of Lodz, which indicates how the most important environmental issues defined by national authorities are dealt with at city level.

Objectives, achievements and challenges in urban green space planning

According to city officials, objectives are restoration, conservation and creation of green space and natural areas. The most important achievements named are: (1) the creation of new parks; (2) rehabilitation of the Sokolowka river valley; and (3) the practice of planting new trees as part of infrastructural investments. Additionally, the authors consider the creation of the concept of the Blue-Green Network an important achievement that was developed in a participatory process including the European Regional Centre for Ecohydrology under the auspices of UNESCO, the University of Lodz, Lodz City Office, and a number of other stakeholders. This network is a system connecting existing and proposed green and blue spaces in the city. The rehabilitation of the Sokolowka river valley is a pilot project carried out to implement the Blue-Green Network.

The most important challenges in urban green space planning identified by city authorities include: (1) preparing local spatial management plans to determine the acceptable land use types for the whole city; (2) creating a quantitative and qualitative inventory of green spaces, including potential tree planting sites; and (3) increasing funds for maintenance according to the increase of funds for investments in green space.

Besides funding, additional challenges for green space planning and management have been identified in a workshop organized by the Sendzimir Foundation and Lodz City Office in 2013. A group of 26 government and non-governmental actors suggested the following key challenges: (1) improving the quality of existing green spaces; (2) introducing strategic and integrated approaches to green space management, i.e. overcoming the problem of poor integration of such activities which are currently scattered among many different actors; and (3) improving public awareness of the importance of urban green space, e.g. educational activities, supporting public participation, preventing vandalism (Sendzimir Foundation 2013).



Lodz's major challenges (from left to right): Improving and securing the quality of urban green spaces remains a challenge. For example, many street trees have been cut. It is difficult to replace them and ensure their survival (photo: Lodz City Office, Urban Greenery Maintenance Authority). -- Introducing strategic and integrated practices requires overcoming sectoral "silo" approaches. An interdisciplinary group of stakeholders collected ideas for improving green space planning and management in Lodz in September 2013 (photo: Jerzy Dauksza).



Lodz's major achievements (from left to right): Several new parks have been created in recent years and others have been restored such as the newest park on Lososiowa street in Lodz, established in 2014 in an old industrial area (photo: Lodz City Office, Urban Greenery Maintenance Authority). -- The concept of Blue-Green Network has become a major idea guiding integrated planning and management of green and blue areas in Lodz (illustration: European Regional Centre for Ecohydrology).

3) EXPERIENCES WITH INNOVATIVE GOVERNANCE PRACTICES

Government ideas and practices regarding participation

City officials in Lodz understand planning as a well-designed, well-organized and conscious process. Local groups and individual inhabitants take part in planning, but in a spontaneous manner on an ad-hoc basis, and are only starting to do so in a well-organized manner. This new organized form of participation results from increasing professionalism of citizens organizing themselves, especially as coalitions of NGOs.

The influence of non-governmental actors on planning, design and management of green space has increased significantly, because the city started from a state of non-existing public involvement. Now Lodz has the biggest participatory budget in Poland, which provides the largest funds for green space in the history of the city covering investment, improvement, and restoration. Furthermore, several NGOs assist the city office, trying to get officials acquainted with new concepts and best practices. Some private property owners and developers understand that urban green space gives added value to their property and therefore take care of surrounding green spaces more often and more carefully than before. However, city officials emphasize that final decisions regarding green space planning should be made by professionals, although other stakeholders may influence these decisions.

Non-governmental actors usually initiate and organize their own involvement. The only example of initiation led by government actors is the participatory budget. The participatory budget is perceived as the most visible and most important example of sharing responsibilities between government and non-governmental actors (for details see below). Public consultations required by the Polish law might provide another example of participation organized by governments. However, so far this form of participation has been carried out only at the final stages of plan or policy development or decision-making processes.

Local initiatives

The city officials mentioned three local stakeholder initiatives. The first is the Nowy Romanów investment. The developer of a new residential estate transformed a nearby forest into a forest park, which was meant to serve as a recreational space for the estate's inhabitants while remaining freely accessible to the general public. The second concerns the Sokolowka river valley restoration (see below). The third regards the participatory budget that makes it possible for inhabitants to directly influence how public funds are spent.

In addition, the authors consider the international SWITCH project (within which Lodz served as a case study city) as a particularly important initiative. Although the project had a global reach, with the University of Lodz as one of 33 project partners, the city agreed to cooperate with the university and served as one of the learning labs. Many stakeholders were involved in an extensive participatory process and the concept of the Blue-Green Network was one of the project's outputs. The project's focus was on sustainable water management.

Supporting and hindering factors in participation as perceived by city officials

According to the city officials, one major factor contributing to participation of non-governmental actors in green space management, planning and design is the opportunity to use the participatory budget through suggestions for projects and voting for the most preferred projects. Participation is also supported by an increased awareness that economic success depends on the quality of the environment, including the quality of green space and changing lifestyles towards outdoor sports and social activities such as jogging or physical exercise.

The most important factor that hinders public participation is the lack of legal personalities in some active social movements that do not allow them to sign contracts and hence to become formal partners of the city office. Furthermore, poor computerization of the city office and its various departments mean lack of access to comprehensive information about space and spatial planning. Consequently, people do not have easy access to information about what is planned in different areas and, as a result, are less likely to get involved. The city also lacks a tradition of participation on the governmental and civic side. The society has to be willing to get involved and cooperate, but a change in attitude takes time. In addition, experience of the researchers shows that the public administration should be more open-minded towards new ideas and suggestions.

Examples of initiatives coming from local stakeholders

Sokolowka River Valley

The Sokolowka River Valley project was a multifaceted pilot project based on the Blue-Green Network. The goal of the project was the restoration of the river to support stormwater management and increase water retention capacity and biodiversity for improved quality of life in the whole catchment area.

For one section of the river, the city administration cooperated with a private developer that owned a housing estate in the area. The role of the developer was to create plans for this specific section and to implement them, while the local authority defined the main objectives and constraints for the area and arranged all the official procedures, such as obtaining consents from the relevant departments. The city was in charge of obtaining financial and legal approval and of monitoring the project.



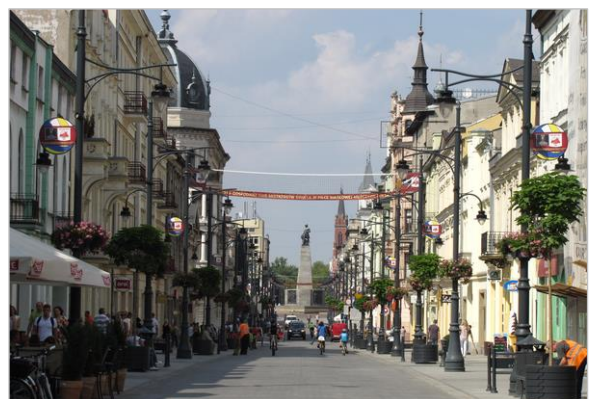
New stormwater retention ponds on Sokolowka river, which are part of a larger river rehabilitation plan (photo: Lodz City Office, Urban Greenery Maintenance Authority)

Participatory budgeting

The participatory budget allows inhabitants to directly influence how public funds are spent. Each year, since 2013, a percentage of the city budget is assigned to this programme. In 2014 approximately 1% of the planned expenses of the city was used for participatory budgeting. Anyone can submit project proposals and take part in the selection of proposals and social monitoring. Participants include local NGOs, informal social movements and individual inhabitants.

If project proposals are approved by the Lodz City Office, they are included in the list of projects from which citizens (aged 16+) can choose up to ten (five in their district and five at the city level).

This new approach to direct democracy is initiated and led by municipality and city officials as they prepare the websites, regulations, meetings, and voting. To some extent non-governmental stakeholders are also involved and some tasks are commissioned outside of the City Office, such as information and promotion.



Potted trees in Piotrkowska Street, the main commercial street of Lodz, financed by the 2013 participatory budget (photo: Jakub Kronenberg).

4) URBAN GREEN INFRASTRUCTURE (UGI) THEMES AND STRATEGIES

Main themes related to urban green space

Due to the very low rate of area covered by detailed spatial plans, business actors can create great pressure for property development and against conservation of urban green space. As a result, protecting green space has become the most important theme. Both documents, the Municipal Management and Environmental Protection Policy of the City of Lodz 2020+ and the Masterplan, focus on preserving the natural system of the city. The Municipal Management and Environmental Protection Policy of the City of Lodz 2020+ suggests that "to protect biodiversity, the city preserves relics of natural ecosystems and prevents further urbanization in areas which provide important ecological functions". These relics and areas have been indicated in the Masterplan as well as in the concept of the Blue-Green Network. Identifying an area or an object as a relic translates into its formal protection.

The main focus of the Blue-Green Network is on green and blue areas as a key factor influencing quality of life in the city, e.g. by improving the microclimate and providing public space for recreation. However, this concept is only loosely integrated into urban planning.

The Masterplan also refers to the Green Circle of Tradition and Culture (GCTC), which consists in green spaces being shaped by cultural processes such as palace gardens, rivers used in a specific way, or cemeteries that are considered as a kind of cultural heritage to be protected.

A main theme is also connected to water and sewage management to retain stormwater and restore water courses.

The Study of Determinants and Directions of Spatial Development of Lodz (Masterplan)

Original title: Studium uwarunkowan i kierunkow zagospodarowania przestrzennego miasta Lodzi

Date: 2010

Responsible department(s): President of the City

Spatial scale: City

Legal status: Non-binding, but approved by politics

Main themes

- Protection of the connectivity and the different components of an urban ecological system
- Conservation of historical and cultural heritage areas and valuable nature areas (Blue-Green Network, Green Circle of Tradition and Culture)

Parallels with GREEN SURGE policy concepts

- None

Understanding of UGI and representation of UGI principles

The concept of UGI is not explicitly mentioned in planning documents from Lodz. However, the Masterplan refers to a coherent "natural" or "ecological system" which is a guiding concept for environmental protection. The plan aims at the creation of a properly functioning natural system to improve the quality of the environment, especially with regard to air, water and landscape.

The natural system is considered as a network that also links to natural areas outside the city. The Blue-Green Network mentioned in both analysed documents also aims at connectivity. The Blue-Green Network is understood as a socio-ecological system of urban green areas enhancing self-regulating ecological processes and connecting parks and forests through ecological corridors running along the river valleys of Lodz. Furthermore, another concept developed in Lodz, the Green Circle of Tradition and Culture (GCTC), is intended as a network of (mainly) culturally significant places.

Different functions of the natural system are addressed separately as pro-

Municipal Management and Environmental Protection Policy of the City of Lodz 2020+

Original title: Polityka komunalna i ochrony srodowiska Miasta Lodzi 2020+

Date: 2013

Responsible department(s): Lodz City Office, Bureau for City strategy

Spatial scale: City

Legal status: Non-binding, but approved by politics

Main themes related to urban green space

- Securing environmental quality for the people
- Accessibility of green space

<p>vided by a biological system, a hydrological system, and a climatic system. Urban green space is also valued for its socio-cultural functions. The Masterplan aims at appropriate management in order to secure relevant functions, but does not explicitly consider increasing the multifunctionality of the natural system as a separate objective.</p> <p>Links between urban green space and other infrastructures are mentioned in regard to roads, which are seen as complementary to the natural system due to ventilation functions. The Masterplan aims at greening selected roads in order to improve the ventilation function. Other references to connecting grey and green infrastructures are made with regard to the sewage system and especially stormwater management.</p>	<ul style="list-style-type: none"> ▪ Restoration and partial renaturalization of water courses <p>Parallels with GREEN SURGE policy concepts</p> <ul style="list-style-type: none"> ▪ Biodiversity
<p>Implementation and evaluation</p> <p>The city of Lodz could improve all areas of implementation. For example, the Municipal Management and Environmental Protection Policy of the city sets many specific objectives and targets, but lacks proper monitoring mechanisms and must face the consequences of not meeting the targets.</p> <p>The most important factors mentioned by city officials that support implementation are pressure from inhabitants, funding for investments in urban green spaces, and obligations of the city defined in the sectoral policies accompanying the Integrated Development Strategy Lodz 2020+.</p> <p>Factors considered to hinder implementation include special interests of individuals or groups, especially those who want to use land to build. Furthermore, the allocation of funds is problematic because too little money is available for current maintenance, especially in comparison to the amounts available for investments. Also, poor cooperation among different units/departments within the municipality can hinder implementation.</p>	

5) URBAN GREEN SPACES: LINKAGES BETWEEN BIODIVERSITY AND CULTURE

Views of what biocultural diversity is referring to and how it is addressed in policy

The term biocultural diversity has never been explicitly used in Lodz. During the interview, representatives of the City Office indicated that green spaces are designed in a way to accommodate the needs of all users. In their opinion, this does not require any specific effort as the users are relatively homogenous, at least with regard to their cultural background. The only differences among the users of green spaces result from their age and interests, e.g. the young vs. the elderly, skaters vs. walkers. To take this diversity into account, facilities that accommodate the needs of different user groups are considered when designing green spaces. For this purpose, parks are often designed in different zones for relaxation or active recreation. An additional spontaneous interpretation of biocultural diversity is connecting nature and culture by organizing concerts, movie screenings, etc., in green areas.

In planning, cultural aspects of green spaces are highlighted within the concept of the Green Circle of Tradition and Culture (GCTC). The areas within the ring around the centre of Lodz include palaces and 19th century industrial factories, which are surrounded by green space and often located next to rivers, cemeteries and parks. Some parks still have remnants of the old forest that grew from pre-industrial times. These areas remind the inhabitants and visitors of tinteractions between nature and culture – being a product of cultural and natural processes of the past.

However, apart from the concept of GCTC, biodiversity and cultural diversity are usually discussed separately. Biodiversity conservation focuses mostly on the need to create nature reserves and protect native species; non-native species are often considered to be related to environmental degradation. As described above, in park management the needs of different user groups are primarily taken into account rather than biodiversity conservation concerns. In regard to species selection exotic trees, such as fast-growing poplars, are not planted in parks anymore, since native trees are better adapted to local urban conditions.

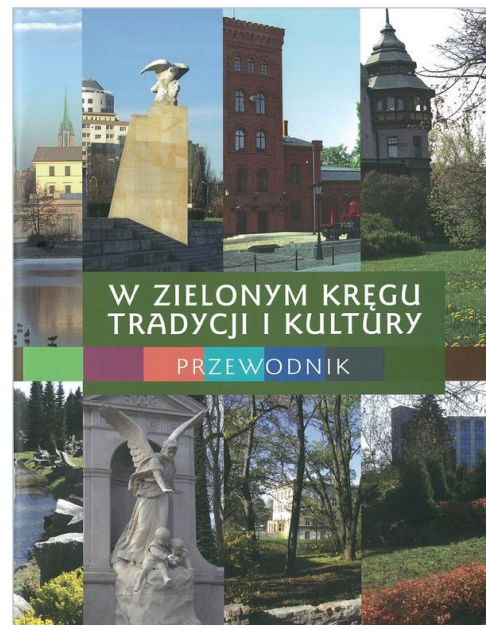
Bioculturally significant places

The city officials suggested that multifunctional green spaces, especially parks, are the best examples of biocultural diversity because they are used by different groups of people.

Within the GCTC, the most important sites are historical palaces and factories with remnants of historical parks and rivers. One particularly important site is Księży Młyn (Priest's Mill), with a well-preserved factory, palace, workers' residences, river and a lake, and a historical park on its borders. These sites represent a green cultural heritage reflecting historical land-use.

Another example is the Park na Zdrowiu, which has various attractions such as a zoological garden, an amusement park, and an outdoor concert venue.

Most other parks also have areas dedicated to sporting activities, such as football pitches, tennis courts, open-air fitness equipment, roller-skating tracks, playgrounds and/or educational trails.



Cover of the guide of Green Circle of Tradition and Culture, published by the City Office (photo: City Office of Lodz, 2011)



The Grohman-Scheibler factory at Księży Młyn is historically one of the most important industrial monuments in Łódź. It was built on one of the city's 18 rivers (photo: CC BY-SA 3.0, wikipedia.org, Polimerek, 2005).



Map of Green Circle of Tradition and Culture from the guide published by the City Office – the circle surrounds the very centre of Łódź (photo: City Office of Łódź, 2011)

6) CONCLUSION

Lodz, a former textile industry centre in Poland, is today a good example of a revitalization process. The process of urban redevelopment is still under way. In principle, spatial planning is organized hierarchically and at the national level general guidelines are introduced, which are then passed on to the regional and municipal levels. The regional administration is responsible for ensuring that different parts of the region develop in a balanced and coherent way. The administration pays attention to the interconnected natural environment within the region, and even within the Lodz agglomeration, although compared to other sectors green space planning is not very high on the list of priorities. The local municipal level is autonomous in its spatial planning policies; however, even though the city has a masterplan, only 5 % of the urban area is covered by detailed local spatial plans, which makes it difficult to protect green spaces against developmental pressures. For this reason the main theme of green space planning in Lodz is “preservation and protection”.

The city places emphasis on protecting native plant species not only because of their heritage values but also for their tolerance to local conditions. Two concepts for green space networks highlight their cultural, ecological and quality of life aspects. However, these concepts are mostly used as guiding ideas and relatively few projects, such as Sokolowka river rehabilitation, have been carried out to implement them in practice. This project is perceived by the city administration as one of the main achievements.

Lodz has plans and policies that take urban green space into account, such as the Municipal Management and Environmental Protection Policy of the City of Lodz 2020+. However, scarcity of funds for maintenance and the low level of cooperation among different actors make implementation difficult.

The level of public participation is constantly growing as a result of increasing awareness of environmental values. The activity of different science centres in this field supports the municipality, e.g. in regard to development of the Blue-Green Network, which is the result of an extensive participatory planning process. Another example of results from public participation is participatory budgeting for investments in urban green space. Non-governmental actors campaigning for green spaces are becoming more commonplace. This is increasingly important, in spite of the still rather poor social capital in Poland and poor social empowerment resulting from the fact that society is still in the process of learning about public participation.

Biocultural diversity in urban green space planning in Lodz is best reflected in the concept of the Green Circle of Tradition and Culture, which emphasizes that modern green areas result from historical cultural and land use practices. Thus, the way in which land was managed by different social groups and for different purposes in the past is reflected in the green areas the city has today.

LINKS AND REFERENCES

Websites of municipality and core organizations

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- **Lodz City Office's Bureau for Spatial Planning:** <http://www.mpu.lodz.pl>
- **Department of Agriculture and Environmental Protection of Lodz Region Marshall Office:** <http://www.bip.lodzkie.pl/departament-rolnictwa-i-ochrony-srodowiska>
- **Regional Directorate for Environmental Protection in Lodz:** <http://bip.lodz.rdos.gov.pl>
- **Group of Landscape Parks of Lodz Region:** <http://www.parkilodzkie.pl>
- **Urban Greenery Maintenance Authority:** <http://www.zzm.lodz.pl>

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- **Area core city and larger urban zone:** *Urban Atlas*.
- **Population core city and larger urban zone** (2012 or latest): mainly *Urban Audit*. Note: in a few cases the population numbers have been provided by researchers based on statistical data
- **Average annual population change rate** (Core city; 1990-2012 or similar): calculated $[(100 * \text{population number last year} / \text{population number first year}) - 100] / (\text{last year} - \text{first year})$ based on *Urban Audit*.
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