Integrated Approach as a Means of Leading the Degraded Post-Industrial Areas Out of Crisis - A Case Study of Lodz

Monika Cysek-Pawlak¹, Sylwia Krzysztofik¹

¹Łódź University of Technology, Poland

monika.cysek@p.lodz.pl

Abstract. The article analyses the issue of modern development strategies in post-industrial areas. The issue concerns many regions in Europe and is one of the fundamental challenges of urban policy. The aim of the study is to define the methods of achieving lasting changes in the quality of life in the degenerated areas of post-industrial cities. If projects in the spatial, cultural, economic and social sphere are carried out simultaneously, they produce long-term effects. Projects in the spatial, cultural, economic and social sphere carried out simultaneously produce long-term effects. In this context, projects improving the accessibility of the area, making use of its cultural heritage, which naturally includes architectural elements that create the identity of the city, as well as activities aimed at an economic recovery, are absolutely vital. Another key element is changing the city image, both in the eyes of the residents as well as outsiders. The study analyses approaches adopted by the urban policy of Lodz, a city which has received the largest EU funding for urban renewal in Poland. The article presents new legal mechanisms introduced by the Urban Renewal Act to the Polish legal system. The redevelopment of the city's transport network, renovation of historic urban tissue, improving civil engineering infrastructure and quality of public spaces are all part of the projects implemented in Lodz. Moreover, a proposal to locate a cultural event of international importance in the heart of the city centre has been put forward. Lodz as the only European city applied to organize EXPO 2022. The exhibition area is located in the immediate vicinity of the newly built multimodal railway station, the biggest railway investment in the country in the recent years. These projects will improve city image, enhance economic recovery and raise the quality of life in the city centre. A consistent implementation of the development strategy, despite the centralization of projects in the city centre, will also have a positive impact on smaller urban settlements in the agglomeration, leading to sustainable development of the metropolis

1. Introduction

Many cities and agglomerations, particularly in Europe, face today a major question of how to use their post-industrial heritage. Blooming and growing during the industrial revolution in the 19th c., in the early 1970s many cities started to decline as a result of the oil crisis. Because of the complexity of problems observed in urban areas, it is expected that the modern definition of a new urban strategy should promote the use of interdisciplinary approaches.

This article presents the results of a study of Lodz, a city lying in the centre of Poland. Its growth, heavily dependent on the textile industry, started in the early 19th c. and continued until political transition in the 1990s that had a serious and detrimental effect on its industrial base. Having lost access to important markets in the east, many factories first cut their production and then abandoned it completely. The consequences of this abrupt change included not only economic, social and spatial consequences, such as rampant emigration, unemployment rates higher than in other Polish cities, and almost 200 empty factories in the heart of the city, but most of all an attempt to redefine the contemporary identity of the city [1]. In creating its new image, Lodz concentrated most efforts on its heritage [2]. The approach resulted in a development strategy including a pilot Area Revitalisation
Programme, which is expected to draw the largest funding for the revitalization of neglected urban tissue in the city’s centre of all Polish cities [3]. The programme is based on a new legal framework provided by the Revitalisation Act of 2015, in which revitalisation has been defined as an interdisciplinary activity. This new approach to revitalisation is consistent with the hypothesis tested in the article that for a revitalisation process to be effective the spatial, cultural and economic aspects of the designated area must be addressed. All these aspects are analysed in the context of the Area Revitalisation Programme for Lodz. What makes the Programme particularly worth looking at is the fact that it has already been made operational and tenders for the delivery of some works to be completed by the end of 2020 have been announced. Moreover, the city’s application for hosting the EXPO 2022 may work as a catalyst supporting the turnaround of the area designated for revitalisation.

2. Spatial issue
Following the collapse of its textile industry Lodz had to face huge unemployment and social degradation of those residents who were not entrepreneurial enough to cope with the new situation. Those who were better-off willingly sought new homes in the outskirts of the city. As land development projects were drifting away from the central areas, the quality of buildings and spaces in these areas was gradually deteriorating [4]. To tackle this problem, the strategies, plans and programmes developed by Lodz indicate an urgent need to improve the quality of buildings and public spaces in the central part of the city called the Metropolitan Area as a means of raising the living standard of its residents.

The legal framework for revitalisation processes and tools enabling the degraded urban areas to be turned around is provided by the Revitalisation Act of 9 October 2015 [5]. Pursuant to the Act, revitalisation should focus on a designated urban area that may not be larger than 20 percent of the city’s total area and may not be populated by more than 30 percent of residents. The Act also allows municipalities to exercise a pre-emption right to sites within the designated area, to deny the issue of land development requirements to investors, to create new instruments such as municipal revitalisation programmes, to pass local laws establishing special revitalisation zones, and to create local revitalisation plans. In the Municipal Revitalisation Programme formulated by the City of Lodz the degraded area and the revitalisation area have the same borders and cover almost all of the Metropolitan Area. The area designated for revitalisation accounts for almost 5 percent of the city’s area and is populated by 18% of its residents.

![Figure 1](image)

**Figure 1.** The position of the Metropolitan Zone and the revitalised area within the administrative borders of the city; the Core and the site of the EXPO inside the revitalized area

The focus of the Area Revitalisation Programme is on the so-called Core of the Metropolitan Area, which has been divided among 20 projects. Eight of them have the status of priority projects. Their primary purpose is to improve the quality of public spaces and the state of repair of the buildings in prominent parts of the city. Public spaces will be improved to make them more useful and safer for the public, as well as more accessible to people with disabilities, and to increase the number of people using public transport and bicycles. The street system will be redesigned: traffic will be slowed down by raised
intersections, the pavements will be widened, the number of parking places will be reduced and tree lines will be planted. The changes are intended to increase the number and activity of the users of public spaces. The whole area to undergo redevelopment amounts to impressive 162 hectares.

The blocks of streets in Łódź are several times as big as in other cities. Those in the city centre have the same size as the lots that were granted to craftsmen seeking to establish their settlements in the 19th c., when the city’s industry was booming [6]. After a time, as the boom continued, the original sites of weavers’ houses were developed more densely with more impressive, prestigious buildings that can be seen today along the central streets in Lodz.

![Figure 2. Blocks of streets in the centre of Łódź compared with several other cities](image)

In some cases, the middle sections of the long and narrow blocks of streets in the central part of the city, resembling the strips of farming land, are useless spaces with no access to the road system. The problem could be solved by creating green pedestrian walks and special access roads, but its implementation is hindered by the complicated land ownership structure. It has already been shown to work in some cases, though, so new sections of roads will be constructed in years to come.

![Figure 3. left: the projected system of cross streets in the centre of Lodz (partly completed); right; the projected cross-streets inside a block; Pasaż Lutra connecting Piotrkowska and Wschodnia Streets](image)

The redevelopment of the key sites in the centre of the city that used to be its main squares in the medieval times and in the 19th c. (Stary Rynek and Plac Wolności) will be carried out under the Area Revitalisation Project no. 4. The south side of Plac Wolności will continue to be a pedestrian zone, thus allowing the car-free Piotrkowska St., the backbone of the city’s centre, to seamlessly reach the central point of the square. The octagonal shape of Plac Wolności will be accentuated by lines of trees, small architecture and the pavement pattern. The project is expected to be completed by the end of 2023.
Other interesting changes in the same area are proposed for Park Staromiejski (the Old Town Park), which is a short walk from Plac Wolności and borders on Stary Rynek (the Old Market). New elements and plantings are projected to bring its history back to life. Germans during World War II made here the buffer zone dividing the Litzmannstadt Ghetto from the rest of the city - they pulled down all buildings and expelled the residents. The pre-war layout of the demolished district will be resurrected by means of plants, small architecture and lights. The old facades of buildings near the old intersection of Wolborska St. and Jerozolimska St. will be recreated by retaining walls, the pavement pattern and lamp posts designed to resemble their historic predecessors. The elements of small architecture will be used to commemorate the landmark pre-war objects; for instance, the entries to the pre-war Eljasz Karo market will be marked by gates merging into the projected layout of the park. According to the plan, the redevelopment of the park should be completed in 2023.

The central part of the city covered by the „New Centre of Lodz” programme is the site of the largest projects, completed or in progress, some of which are of region-wide importance. The most prominent of them are located in the vicinity of the multimodal train station that became operational several months ago. The station and some sections of the tracks have been constructed underground, as a result of which an area of 100ha has been released for new development projects. The station has been designed as a transportation hub capable of handling high-speed trains, regional trains, long-distance coaches and city transport. The railway system upgrading plan provides also for the construction of a cross-city tunnel for trains, which will link the city’s main station with all destinations. The „New Centre of Lodz” programme is very clear that the neglected post-railway areas need to be developed and be given new functions, including metropolitan functions. The street system, public spaces and new buildings in the New Centre of Lodz will correspond to the existing spatial arrangements and will ensure the preservation of elements defining the identity of the city.

3. Cultural challenge
In creating a development strategy for post-industrial areas projects enhancing the identity of a place are vital. Therefore, Lodz gives special attention to the elements of historic factory complexes and tenement buildings valued for their eclectic architecture. A manifestation of this approach is a number of projects undertaken by private investors, e.g. Manufaktura (a mall and an entertainment centre), Off Piotrkowska (a venue for meetings and creative services), as well as municipal projects such as Mia100kamienic (a renovation programme for tenement buildings), Art Inkubator (a centre for creative industries), or EC1 (the first in Lodz heat and power station that has been turned into an arts and culture centre). The Area Revitalisation Programme provides also for the redevelopment of some historic buildings into centres of arts and culture.

The redevelopment of the tenement building at 46 Tuwima St. and of the former Wigencja spinning mill located close to the New Centre of Lodz is particularly worth mentioning here. Both projects are meant to complement the range of cultural services provided in the New Centre. The first of the buildings will be used for the branch of the municipal library and as office space for the adjacent culture and arts centre EC1. The extension projected for the building will be designed using forms typical of modern architecture and its historic part facing the Tuwima Street will be meticulously renovated. The building
is envisaged as a metaphor presenting the modern image of the city. The decision to turn it into a public library is significant, because it shows the role of education in the municipality’s development strategy for the central part of the city.

Figure 5. – left: the projected redevelopment of the tenement building at 46 Tuwima St.; right: the projected redevelopment of Wigencja spinning mill.

The Area Revitalisation Programme addresses also the cultural needs of the youngest residents of the city. Following redevelopment, the aforementioned Wigencja spinning mill will provide space for a puppet theatre, workshop rooms and a restaurant with a special menu for kids. Because Wigencja is a piece of the cultural heritage of Lodz, its new design had to be negotiated with the heritage protection officer to ensure harmony between its functionality imposed by modern standards and the historical atmosphere of the place.

When discussing the role of culture in the revitalization of post-industrial sites, the Lodz efforts to host the EXPO 2022 need to be mentioned, because urban heritage is made up as much by structures embedded in the cultural landscape of a place (libraries, museums, theatres, etc.) as by concerts and festivals. The opportunities related to EXPO should not be missed and the event should be looked at as an ingredient of the overall cultural strategy of Lodz.

Lodz also seeks to host the International Specialized EXPO. The event is held every year and its organizers are required to provide a space at least 25ha. Lodz has proposed a unique, given the area requirements, central location for the exhibition, with a view to making it more attractive and accelerating its re-urbanisation. The short distance between the Expo site and the main street in the city - Piotrkowska St. – may also encourage the Expo visitors to learn more about the culture of the city and help the local economy that needs a new impulse to grow.

The theme of the EXPO, „City Re:Invented”, clearly indicates that the exhibition will be organized around the urban revitalisation. It is planned that if the city is awarded the event, the exhibition halls will be installed in structures making up its post-industrial heritage. The EXPO strategy adopted by the city is a tough challenge for architects, who are expected to design an urban area that can serve the contemporary needs of residents after the event.

Figure 6. The design of Expo Łódź 2022, a view of the site from EC1. The Expo 2022 feasibility study materials. Source: The Ministry of Development and the City Council of Lodz, 2016
4. Economic aspects
Most revitalisation projects in the centre of Łódź will be financed by external funds. As of today, an impressive amount of more than PLN 1 billion has been raised. The funds will be used to repair buildings, many of which are protected as natural heritage, to redevelop public spaces and the street system, and to renovate and enlarge the city’s parks. Although the projects rarely provide mechanisms that could support economic recovery in the city’s centre, they may unleash changes in this area and change its perception in the long term.

Table 1. Projected costs of revitalisation projects by priority area in Łódź (PLN)

| Specification | Total | Incl.: | Description of buildings selected for redevelopment |
|---------------|-------|-------|----------------------------------------------------|
|               |       |       | Renovation of buildings w in the Register of Historic Monuments | Real estate | buildings |
| Area 1        | 208 518 706.00 | 54 808 000.00 | 57 | 196 |
| Area 2        | 106 219 629.00 | 38 619 469.52 | 118 | 370 |
| Area 3        | 78 635 543.00 | 20 298 889.50 | 45 | 142 |
| Area 4        | 199 633 148.00 | 17 300 000.00 | 96 | 341 |
| Area 5        | 68 090 000.00 | 12 630 000.00 | 83 | 207 |
| Area 6        | 55 113 467.00 | 30 552 359.00 | 43 | 133 |
| Area 7        | 219 449 450.00 | 50 850 000.00 | 74 | 208 |
| Area 8        | 76 274 000.00 | 43 100 000.00 | 30 | 111 |
| Areas 1 through 8, total | 1 011 933 943.00 | 220 306 359.02 | 546 | 1 708 |

*developed by the authors based on the Municipal Revitalisation Plan [7].

To make sure that the improvements made by revitalisation projects are sustainable, economic recovery of the designated area is necessary [8]. It cannot be achieved, however, unless the projects are enhanced by municipal programmes, particularly by housing policy programmes. Programmes aimed to improve the quality of built environment in the centre of the city should be continued and extended, with more emphasis on improvements to technical infrastructure, including the connection of the existing buildings to the heating and sewer systems.

It is expected that the investment value of central sites in Lodz will grow alongside improving quality of central spaces and buildings, likewise interest in projects carried out through private-public partnership or as private ventures. Business projects in the Metropolitan Area should be eligible for various forms of support, such as exemptions from the real estate tax and extra charges, a rent freeze, or reduction of rents paid by the providers of services. The Revitalisation Act allows new mechanisms to be used in support of landlords or homeowners’ associations. A system of incentives and solutions encouraging private investors to engage in land development activity and better management of municipal housing stock are also worth considering.

A key to successful revitalisation is public institutions collaborating in implementing policy aimed to turn around the centre of the city. This process requires the creation of mechanisms allowing public buildings to be located in line with the „back-to-the centre” policy. The recovery policy can be made much more effective by introducing into the central area projects serving public purposes, for instance buildings of tertiary schools,
halls of residence, R&D centres, and offices, all of which add to the diversity of functions in the central part of the city and attract new users and residents.

5. Social impact
In analysing the social aspects of revitalisation both ‘soft’ measures and ‘hard’ projects, particularly housing projects, need to be considered. One of the goals pursued by the Area Revitalization Programme is to renovate the municipal housing stock in Łódź. It is projected that most units above the ground floor will be used for residential purposes. As part of the solution of social problems sheltered flats (39 Kilińskiego St.) and daily-care homes (33 Tuwima St., etc.) will be provided for persons who have problems because of disabilities or age, or starting independent life. The decision to locate these facilities in the centre of the city follows the municipality’s policy aimed to prevent social exclusion of their users.

The Area Revitalisation Programme provides also for the establishment of a Community Support Centre (35 Tuwima St.), a project intended to stimulate the social and economic activity of its users. It will house a branch of the Municipal Welfare Centre and will be provided with a pocket park. Green spaces will be an opportunity for people at all ages to recreate and enjoy physical activity. Children and senior residents will have access to playgrounds and gyms, respectively. The extension of the tenement building at 33 Tuwima St., will house a special programme for senior residents called „Senior-WIGOR”. The daily-care home to be run by it will be a place for seniors to meet and participate in a variety of motivating courses.

Figure 7. left: the projected pocket park before the Community Support Centre right: the projected redevelopment of the tenement building at 33 Tuwima St.

A vital element of revitalisation programmes is community involvement and public consultations, because projects must address the true problems of local residents. The revitalisation programme for Łódź contains a number of interactive measures, such as consultation meetings, walking tours and meetings for smaller groups to discuss specific issues relating to some tenement building or functions, e.g. services that will provided in the area. According to what has already been observed, implementing guidelines worked out during public consultations can be very difficult and the process will certainly have to be improved in the future.

6. Conclusion
The process of revitalisation is guided by three general goals: to lift the designated area from crisis, to monitor the process outcomes and to ensure their long-term sustainability. There also three specific goals that revitalisation is expected to accomplish: the protection of cultural heritage (tangible and intangible), social integration and stimulation of economic processes. They are further subdivided into technical goals, urban planning and architectural goals, environmental goals and socio-economic goals. [9]. It is noteworthy that revitalisation is now understood as a process going beyond repair works.

To raise the living standard in the central area of Lodz its built environment and spaces need to be improved, but this is only one aspect of revitalisation that should be accompanied by other measures. For the results of revitalisation, such as higher quality of life in the crisis-affected areas, to be sustainable in the long term, higher activity of the residents and economic recovery are necessary. The mission of the Municipal
Revitalisation Programme for Łódź is to „unleash the potential of the centre of Łódź and of its residents” through complementary activities addressing several areas: social, economic, cultural and spatial. Economic recovery is to be accomplished by supporting local business, including crafts representing the cultural heritage of the city, and by promoting education enhancing entrepreneurial attitudes. The problem of inherited poverty will be tackled by encouraging citizens to be active and participate in culture. For revitalisation impacts on the designated areas to maintain in the long term, a combination of actions improving the quality of buildings and urban spaces with economic and social programmes is necessary.

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