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Integrated Urban Regeneration - Solution for Cities Revitalize

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Abstract

To overcome the crisis which present society faces, it's necessary find solutions, adopt new strategies, leading to transforming too and revitalizing urban areas. Urban regeneration means the improvement the quality of life and investing in the future, this action being a very broad one, continues, difficult, but not impossible, in any case imperative. This paper presents the results of a study on integrated sustainable urban regeneration in several European countries, including Romania, and comparison between these countries in terms of urban regeneration.

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1. Introduction

The crisis that present society travels for several years has deeply affected the construction industry and the housing market, stopping investments in public infrastructure and rising the unemployment. To overcome this difficult situation, it's necessary to think and adopt new strategies. Also there are necessary actions, studies, researches, legislative proposals, policy formulation, leading to the transformation and regeneration of urban areas, to preserve the environment and the landscape and to stop the loss of grounds for other purposes. In the European Union, the sustainable development principle underlying of all policies and strategies.

Thus, the common agricultural policy, cohesion policy, community policy on research and development, transport policy and the energy and telecommunications policy, environmental policy and housing policy too, based on the principle of sustainable development (Albu, 2006).

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The most important interventions, in the recent decades, targeting urban areas, are considering the urban sustainable development and regeneration, which is one of the objectives of European Union cohesion policy. It's a process focused on solving important problems of the city, which will benefit both current population, and the future population, in order to achieve the quality standards of the disadvantaged communities.

Urban regeneration, according to Roberts and Sykes (2000) it's an action aimed to solve urban problems and finding a long-term improvements to the economic, physical, social and environmental aspects of an area to be changed. The most important urban regeneration principles there are: - the need to establish clear and measurable objectives of urban regeneration process and their according with the objectives of sustainable development; - adequate analysis of local conditions; - the need of the efficiently use of natural, economic and human available resources; - participation and cooperation among stakeholders, leading to improve physical condition of buildings, social structure, economic base and environmental conditions (Roberts and Sykes, 2000).

Urban regeneration is an opportunity in solving problems such as: the lack of identity of a residential area, the total lack of public spaces and the high urban density, which makes it impossible the widening of roads, green areas creation, planting trees along the sidewalks etc. ..The urban regeneration term is synonymous with urban rehabilitation or urban renovation. Whatever the mode of expression, this term is based, therefore, on a set of action principles, aiming at sustainable development of the cities.

Urban regeneration involves the distressed urban areas revitalization, through actions such as: - rehabilitation of historic areas; - improvement of living conditions in residential districts; - redevelopment of public spaces: squares, parks, urban furniture and so on; - modernization of urban infrastructure: water networks, gas, electricity, transport infrastructure. A project of this complexity, such as that of sustainable urban regeneration can be achieved only through the cooperation between institutions, universities, urbanists, environmental associations and builders. Urban rehabilitation actions are based on social, economic and technical.

Social reasons, there are:

- improvement of life quality;
- adaptation of buildings and housing to our needs;
- improvement the image of the housing area or district;
- improvement the network of social relationships and perception of security.

Economic reasons, are explained by the fact that: thus we revalued building or dwelling and it's our responsibility is and we must invest in it. Technical reasons, are explained thus through continuous maintenance it's avoid excessive damage and increase of long-term costs.

European Union supports the urban regeneration process "through the Structural Funds, to which EU countries can access participating to the european programs in urbanism" (Ministry of Development, Public Works and Housing, 2007). EU funding for urban regeneration projects is made from European Fund for Regional Development and European Social Fund. European Union contribution is not exceed usually the half of the project value. Urban regeneration projects receive money from the EU, if that propose both a sustainable spatial development, and the framing in the general Urban Plan (PUG).

There are highly complex projects, which contain provisions to entire city scale, their essence is to create a superior comfort and an aesthetics positive change. Not all the projects which are aimed at different urban targets are urban regeneration projects, missing the social, architectural and financial dimension. Urban Development Ministers of the European Union adopted at Toledo, in 2011, "Declaration of Toledo," where it's assert that integrated urban regeneration "aims to optimize, preserve and revitalize the whole existing urban capital (environment built, heritage, social capital), compared to other forms of intervention, in which from all this human capital only the land value is prioritized and preserved by traumatic demolition and by replacing the rest of the urban and most lamentably - social capital". (Présidence Espanola, 2010).

2. Urban regeneration in Romania

Romanian cities whatever the size, face in last decades with issues such as:

- degradation of building space;
- quality of life lower than the European standards;
- low competitiveness of cities;
- unkempt public spaces;
- poor urban infrastructure and services;
- inefficient public transport;
- massive loss of green spaces;
- (and not at least) environmental quality issues.

All these problems have led to the need of city regeneration for improving living conditions in the districts, redevelopment of public spaces and modernization of urban infrastructure, actions that have become a priority for the Romanian public authorities, being at the same time objectives of the public policies.

The quality of housing is the main indicator, which establishes the need of regeneration. This aspect accumulates a wide variety of factors and requires an integrated approach rather than sectorial one, following the increase in the level of organization and empowerment of citizens towards their environment. Meanwhile, in addition to urban regeneration, there is a general shift from the traditional to integrated urban planning. (District 2 Municipality, 2012).

Table 1. Traditional urban planning versus integrated urban planning

Traditional urban planning	Integrated urban planning
Limited flexibility action model	Great flexibility action model
It worked before the '80	It entered in action after the '80
Centralized planned, orderly development based on public funding for urban planning	Decentralized planning, characterized by reduced public funding for urban planning
Decisions are taken by the central public authority (traditional urban actor) and applied locally	Decisions are taken by the central public authority and by the local authority, through negotiations with new actors: professional organizations, national and international investors, representatives of the citizens
Regulation of cities development is done through urban plans	Regulation of cities development is done through urban plans completed by the contribution of local actors
Planning and resource allocation is done through urban plans	Planning and allocation of resources is done through an integrated system consisting of plans and urban rules, where contribute and local actors too
Urban development plan consists of an overview of the city development	Integrated Urban Development Plan is structured in urban projects defined as space, resources and responsibilities

Source: Ministry of Public Works Development and Housing 2007

Therefore, integrated urban regeneration project integrates economic, social and political projects, which are produced by traditional urban actors, namely public administration and new players. This type of project makes that the urban development process to be more flexible, being encouraged debate among all those involved, in order to correlate different aspects of urban development. Also this type of project is based on a common strategic vision on the development and division of responsibilities between urban actors, through negotiations. Urban project is a city complex administration way (Ministry of Development, Public Works and Housing, 2007). Integrated programs contain ensembles of instruments and urban procedures, aiming the reformulation of parts of the city, surpassing the

previous system rigidity and planning deficiencies. Interventions at urban level aimed the urban revitalizing urban acting, therefore, on the network infrastructure, on the quality of environment with impact of economic and social component, of the territorial component, with emphasis on social and environmental sustainability, with the active participation of the private sector.

Sustainable and integrated urban rehabilitation must begin with a multidisciplinary diagnosis enabling the knowledge of area undergoing of rehabilitation process. That means more than the knowledge of buildings, infrastructure and public spaces, in order to involve different actors and people. Shortly, the goal of revitalization of degraded areas is the stopping of the deterioration process of urban and social tissue, strengthening social cohesion, favoring the development of economic activities, in conclusion, improving the quality of life for residents. (Rubio Del Val, 2011). Romanian capital needs an emphasis on their identity and cultural dimension, improving the quality of life and of public services, greater accessibility, construction of a functional metropolitan area. In this sense, the best example is the city of Copenhagen, a city smaller than Bucharest, with a functional metropolitan area since the '50s and '60s due to realistic and impeccable management (ArtLine. ro., 2006).

The concept of urban regeneration is the solution of revitalization the big cities, while for Bucharest is the saving solution. In our capital, the urban regeneration process began in 2009, when the thermal rehabilitation process of blocks starts, it was continued to modernize the facades of buildings, improving the aspect of the urban area through the managing of green spaces, parking spaces, access routes to buildings etc., elements that contribute to increased the quality of life people. This was a premiere for Romania, representing the most complex urban regeneration program organized in the capital. (District 1 Municipality, 2011). Achievements in terms of urban regeneration were recorded at each district of the capital. Since 2009, the Municipality of the first district has proposed to change completely the aspect of Bucharest, through the implementation of "Strategy 2012 District 1". This is a complex urban regeneration project, which aimed to revitalize peripheral residential areas (housing estates) of north of the capital. The project was financed from European funds and from funds provided by the local budget. Integrated Urban Development Plans are financed by Regional Operational Programme, Priority 1 - Supporting the sustainable development of cities - urban growth poles. They aim is the regeneration of urban areas, with the objective: "the increase of life quality and creating new jobs in cities, through the rehabilitation of urban infrastructure, improving the urban services, including social services, and by developing business support structures and entrepreneurship" (District 1 Municipality, 2012).

In 2009, were restored for free, by the Municipality of District 1, 80 blocks, taking into consideration then the rehabilitation of a park and a theater and some schools and colleges from the district 1 of the capital (Building Stock, 2010). The Municipality of the District 2 of the capital developed the urban regeneration Plan of the district, providing urban regeneration building structure, consists of collective housing estates, which were in an advanced stage of degradation, the quality of public spaces was low, green spaces and parking spaces was poor. The Plan provided too actions such as: modernization of education network, road rehabilitation, extension of municipal water and sewerage, rehabilitation of recreational areas, sports centers, churches and culture centers, the development of complex networks, shops, markets, business centers too.

The Municipality is considering for 2013, many projects, some of them being already started to the Municipality of the Capital, as:- urban reconfiguration of an areas, an example is the Berzei-Buzesti zone, one of the most important projects of the capital in the last 20 years, which aimed to restore historic value area between Victoria Square and Mihail Kogălniceanu Boulevard ;- the underground passage South Square, whose works was scheduled to begin on March 1, 2013, and the underground passage Pantelimon Road - Chisinau Boulevard.;- major changes made in the center of the capital, where Unirii Boulevard will become pedestrian area, between Unirii Square and Constitutiei Square. Area including the wells will become pedestrian and the cars will run on the eadge of the boulevard. This project is part of the Integrated Urban Development Plan developed by the Municipality in 2011;- significant changes made on two large lakes of the city: Floreasca and Tei, which will be equip so as to enable to organize tours on this lakes. The development plan includes ports for ships, landing places and two amphitheater with floating scenes and the construction of a multipurpose hall;- construction of new multipurpose halls in the complex Lia Manoliu;- rehabilitation of many boulevards and streets of the capital. A premiere rehabilitation work will be the one done on the Liviu Rebreanu Boulevard where it will be installed the first "green" tram of the Bucharest. The modern boulevard that will result will contain restoring sidewalks, rehabilitated roads and equipped with the first "green-track" of Bucharest. On the surface between the tram rails will increase turf;- introduction of

unique ways on the large boulevards: Carol Boulevard, Victoriei Road, Barbu Vacarescu Boulevard, Dorobanti Road, Polish Road, Aurel Vlaicu Street, Grivitei Road, Sfintii Voievozi Road (Ionita, 2013).

The great cities of Europe and the United States of America have developed in the last decades implementing comprehensive urban regeneration programs that have contributed to improving the life quality of citizens, to modernization of public spaces and services, and to increase of incomes. The success of these cities, can be an example for Bucharest too. Public authorities are those which have to plan the urban development, governing the territory at different levels: national, regional and municipal.

3. Urban regeneration in Italy

As it was stated first, the issue of sustainable urban regeneration, is a priority of the development policies in the coming years in all the countries. For example, for Italian architects, city development issues are and will be the main concern in the coming period. In Italy, as in most countries of the world, the cities are at risk as a result of energy depletion and due to the poor state of post-war building fund (CNAPPC, 2011). National Council of Architects, Planners and Landscape Architects (CNAPPC) of Italy, considers that it was a true urban dehumanization, represented by the absence of public spaces, land consumption reached to an alert level, uncontrolled increase of a number of vehicles, excessive consumption and high price of energy, waste and recyclable materials. In general, urban regeneration programs aim the enhancing of the city effect by improving the quality of urban life. Through these programs were identified strategic directions and were created conditions for strengthening and enhancing social capital, attracting financial resources to transform public and private spaces for regeneration of historical centers, housing districts, private homes and the landscape. Either suburbs should not be neglected, their rehabilitation should be represent the starting point in solving difficult situations such as urban and environmental level (both in terms of construction as well as environmental).

A survey conducted in 2011 by Centro Ricerche Economiche Sociali di Mercato per l'Edilizia e il Territorio (Economic and Social Research Center of Real Estate and Planning), showed that half of Italian citizens believed that live in buildings safe in terms of seismic, while only 6% of respondents live in safe houses or of the 24 million Italians living in seismic regions, only 10 million believe they are safe in an earthquake. Another problem is air pollution inside the home, where 83.3% consider that their home is affected by the use of unhealthy materials, while most of the buildings were made before 1991, so before the application of rules on the main unhealthy materials used in construction (Regioni e Ambiente, 2012). Taking into account that sustainable urban regeneration beneficiary is a citizen, he has the right to know the truth about the safety of the building where he lives and had invested for that, often recouring to mortgages credit for all the life. Therefore the authorities through their actions in urban regeneration plan must ensure the improvement the quality of life and security of citizens. In Italy it was proposed by the Government, Parliament, the National Council of Architects (CNAPPC) and National Association of Constructors (ANCE), development of a national plan for sustainable urban regeneration, with the objectives:

- security, maintenance and regeneration of public and private urban heritage;
- drastically reducing of energy and water consumption by the population;
- valuing of public spaces, urban green areas and housing district services;
- rationalization of urban mobility and the waste generation;
- protection and revitalization of historic centers (Regioni e Ambiente, 2012).

4. Urban regeneration in Spain

The transformation of Spanish cities are characterized by a form of integrated approach to regeneration urban district, through the collaboration between public institutions and citizens' participation and consensus. Different central areas of the big city, and housing districts, some of them very damaged, were included in various rehabilitation programs of the streets, boulevards and apartment buildings, many of them being built since the '50s - '60s. Some rehabilitation programs were conducted over several phases, in which were included public gardens and urban furniture. But the most profound transformations have undergone residential buildings that were consolidated - interior, exterior, and structure of resistance.

The transformation of the cities was made possible by the participation of the Ministry of Housing, Local Council and Municipality of Madrid, through large amounts allocating, mostly of them serving to improve housing conditions, accessibility and sustainability of the houses and then the infrastructure and public spaces modernization. On the other hand, the rehabilitation works were carried out in two directions: on the one hand improving the appearance of public space through a complete regeneration of the area, networks, urban furniture, on the other hand providing public aids for rehabilitation buildings and houses rehabilitation. An example of allocation of public investments in the rehabilitation in Madrid in 2011, with the participation of the Ministry of Housing, Local Council and Municipality of Madrid and managed by EMVS (Empresa Municipal de la Vivienda) ie Municipal Housing Company is:

Table 2. Public investment in rehabilitation in Madrid with the participation of the Ministry of Housing, Local Council and Municipality of Madrid, managed by EMVS

Total public investment in rehabilitation Investments of the three public authorities (EURO)				
	Ministry of Housing	Local Council	Municipality of Madrid	Total
Houses	69.978.175,41	56.494.173,87	64.691.620,57	191.611.969,85
Infrastructure	13.557.598,08	13.491.872,30	36.244.219,89	63.293.690,27
Total	83.535.773,49	70.434.046,17	100.935.840,46	254.905.660,12

Source: EMVS 2011

It can be seen that in the housing rehabilitation the largest amounts were allocated by the Ministry of Housing, followed by Municipality of Madrid. In the rehabilitation of infrastructure, the largest amounts were allocated by the Municipality of Madrid followed by the ministry and the council. Then there are partnerships in various european projects between states, for exemple INSPIRE program, attended by eight countries, including Spain. The main objective of the project is to investigate new directions in the field of energy rehabilitation of houses and offices buildings. The project was initiated in 2009 and was funded by european funds. Its purpose is to develop and demonstrate total energy rehabilitation of buildings, using the most advanced technologies on the facades of buildings, energy generation systems and use of renewable energies. Another category of project concerns on the rehabilitation and revitalization of historical areas of the city, for historical and cultural preservation of historical buildings and of archaeological monuments. Another category, very important, are the rehabilitation projects of worldwide prestigious hotel brands (luxury 5-stars hotels), which are designed to strengthen the capital position, being host to major international events. (Beraikal, 2013), (El Mundo, 2012).

5. Urban regeneration in other countries

In some countries, urban regeneration policies have existed before the formation of policies at EU level urban regeneration. This is the case of France, Great Britain, even of Spain. In other countries, such as Greece and Portugal has created a new thinking and approaching model in the urban development field. In Irish capital, Dublin, urban regeneration projects have been initiated, primarily due to inadequate design of buildings and due to poor management of buildings and due to poor noise insulation, heat and hydro. By urban rehabilitating were obtained achievements in terms of:

- physical and socio-economic regeneration of urban areas;
- construction of main roads;
- emergence of new generating jobs functions;
- renewal of urban infrastructure;
- arrangement of parks and other green areas;
- construction of buildings with cultural and recreational functions.

Supported by european funds and involvement of Irish Government, Dublin passed successfully through urban regeneration. Another example is the city of Dortmund in Poland, which faces with problems such as: poor housing maintenance, insufficient green spaces and recreational areas etc.. Through urban regeneration were obtained:

- improving the aesthetic appearance of building facades;
- improving roads network and auto and pedestrian traffic;
- improving the quality of parks and sports fields;
- improving education buildings and not least,
- transition to an integrated approach of urban regeneration.

6. Conclusions

Elaborating this study it can be concluded that all countries have initiated numerous urban rehabilitation programs both on capital and the other cities. These are integrated rehabilitation programs, which involve participation of the new urban actors besides the traditional urban actors. These programs are also financed by european funds in proportion of 50% of the project. Also, the conclusion is that sustainable urban rehabilitation is an absolutely necessary and irreversible process, aiming to: revitalizing urban structure, rehabilitation of public use areas, rehabilitation of entire urban infrastructure, of residential buildings, including the rehabilitation of their total energy, of the monuments and historical areas, of collective use equipment, and improving mobility and urban transport too. The conclusion is, also, that integrated sustainable urban regeneration is the synthesis of possible solution, through which are supported existing cities, by applying bold strategies, rebuilding and regenerating the buildings and public spaces, avoiding the use of land, saving the energy, improving the traffic and streamlining the waste generation. Urban rehabilitation means to improve the quality of life and invest in the future. It is a very large project, difficult, but not impossible, but in any case urgent.

7. References

- Albu L.L. (2006), Analysis of very long-term sustainability factors, National Institute of Economic Research; Retrieved 12 march 2013, from: <http://www.ince.ro/IPE-2006-site.pdf>;
- ArtLine.ro. (2006), „Every project is an urban regeneration project?“, Retrieved 26 march 2013, from: <http://www.hotnews.ro/stiri-arhiva-1144187-orice-proiect-este-unul-regenerare-urbana.htm>;
- Construction Stock (2010), „District 1 starts urban regeneration process“, Retrieved 14 march 2013, from: <http://www.constructiubursa.ro/s=stiri&articol=9521.html>;
- National Council of Architects, Planners and Landscape Architects (CNAPPC) (2011), International Conference ”Idea for urban sustainable regeneration”, 28 oct. 2011, Padova, Italy, Retrieved 25 march 2013, from: http://www.theplan.it/J/attachments/1987_invito_28%20ottobre_INTERNO%20.pdf;
- The people.es (2012), “Washing the face for Angeles city”, published on 22.06.2012, Retrieved 30 march 2013, from: <http://www.elmundo.es/elmundo/2012/06/21/suivienda/1340305386.html?a=c8b73098c3e973bb5e03f54088990903&t=1363938420>;
- EMVS (2011), “Urban renewal plan from the Manzanares rio”, Retrieved 30 march 2013, from: http://www.five.es/descargas/archivos/Regenera/02_Agustin%20Arroyo_RioManzanares_EMVS.pdf;
- Euskadi.net (2013), „Rehabilitation of Angeles city from Madrid“, published on 22 march 2013, Retrieved 30 march 2013, from: <http://eraikal.blog.euskadi.net/blog/2013/03/22/rehabilitacion-de-la-ciudad-de-los-angeles-de-madrid/>;
- Ionita A. (2013), News, „What will show Bucharest city in 2013. The most important projects that change the lanscape of the capital“, Retrieved 26 march 2013, from: http://www.b365.ro/cum-va-arata-bucurestiul-in-2013-cele-mai-importante-proiecte-ce-se-vor-inaugura-in-capitala_185847.html;
- Ministry of Public Works Development and Housing (2007), „ Informative guide on urban regeneration - principles and practices in Europe - "A Chance for your city" !”, Retrieved 24 march 2013, from: http://www.mdrl.ro/_documente/publicatii/2007/Brosura%20Ghid%20informativ%20privind%20Regenerarea%20Urbana%20-%20principii%20si%20practici%20Europene.pdf;
- Spanish Presidency (2010), „Informal Ministerial Meeting on Urban Development“, Declaration, Toledo, 22 june 2010, Retrieved 25 march 2013, from: <http://www.lexcivitas.ro/images/stories/norme/Declaratia-Toledo.pdf>;
- District 1 Municipality of Bucharest (2012), „Urban Regeneration Strategy“, Retrieved 16 march 2013, from: <http://www.primariasector1.ro/strategie-regenerare-urbana.html>;
- District 1 Municipality of Bucharest (2012), “Urban Development Integrated Plan Bucureștii Noi, Pajura, Chitila și Dămăroaia, District 1, Bucharest”, Retrieved 10 march 2013, from: http://www.2012sector1.ro/upload/p0003_PIDU%20Buc%20Noi%20June%2028th_r.pdf;

- District 2 Municipality of Bucharest (2012), „Urban Integrated Regeneration in protected tessue, Traian District”, Retrieved 30 march 2013 from: <http://ro.scribd.com/doc/83163323/Regenerare-Urbana-Integrata-Cartier-Traian>;
- Regions and Environment (2012), Information and update review, Territory and landscape, ”A plan for urban sustainable regeneration”, 22 june 2012, Retrieved 24 march 2013, from: <http://www.regionieambiente.it/territorio-e-paesaggio/urbanistica/363-un-piano-per-la-rigenerazione-urbana-sostenibile.html>;
- Roberts P., Sykes H. (2000), “The evolution, definition and purpose of urban regeneration”, Urban Regeneration. A handbook. Sage 2000, p.17, p.18;
- Rubio Del Val J. (2011), Zaragoza Vivienda, “Urban Rehabilitation in Zaragoza. Recent experience”, Retrieved 30 march 2013, from: http://www.five.es/descargas/archivos/Regenera/04_Juan_Rubio.pdf;