

## NEW DWELLING IN OLD-FASHION MANNER

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### Abstract

*As known, nowadays we are facing new ecological pressures, when land, water and clean air are not anymore regarded as infinite resources. As an example, in Bucharest, the current urban sprawl has begun to destroy the most valuable land and open-space resources. All along the Colentina river there is an impressive potential of creating green areas, but also new dwellings combined with peri-urban agriculture, not forgetting about heritage. All the 13 lakes have their own identities, but which are not fully taken care of. It can easily be noticed the lack of management of these lakes- the shores are in a bad condition, inaccessible, the water is far from being clean and, what is more, water pollution happens without any refrain. What we suggest is to design cycle tracks, walking paths, beach areas, sportive areas, decks, restaurants, greenways, community gardens, agricultural areas, all intelligently integrated in a eco-neighbourhood along Grivita lake. Also, reinforcing the shores and reassuring the continuity of the existing ecosystems are important aspects of our project. All in all, our aim is to tackle the social, economical and ecological issues all together. This would mean to rise the quality of living in the peripheral areas of Bucharest, create social mixity and also encourage the small commerce which is an extremely important aspect for the community*

**Key words:** evolution, green areas, Colentina river, quality of living.

### INTRODUCTION

The landscape, in all its shapes and functions is everything that we can look at. Of course, the esthetical role is extremely important. However, it is even more important to correctly understand and be aware of all its aspects.

The lakes along the Colentina river have been created in the '30s (Figure 1).

However, instead of being one of the most attractive areas in Bucharest, the lack of maintenance of these lakes has minimized the potential and beauties of this chain of lakes.

Grivita Lake encounters an impressive variety

of areas with high potential, therefore multiple possibilities of improvement and development.

There are four directions that we have focused on, which can be treated all together in order to create a unity and complexity in the area. These directions are: urban sprawling, tourism and leisure, sustainable agriculture, but also heritage and identity. As our purpose is to increase the quality of living and also an identity for the place, it is highly necessary to combine these four elements.

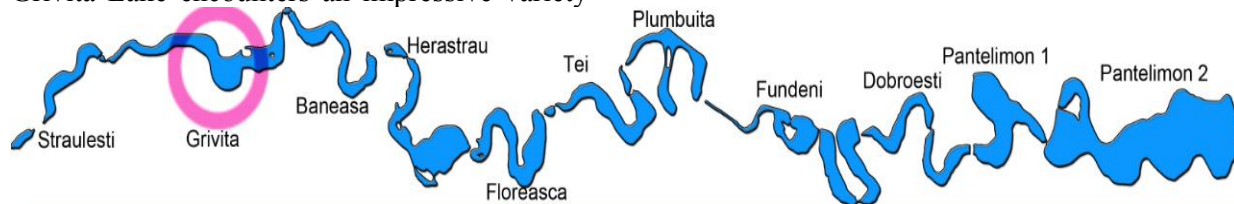


Figure 1. Colentina's Chain of Lakes

## MATERIALS AND METHODS

Our aim is to design a neighbourhood according to both ecological principles and sustainable aspects (Ruano, 1998). Therefore, we propose that the areas affected by urban sprawling to be inserted into a high-density neighborhood, which will also include community gardens and small local commerce areas in order to develop a sustainable economy. Large scale agriculture can not be ignored, the rich fields offering not only good quality cultures, but also new working possibilities, especially for people with low or no income.

In order to limitate the tendency of urban tissue to spread towards the lake, where the risk of flooding is increased, we find suitable the design of different open green areas. In the northern part we suggest the expansion of Baneasa forest which would become a natural limit and will also have an extremely important role in reducing air pollution.

Also, we encourage people to use non-pollutive means of transport by creating bicycle tracks and walking paths. Also, a better connection between the northern and the southern parts of the lake is assured by pietonnal bridges. A cycling track is proposed to connect Damaroia neighborhood- proposed as a historical area- and the military forts along the ring road of Bucharest. Moreover, besides the designed corridors and public green areas, our wish is to explore the wetland which already has an important ecological function.

## RESULTS AND DISCUSSIONS

The General Urbanistic Plan of the Capital (see The General Urbanistic Plan of Bucharest, 1996-2000) requires the new constructions to depart between 30 and 50 meters from the waterfront, but this legal provision has not been respected, each owner building as pleased, with no streets nor Figure 2. Urban tissue and floodplain owner building as pleased, with no streets nor utilities.

Approximately 60% of the new houses are build on the floodplain area. (Figure 2) Moreover, most of them are extremely close to the lake, even though it is banned in the Water Law (see The Water Law, no. 107/1996).

However, the main issue is the lack of coherence and identity of the area. Because of this, what we propose is to create a living high-density neighborhood, which will have collective housing instead of the spread single-houses (Freilich et al., 2010). Also, this will allow to have mixed community-oriented instead of private-focused, while small-scale commerce, community gardens and public spaces would improve the neighbourhood's unity (Tozzi and D'Andrea, 2014).

In order to sustain the idea of an active and healthy community we suggest outdoor activities such as cycling, sailing, exploring nature, sun bathing, reading, etc.

As known, green corridors have an important ecological role. It is highly recommended to have trees in the built areas for multiple reasons. On the other side, we suggest to extend this corridors on the agricultural area also, not only because of the ecological purpose, but also for the benefits they bring to cultures.



Figure 2. Urban issue and flood-plain

In what the Grivita pond (the wetland in the northern part) is concerned, we can easily remark the need to control the amount of reed which has taken over in the past few years. Although it provides shelter to insects and animals, enriching the ecosystem, it is important to decide where to keep them and where to clear them, in order to attract the visitors and not to block the view.

So, in this wall of vegetation we propose open areas, decks and observatories.

The main material in making these elements is specially-treated wood. It is mandatory to use a wood core with high durability, as it has to

cope with the conditions faced by the field (alternating wet - dry).

Also, regarding the extension of Baneasa forest, this may become a natural barrier in order to prevent the well-known and common urban sprawling.

As we wish to involve the community in our project, the plantations will be done with the help of everyone interested. The planting will be done in vegetative rest (fall, after leaf falling/ spring before burgeoning). A mixture species will be chosen, in order to create diversity.

This operation can be performed in a voluntary event, by involving children, students, residents in the neighborhood, environmental NGOs etc.

In parallel, water samples will be taken and its quality will be analyzed. In case of existing pollution sources, ecological measures will be applied.

What is more, it is highly needed a shore rehabilitation and slopes, which can be achieved using synthetic sheet piling (PVC and composite material). This is a fast method, and also has a lifespan of over 50 years and it is a convenient alternative to traditional materials (iron, concrete, gabions or rockfill).

The presented changes are suggested in the strategy plan (Figure 3).

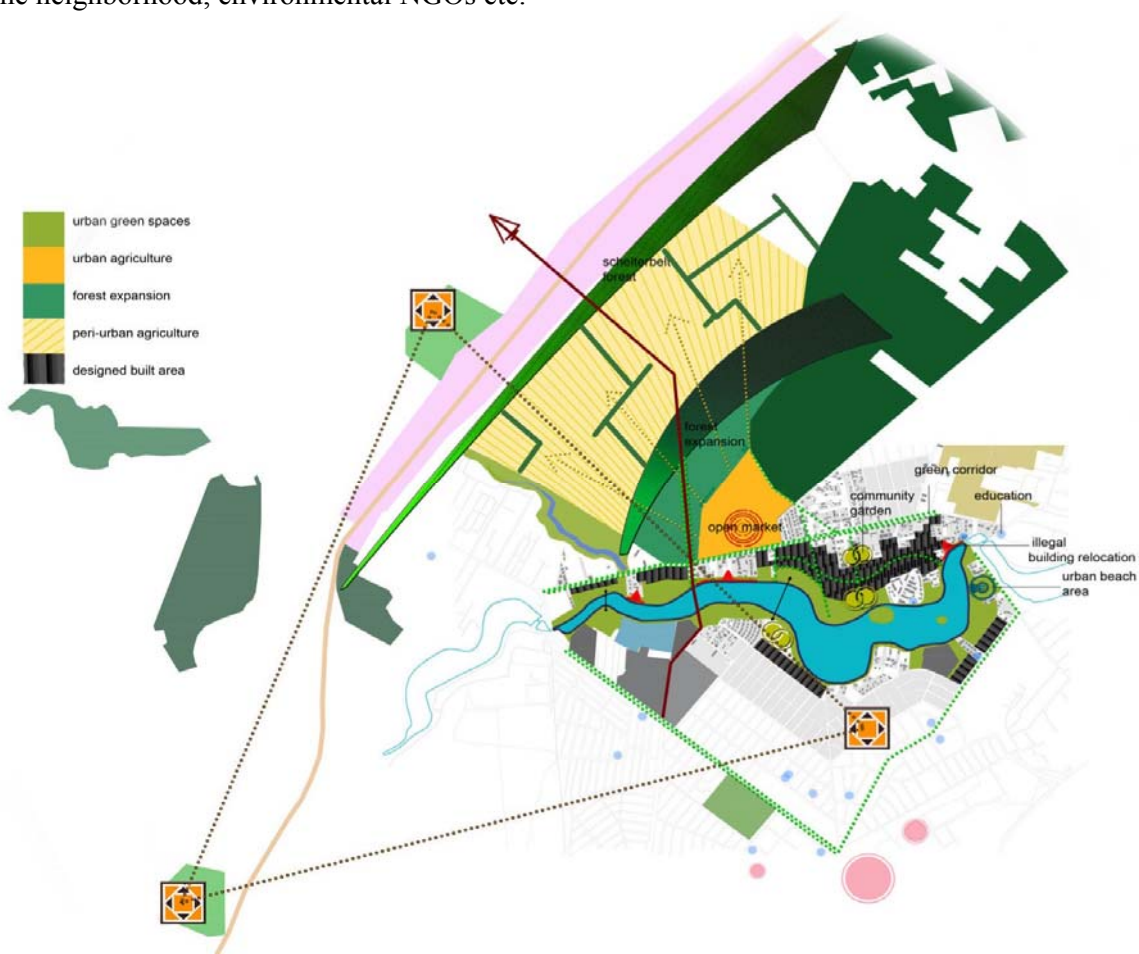


Figure 3. Strategy for the detailed area

## CONCLUSIONS

All in all, we are aware of the necessity of creating a balance among social, economical and ecological aspects all gathered in friendly neighbourhood. Our aim was to give life to an

area which had no logical built tissue. The main idea of this project is to transform the site near Grivita Lake into new sustainable neighbourhood, while recreating a relationship between human and nature.

Moreover, it is extremely important to awaken population's awareness regarding the ecological

aspects, as we are facing new challenges with nowadays problems with deforestations, pollution and climat changes

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