

REVITALIZATION OF THE RIVER BED BIC

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Resume: *I analyzed the problem of river Bîc, Studies show that small water basins in Moldova are heavily polluted and there is a high water shortage. In particular, the river Bîc, to which the lake Ghidighici has completely dried up its bed, is in a particularly serious state. The communication strategy for surface water in the Bic river basin will be introduced into practice. Experts aim to draw the attention of authorities and the public to the need to solve these problems in order to give life to the Bic River. In the end I came with certain amount of solution for the revitalization of the river bed Bîc sustainable, green and ecological city to make this area suitable place to live their life and avoiding drying the river.*

Key words: *revitalization, river, ecology, sustainability, green.*

The National Environmental Center, in cooperation with the Chisinau Territorial Organization of the Ecological Movement of the Republic of Moldova, today presented the strategy for solving the problems related to the surface water and the basin of the Bic River.

Studies show that small water basins in Moldova are heavily polluted and there is a high water shortage. In particular, the river Bîc, to which the lake Ghidighici has completely dried up its bed, is in a particularly serious state. More than that, it is totally lacking in the hyphaeophone, and the concentration of chemicals exceeds the admissible limits. According to experts, the state of the river continues to deteriorate because of the passivity and indifference of the authorities, who do nothing to improve the environment in the country. Civil society is not sufficiently active in preventing pollution and rational management of water resources.

The communication strategy for surface water in the Bic river basin will be introduced into practice. Experts aim to draw the attention of authorities and the public to the need to solve these problems in order to give life to the Bic River. The Bîc River is situated on a steep slope, on which a beech forest grows extraordinarily beautiful. Here is the water protection area enclosed by a wire mesh fence. The problem is that here comes the Temeleuti village water, located below. The springs that supply it, are hermetically sealed in concrete wells. The Bîcului spring also has a symbolic index, a concrete panel with a tap in it.

Nevertheless, at the exit of the reservoir and on the outskirts of Chisinau, the waters of Bîc with regain their transparency and look clean. Even in Chisinau, near the Ismail Street, the water is relatively clean and has no unpleasant smell. But here i have to tell you what's near the river banks. I believe that few of the Chisinau people look under the bridges, which are above the river Bic and rarely look what's on the shrubs growing on the banks of the river Bic. It is a full of garbage space, and it is, therefore, an unobtrusive view. The shrubs on the banks are practically completely covered with plastic bags, the banks themselves are not groomed, and they are just as polluted and full of garbage.

After viewing about problems that BÎC river struggling with , as I started to design a business center with hotel 5 stars at this area , I have to think how to make this river and area useful and in the same time place that people can live there in city that make them feel comfortable in this city. So as architecture student first thing to think about it is to clean BÎC River from the garbage, algae, and chemicals if there are especially at the bank of the river. Then I was thinking to increase the river's water level and width, so I can use this water to get through to the land scape of public buildings, using it for view. As I said this area has to be that you feel yourself comfortable like that you were at your home. So i will say some solution for this area to be this city with BÎC river sustainable, green and ecological city. To get this solution for this city here is:

1. Sustainable land use planning and urban form: Keeping the city compact and fighting urban sprawl, as well as creating a distinct separation between urban and rural areas, sustainable land use planning and urban form. Moreover, it is important that a city create walk able neighborhoods, have good public transit, and in general, rely less on the automobile.

2. Innovative housing strategies. Housing in dense, walk able neighborhoods, typically in mixed-use environments, is one example of a sustainable housing strategy. It is important to provide a variety of housing options, where you don't have live in a Manhattan-style high-rise to achieve density. Other innovative sustainable housing types include accessory dwelling units, housing over shops, and co-housing.

3. Sustainable transportation and mobility: The most important thing to remember here is that the personal automobile is not part of sustainable transportation and mobility. Instead, sustainable transportation

options place an emphasis on fast, comfortable and reliable public transportation; usually some combination of rail, tram, metro or bus.

4. Urban ecology and strategies for greening the urban environment: Think cities are nothing but urban jungles? Think again. Cities have their own natural ecosystems, like parks, urban forests and urban landscapes. It's important to protect and nourish these natural assets and leverage them for the health of city residents, as well as the health of the planet.

5. Recycling, up cycling and closing the loop of "stuff": Much like a living organism, a city has energy and resources flowing in, and waste and pollution flowing out. The key here is to try to up cycle that waste to become part of the energy and resources stream, thereby closing the loop of the urban metabolism. An example is to use household waste to fuel power plants, which in turn fuel the city, which in turn produces sewage that is used to start the cycle over again.

6. Energy conservation and renewable Energy: To achieve energy efficiency on a municipal level, cities must make it a part of their general plan and zoning codes. To do that, they have to make room for things like district heat and power plants, and write energy efficiency standards into their codes for new development and redevelopment.

Ultimately, the key goal of any Sustainable City should be to provide residents and workers with the highest quality of life together with the lowest environmental footprint. A good sustainable city is one where people want to live, work and visit.

Bibliography:

1. "Situafia ecologică din bazinul râului Bâc" (pag. 5-8,31-37,57-63,76-77), Mihail Mustea, Chişinău 2013, http://comunicate.md/upload/6744_Raport%20Bazinul%20riului%20Bic_integral.pdf;
2. *Planul de Gestionare a Districtului Bazinului Hidrografic Nistru*, decembrie 2014,(4-17,41-45), http://irigare.acsa.md/imagini/Proiect_PGDBH_Nistru_01%202015.pdf.