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INVESTMENTS IN LANDSCAPING

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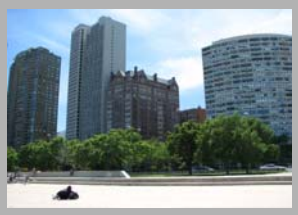
Global worming and pollution, degradation of all natural elements, waste of human energy and hope... How to solve, how to cure, how to protect, how to prevent? The need for healthy, livable and sustainable environment became critical today. On international territorial-planning scale, we can notice researches efforts to provide sustainable solutions for healing the environment and solving the problems of our cities which go on expanding their polluting tentacles.

Nowadays, in detriment of green spaces and urban water surfaces, the exaggerated increase of town construction density and of all urban horizontal asphalted-concreted impermeable surfaces has emphasized the pollution process. We all know how the ozone is dissolving, and what danger it is to humanity. Analyzing the urban climatic phenomenon, we observe that the polluting urban process influence the existent climate, producing an "impurity calotte" with many dust particles, a large quantity of CO_2, producing more radiation than normal, less humidity, more fog.

One of the worst effects of this "impurity calotte" is the warming microclimate, which transform our cities in dry, dusty and foggy zones.

Being a profession that has an important impact over the environment, the modern landscape architecture, tries and succeeds to cover a very wide area: from strategic territorial systematizations to the redesign of the individual yards and gardens, from the ecological recuperation of the polluted and degraded areas to the rehabilitation of urban spaces, from "vegetal urbanism" to "green spaces", from micro to macro landscape. In order to ameliorate the effects of climate change over the built environment, one of the most important solutions could be the investment in landscaping projects: enhancing the green and blue surfaces, means many landscape arrangements with plantations and water.

Unfortunately, the virtues of landscape architecture science are not yet used at their maximum potential and the international investments are very small.



The landscape design science, urban and territorial, has an important role in the policy of the environment protection and healing. Through judicious, multifunctional and sustainable projects we can transform the old polluted and pollutant areas into safe and magnetic places. The inner power of landscape architecture morphological elements - green spaces and water surfaces – can destroy many kinds of pollution.

As a result the microclimate and finally the macroclimate will change on a large scale.

Urban-planted spaces and the landscape arrangements with water can remove the pollution, protecting the built environment, changing the warming micro and macroclimate process. Urban green spaces have an important hygienic-sanitary urban function. That means the vegetation can reduce air pollution, acting as a natural filter, removing both particulate and gaseous pollutants. Planted and water arrangements are important organs in the living cities body, working like liver and lungs together.

Their powerful metabolic process generate important effects over the urban atmosphere: air purification trough oxygen emanation of trees; positive humidification of the atmosphere through the water surfaces; the leaves of trees perform a microbial cleaning of the air; leaves reflect a quantity of solar radiation back into the atmosphere; the reduction of carbon monoxide-CO2 and sulfur dioxide-SO2 from the atmosphere through consumption processes, absorbing trough leaves and other plant parts; ionization of town air through the decomposing of O3 in O2 and negative ions, which have energetic stimulator effect; plantation metabolism destroy the positive ions which create exhausting and sickness effects.

The urban enhancement of green spaces and water surfaces arrangements has noticeable effects against the negative action of climate changing factors.

1. Solar radiation penetration is obstructed by the impurity calotte. In order to improve the positive effects of solar radiation in the cities, this calotte should be reduced through the increase of planted spaces around and inside the areas with pollution producers (which can be auto circulation areas, industrial zones, etc.). The plantation emanations will transpierce the calotte and will clean the atmosphere.

Another positive phenomenon related with solar radiation is the protection from the sun's excessive rays - the leaves reflect a quantity of radiation back into the atmosphere. The existing vegetation that has wrong placements, shading or exposing to excessive sunlight the buildings and other urban surfaces, must be corrected by judicious landscape projects.

2. Urban temperature varies because of pollution, presenting important differences between the city and the environing territory (summer temperature differences between polluted towns and their environs are able to reach 10° C in evening and night). The buildings exterior cover and all horizontal asphalted and concreted surfaces of cities became radiant surfaces all the long warm period and this caloric radiation phenomenon change the normal climate, degrading in time the build environment and the human health. Ecological studies come out that there are important temperature differences between planted areas and unplanted ones (about 5°C-10°C). Therefore through urban landscape projects we can propose the increase of vegetation and water surfaces in the areas with deficiencies.

The air temperature differences and the microclimate changing are aggravated inside towns by humidity and air movement deficiencies. And all these climate factors are influenced by the destruction of green spaces and water surfaces, like urban parks and squares, in order to obtain urban space for new buildings and parking areas.

3. Air movement (permanent, seasonal and irregular winds and urban breezes) can be directly influenced by the presence of plantations. The increase of green spaces and its correct placement in different town zones can improve the air movements in order to obtain results as: insurance of cities ventilation in warm and calm seasons; planted spaces produce a cooling atmosphere and a different pressure aria, generating air movements between these zones); control and the stopping phenomenon of noxes transport through these urban artificial breezes; energy saving processes and protection of urban spaces and buildings against winds effects through reduction of direct pattering and friction effects over exterior surfaces.

4. One of the most important climate comfort factors, the air humidity, became nowadays a polluted factor. Urban noxious humidity aggress the health towns as much as winds and caloric radiations. The natural humidity sources of towns are reduced by the heat generated by city impurity calotte. It is a feed-back process and finally it reduces the normal breathing of urban horizontal and vertical build surfaces. Air humidity combined with pollution creates urban fog or "the smog", which is very dangerous for human and buildings health. Landscaping measures, as increasing the surfaces of trees and water, reducing asphalted and concreted horizontal surfaces, can balance the humidity inside cities and reduce the noxious smog.

5. The impurity calotte generate nebulosity and rainfalls periods longer about 20-40days than in extravilan territory. Covered sky and rainfalls changes inside cities are also influenced by town vegetation and waters, so, landscape architectural proposals to create many such surfaces will balance the seasonal rainfalls system.

SCIENTIFIC RESEARCHES

A large number of Scientists are reporting daily, monthly and yearly about the dying forests in Europe, Canada, U.S.A. and Australia. In Romania we are confronted today with an alarming phenomenon: a fury of creating many buildings and parking lots, destroying existing parks and squares. These destructions enhanced pollution level changing the micro and macro climate. The increasing process of the planted and water surfaces and the purification of urban water surfaces should be accelerated. In order to obtain faster improvement of urban climate, enhancing plantations and cleaning waters actions, researchers from India, Ukraine, Austria and Romania found and experienced an alternative revolutionary energetic method, with important scientific results.

Its application can increase and accelerate the growth of plants and can purify polluted waters.

The name of this revolutionary method is Sahaja Yoga. The founder, Shri Mataji Nirmala Devi, obtains important international recognitions, has been recognized worldwide by several prestigious institutions for her selfless work and for the important results of her scientific teachings. She was born with the fundamental energy complete awakened, with a huge power to spread and activate this energy in any humankind, at individual or collective level. The most important fact for all experiments is that the awakening of the inner fundamental human energy can be done also in the presence of any photo of Shri Mataji, which spread the same energetic power as the person of Shri Mataji.

Any person can feel easily in palms the awakening of energetic vibrations, holding a few seconds the hands towards Shri Mataji's photo. The vibrations of Shri Mataji's photos was used succesfully not only in medicine, curing all kind of diseases, but also in agriculture and horticulture.

Farmers are especially the biggest beneficiaries of this gift of Shri Mataji Nirmala Devi, as they expend much physical effort and have to face many unforeseen natural calamities. Shri Mataji set up in 1982 a research farm in Pune. Giving vibrations to sun flowers, these became over one foot in diameter and the government of Maharashtra became interested in Sahaja Yoga methods. They granted her land at Neera Narsingpur to experiment Sahaja Yoga method for producing non-hybrid seeds. After that, in 1982, Rahuri Agriculture University gaved a special grant for making green trees for Maharashtra. In 1993 her farm won many prizes in flowers shows, producing beautiful tulip and roses. Also, the process of Tissue Culture has been revolutionized by using Shri Mataji vibrations in Bangalore.

Sahaja Yoga has been successfully tried and tested, in many universities and research institution, to provide extraordinary agricultural production and livestock quality in various countries. Senior research scientists have successfully proved that by using seeds invigorated through vibrations from the photo of Shri Mataji and usage of vibrated water for irrigation, the plant quality & food production has been much higher than the normal yield.

The vibrated water not only activates the growth of the plants, it also enlarges and improves the sprouting potential of the seeds. For example, the sprouting ratio of sunflowers rated normally between 75% - 80%. Through the use of vibrated water the ratio was increased to about 95% - 100%. Because of the high germination ratio and the strong growth of the plants in the vibrated portion of the test area, you can well imagine this caused a severe competition for space, water and light. Such a condition usually inhibits the growth of plants but despite the density in the vibrated plot, its harvest was about 20-25% better than the control plots.

Few examples of research done: in chemistry of vibrated water by Lyudmila Tkachenko, Dr. of Chemistry, Kiev, Ukraine; in agriculture and horticulture at Maharana Pratap Agriculture & Tech University, Udaipur (http://www.sahajayoga.org).

Finally, last but not least, one of the most important results of the investments in amelioration climate trough landscaping projects, will be a benefic change of human awareness and attitude versus the natural and built environment.

The results of using Shri Mataji vibrations are very important on the level of increasing pollution and global warming process, giving hope for accelerate saving solutions of Earth environment and for investments in sustainable landscaping using less resources.

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