

## ***The Role of Local Authorities in Urban Environment Improvement***

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The urban areas are playing an important role in reaching the objectives for the European Union strategies for the solid development. In urban areas, the environment dimension, the economic one and the social one, are a powerful merger.

In the cities are concentrated the major environment problems and still there is the place where you can find many economic agents and many investments. Four of five European citizens are living in the urban environment and their quality of life is directly influenced by the urban environment stand. A high quality of urban environment contributes as well, to reaches of Lisbon Strategy's priorities, revised and namely "to make Europe an attractive place to live and invest".

The attractiveness of European cities will recruit the growth potential and will generate place of labor, and accordingly, cities are the key factors for the implement of Lisbon agenda.

There are more internal concerns regarding the stand of urban environment in Europe. The environment challenges which are confronting the cities have relevant consequences for human's health, life's quality from the urban environment and for the economic performance of cities.

In 2006 June, under the frame of the reunion of Environment Council, was adopted the Thematic Strategy for the Urban environment. This thematic strategy was elaborated in reckon of the precognition of the sixth environment action program and it follows the performances improvement at european cities level. The objective of this strategy is to contribute to a better life quality, through a integrate approach regarding the urban areas, through the assurance of an environment in which the pollution level to not generate noxious effect for human's health and through the encouragement of urban durable development.

### **Environment challenges which are confronting the urban zones**

The environment problems from cities are highly complex, because the causes are interdependent. Local initiatives for resolving some problems can generate new problems, in other domains, and can be in contradiction with local or regional politics level.

It is recognized at a large scale that the majority of successful local authorities are using the integrate approach to administrate the urban environment, adopting the long term strategy, and action plans in which are analysed in details the bonds between the different administrative levels. The imposed duties at local, regional, national or European level (for example: air quality, land use) can be efficiently implement at local level when they are integrated in a local frame of strategic management. The proposals for the Cohesion Funds and Structural Funds for 2007-2013 period, are including assistance opportunities significant that are addressed to the environment priorities to urban areas (example :residues management, air quality, rehabilitation of contaminate land).

From many environment problems, that are threatening the countries from Europe and the whole planet, the major problem is, with no doubt, the residues. The residues stock among the fact that

represents a technological process very expensive, present also an disadvantage: pollutes the environment. The solution do not consist in stoking in viran places, but on selective collection and on recycling.

In the current conditions, there is although a most frequent tendency of using the ecology term for nominating the succeeding and maintaining the cleanness in one city by collecting and by removing urban residues.

The city is considered a complex ecosystem , unbalanced, that is consuming very much and is reciclyng very little. It must contribute to the ensurance of the solid development that is requiring the keeping of fundamental inputs like: air, water, space or in global terms, the keeping of the coat of ozon, the preventing the planet heating.

The cities with an weak economy, are suffering because of the minimal environment services, uncontrolled use of the fields, human waste because of the natural catastrophes.

In the prosperous cities, with a higher economy, the problems are focusing on water pollution provoked by the industrial residues, air pollution provoked by the traffic and by wrong politics regarding toxic residues.

In the developing countries, the urban ecology must submit alternatives of environment management that are less technological and less radical than the one that are provoked in the industrial countries.

Considering the annual growth of residues quantities, and the concerning that is produced for the local communities, is dock the accent on the residues problems, in relation with the quality of life under social, ecological and economic appereance.

The urbanization is the current phenomenon with the most profound connotation for the scale and the models for the consumption, contributing for a growth enquiring of energy and natural resources. The conversion of those is generating although a higher pollution and is requiring a higher capacity of residues assimilation that are resulting from this. The industrial enterprises, the distribution of activities and the services, the private house-keeping, are producing solide residues which are variating in time from the quantity and distribution point of view from one city of another, from one area to another.

Urban areas, among the advantages that are presenting under work condition, of living and services, a new quality of life, contributes of getting worse environment and health problems, by focusing on variated types of residues:

- Rubbish; which is made from fermentable substances, (food grout, paper) and other unfermentable materials (glass, wood, drafter, plastics and metals).
- Other solid residues: grout houskeeper, residues coming from the use of vehicles, residues coming from markets which can be assimilated with grout hosekeeper, the mud of purification stations, residues coming from the support of the parks and gardens.
- Industrial residues:inerts residues (building materials and mud), usual resiudes like grout housekeeper (grout of remaking and wraps), special residues that are containing toxics and polluting elements: and slag (produced by the daggering and siderurging) muds, industrial dusts (ash and sterile).
- Toxics residues: detergents, lubricants and beats, but also microbiological residues coming from hospitals.

In present the volume of dangerous and housekeeper residues is enormous, the causes being the growth of population and the intensifying of urbanization process, and also the high rhithm of industry and the growth of life standards. These causes contributes to the quantitative growth and to the diversity of types of solide residues, generated not only in the developed countries but also in the developing countries. The focusing on grout housekeeper is bigger in the cities, than in rural areas, because of the urban population tendency to consume much in the rural areas.

It is estimating that on the planet are annually producing almost one billion tones of grout housekeeper. For example in US are annually recordering an unflow of solide residues of over 200 million tones.

The inducing of these grout housekeeper increased permanently in all over the world. Thus, for example, the quantity of solid residues produced in the developed countries has increased, from 318 million tones in 1970 to 400 million tones in 1990. It is ascertain that in that period, the growth in the developed stats was about 25 per cent. For example, in France in 2000 are recorderd almost 450 pounds of solide residue per dweller comparing with 220 pounds 30 years ago. In the same period, in the developing countries, practically, it was produced a duplication of the volume of grout housekeeper.

In the European countries, the residues quantitiy annually generated is growing up, reaching about 2000 million tones, in which 200 million tones are from the grout housekeeper category, and 40 million are dangerous residues.

The habitants of industrial countries, are generating much more residues than the habitatns from the developing countries. The statistics shows that in the urban areas from industrial countries, are producing three times more residues besides the one in the developing countries.

The generating rate of the urban solid residues is estimated between 0.7 and 1.8 pounds/ personne/day in the industrial countries and between 0.4 and 0.9 pound/ pers/day in the developing countries.

Because of the complex problems which are generating by the solid residues, the politic of those residues of many industrial states established the development of an hierarchy of solutions. Thus the management of the municipal dregs contains many managerial options:

- Reducing the sources.
- The reusing of residual products.
- Recycling.
- The cineraton and retrieval the energy engrafted.
- The recovering of the methane from organics residues.
- The burial of solid residues in graves very well controlled.
- The recycling is used for:
  - Grout housekeeper: glass, paper and plastics. A tone of recycled paper spare 1.6-2.3 tone of wood, 250-450 litres of astral oil and 200 of water.
  - Simple industrial residues (packing and grout of remaking).
  - Some dangerous and industrial residues that can be used after the treatment.
  - High volume residues with a big content of methal.

The incinerating represents the method of reducing of residues volume (90% of volume and 70% of weight) by burning in special furnals, resulting the residues that are stored in controlled garbage pits. The thermic energy produced by the burning of the residues can be reused either for generating the electricity as un input in the districtual heating system, either as industrial oil. A tone of incinerate residues can produce heat – like 130-160 litres of astral oil and 50-150 kwh electric energy.

The producing of the methan from the organics residues is an improvement method. This nutritious source is ensuring the hold-back of the water in the sol, thus is wasted less water. To obtain a pur compost, the organic substances must be perfect sortated. It can be used two methods: aerobe punch (in the presence of the oxygen) that can transform the organic residues in compost in some months, being used at the improvement of the sol, and the anerobe punch of the methan (without oxygen), a procedure destined to degrade the organic substance and to produce the methan and not a product that is used in farming.

In line with the official residues management was born “the residues economy”. It exists in many developing countries. The collection and the reusing can be so intensive that just a small part of

the solid residues could be beyond. An example can be Bangalore town, considered one of the biggest and prospering town of India. Although it has 4 million dwellers, eliminates only 335 tones of solid residues per day, because 2.700 tones are recycled. In this way, the annual average of generating solid residues per person is reducing from almost 270 to 30 pounds. In addition, over 40.000 people are living from collection and recycling of the residues. Another example is Delhi town where the "residues economy" delivers middles of existence for 100.000-150.000 people that are collecting/ sorting 12-15% from 6000 tones of residues that are daily generated.

The dismissal of the solid residues exercise many influences for the environment and for the people's health.

In Great Britain, the bigger part of the grout are in the garbage pits. The same thing happened in France where over 52% from solid and municipal residues are stored in convenient. Other European countries like Sweden, Denmark, and Switzerland are storing at the garbage pits less than half from the volume of the produced grout.

Most of the developed countries are reaching to the point that because of the enormous quantity and because of the characteristics of the garbages, the deposit on virgin ground or base ground is inadequately like deposit method. These terms allowed the penetration in the phreatic cloth of the toxic substances trained by the rain water and the form of a mixed that can contain many dangerous pollutants, like hard metals, or chemical organic substances.

The split and the burning of the residues from the garbage pits contributes to the air pollution by the discharging from methane and other gases, in anaerobic conditions. It is estimating that 70% from all the methane emission of the world become from the pits grounds of storing residues, methane gas being an important component of the heating factors to the global atmosphere. The discharging of the garbages represents also a risk of fire, incorrect administration bringing the explosion of these gases.

The burning of the residues is spread out at the storing pits from the developing countries. Although the open burning of the garbages is not allowed by law, many times, the burning is deliberated, with the aim of reducing the excessive volume. Many times, are producing fires in an spontaneous way, when the organics residues are becoming fuels, by exposing at the sun. Thus are effusing oxides of sulphur and azote which lay to acid rains, wireless an direct effect of the human's health is considered the dioxides and furans, toxic substances suspected that can cause cancer and genetic bugs. In attend of the burning results the toxic ash. This is generating another polluting form by contaminating the water that cools the hot ash with acid substances.

Environment and health problems are created also by the uncollected residues. This situation is often met in the towns of developing countries, where collection rate can be only 30-50%. The uncollected residue can be burned, stored in inappropriate and uncontrolled places, or can remain on the streets, making risks for the population.

The most gravely effects of the defective management of the solid and municipal residues are considered the air pollution and the contamination of the drink water reserved. The effects are feeling, at last, on the population, affecting directly or indirectly the stand of the health.

Local authorities have a decisive role regarding the urban environment improvement. The diversity regarding the history, the climate, administrative and legislative conditions are leading to embracement of developed solutions to local level. The adhesion of subsidiarity principle as per local actions must be undertaken to the most proper level, this is involving as well the activity of local level. The urban environment requires actions of all the levels: national and regional authorities, European Union as well, each of them having their own level.

Some cities have already found the solutions but these are not enough disseminated or implemented. European Union can support the member states and local authorities by promoting best practices at European level and encouraging the creation of efficient network and the reach to the environment priorities and the information switch between the cities. It could offer financial support for the necessary investment for reaching the environment priorities and could offer support for the capacity enforcement by founding conferring for researching and instructing, by realizing relevant guides and encouraging the foundation of national consular points for towns.

The evaluation of urban environment problem, the need of action of all levels and also the evaluation due to involvement of European Union, was shared by all the involved factors, including the member state in many organized consulting.

Conclusively, the creation of an urban zone of high quality is requiring a tight coordination between divert politics and initiatives, and a better cooperation between many administration levels. Member states have the responsibility to help the local and regional authorities regarding the improvement of environment performances from their territory. The support measure must contribute to help provide for the local authorities and other factors for the identification of the proper measures for their situation.

These could also contribute to promoting best practices in environment management problems outside The European Union (for example: the initiative “Green Town” from Environment United Nation Program).

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