Ecology

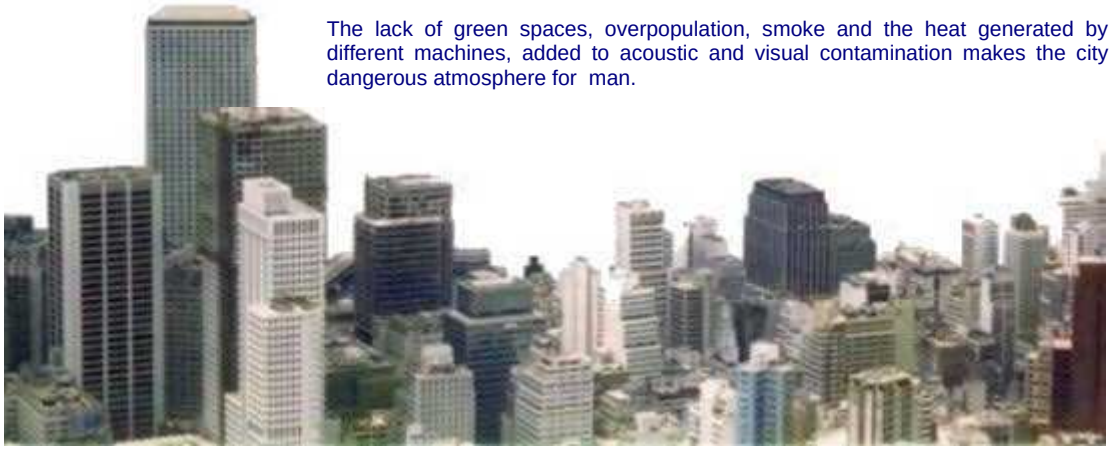
Ecology has gained enormous importance in the last few decades.

Man's increasing interest in the environment is mainly due to the awareness that human beings have to take on the problems affecting our planet and ask for a quick solution.

Living creatures are in permanent interaction with the environment . Ecology analyzes how each element of an ecosystem affects the other components and how it is affected by them. To understand the complex plot of relations of an ecosystem, knowledge from botany, zoology, physiology, genetics and other disciplines like the physics, chemistry and geology are necessary.

In 1869, the German biologist Ernst Haeckel coined the term ecology, referring to the Greek origin of the word (oikos, house; logo, science, study, treaty). According to Haeckel, ecology had studied the biological relations of species with the environment. Later other scientists investigated the surroundings in which each species lives as well as its symbiotic and antagonistic relations with different ones.

Around 1925, August Thienemann, Charles Elton and others tried to work for the ecology of the communities. They worked with concepts as the one of food web, or the one of pyramid of species, in which the number of individuals diminishes progressively from the bottom to the top, from plants to herbivorous and carnivorous animals



The lack of green spaces, overpopulation, smoke and the heat generated by different machines, added to acoustic and visual contamination makes the city dangerous atmosphere for man.

New name for an old problem

The problems ecology deals with are not new. Ecology is only a fleeting fashion.

In the Neolithic period, ten thousand years ago, men destroyed forests to get wood and to clear spaces where to sow the grains on which they fed. Thus they altered the ecosystems where their communities lived.

In Greece, Plato left written testimony of the deforestation of Attica's mountains, that in his words was left as "the skeleton of a body made thin by disease". Water, the philosopher observed "was not lost running on the naked land as it happens today".

Of course, the problem did not affect only Antiquity: throughout history different land areas were modified by man's action. For example in the Fifties agriculture experienced a significant growth thanks to the advances in genetic engineering of seeds. The intensification of the use of the soil caused its degradation and the necessity to exploit new areas.

When human activity lacks controls and regulations, great catastrophes are likely to take place. Oil spills cause the death of numerous organisms, thus altering ecological balance.

When forests disappear not only the capacity of renewing oxygen in the atmosphere is lost, but groun fertility is reduced and its erosion increased, too.

The Earth faces serious danger of contamination and death of vegetal species and animals, and also of grounds, the atmosphere, rivers and seas that sustain life

Aware of the dramatic situation, in 1992 the member countries of the United Nations met at the Conference on "Environment and Development", known as the Summit of Rio de Janeiro. Governors, scientists and journalists worldwide, informed and alerted on the problems caused by industrial and technological development.

Knowing nature and the cares that it requires are fundamental subjects in present educational processes. Schools should indeed, provide information on ecology at all levels: from the care of a domestic animal, to daily discussions with teachers on the problem, as well as with work in scholastic orchards at all levels and all this should be carried out from primary to tertiary specializations.

Awareness of professionals in institutes and universities will certainly help.

The great amount of garbage produced by man may be used in sanitary fillings to reduce the impact to the minimum and recycling campaign the developed countries may surely help.

The lack of care on the part of man towards other living creatures puts in danger of extinction many species, the bulging bear, some batrachians, the seals of the Arctic or the whales of the seas of the south are some of them.