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I.- Introduction

In the last decades we have become aware that the growth of our society has compromised the integrity of the environment that surrounds us. The industrial revolution and the exponential growth of the population consume the natural assets of the planet, putting in serious danger even the recovery of renewable resources.

These all are the reasons why in 1972 the international community gathered in Stockholm, Sweden, to have the first United Nations Conference on the Human Environment. Since then, we have been witnesses of the growing concern regarding the state of the environment of our planet. From this important conference it was admitted that human development needed a change, in which our actions would also take in account the environmental consequences.

In 1992 this change was finally defined as sustainable development through the Rio Declaration on Environment and Development.

In this document we will shortly describe sustainable development and its importance, and then we will review some of the most important obstacles that we face towards sustainability. Finally, in the conclusions we will mention some of the proposals that aim to solve those obstacles; all of these within the framework of the Latin American Region.

II.- What is sustainable development?

There is nothing new about the idea of sustainable development. Through the course of human history, different civilizations have known the need for certain equilibrium between the population, their activities and their environment. Nowadays what has changed, is that our present society has compromised that balance. In this sense, we have realized that this situation urges us to develop an integral strategy that will ensure that we can regain that balance, or at least minimize the impacts on it; within the context of an industrialized and technological era, where free trade and massive consumption are the basis of our society.

This new strategy was originally defined by the World Commission on Environment and Development, also known as the Brundtland Commission, which in 1987 emitted its report, named *Our Common Future*. This report conceived sustainable development as the one “*that meets the needs of the present without compromising the ability of future generations to meet their own needs.*”

In this sense, sustainable development represents a formula that will enhance the quality of life of human population in the planet, without causing more damage to the fragile equilibrium of our global environment.

In order to achieve this difficult task, sustainable development requires a series of actions that will enable us to modify individual and collective costumes and practices, within a national and international level.

In 1992, during the Rio Conference on Environment and Development, the idea of sustainable development was inserted in the main international agreements and documents that were produced.

In first instance, the basic concept of sustainable development inspired many of the principles of the Rio Declaration on Environment and Development. This can be seen on principles 3 (The right to development must be fulfilled so as to equitably meet developmental and environmental needs of present and future generations) and 8 (To achieve sustainable development and a higher quality of life for all people, States should reduce and eliminate unsustainable patterns of production and consumption and promote appropriate demographic policies), jus to mention some.

It also became a key element for the international Conventions on Climate Change and Biological Diversity, and their protocols.

As we have all ready said, achieving sustainable development requires a series of actions. For this matter, during the Rio conference was also agreed a guide to continue the development of our international society, but within a social, economical and environmental balance. This guide line was known as Agenda 21.

III.- Why is sustainable development so important?

If sustainable development represents the means of preservation of our society, ensuring quality of life, economical growth and social welfare, without increasing the use of natural resources beyond their capacity to regenerate, then its importance it's out of the question. Sustainable development may become a matter of life or death.

Recognizing this importance, in Mexico the Federal government has declared that the conservation of water quantities and qualities are a matter of national security, as well as forests¹.

¹ Third Government Report of President Vicente Fox, given on the 1st of September of 2003, available at <http://tercer.informe.presidencia.gob.mx/index.php>

IV.- Obstacles in making decisions for sustainable development:

As sustainable development implies a change in individual and collective behaviors, and on institutional organizations and policies, within the public or the private sectors, it has been difficult to implement it.

There are strong interests that oppose the change, and social and cultural aspects that refuse to adapt to the new circumstances.

In a general perspective, all these obstacles can be classified into economical, social, political and environmental, although, this separation is not precise, as all these aspects interact between each other, enlarging the complexity of the problem.

These obstacles that I have mentioned are the following:

1.- Economic:

It is only recent that we have become aware that there are hidden environmental costs in many of our decisions and activities; costs that are unaccounted for, thus, becoming environmental externality costs.

An external cost exists when “*the private calculation of benefits or costs differs from society’s valuation of benefits and costs*”. Any environmental damage implies an external cost because the impacts are suffered by society, while is not reflected in the market².

In this case, the challenge is to find the means to consider the environmental externality costs in all the process of decision making; this within the public and the private sector. But the task is not an easy one. Economists have found it very difficult to establish the cost of polluting the atmosphere, or of the loss of biodiversity.

On the other hand, environmental protection and sustainable development entail additional costs, if compared with certain practices that seem to be less expensive; at least, in the short term. This can be seen with the resistance to reduce the use of fossil fuel and the proliferation of renewable energies.

Mexico is a good example of what we have said, as the country’s economy depends on oil extraction and export. It is still cheaper to produce energy by burning oil, than taking advantage of the countries Tehuantepec isthmus, where official sources calculate that it could produce over 5,000 MW by wind power³.

Finally, it’s important to consider the conflict that exists between international trade and sustainable development. This conflict can be seen in the tuna-dolphin case between

² James M. Griffin and Henry B. Steele, *Energy Economics and Policy*, 2nd ed., Academic Press, 1986, p. 58.

³ Energías Renovables para el Desarrollo Sustentable en México, Secretaría de Energía, 2004, p. 11.

Mexico and the United States of America, or the case of transgenic products between Argentina and Bolivia⁴.

2.- Social:

Inside the social obstacles for sustainable development, we can identify to main aspects, which are education and awareness, and public information and participation.

A relevant example of the importance of environmental awareness can be seen in the fact that most Canadians believe that their country possesses an unlimited source of fresh water, as is stated in the next quote:

“The abundance of Canada’s water supplies has been a prime factor in shaping public attitudes and federal and provincial policies. Despite rapid growth in economic and social needs, technological developments and new environmental requirements, generations of Canadians have felt free to use and abuse their water resources as the result of low pricing. (Canada’s per capita water use is now among the highest in the world and the prices charged for it are among the lowest.)”⁵.

In order to modify that idea, the Federal Water Policy of Canada establishes two main strategies, which consist of water pricing and public awareness.

On the other hand, public information and participation is also an important element of sustainable development. These two activities interact and depend on each other, because a proper information system is required for an active and serious participation process.

People in Latin America are tired of being separated from the decision making process. In our region the decisions usually take place in an office, far away from the place were the project is going to be developed, and without the knowledge of the people that will suffer the direct consequences of it.

In a democratic state, decisions concerning the environment have to be transparent, and they have to take in account the opinions of the social sector. Especially if we consider that most Latin American countries recognize the right of all their citizens to a clean and healthy environment⁶.

Despite all we have mentioned, there is a strong resistance of governments and the private sector to open their information and to establish public participation procedures. In this case, the lack of public access into information and into the decision making process is one of the causes of generalized opposition of development projects.

⁴ Information available at <http://www.greenpeace.org.ar/noticia.php?contenido=1783&item=&seccion=3>

⁵ Federal Water Policy, Environment Canada, 1997, p. 1.

⁶ These are the cases of article 19 of the Constitution of Chile; 41 of the Constitution of Argentina, and 4° of the Constitution of Mexico.

This can be seen in many examples through out Latin America, where the people oppose the execution of different kind of projects. This is the case of the Sarayacu community in the Amazonian region of Ecuador, who opposes the activities of oil search in their lands⁷.

3.- Political:

The political obstacles in making decisions for sustainable development are very divers, and differ from one country to another. Even though, the most common political difficulties that can be found in the Latin American region are the fragmentation on the environmental governance, and the fact that sustainable actions usually take a long time to develop an improvement in the quality of life.

Regarding the first political problem, we must take in account that in most Latin American countries the competences are separated into local and national levels. This produces a variety of actions concerning or related with environmental issues and sustainable development, which are not necessarily coordinated or at least coincident. In fact, it is possible to find many contradictions within the environmental policy of a country.

For example, we refer to the Metalclad case, in which the Mexican government was sued by a U.S. investor (under Chapter 11 of the North American Free Trade Agreement), who argued that through the actions of a local municipality (which did not grant the construction license), his property was effectively expropriated, even though he had obtained all required permits from Mexican federal authorities (including the environmental impact assessment authorization) to construct and operate a hazardous waste facility.

The decision of the International arbitration panel directed Mexico to pay \$ 16.5 million dollars (plus interest) to the U.S. investor.

The second problem that we have mentioned has to do with the limited period of time that a public administration lasts. In this sense, governments give priority to actions and programs that will show substantial results in a short period of time, because to them, this will be politically more profitable (in terms of election). And then, when the new administration arrives to office, they usually do not continue the actions of the former government, in prejudice of the continuity of environmental improvements and sustainability.

A case like this has been made public by Greenpeace Ecuador. It concerns the destruction of mangroves forests by shrimp farms, and the compromise acquired by the former administration to protect this fragile ecosystem. The organization is concerned that the new government will not accomplish the agreements made before their recent election⁸.

4.- Environmental:

The environment must be conceived as a system, integrated by different elements which interact between them. In this sense, we can be certain that the environment is a complex

⁷ Information available at <http://www.greenpeace.org.ar/noticia.php?contenido=3725&item=&seccion=7>

⁸ Information available at <http://www.wrm.org.uy/bulletin/14/Ecuador.html>

system, situation that makes it very difficult to understand, and therefore, to protect and use in a sustainable way.

An environmental problem for sustainability, which is related to the economical aspects, is taking in account the environmental costs of our actions. In order to achieve sustainable development, we have to be able to measure environmental resources. But how can we measure intangible environmental resources, such as biodiversity, ecosystems, or the atmosphere⁹.

This raises another problem; as many natural assets are intangible, the property over them is also unclear, making no one responsible for their damage.

Finally, we must consider that the environment and its elements do not respect political boundaries, thus creating conflicts between different jurisdictions.

An international conflict on this matter can be seen between Bolivia and Chile, because of the water of the rivers Lauca and Silala. In 1978 the conflict of the Lauca River, was the reason for the suspension of diplomatic relationships between both countries¹⁰.

V.- Conclusions:

As we have seen, there are many difficulties that have to be solved, in order to achieve sustainable development. The nature of the obstacles mentioned above is diverse, which means that we require diverse answers for them.

In first instance, our global society and the institutions that represent it need to compromise themselves towards sustainability. With this conviction it would be easier to insert environmental concerns in all decision making processes.

Second, environmental policy and sustainable development have many tools that are aimed to the achievement of the primal goal.

One of the tools that allow us to internalize the environmental costs of our actions, and reflect them in the market, is the different economic instruments; which are defined as measures that use market-based signals to motivate desired types of decision-making, providing financial rewards for desired behavior or impose costs of various types for undesirable behavior¹¹.

⁹ Stuart Bell and Donald McGillivray, *Environmental Law*, 5th edition, Blackstone Press Limited, London, U.K., 2002, pg 16.

¹⁰ Information available at <http://www.tierramerica.net/2000/1008/articulo.html>

¹¹ Economic Instruments for Environmental Protection and Conservation: Lessons for Canada, see reference online at <http://www.smartregulation.gc.ca/en/06/01/su-11b.asp>

In this case, in Colombia the Ministry for the Environment designed pollution water taxation for the industrial sector, which represents an interesting proposal for the internalization of this environmental cost¹².

Regarding some of the social obstacles that we mentioned, the United Nations Environment Program, Regional Office for Latin America and the Caribbean developed a “*Proposal for a Basic Law on Environmental Protection and the Promotion of Sustainable Development*”, in which they advice to integrate a Section destined to regulate a “*National Environmental Information and Monitoring System*”, and another one regarding “*Publicity and Citizen Participation*”¹³.

This proposal has been adopted by many of the countries in our region. As an example, El Salvador has developed an environment information system that concentrates information concerning the state of the environment in the country. This allows that almost any one can review the environmental situation of El Salvador¹⁴.

As for the political obstacles, some countries are trying to ensure that environmental and sustainable policies can aim for long term objectives, which are not affected by changes in the authorities. In Mexico the General Law of Sustainable Forestry, establishes that the National Strategic Forestry Program will determine objectives and action lines for at least the next 25 years¹⁵.

Regarding environmental obstacles, we must mention that there are some initiatives to determine an approximate value of biodiversity loss, or regarding the sustainable use of ecosystems and the natural services that they provide to our society.

As we have seen, there are many difficulties that oppose sustainable development. For this reason, we have the urgent need to solve these variable problems, through different answers. The real challenge is to execute all this actions in a coordinated way. In this sense, we must bear in mind that economical instruments, social information and participation, and legal obligations will not substitute each other; on the contrary, they all complement and support each other, as they constitute the elements of an integral strategy that aims towards sustainability.

¹² Luis Fernando Castro, Juan Carlos Caicedo and Andrea Jaramillo, *Aplicación del principio contaminador-pagador en América Latina; Evaluación de la efectividad ambiental y eficiencia económica de la tasa por contaminación hídrica en el sector industrial colombiano*, Serie Medio Ambiente y Desarrollo, United Nations, 2001, p. 5.

¹³ Proposal for a Basic Law on Environmental Protection and the Promotion of Sustainable Development, United Nations Environment Program, Regional Office for Latin America and the Caribbean, 1993, pp. 34 and 42.

¹⁴ Article 30 of the Law of the Environment of El Salvador establishes the legal basis of this information system, which can be consulted on line at: <http://www.marn.gob.sv/gis.htm>

¹⁵ Article 36. II of the General Law of Sustainable Forestry of Mexico.