

# The Path Towards Environmental Management

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Some strength, some axis is moving and levering a new way of thinking, a new society. History is not dead; to the contrary, it is being built upon new paradigms; and so swiftly that sometimes it gives us the feeling that we are late in sharing in the transformation.

A short time ago, in Brazil, not even the democratic liberties were assured; and today hope has given birth to the unexpected. Paraphrasing the theologian Leonardo Boff; we have a government in which we believe, born from the longing of the people, born from hope, begotten by dreams and the will to do right.

The environmental issues, which have become, in the contemporary world, catalyzers of concerns, anxieties, expectations, political and social longings, are, in a way, shedding light upon new perspectives; and attempting to reverse the trends of random economic growth, in the direction a model of sustainable development committed to respect for life.

The concept of sustainable development, from Ignacy Sachs, Maurice Strong, the Brundtland report, and so many others, although still under discussion, sometimes technical, sometimes political, has raised itself to the highest level of international political proposals.

Among the many debates about this concept, at the National Conference, the following approach has been consolidated: “A socially just and economically feasible way of exploiting the environment that ensures the perpetuity of renewable natural resources and ecological processes, preserving biological diversity and other ecological attributes for the benefit of future generations, while fulfilling the present needs”.

Therefore, recalling an article by Henry Acselrad in the book “The Challenge of Sustainability,” the type of model that makes citizenship a condition for development comes into existence when “in its construction, integrated environmental policies concur, democratizing the material basis of society and finding support in the possibilities afforded by the variety of biomes, ecosystems and other territorial configurations; that is to say, in the diverse types of knowledge held by the social subjects who are a reference for those Territories.

Still, recalling once again Leonardo Boff, the Brazilian empire, or the “Tropical Rome”, contrary to the Roman Empire, is to be based on solidarity instead of military domination. Its mission would be to “unify the human family in the home of Earth”. The theologian stated that there are four steps to be taken in order to reach this new status. The first would be to press the State, which should be focused on social issues and the general population, to take the necessary measures. Another would be to demand engagement on the part of the national intelligentsia. “It has a debt to pay to those who did not have the privilege of going to the university. It is necessary to bring together the types of knowledge characteristic of the masses and the professionals”, he explains. The third measure, dependent upon the second, would be to aid the mobilization of the masses; while the fourth point would be the adoption of an “ethics of caring”, by politicians. For the theologian, the governors “should spend more time on the plain than on the Plateau.”<sup>1</sup>

Medium and long term success of all that can be attained from this knowledge will not depend upon the Lula government and its environmental work agenda alone, but upon all of us, in the struggle against poverty; considering the relationship between poverty and the environment, which should be systematically included in the urgent demands from society and the political dialogue.

We, and almost everyone in Latin America, have lived through a good part of the 20th century under dictatorships that restricted individual liberties. The environmental issue has only begun to be discussed among us in greater depth since the 1980's; meanwhile, the environmental problems have increased, due to the concentration of the populations in large urban centers, and the inadequate appropriation of natural resources, as a consequence of numerous economic activities. The continuous urbanization, associated with industrial expansion, has become a growing problem for public health.

Yet, our heritage is incalculable. Our biodiversity is one of the most extensive in the world. This is because we have a vast territorial extension and a broad geographical and climatic diversity, in addition to the largest covering of tropical forests in the world, mainly concentrated in the Amazon. Among the countries possessing a “mega-diversity”, Brazil is in first place, concentrating 15 to 20% of the total of identified species on the planet. It must also be pointed out that, according to data disclosed by the Ministry of the Environment in 2002, there are 55 thousand species of superior plants here (approximately 22% of the world's total). The following data can be added to this information: Brazilian biodiversity is also the greatest in terms of fresh water fish and mammals, the second in amphibians, the third in fish, and the fifth in reptiles. Not to mention our water resources: the Amazon river basin is the largest on the planet; the basins of the Paraná and Prata rivers – located between Bolivia, Paraguai, Uruguay, Brazil and Argentina; and that of the Orinoco river, between Venezuela and Colombia, are among the most important on the planet. South America has the largest aquifer in the world, the Guarani; taking up part of the territories of Brazil, Uruguay, Paraguay and Argentina.

In face of this scenario of poverty and greatness, our political responsibility increases proportionally to the constitutional pledge that makes sacred the right of all to an ecologically balanced environment for the common use of the people, essential to their quality of life. Thus, the governmental strategy broadens, becoming receptive to values of social and environmental equity and justice.

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1. A reference to the plateau on which the city of Brasília, the capital of Brazil, is located. (translator's note)

U Upon verifying the results of the national hearing, compiled from the state and regional pre-conferences, a consensus on the definition of five strategic foundations for the project of the Positive Environmental Agenda of the Ministry, as a whole, has been identified:

- Participative management and partnerships between the three levels of government;
- Partnerships with the civil society and private players;
- Generation and dissemination of environmentally sound information and technology;
- Environmental education; and
- Social control and inclusion.

Upon these foundations I based my presentation on sustainable development and the construction of desirable futures for the environmental area.

Environmental actions must be seen and treated as part of a system and not as the responsibility of one sector or sphere of the government. Minister Marina Silva has established the relevant issue of transversality as the structuring axis for the governmental policy of the Ministry. This axis constitutes the conducting wire for the operationalization of the governmental actions, within the ambit of the “Sistema Nacional of Meio Ambiente” (National System of the Environment). SISNAMA, created in 1981, becomes strategic because it represents a political project for integrated governmental action, including systemic environmental management.

Still, SISNAMA lacks a greater closeness to society and private initiative to, essentially, give it a contemporary character. That is, to endow it with the instruments capable of overcoming the internal contradictions and make of it a facilitator of social-environmentalism. This means introducing its action into a social process and not restricting it within the restricted domain of environmental issues. Today, a very broad opportunity is open for the establishment of partnerships between different bodies of the government, within the scope of a policy of convergence of interests; as long as objectives and roles are clearly defined in the promotion of environmental and social development. These objectives and roles are described in the results of the National Conference, and will be addressed by the Tripartite Commissions, proposed by the Ministry of the Environment, and about which Dr. Langone will be speaking.

**T**he active participation of civil society in environmental advocacy will only be assured at the end point of the system if there are political will and strong environmental entities to effectively respond to the demands of the population and support them in their struggle for quality of life and living conditions .

Only the perfecting of the coordinated effort of all the agencies that deal with environmental issues per se, and of the related sectors, will allow the country to make a leap in quality for the environment.

Participatory democracy, transversality and social control presuppose that the State will necessarily draw nearer to the citizens, in order to improve their quality of life; eradicating poverty, and assuring them all the rights of citizenship. In order to engender this approximation, in the field of environmental management, Ibama has been making efforts towards generating legal, institutional and operational arrangements; as well as differentiated mechanisms and modalities, to promote a narrow and active cooperation of the civil society, for the defense of the environment. This will only be assured, at the end-point of the system, if we build a net for political and institutional coordination, capable of efficiently responding to the demands of the communities, in their struggle for their own quality of life and living conditions.

Francisco Reifscheineder and Pedro Viana Borges, in the introduction to an article about multi-institutional partnership in the field of agricultural research, defined the reason for the constant search for partnerships by the public companies, both among themselves and with the private initiative, very well: "The growing competitiveness existing in the contemporary world implies in a curious paradox: the search for partnerships has become a way of developing quality products and assuring substantial portions of the market". In the specific case of the public sector, partnerships acquire even greater prominence, if we take into consideration: 1) the need for interaction with the private sector, in order to assure the fulfillment of the existing demands, and 2) the limited resources available.

And they continue: " Partnership must be understood as the relationship between two or more different institutions complementing each other, from which both parts obtain advantages and benefits. The results of the partnership should also exceed the mere sum of the individual efforts of each partner. Multi-institutional partnerships are a necessity of the new times in which we live".

In this line of thought, President Lula recently sent to the National Congress a bill that institutes general norms for biddings and contracting of partnerships between the public and private sectors, within the ambit of the public administration.

In accordance with this law, what is considered a partnership between the public and private sectors is an agreement between the public administration and private entities, establishing a legal bond for the implementation or management, as a whole or in part, of services, enterprises and activities of public interest; in which financing and the responsibility for investment and exploitation are incumbent upon the private sector participant, while observing the guidelines for efficiency. The expectation of the government is to make available approximately \$36 billion in resources, which should be preferably invested in infrastructure.

It must be pointed out that this law applies to the agencies of the direct administration, special funds, autarchies, public companies, mixed economy societies, and the remaining entities controlled directly or indirectly by the Federal government, the States, the Federal District and the Municipalities.

At the present time, a broad range of alternatives and opportunities is open to the environmental area. Indirectly, it has been established, in principle, that all infrastructure projects should be enabled to be in line with the conservation of the environment: the construction of roads, waterways, ports, telecommunications and electrical power structures - with specific investments in the sector. Directly, it assures environmental services; especially in the areas of public sanitation, waste management, leakage treatment, and garbage collection; all of which, according to data from the Ministry of the Cities, require \$178 billion, in order to overcome the deficit, in the entire country , in the next 20 years.

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The first desired institutional condition for the success of the partnership between the public and private sectors is the creation of a forum for discussion and business; the second is the existence of good projects. In this respect, president Lula has said: "We need to establish partnerships for the projects for which the government is without resources". He states: "It is not money that makes the project, but the project that makes the money." In his government program for the environment, a pledge has been made to discuss new mechanisms and create special funds, for the financing of specific policies and programs.

The social-environmental funds are intended to channel resources, following previously established criteria of eligibility, towards small projects from low income groups, devised and implemented by public or private agencies, NGO's or associations, or community groups. If well managed, they are an excellent tool for environmental management. The bill that establishes norms for the contracting of partnerships between the public and private sectors provides that the federal government may complement the funds, by means of a Fiduciary Fund of Incentive to Partnerships Between the Public and Private Sectors; and authorizes the states, municipalities and the Federal District to do likewise, by specific laws, through funding with the characteristics established in the bill.

The state and municipal governments will be enabled to encourage partnerships with private initiative for environmental services; especially in the fields of public sanitation, waste management, leakage treatment, garbage collection and others contributing to regional and local social-environmental development.

An example of the possible means for creating conditions of sustainability are the environmental commodities: goods originating from natural resources, which function as inputs for the industry and agriculture, and are divided, according to experts in this field and market, into seven modalities: water, energy, biodiversity, wood, ore, recycling and polluter control (water, soil and air).

In this context, Amryah El Kalili, economist and coordinator of the CTA (Consultant Trader Adviser) project, from the Economists' Union of São Paulo, presented, in a seminar, a project that foresees the development of a mechanism for appreciation of forest products, transforming them into assets of the Atlantic Rain Forest. "The bromeliad, the urucu or palm will have certificates proving that they were produced in sustainable conditions, and not illegally extracted", as he explains. With the implementation of this project, the products of the Atlantic Forest would be traded in stock markets.

Within this perspective, opportunities are also opened for a carbon-credit market in Brazil. The mechanism of carbon credits has been foreseen in the Kyoto Protocol, which has already been ratified by more than 100 countries, but is still pending the adhesion of Russia, in order to be go into force.

Business deals are already being closed, independent of the final ratification of the protocol. Countries such as Holland have already been financing projects - acquiring these credits by anticipation - in several countries of the world, including Brazil.

A generalized change of consciousness is taking place in every part of the world. In community settings one encounters a new movement of citizens, above political parties, crossing over the traditional jurisdictions, working almost without resources, acting in conjunction, in order to solve common problems, especially those related to the eradication of poverty and improvement of the quality of life, and which allow a dignified, peaceful and equalitarian existence for all.

Communities have been organizing themselves through community counsels, committees, class associations and neighborhood associations; and are becoming structured to the point where the government will have to listen to them when it makes political decisions and devises public policy.

In this sense, true decentralization is one that draws the State nearer to the citizens, thus making possible the leap from representative democracy to participatory democracy. This is an efficient partnership. Social control, currently so widely discussed, is an effect of this model.

The partnerships within the public sector, between the public and private sectors, and between governmental and non governmental associations and communities have made possible the emergence of successful initiatives throughout the country.

The expansion and strengthening of these initiatives requires that they be organized into networks, so as to allow better interaction among the agents involved, as well as facilitate the flow of information and knowledge, and exchange of experiences from the periphery to the center, and vice-versa. The success of these partnerships will greatly depend upon the competence of the public authorities in watching over the environment and “preserving it for present and future generations.”

In this sense, an undelayable priority is the creation of a National School of Public Environmental Management (Escola Nacional de Gestão Ambiental Pública), which will be an important instrument of cooperation and support for SISNAMA in the training of experts committed to the development of the essential knowledge that would guide the progressive transformations of the public policy in the environmental field.

Environmental education, at all levels and in all modalities of education, is an essential element in the context of sustainable development. It includes building awareness in society as to the need for environmental preservation. It reinforces changes in attitudes towards the environment, and promotes habits of sustainable use of natural resources in the communities; making possible the involvement of the people themselves in the planning and evaluation of social projects.

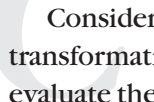
It has become necessary to foster the training of creative scientists, which would associate other types of knowledge with the academic subjects. Intellectual transversality will surely allow advancement in the quality of environmental education. The sustainability of a new standard of development requires political will, in order to enable academicism to break through its structure; which traditionally perceives only one axis on which to base its analysis. This systemic vision will exponentially increase the sustainable use of the mega-diversity of our biological resources, channeling this knowledge into projects that contribute to push forward development, for the benefit of those who are socially less favored.

Decidedly, the prospects are optimistic.

The projection of scenarios is not a mere exercise of the imagination, for the future that awaits us should not be foreseen based only on the subjective character of individual beliefs. On the contrary, scenarios are defined based on an evaluation and combination of several factors that should contribute to making them feasible and balanced. Among these factors, the “moving forces” stand out.

Therefore, identifying the main moving forces for the environment is the first task to be carried out in this procedure. moving forces are social-economical factors that drive forward environmental changes. The way in which these factors evolve determines the conformation of worldwide and regional development, and the long-term state of the environment, allowing for reflection on the relationship between these forces and the environmental issue.

Within this perspective, seven moving forces have been identified – Politics and Geopolitics, Demography; Sciences and Technology; Economy and Society; Values and Culture; Ecology and the Environment, and the Energetic Balance.



Considering the difficulties in identifying and managing the uncertainty generated by the far-reaching global transformations, it becomes necessary to make use of instruments that would allow one to identify, process and evaluate these factors of global change (moving forces) and their implications in shaping different time periods in the future. Therefore, identifying the trends of these factors of change has been essential for the construction of the scenarios and determining of their direction in the long term.

These trends allow for the identification of possible changes in society, which could turn into threats or opportunities; and which a government must create capacities to confront or take advantage of. In order to reduce risks and take advantage of opportunities, government and society in general should be capable of thinking and acting within a framework of great transformations.

The construction of scenarios is not a mere exercise of futurology. Based upon the identification of the moving forces and their trends, a few hypotheses have been generated. Even though some aspects of modern life can be anticipated, growing and continuous technological innovation, globalization, and the collapse of trade barriers fill the journey to the future with uncertainties and surprises. Analyzing these hypotheses may signify a change in this process. By exploring a series of future hypotheses it is possible to obtain a clearer image of what we may face, and what may be the consequences of the decisions we make. Therefore, the pertinent question that the hypotheses can answer is not what will take place, but what may take place, and how leaders can act to lessen the effects of those events.

Society, through its institutions, will promote quality of life; assuring universal access to essential services and consolidating awareness of the indivisibility of the environment, both as a theme, and in economic, cultural and geopolitical terms, with human beings acting individually and collectively for the benefit of present and future generations. ■