

**PRESIDENCY OF REPUBLIC OF GUATEMALA**  
**NATIONAL COMMISSION OF THE ENVIRONMENT**  
**CONAMA**

**FIRST NATIONAL REPORT ON IMPLEMENTATION**  
**OF**  
**UNITED NATIONS CONVENTION**  
**TO COMBAT DESERTIFICATION**

**GUATEMALA, APRIL, 2000**

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**UNITED NATIONS CONVENTION  
TO COMBAT DESERTIFICATION**

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# **FIRST NATIONAL REPORT ON IMPLEMENTATION OF UNITED NATIONS CONVENTION TO COMBAT DESERTIFICATION**

## **PRESENTATION**

The present document, is guided to provide a general vision of environmental national problematic, generated from depletion and degradation of the natural resources; which influence of direct manner in the processes of Desertification and effects of Drought.

Specifically is informing about the process of implementation of The United Nations Convention to Combat Desertification and Drought, treating the following aspects 1) Strategies and priorities established inside the context of the plans and/or political of sustainable development; 2) Institutional measures adopted for implementate the Convention; 3) participative process to support the preparation and implementation of the national action programs; 4) Process of consult in support to the preparation and implementation of the national action programs and of the agreements of association with developed countries Parts and other entities; 5) adopted or planned measures inside of the context of national action programs, including measures to promote environment economized, to conserve natural resources, to promote institutional organization, increase the knowledge about desertification and control for labors of following up and evaluation of desertification and drought; 6) financial contributions of national budgets to support implementation, as well as financial attendance and technical cooperation, including affluency processes to identify requirements, financing areas and establishment of priorities; 7) revision of points of reference and utilized indicators to measure the progresses and evaluation of same.

Finally, it is important to mention that the present report was elaborated by joint efforts between Executive Secretariat of Convention of Desertificación, Environmental National Commission and Focal National Point, with the collaboration of following organizations: Coordinator National of the Mayan Town of Guatemala, National Council of Institutions of Development (ONG´S), National Association of No Governmental Organizations of Natural Resources and Environment, National Association of Municipalities, National Network of Formation and Environmental Investigation, (Universities and instances of investigation), Ministry of Agriculture, Cattle and Feeding, National Institute of Forests, National Council of Protected Areas and Plan of Forest Mayan Action.

## **FIRST NATIONAL REPORT ON IMPLEMENTATION OF UNITED NATIONS CONVENTION TO COMBAT DESERTIFICATION**

## EXECUTIVE SUMMARY

### **D) STRATEGIES AND PRIORITIES ESTABLISHED INSIDE THE CONTEXT OF THE PLANS AND/OR POLITICAL OF SUSTAINABLE DEVELOPMENT**

The National Environmental Management was framed in the proposals defined by National Agenda 21, Central American Alliance for Sustainable Development, National Environmental Action Plan, the Peace Agreements undersigned 1,996 and the Environmental National Politics.

#### **The National Agenda 21:**

Generally it defines to reach the following purposes: 1. To strengthen bases that promote the implementation of a model of sustainable development, articulating the economic scenes, social, politician, cultural and environmental. 2. To Incorporate the environmental component in national plans, programs and into project with an multisectorial interpretation. 3. To strengthen the participation and the capacities of management of the governmental entities, no governmental and local municipal organizations in the process toward the sustainable development. 4. To prevent and mitigate the environmental contamination in all the manifestations.

By the other hand, is planning the following strategic elements for the implementation: 1. Identification of actors and groups of interest in specific problems that affect the environment and the sustainable development. 2. Analysis of national problematic in multisectorial manner and participates to identify priority areas at regional and local level. 3. Formulation participatively of plans, programs and projects of short, median and long term. 4. To Incorporate the both aspects in political of planning of the country. 5. To provide the general guides of action to strengthen the capacity of management of different actors of the society at national, regional, municipal and local levels.

#### **The Central American Alliance for Sustainable Development :**

In 1994 the Central American Presidents approved the Central American Alliance for Sustainable Development, that pursues to transform, with the complementary support of the international community, to the region in a model of sustainable development for all the planet. A region where the respect to the life in all the manifestations, the permanent improvement of the quality of life, the respect to the vitality and diversity of our earth, the peace, the

democracy participates, the respect to the cultural diversity of the townes of the central american area, are the principles that regal the future.

One of bases of the Central American Alliance for Sustainable Development constitutes the sustainable management of the natural resources and improved the environmental quality. The depletion and deterioration of the base renovates the natural resources is a problem for the future development in Central America. The contamination of the water, the air and the land have increment rapidly in the region and probably continues if no guide the current processes of development and industrialization. The principal threat radiates in the loss of forests and the decrease and deterioration of the wealthy and quality of the water, what to the time is one of the cause principals of sickness and death over in the populations. The consumption of assets and services implicated the use of resources of all type, marginal.

### **The Environmental National Action Plan:**

The Environmental Action Plan was elaborated in 1995, with the vision of formulating plans, programs and to project that involve to all the population in order to propitiousing the interrelation of the management of the natural resources and the coherent environment with the development economic and social.

Identified as principals both problems the following:

- 1) Damage Of the land natural resources: deforestation, deterioration of the soild resource, reduction of hydric resources and lost of the biodiversity.
- 2) Damage of the marine-coastal resources: About exploitation and disorderly exploitation of the fished resource, loss of the mangrove and contamination of the water in the region of production coastal-marine.

### **The Peace Agreements :**

Three agreements are mention with major protagonis of the natural resources and the environment, these are :

- a) Agreement for the resettlement of uprooted populations by the armed confrontation.

This agreement mentions from the fixation of the principles the sustainable development, sustainable and equitable, refer to the criteria for the selection of lands: to the potential agro-ecological, price, sustainableity of the natural resources reindeers and existing services. These criteria relate specifically the production with the sustainable management of the resources.

In relation to the execution of the projects also combine aspects related to the agricultural sustainable development, the territorial settlement, the utilization of the natural resources in function of the potential to title and rights about the land and the water, use and planning of the natural resources, and infrastructure of sanitation.

b ) Agreement on the identity and right of the indigenous townes

In this agreement strengthen and enlarge the related aspects with the ambiance and the natural resources, in it related to the science and the technology mention the need of promoting technological innovation and the ethical principle of conservation of the environment. Referring to the land, it is contemplated the need of administering of sustainable manner the natural resources that of the land depend on a proper conception of the indigenous population.

c) Agreement on socioeconomic aspects and agrarian situation

It is the agreement where mention with major insistence the related aspects with the environment and the natural resources, from a principle mention the need of promoting an integral strategy that includes: Possession of the land, use of the renovable natural resources, systems and mechanism of credit, processing and commercialization; legislation agrarian and juridical security and labor relations; technique attendance and training; sustainability of the natural resources and organization of the rural population.

As soon as to the fund of lands, is planning the promotion of the access to the property and sustainable use of the natural resources. Furthermore the development of plans of territorial settlement and the application of criteria of economic and environmental sustainability. It is planned the creation of and environmental agrarian jurisdiction within the judicial organism, by means of the emission of a corresponding law.

In relation to the access of the natural resources it is planning that for 1,999 must have granted to little and legally median organized peasants, in concessions the management of 100,000 hectare distribute them between protected areas, ecoturism, protection of fountains of water and other compatible activities with the potential and sustainable use of the natural resources.

Also establish the promotion and support to the private sector and communitary organizations of basing in projects of management and conservation of natural resources through incentives, direct localized subsidies or mecanismes of funding in conditions brandishing and point to the search of the international cooperation.

From this frame indicator of different guides that in matter of environment and natural resources must to be observed in the search of a model of sustainable

coherent development with the economic and social development of the country, has planned and in some cases implementing political, strategies, plans and following programs:

### **1. Agrarian and Sectorial Politics (1, 998- 2030)**

It establishes as general objective "to contribute to the improvement of the quality of life of the rural population that depended direct and indirectly of the agriculture and the natural resources, that permit to revalue the life in the field, the advance toward equity, the equalized development of the regions of the country and the decrease of the structural heterogeneousness that is the expression of the undevelopment and poverty".

### **2. Forest Politic of Guatemala**

It is proposed as general objective "to increase the socioeconomic benefits of the goods and generated services in the forest ecosystems and to contribute to the territorial settlement in rural lands, through the promotion of the productive management and of the conservation of the base of natural resources, with emphasis in forest and associated resources as the biodiversity, the water and soils; incorporating increasingly the forest activity to the economy of the country in benefit of the guatemalan society"

### **3. National Politics for the development of the Guatemalan System of Protected Areas Protected (SIGAP)**

The which is defined as "The description of the group of principles, objectives, legal and institutional frame, lines of politics, instruments and desired situation, that State might declare, with the purpose of guaranteeing the provision of goods and services and the conservation of the biological diversity for the social and economic welfare of the settlers"

### **4. Environmental National Politics**

It is proposed as central objective, to improve the quality of the environment and to manage adequately the natural resources of the country, inside of a frame of equitable and sustainable global development, in order to help to improve the quality of life of the guatemalan population.

**Sectorial Environmental Politicals for sectors:** Agriculture, Industry, Commerce, Tourism, Petroleum and Natural Gas.

**Transectorials:** Biodiversity, Climate Change, Desertification, (in consultant process with diverse sectors): Waste, Air Water, Energy.

### **5. National Strategies for:**

Biodiversity, Climate Change, Prevention and Control of Forest Fires.



## 6. Hydrobiological Action Plan

It is important to observe, that the term Desertification does not appears considerate as such in the context mentioned, however, the concepts and principles of the prevention, mitigation and to control of the exhaustion and the degradation of the natural resources, principally the water, the soil and the forest are considered of prior in different instruments mentioned before.

## II. INSTITUTIONAL MEASURES ADOPTED FOR IMPLEMENTATE THE CONVENTION

Starting from its participation in the First Regional Meeting for Latin America on Desertification and Drought held in Buenos Aires, Argentina in February of 1,996, Guatemala begins the process of analysis, discussion and definition of some actions focused to the combat Desertification and the negative effects to the hydric resource and to the environment in general. At the same time are begun the steps established in the legal procedure for the subscription and adhesion of the country to the Conference of the Parties, which were achieved in April of 1,999.

The adhesion of Guatemala to the Conference of the Parties implicates the responsibility of the State toward the execution of the established in the same. Like first step is delegated to the National Commission of the Environment (CONAMA, entity state clerk directly of the Presidency of the Republic) like focal point of the country in front of the Convention, reporting it officially to the Executive Secretariat this national decision.

Inside the CONAMA's organization, has delegated to the staff of professionals of technical attendance (instantance of direct advisor to the National Coordinator, the attention and accompaniment of Conventions of Desertification, Climate Change and Biodiversity. So in this manner, the CONAMA has assumed the role of National Coordinator Agency for the implementation of Convention of Desertification, putting to disposition the human resources, material and necessary equipment for the good fulfill. Institutionally has an annual budget distributed as follows :

Human Resources :	Q 3, 700, 000.00	US \$ 47, 435.00
Material and Institutional Equipment :	<u>Q 8, 300, 000.00</u>	<u>US \$ 1, 064,102.00</u>
TOTAL :	Q 12, 000, 000.00	US \$ 1, 538, 400.00
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As has manifested since the beginning of the present report, The Program of National Action to Combat Desertification, has not been adopted yet officially by the government of Guatemala as a priority component of the agenda. It is important to mention that as such Convention, as same as of Climate Change other agreements and international treaties are relatively new initiatives in the concept and focus why the process of implementation has initiated with actions of information to diverse actors of the society. However, exist similar initiatives that have undertaken as by as no governmental and governmental organizations on the plans and work programs.

Must to be mentioned, that of the budget of the State, assigned for the functionality of CONAMA, has not assigned a specific departure for a national program to combat Desertification. Even though has proposed the assignment of this departure for the budget of the year 2001 in forward.

### **III. PARTICIPATIVE PROCESS TO SUPPORT THE PREPARATION AND IMPLEMENTATION OF THE NATIONAL ACTION PROGRAMS**

The process of implementation of Convention of Desertification, initiated in 1997 by means of First National Encounter realized in Northwest and Northeast Regions of the country. This encounter had as fundamental purpose, to identify the principals causes and the effects of the degradation of the soil, concluding in that the causes of this phenomenon have the origin in the social aspects, economic and cultural, whose effects influence directly in the environmental deterioration and to the increment of the poverty. At the same time the results of this national encounter served of base to propose to the current governmental authorities the criteria for the formulation of political and national strategies to combat Desertification and mitigation of the effects of Drought.

The citizen participation, is an established commitment by means of the subscription of the Peace Agreements. Nevertheless, the process participate is still incipient, first by the fear of public expression that let the 36 years of the armed internal conflict and later by the lack of organization in the expression and proposal of the civil society, before the daily proposals of the government.

In Guatemala the community participation is not a new matter, since 1945 constitute legally the committees of community development with a focus of support to the management of the central government and the municipal governments, however these never have had an outstanding paper before proposed of both governments, turning them only in manager of conjuncture community actions, for example in the organization of festive days, organization of religious events, community vigilance before incidental problems, etc.

Actually in the guatemalan society, the woman plays an important paper in profit and management of the natural resources, as well as in the national economy; however, the role is not completely recognized, inclusive by the same

woman. This has a direct relation with the cultural and social proper pattern of the country; since for historic the man is who had developed the economic activity, and his male conduct has relegated to the woman to a second place. Actually the woman has recovered some spacious of participation in the national life, principally in the politician aspect what has created a climate hopefulness for a focuss of equality of opportunities for women and men. This of course, also will transcend in the efforts of incorporating focuss of type in different initiatives and national commitments, as the implementation of different Conventions, between them of desertification.

The participative focus are effective always that the communitary count with a transparent and truthful information about the problems that affect them; at the same time, the participation must create demand and disposition in the definition of proposed serious and viable.

In spite of not to be duly implemented the National System of Environmental Information (SINIA), some concrete actions have come developping, such is the case of to divulge of some political, strategies, laws, rules, etc. related with the environmental management and the natural resources. However, by the characteristics of nation pluricultural, pluriethnic, and multilanguage, in Guatemala is not so easy to design a strategy of divulging and/or general communication without taking in these consideration particularities of the country.

In the proposals of (SINIA), is considered extremely important to conform of database, no only of both aspects, but also of inventories and diagnoses of the natural resource for an certain definition of the national accounts of the environmental and cultural patrimony of the country.

#### **IV. PROCESS OF CONSULT IN SUPPORT TO THE PREPARATION AND IMPLEMENTATION OF NATIONAL ACTION PROGRAMS AND OF AGREEMENTS OF ASSOCIATION WITH THE DEVELOPPED COUNTRIES PARTIES AND OTHER ENTITIES**

As before mentioned, the process of implementation of Convention of Desertification initiate with the first national encounter in the Northwest and Northeast regions of the country, where are presented the major problems of the phenomenon. In this encounter, besides identifying the causes and effects of the desertification, was planning the urgent needs executing actions to detain the accelerated depletion of the lands of those regions.

In spite of the problem is patented at simple sight, this must be tackled in the frame of a national politics, with different strategies of implementation, and no with remoted mitigating actions and to control. In the agenda of the current government, the theme has gone turning importance in a slow manner due to problems of major importance that according to this must to be resolved with priority.

On the other hand, the international cooperation at technical support, economic and financial level, might seem not to consider it neither in the priorities. In multiple occasions have done proposals to organisms, such as bilateral and multilateral in search of support, but up to date any results have obtained about this.

It is important to mention, the support that Secretariat of Convention has offered to the national counterpart, as for the ratification as for the execution of the national encounter, and the elaboration of this national report. Attitude that not have assumed the parts or development countries members of Convention, in spite of being established as an agreement inside of the same.

In the efforts of implementation of the commitments emanated from the peace agreements undersigned on 1996 in which the recuperation of soils and degraded lands and subutilized ones, form important part, concrete actions to the respect have been planned, such is the case of the request of support proposed to the countries friends (Sweden, Norway, Spain, France, Canada and United States of America), for the protection of the basins as units of production and alimentary subsistence.

Separately the National Commission of the Environment, (CONAMA), has initiated negotiations with international organisms for the support of the management in environmental matter in which undoubtedly will be given full importance to the protection and conservation of the natural resources, principally the water, the soils and the forest.

With the purpose to promote a process of self-management, actually is working in order to conform of committees and communitary and voluntary groups for the prevention, recuperation and conservation of productive degraded areas by causes of the hydric and eolic erosion, the protection of the fountains of water and the reforestation. This initiative is carry out in coordination with municipal government and the urban and rural development departamental and regional councils.

In synthesis, has not obtained yet, the cooperation of developed countries parts, such as establishes in the Convention, surely because neither has proposed of punctual manner the problem in the frame of a national politics, with concrete actions from the concept of the desertification.

## **V. ADOPTED OR PLANNED MEASURES INSIDE OF THE CONTEXT OF NATIONAL ACTION PROGRAMS,**

**INCLUDING MEASURES TO PROMOTE ENVIRONMENT  
ECONOMIZED, TO CONSERVE NATURAL RESOURCES, TO  
PROMOTE INSTITUTIONAL ORGANIZATION, INCREASE THE  
KNOWLEDGE ABOUT DESERTIFICATION AND CONTROL  
FOR LABORS OF FOLLOWING UP AND EVALUATION OF  
DESERTIFICATION AND DROUGHT**

Upon analyzing the problem of the desertification, is necessary to consider that in the dynamics of the phenomenon, the social and economic factors have a meaningful incidence. It is probably, in the case of the problems related with the desertification, where is more evident the incidence of said factors.

Nowadays, is recognized, that exists a clear association between situations of poverty, but yet extreme poverty, and conditions of desertification; exist evidence clear of it in, practically all the areas of the country, affected by the phenomenon of the desertification in different degrees and magnitudes. In the context of this association is that dynamic a vicious circle poverty-degradation environment-poverty, the poverty as cause and consequence of the deterioration of the natural resources.

Exist high population concentrations in relatively rural little areas, facilitating a progressive degradation of the natural resources of same areas. This situation has unchained a group of subprocesses with environmental negative impacts, migration to the cities pressuring over areas of ecological severe risk, exploitation of fragile ecosystems with surcharged demographic and deforestation enlarging the agrarian frontier.

There is in consequence a social and economic pressure over the natural resources which destruction or deterioration leads to the desertification, though the majority of the guatemalan population, recognized and this is conscious, that to alleviate such pressure and to detain, and possibly, to revert the situations of degradation, is necessary to adopt a model of economic and social equalized and compatible development with the environmental protection; however, situations of economic and social crisis, determine priorities, that currently, favor the achievement of benefits at short term, favoring the persistence of processes of environmental transformation negative.

Some aspects of direct incidence in the desertification, according to the the results of the national encounter on the theme are following : Social pressure on the land (property and tenure, availability of lands), utilization of firewood as only fountain of combustion in rural areas and urban marginal areas (massive deforestation), change of use of the land to (of agricultural or forest to cattle), overpopulation, etc.

Guatemala has experienced very few advanced meaningful in matter to combat the desertification and the drought specifically; since the political, strategies, plans, programs and to project that of global manner and/or of separated manner have formulated in the search of a model of sustainable development

for the country, not have considered this variable as parts important to structure and operativity. The academic entities and of investigation, as governmental as no governmental, do not incorporate yet in the programs and pensum of studies the theme, so that these studies serve as point of departure for the formulation of political, strategies and actions tending to the prevention and to control of the problem.

Some initiatives that have proposed up to date, such the case of the Action Plan for the Forest, Action Plan for the Environment, Program of Agricultural Development, etc. To guide the propositive actions to the conservation of the natural resources water, soil, forest, of manner individualized. It have lack a perspective of group, integrating, that considers the new conceptions of the sustainable development (economic growth, social equity and environmental conservation) and incorporates from a vision of nation the alternatives of solution to problematic given.

On the other hand, have promulgated legal texts that believe in normative instruments and also, economic, oriented to the conservation or development of the renovable natural resources to (soils, vegetation, continental waters, etc.). However, are limited or very scarce the successful results that, objectively, could to be attributed to the majority of plans, programs and to project executed, to equal thing can be told respect to the results of the application of normative bodies and economic instruments for the management of the natural resources.

Taking as premise the prior proposals, has suggested to the current authorities of government to adopt a group of criteria over the which must to be based the operative schemes for the formulation and implementation of political and national strategies to combat the desertification and mitigation of the drought, being these :

- 1) To Structure of Nation Programs of Action to combat Desertification
- 2) Compatibility of political and national strategies of environment and natural resources with problematic derived of Desertification
- 3) To Incorporate of economic instruments
- 4) Evaluation of the phenomenon of the desertification and agroecological and socioeconomic zonification
- 5) Creation and/or to consolidate of decentralized schemes and participative of management
- 6) Adoption of a institutional frame for the execution of programs of action to combat the desertification
- 7) Formulation of guided programs to the nucleuss of desertification

- 8) To Delimit spatial of proposals
- 9) Creation of mechanisms for the technical support and financier of the national strategy to combat the desertification
- 10) Implementation of the national system of environmental information

It is necessary to mention, that since 1, 997 year in that was held the first meeting of the subregion (Central America, Mexico and Caribbean) in Santo Domingo, Dominican Republic, and later in the month of march of 1998 In Guatemala city, has come proposing the need of coordinating actions to level of the subregion. However, has not achieved to concrete these ideas, by a side, because in the majority of the countries members of the subregion, still has not implemented the programs of national action, and by other side because apparently to governments of these countries still not achieve to value the problematic existing for prioress in the contents of the agendas of work.

In view of the above mentioned, is indispensable to socialize with many most aggressiveity Convention to level of takers of national decision, and penetrate the contents in the instances of subregional coordination as Central American Commission of Environment and Development- CCAD-, Central American Bank of Economic Integration- BCIE-, etc. At the same time, is necessary to promote a third subregional encounter for making compatible the problematic and interests of the same, identified by means of respective national reports, and to formulate a subregional plan in agreement with the realities of this, which could be appropriate by the governments of the subregion.

## **VI. FINANCIAL CONTRIBUTIONS OF NATIONAL BUDGETS TO SUPPORT IMPLEMENTATION, AS WELL AS FINANCIAL ATTENDANCE AND TECHNICAL COOPERATION, INCLUDING AFLUENCY PROCESSES TO IDENTIFY REQUIREMENTS, FINANCING AREAS AND ESTABLISHMENT OF PRIORITIES**

As is presented in the report, the government of Guatemala still has not assumed of official manner in the agenda the theme of Desertification, consequently no assigns a budget for the implementation and operativeity. On the other hand the external cooperation does not manifests full interest in supporting the actions tending to the prevention and/or mitigation of the effects of Desertification, possibly because has not done a concrete proposal of the problem.

Of equal manner, the parts that are developped countries, neither have pronounced or shown their will of supporting technique and financially to the developing countries, such as establish in the text of Convention.

In 1999 CONAMA, owing to a diagnosis of the national and international cooperation, identified different scenes to part the which will be developed the strategy of cooperation. Between the aspects most important of this panorama cite:

1. The manner how has managed the cooperation
2. The agreements undersigned.
3. The effectivity and operativeity of the agreements undersigned
4. Why is necessary to define a national strategy for the cooperation
5. Objectives to reach with the cooperation
6. The lines of cooperation (scientific, technique, financial)
7. Instances and local entities of cooperation
8. Entities and International Organismes with who has experience in the cooperation
9. Entities and international organismes suggested to establish cooperation

## **VII. REVISION OF POINTS OF REFERENCE AND UTILIZED INDICATORS TO MEASURE THE PROGRESSES AND EVALUATION OF SAME**

As much as the National Plan for the Environment, as Environmental National Politics in the proposal value of meaningful manner the permanent evaluation of the indicators and instruments of implementation of a mark of reference. In this sense, in the context define following indicators and instruments :

1. Indicators :
  - a. Modernization of the management of protected areas and conservation of the biological wealth of the country
  - b. Restauracion and conservation of the soil and utilization of the forest resources, to improve the management in benefit of diverse regions of the national territory
  - c. Integral management of the water, promoting the efficient use and sanitation
  - d. Protección of the oceans and utilization rational of the resources, as well as to modernize the fished activities and related to water.
  - e. Improvement of the quality of the air, specially in the urban zones to protect the health of the inhabitants
  - f. Rational ecologicalallly management of the solid and dangerous ecological wastes.
  - g. Ecological territorial settlement, to control and norm the use of the earth and the resources in a frame of certitude and knowledge for the possessors.
2. Instruments:



- a. Instruments to fixed environment conditions
- b. preventive Instruments )
- c. correctional Instruments

These have as purpose to correct situations that are contributing to that the both standards are to point of being, or have been known.

Also here the plans of destined conservation to insure the capacity of regeneration and the biological diversity associated to the use and profit the natural resources. These plans of management include, between other, following both considerations : a) maintenance of wealthy of water and conservation of soils, b) maintenance of the landscape value, and c) protection of species in danger of extinction, vulnerable, rare or insufficiently known.

- d. Instruments of fulfillment
- e. Instruments economic
- f. Instruments of education and investigation
- g. Instruments of the citizen participation
- h. Instruments for the generation of information
- i. Instruments of financing

In the frame of the environmental national legislation, established two fundamental mandates for the implementation of the mecanismes of evaluation and control of the degradation and/or deterioration of the natural resources, being these :

- a) The obligatority of presenting a study of evaluation of environmental impacts by part of interested, for the development of any productive activity.
- b) It is conceded popular action to denounce before the authority, all done, act and omission that generates contamination and deterioration or loss of natural resources or that affects the levels of quality of life. If in the locality no exist representatives of National Commission of the Environment, the denunciation could do before the municipal authority, that will remit for the attention and procedure to the group of mention commission.

In the search of an authenticated representation and participation of the actors of the guatemalan society in the development of the national environmental management, doing efforts by implementing a mechanism of institutional coordination and sector by means of the creation of the National System of Environmental Management (SINGA). This mechanism of coordination base in to conform of National Councils integrated by representatives of different sectors, stablishing in forums of expression and debate in different areas and levels.

The SINGA, has represented, though of incipient manner the best mechanism of coordination, and proposal of the most serious alternatives of solution to national environmental problematic. This mechanism bases the operativeity in the coordination with the government through CONAMA, and the materialization of the respective actions through of to municipal governments.

## **FIRST NATIONAL REPORT ON IMPLEMENTATION OF UNITED NATIONS CONVENTION TO COMBAT DESERTIFICATION**

### **THE NATIONAL CONTEXT**

#### **Biophysic Aspects:**

The Republic of Guatemala is located in the Central American isthmus between latitudes 13° 44' and 18° 30' north; and the longitudes 87° 30' and 92° 13' west. It is adjacent to the north and to the west with Mexico, to the east with El Salvador, Honduras, Belize and the Caribbean Caribbean; and to the south with the Pacific Ocean. It has a territorial extension of 108.889 Km<sup>2</sup>.

Due to their altitudinal differences, exist diverse ecosystems and bioclimate and morfological landscapes and: "The ecosystems from Guatemala combine wild life of the neoartic region of Norteamérica with the wild life of the neotropical region of Southamerica. From the point of view of the Biodiversity, Guatemala is one of the most important countries of Central America; since it has almost 1.500 species of vertebrates, the forests of the Petén located in the north part of the country, are the biggest seconds of the region (Mexico and Central America) and are calculated that they have more than 450 species of different plants. The

species known of brackens, orchids and mosses add 842 and are estimated that still they remain a good number of species that they have not been investigated. From the same way are estimated that 200 vegetables species with potentialities for medicinal use at fewer exist, industrial and of human consumption" (PAFG, 1992).

According to opinion of the Doctor L. R. Holdridge, in Guatemala 14 zones of life are characterized to know: Mount Thorny Subtropical, Dry Tropical Forest, Forest Dry Subtropical, Forest Humid Subtropical (temperate). Forest Humid Subtropical (warm), Forest Very Humid Subtropical (warm), Forest Very Humid Subtropical (cold), Forest Pluvial Subtropical, Very Humid Tropical Forest, Forest Humid Montano Low Subtropical, Forest Very Humid Montano Low Subtropical, Forest Pluvial Montano Low Subtropical, Forest Humid Montano Subtropical, Forest Very Humid Montano Subtropical.

According to the classification of soils of Guatemala (Simon's, Tarano and Pinto) and studies carried out by the FAO, exist 13 several types of soils; from them, 26% are considered adequate soils for agricultural intensive use and 70% are considered of forest vocation. The physical composition of these soils of origin calcareous, carstic, volcanic or deposited sand, it makes that they are permeable. Characteristic that facilitates the transport of deposited or generated pollutants (for example leached) toward the underground current. On the other hand the deforestation has caused a significant level of erosion: the loss of soils in areas with covering vegetable dense 300 to varies between 20/ton/hectares/ year. Soon after this situation, it is estimated that around 63% of the soils of the country are subjects to several grades of erosion.

As for the forest resource, it is estimated that between the 65% and the 70% (PAFG 1990) of the country was place setting with forests in 1950, while at the present time, it is calculated that approximately there is 35% of forest, calculating a rate of deforestation between 3% and 5% (PAFG 1998), with an annual loss of 90.000 hectares; from those that 35.658 Km<sup>2</sup> corresponds forests latifoliated and 8.096 Km<sup>2</sup> to conifers. These figures, although they evidence plus a tendency that an exact fact, they show the graveness of the problem with evidence. If this rhythm of deforestation continues, the arboreal cover will disappear in a period of 20 to 35 years, mainly in the mountainous zones in those that the pressure demographic on the earth is very strong, and in the zones of colonization of the tropical forest in Peten and the Traverse Fringe of the North, where the soils are extremely fragile and the extremely rich ecosystems in Biodiversity. The Forest Action Plan of Guatemala (PAFG) for example, deduce wooden volumetric of the order of 16 millions of cubic meters per year and an rate of deforestation in base to an increment of around 22.5 million of cubic meters per year, that the forest cover as well as their capacity of regenerating, they fall constantly.

## **Social-Economic Aspects**

It is estimated that in Guatemala are more than 10 millions of inhabitants, although the official data, of agreement at last census of population of 1995, they indicate 8.3 millions.

In 1989, 49% of the population was illiterate, reaching the 72% in the rural area, with strong occurrence in the indigenous population. For 1992, the rate of illiteracy went down to 39% with gross rates of schooling of 82.5% for the primary level and of 30.9% for the secondary level.

The 10 principals causes of mortality are infectious illness, of the which 50% are related with the sanitation (drinkable water, served waters, solid, etc.)

The five principals causes of general mortality are the infectious illness, intestinal, pneumonias; affections peri-native and malnutrition; in a proportion of 55% for the masculine sex and 45% for the feminine sex. From the total of deaths in the country, 40% occur in the minor of 5 years.

The services of health meet almost exclusively in the urban zones. The Ministry of Public Health and Social Attendance cover the 25% of the population, the Guatemalan Institute of Social Security the 15% and the Private Sector the 14%. This means that the 46% of the population has old difficulties to access to the any type of medical services. The country relies on 8.3 doctors' for each 10.000 inhabitants average and a hope of life of 64 years average.

In the last decade the index of poverty was valued in a 84%, reaching a 55% the extreme poverty; esteeming an entrance per cápita of Q.7,200/ year (US\$1,200) for workers and workers of the field without greater instruction.

The economical recession and the persistence of the structural and circumstance concentrated mechanisms of the entrance, had determined that the groups of more elevated revenue increase their participation percentage in the winning of the national entrance. Between 1980-1981, the 10% of the unfortunate population perceived 2.4% of the entrance, percentage that was reduced to 0.5% in 1989; in inverse form, the population group of higher revenue (10% of the population) perceived the 41% of the entrance.

According to data of the General Secretariat of Economical Planning (SEGEPLAN), the level of employment increased in 3.1% in the year 1994. The number of employed people passed of 2,865,500 in 1992 to 2,954,200 in 1993 and, to 3,845,600 in 1994. This growth is lightly old to the observed in the Population Economically Active (PEA), which grew 2.8% in 1994.

"The economy of the country has been based on fundamentally in three economical sectors: agricultural, industrial and commercial. The contribution of these sectors, on the whole, to the Gross Intern Product, to constant prices, had remained around at 65%.

The construction sector, although participates limited in the total of the Product, it constitutes one of the important sectors in the generation of employment and of other favorable goods that they are transmitted in form chained to the remainder of economical sectors.

The production of goods is destined so much to the external market like to the internal market. As for the exports, the greater proportion is of primary origin. Outstanding the traditional products: coffee, sugar, banana tree, cardamom seed and cotton. In the last years, given the impulse granted to the promotion of exports of products not traditional, these have manifested rhythms of satisfactory growth"

## **Cultural Aspects**

Guatemala is rich as for manifestations of the Mesoamerican culture. In practically all country meets archaeological representative vestiges of almost whatever stage of this civilization, that undertook from 1500 years a.c. to 1500 a.c. The bloom and apogee (pre-formative and pre-classical periods) of the olmecoide culture gave up in the coast of the Pacific; the one of the Mayan culture in the netherlands of the North, during the posterior classical period; and the of the Quiche culture in the central highland, during the post-classical period. The most probable cause of the decline of the Mayan civilization of the classical period, maybe had been a combination of natural, ecological and political-social factors.

Although the indigenous groups were differentiated from the moment of the conquest, exist enough elements that they are them common and they help to define a cultural profile that is them own like group. Within him one could mention element present in their diverse languages and languages and another of greater depth, like the mystic meaning of the corn, their understanding of the relationship man-nature and their characteristic philosophy" (CONAMA-UNCED 1992)

The Guatemalan society is plural cultural, plural ethnic and multi-language; conformed by four towns speakers of their own language: the Ladino Hispanic speaker (38%), variations of the Maya (61%), Xinca and Garífuna (1%); that side-by-side totalized 23 languages (Center of Maya Investigation, CEDIM 1,999).

The principal groups not principal Hispanic are sub-divided so:

- A) Quiches: Quichés, Kakchiqueles, Zutujiles, Sacapultecos
- B) Mames, Man, Ixil
- C) Kekchíes
- D) Kanjobales: Kanjobal, Jacalteca, Chuj
- E) Pocomám: Pocomames, Pocomchis
- F) Chortís
- G) Caribbean

## H) Xincas

The 62% of the population of Guatemala live in 19.000 communities of less of 2.000 inhabitants and approximately 90% of the rural population live in communities of less of 500 inhabitants.

### **Environmental Aspects**

The levels of degradation of the natural resources, in many cases the depletion; the emission of greenhouse gasses and the implications over the climate; the depletion of the biodiversity; accelerated degradation of soil ;the magnitude of the industrial residuals not to degrade; the atmospheric contamination; and the contamination of waters and oceans, between other, not could to be detained nor be reverted without deep changes in the social values and in the reguide of the economies.

The conditions of economic and social progress with sustainability enter a shared commitment to realize meaningful changes. The current tendencies continue without favoring the purposes of the sustainability of the development, it which implicated major efforts in the transformations to institute you, technological and cultural patterns.

To reach a vision of pertinence and effectiveity of political oriented to articulate objective economic and social with both in the development must to be incorporated a concept of change. The sustainability can not be resolved only by the laws of the market, but neither State has same possibilities by itself to direct that transformation, and the implications are the need of the participation of the most diverse social groups in the definition of political, strategies, instruments and indicators of evaluation, in corresponding, but with a clear state directionality. The challenges present in two large groups: recuperate and to restore the ambiance degraded and contaminated; and to brake the tendencies of deterioration.

The environmental legislation of Guatemala was framed in an ample normative dispersion that gives manner to a juridical heterogeneous orderment compound by 23 laws and over 30 international agreements. As is be supposed in this ample legal diffusion find standards of the most distinct hierarchic level, what has permitted that some standards:

- Repeat them in different normative bodies and assign the responsibility of the administration to over an institution ;
- Lack them to the order of preeminence upon contradicting or set against to standards of major hierarchic level; and
- Result them to be and inefficient, given the low level of aptitude to satisfy the whose needs existence motivated the promulgation, lacking to the capacity in the application, what does inappropriate for regular a given environmental situation.

To the previously mentioned can be added that many times the application of the laws see benumbed by the absence of dispositions regulated to that with frequency the legislation remits, what in practiced also makes hard the application.

The juridical system of the Republic of Guatemala is governed by the Political Constitution or Magna Letter. Starting from the Political Constitution, exist laws and specific regulations that regulate the different related with the environmental management.

The state of Guatemala, through the Political Constitution, guarantees the respect to the cultural identity and the development of the conservation and protection of the environment. The following laws and regulations obey this politics; whose spirit prevails in the subscription of agreements and international treaties (Lanuza Monge, V. 1996).

**a) Political Constitution of the Republic (Decree May 31, 1985, in validity starting from January 14, 1986).**

**Article 64:** - Natural patrimony. **65:** - Preservation and promotion of the culture **66:** - Protection to ethnic groups. **97:** - environment and ecological equilibrium. **121:** - Goods of the State (resources natural renewable). **125:** - Exploitation natural resources not renewable. **126:** - Reforestation. **128:** - Use of waters, lakes and rivers.

**b) Code of Health. (Decree 45-79)**

**Article 1:** - Conservation, protection and recovery of the health **5:** - Preminencia of the sanitary laws. **19:** - Sanitation of the environment.

**c) Law of Protection and Improvement of the Environment (Decree 68-86)**

All the articles.

**d) Law of Protected Areas (Decree 4-89, reformed by the 18-89)**

**Article 1: - National Interest:** the wild life is integrated part of the natural patrimony of the Guatemalans and therefore, it declares its restoration, protection, conservation and handling of areas of national interest properly planned. **2:** - Creation of the Guatemalan System of Protected Areas (SIGAP) **5:** - Objectives of the law (articles a, b, c, d, and). **11:** - Official Declaration of a protected area. **22:** - Humans settlements in protected areas. **19:** - Creation of CONAP (National Council of Protected Áreas). **22:** - Goals of CONAP.

**e) Forest Law (Decree 70-89, reformed by the Decree 101-96)**

**Article 1.** Object of the law. It declares of national urgency and of social interest the reforestation and the conservation of the forests, for which will be propitiated the forest development and their handling sustainable. This article presents the objectives of the forest law, that in general everything regulates the with respect to the sustainable utilization of the forests resources, including the wood, seeds, resins, rubbers and other products not of woods. **5:** - Creation of the National Institute of Forests (INAB). **46:** - Change of cover. **47:** - hydrographic watershed. **48:** - Use, utilization and handling sustained of the forest. **66:** - Liability in the exploitation of natural resources not renovable. **67:** - Liability of the forest repopulation. **69:** - Study of prefactibility in hydroelectric projects. **71:** - Incentives **88:** - National Forest Registration. **89:** - Punishment in forest material. **90:** - Estimate of damages.

**f) Municipal Legal Code (Decree 58-88)**

**112:** - Obligation of formulating and execute plans. **113:** - Plans and use of the soils.

**g) Civil Legal Code (Decree 106 of the Congress of the Republic).**

Exist some applicable articles to the environmental topic: **24:** - Civil Responsibility. **457:** - Goods of public common use and of special use. **458:** - National Goods of common use. **464:** - Law of property.

**h) Penal Legal Code (Decree 17-73)**

In the Penal Code gives category of crime to infractions committed against the atmosphere, specifically in the X Title orb the crimes against the national economy, the commerce and the industry.

The handling of the environmental legislation gives up through two instances: the judiciary and the administrative. The judiciary is who is charged with applying the law by means of the Tribunal of Narcoactivity and Crimes against the Atmosphere. And the administrative, who dictates the politics and respective regulations; in this case, the National Commission of the Environment (CONAMA): agency that dictates norms in order to guarantee the efficient use of the resources, supervise and approve the environmental studies. Their dispositions are of preventive character, controller and of control. It depends directly of the Presidency of the Republic.

The Government of the Republic of Guatemala has subscribed and ratified several agreements and international treaties in environmental material, between those that highlight: Convention of the United Nations on Climate Change, Biodiversity, Desertification and Drought, Protection of the Medium Marine Great Caribbean (Decree 32-89) Protocol of Montreal on the Covering of Ozone (Decree 34-89), Protocol of Kyoto, Agreement for the Exploration of Natural Resources (Decree 37-89), constituent Agreement of the Central American Commission of Environment and Development- CCAD- (Decree 12-90) and the Central American Alliance for the Sostenible Development



(Subscribed for the Presidents of the Republics from Costa Rica, El Salvador, Guatemala, Honduras, Nicaragua, Panama and the First Minister from Belize; in the city of Managua, Nicaragua in October of 1994).

## **I. STRATEGIES AND PRIORITIES ESTABLISHED INSIDE THE CONTEXT OF THE PLANS AND/OR POLITICAL OF SUSTENTABLE DEVELOPMENT**

The Central American Alliance for the Sustainable Development (ALIDES), like instrument of coordination intergovernmental, establishes the necessity of incorporating in the politics and calendars of the governments of the region, the beginnings and following bases:

Principles:

- a) The respect to the life in all their manifestations
- b) The improvement of the quality of human life
- c) The respect and utilization of the vitality and diversity of the land of sustainable manner.
- d) The promotion of the peace and the democracy like basic forms of human living.
- e) The respect to the pluriculture and ethnic diversity of the region.
- f) The achievement of senior grades of economical integration between the countries of the region and of these with the remainder of the world
- g) The responsibility intergenerational with the sustainable development.

Bases:

- a) Stable and durable Democracy
- b) Social-culture Development
- c) Development economical sustainable
- d) Sustainable Handling of the natural resources and improvement of the environmental quality

In this context, the Central American governments have adopted the sustainable development under the following concept:

***“Sustainable development is a process of progressive change in the quality of life of the human being, that places it like center and primordial subject of the development, by means of the economical growth with social justness and the transformation of the methods of production and of the patrons of consumption and that are sustained in the ecological equilibrium and the vital support of the region. This process implicates the respect to the ethnic and cultural regional diversity, national and site, as well as the strengthening and the full civic participation, in peaceful living and***

***in harmony with the nature, without committing and guaranteeing the quality of life of the future generations.”***

In agreement with the proposal and considerations of the ALIDES, the government of Guatemala from 1,994 year in that was impelled the Central American Alliance, comes considering within their plans and programs of development, although of incipient manner still, the handling sustainable of the natural resources, fundamentally the water, the soil and the forest.

Starting from the identification of the problem as for their dimension, causes and goods, there is been defining the pertinent actions for their solution, like it is the case of the national plan for the handling sustainable of the hydric resource, the national strategy for the conservation of soils in the frame of the national agrarian politics, the politics and national plan of forests and protected areas.

The Ministry of Agriculture, Cattle and Feeding, during 1.998, developed the Agrarian Politics and Sectorial (1998-2030) whose general objective is "Contribute to the improvement of the quality of life of the rural population that depends direct and indirectly of the agriculture and the natural resources, that permit the revaluation of the life in the field, the advance toward the justness, the development balanced of the regions of the country and the decrease of the structural heterogeneity that it is the expression of the underdevelopment and poverty."

It expound like specific objectives:

- \* Contribute with the sustainability of the agriculture and of the natural resources.
- \* Achieve the territorial arrangement of the rural lands in function of their vocation.
- \* Convert the current comparative advantages of the country and the sector in competitive advantages, by means of mechanisms of more efficient market, that guarantee the innovation and the economical growth of the sector.
- \* Strengthen and promote the strategic investments in technology, infrastructure and services of support to the production and commercialization in the rural area.
- \* Guarantee the supply and the stability in the production and commercialization in the rural area.
- \* Guarantee the supply and the stability in the production of foods in order to satisfy the nourishing necessities of the population.
- \* Consolidate and enlarge the organization and dynamic and efficient participation of the economical agents in the several activities of the agriculture, industry and commerce.
- \* Consolidate enlarge the several operative forms of decentralization and organization that it impel the Ministry of Agriculture, Cattle and Feeding

and strengthen the modernization of the Public Agricultural Sector, Forest, Hydrobiological and of Feeding.

For their operativity this politics contemplate four areas of strategic action: a) artificial security on the use, holding and property of the land; b) use and handling of the hydric resource; c) territorial arrangement in rural lands; and, d) productive and commercial development.

In the same context, up to date the Ministry of Agriculture, Cattle and Feeding, is developing the Plan of Hydrobiological Action whose principal objective is "To plan participatively the necessary actions in order to impel a process of development sustainable of the hydrobiological subsector".

It defines the specific following objectives at the same time:

- \* Improve the national capacity for the administration of the hydricbiological resources so that their utilization is assured sustainable and conservation.
- \* Define, formulate and design participatively the sectorial politics.
- \* Promote a consensus modernization of the legal frame for adapt it to the necessities of the actors, of the resources, of the opportunities of market.
- \* Develop the spaces of discussion and permanent analysis of the problem of the subsector.
- \* Plan the strategic actions that guarantee the sustainable development in the relationship of the necessities of basic information, infraestructure, technology, organization, etc.

During 1.999 the National Institute of Forest, (INAB), also developped the forest politics of Guatemala, which are defined like "the group of principles, objectives, legal and institutional frame, lines of politics, instruments and desired situation, that the State declares, with the purpose of guaranteeing the provision of goods and services of the forests (natural or cultivated) for the social and economical well-being of their inhabitants. Additionally establishes the orientations of behavior, that with the purpose of reaching the objectives or desired situation, they should observe the several actors of the forest sector"

It proposes like general objective "increment the social-economic benefits of the goods and services generated in the forests ecosystems and contribute to the territorial settlement in rural lands, through the development of the productive handling and of the conservation of the base of natural resources, with emphasis in the forests and the associate resources like the Biodiversity, the water and the soils; incorporating every time plus the forest activity to the economy of the country in benefit of the Guatemalan society"

The National Council of Protected Areas developped the national politics for the development of the Guatemalan System of Protected Areas (SIGAP), which is defined like "The description of the group of principles, objectives, legal and institutional frame, lines of politics, instruments and desired situation, that the

State declares, with the purpose of guaranteeing the provision of goods and environmental services and the conservation of the biological diversity for the social and economical well-being of their inhabitants"

This politics pursue the following objectives:

- \* Make known the public the courage and the frame of action of the development of the SIGAP.
- \* Develop alliances and share the administration of the areas protected with actors of the society for the consolidation of the SIGAP.
- \* Strengthen the capacity of the administrators of protected areas and attract investments private activities related with the SIGAP.
- \* Determine parameters for monitor and evaluate the construction of the SIGAP.

The strategy of implementing this politics is centered in four topics: a) Support to the National Council of Protected Areas (CONAP) in the forest administration of the productive forests; b) Strengthening of the handling of the areas protected in charge of the National Institute of Forests (INAB); c) Identification and nominative of new areas from the perspective of the conservation of the Biodiversity and other strategic security of the SIGAP like the functions of production of water, the landscape and the eco-tourist; d). Creation of local and regional systems of conservation of zones of load and fountains of water.

At an environmental level it has been defined and implementing, the Environmental National Politics and the Sectorial and Transectorial Politicals.

### **Environmental National Politic**

It has like conceptual base, the improvement of the environmental quality and the adequate handling of the natural resources in the search of a model of sustainable development that conciliate the protection of the environment with the economical development, in an equal frame of social participation and public transparency, with the purpose of improving the quality of life of the Guatemalan population. In this context are defined at the same time, the sectorial and transectorials politics environmental, as well as the indicators and pertinent instruments in order to implement this proposal frame.

The Environmental National Politics proposes the following objectives:

- \* To prevent the environmental deterioration and restore the environmental quality
- \* To know and manage on sustainable form the renovable natural resources and know and promote the rational use of the natural resources not renovable
- \* To watch over and promote in a participative and decentralized of the environmental administration for the character
- \* To revise the legal environmental frame permanently

- \* To propitiate that the treatment of the environmental topic in the international relationships of the country will be consequent with the Environmental National Politics

#### Sectorials Environmental Politics Sectorials for:

- \* Agriculture. It suggests the territorial settlement in function of the implicit use of the natural resources and the technological utilization of systems of sustainable agriculture composed to the adequate handling of the natural resources in a plan of same importance; and implement processes of certification of respectful products of the environment. Part of the coming gains from the managerial success should be channeled of turn toward the protection, the regeneration and the improvement of the base of resources that they sustain the productivity and the utilities.
- \* Industry. It stimulates and incentive to the managers so that the industries convert their current processes of gradual manner in "clean processes," that they allow to reduce the current levels of contamination of the served waters.
- \* Trades. It promotes and impels within their politics, the ethical environmental in the products of export and a strict control of the mattered products demanding the certification of the same; besides stimulating the commercial activities and the consumption of products that they fulfill the national norms of sustainable development and protection of the environment.
- \* Tourism. It expounds preserve the nature and Guatemalan culture of tourist interest, should adopt within their politics, the public and private investment in restoration and conservation; as well as the technical planning of use, for the tourist national development and the implementation of a certificate of sustainability tourist. To the same as with the agriculture, part of the coming gains from the managerial success of the tourism, should be channeled of turn toward the protection, the regeneration and the improvement of the base of resources that they sustain the productivity and the utilities.
- \* Petroleum and Natural Gas. It proposes implement the new environmental politics for the exploration, exploitation and transport of petroleum and natural gas, approved by the National Commission of the Environment (CONAMA), the Ministry of Energy and Mines (MEM) and the National Council of Protected Areas (CONAP); which permits the exploration and exploitation of petroleum still in areas protected without the deterioration of the environment and with the clear and only rules on the topic, the one which will allow to increment the investment.

#### Transectorials Environmental Politics:

- \* Biodiversity. It expounds the promotion and the administration deprived of the protected areas, with the objective of searching for their financial sustainability. It won't create new protected areas until those that already exist legally, are protected and administered in sustainable form. Impelling the investigation of the Biodiversity and strengthen the system of patents that allows to market the Biodiversity in the better conditions for the country. Strengthening the commerce by means of the correct administration of the protected areas fomenting the reconnaissance of the agricultural and forests products that they conform biological corridors.
- \* Climate Changes. It expounds to implement work on the mitigation and adaptation to the climate change, fomenting the negotiation for sale of carbon at the same time, through programs and forests projects, change of use of the soils, renovable energy, energy efficiency, and promotion of capables mechanisms of absorbing Greenhouse Gases with the one which will contribute to help the challenges of the climate change and to improve the perspectives of the sustainable economical development of the country.
- \* Desertification and Drought. Still in discussion with actors and sectors from the guatemalan society, it expounds the incorporation of this politics in the plans and programs of government, by means of strategies and actions of prevention and mitigation of the degradation of the soils for the several forms of erosion, the recovery of degraded soils and the implementation of plans, programs and projects of compatible production with the social, economical and environmental development of the country.
- \* Wastes (liquids and solids). In coordination with the municipal authorities and the civil sectors will adopt actions of handling composed of the wastes; taking in consideration some aspects: protection of fountains and supply of drinkable water, treatment of waters; improving the administration involving to the civil sectors; supporting financially through the social bottoms and the private bank; supporting the recycling; stimulating fiscally the investment in environmental infrastructure; and qualifying human resources.
- \* Air. It defines the reduction of the atmospheric contamination to acceptable levels, by means of the reduction of the levels of contamination of the float vehicular in gradual form through a program of certification and paralely reducing the contamination generated by firm fountains (industry) with mechanisms of certification linked to the permissions of operation in order to make them effective.
- \* Water: Some basic elements to consider in the implementation of the national politics are inventorying the basins and study their problem,

prior hoisting them; establishing an office worker-institutional frame for the handling of the water; establishing a juridical frame and controller for the use of the water; and promote an educational process in the population on the use and the adequate administration of the water.

- \* Energy. It expound the impulse of the generation of renovable energy and the energy efficiency of access to all the sectors of the population and favoring: the utilization of the renovable natural resources for the generation; supporting the use of independent generators; incentivating the self-production; impelling the rural electrification; modifying the electric state companies to become competitive ones; facilitating the investment deprived in generation; and searching for reach a development electric environmentally sustainable.

As background it is opportune to mention that in the decades of the years 70s and 80s, the government of Guatemala with support of the international cooperation, impels the National Plan of Agricultural Development, organizing the agricultural sector by means of the creation of the Institute of Science and Agricultural Technology (ICTA), the National Institute of Agrarian Transformation (INTA), the National Bank of Agricultural Development (BANDESA), the General Direction of Agricultural Services (DIGESA), of better manner and the Institute of Agricultural Commercialization (INDECA), whose functions are explained for themselves.

During was developped the above mention plan, the General Direction of Agricultural Services (DIGESA), developes programs and projects of conservation of soils and waters in several regions of the country; however for lacking in financement and of a clear and sustainable politics in the participation of the several actors of the society, the national plan concluded in 1,986, with which the initiate processes were interrupted, leaving frustrated the objectives and expounded goals. Although these programs and projects were not expounded in the frame of the Desertification, their objectives and achievements gotten in material of prevention and mitigation of the several forms of erotion, and consequently of degradation of soils is very coherent with the beginnings and objectives pursued by the Convention.

## **II. INSTITUTIONAL MEASURES ADOPTED FOR IMPLEMENTATE THE CONVENTION**

Starting from its participation in the First Regional Meeting for Latin America on Desertification and Drought held in Buenos Aires, Argentina in February of 1,996, Guatemala begins the process of analysis, discussion and definition of some actions focused to combat the Desertification and the negative effects to the hydric resource and to the environment in general. At the same time are

begun the measures established in the legal procedure for the subscription and adhesion of the country to the Conference of the Parts, which were achieved in April of 1,999.

The adhesion of Guatemala to the Conference of the Parts implicates the responsibility of the State toward the execution of the established agreements in the same. Like first step is delegated to the National Commission of the Environment (CONAMA, entity state clerk directly of the Presidency of the Republic) like focal point of the country in front of the Convention, notifying opportune officially to the Executive Secretariat this national decision.

With a criterion of integration of efforts, and of reduction of the atomization of actions, the CONAMA like the coordinating institution of the environmental administration of the country, has assumed at the same time, the responsibility of National Coordination Agency, for the pursuit and accompaniment of the Convention of Desertification and Drought, in front of which have begun to readiness of the works that this task takes, the human resources, materials and the economical and financial tallies; as well as the necessary equipment for their good development.

For the importance that reviewed the topic, the CONAMA has designated to the technical attendance, instance of direct consultantship of the National Coordinator, like entity entrusted of the treatment, accompaniment and pursuit of the Convention. From this manner is like the National Coordinator has the information and the permanent control of the events framed in the dynamic of the same. This instance, at the same time, is entrusted of the national efforts of integration of the Conventions of Climate Change, and Biodiversity with Desertification and fundamentally Drought.

For their administration lean on Advisory Technician Council (created by means of the same Legislative Decree Nr. 68-86, same which founded the CONAMA), instance of multisectorial representation, whose principal functions are the following:

- a) Formulate the national politics related to the protection and improvement of the environment
- b) Supervise the execution of the agreements, treaties and international programs, of those that Guatemala forms part in connection with the protection and improvement of the environment
- c) Emit the pertinent recommendations so that the projects of development contemplate the ecological considerations for the rational use of the natural resources, the protection of the environment, zoning of the space and the conservation and improvement of the natural and cultural patrimony of the country



- d) Promote the environmental manners in the educational, informative and cultural systems, in order to creating and foment an ecological conscience
- e) Collect, centralize and analyze all inherent information to the protection and environmental improvement through databases
- f) Maintain a current registration of all those legal dispositions, so much to national level, like international, comparative to the protection and improvement of the environment
- g) Promote and coordinate the actions tending to recover deteriorated environment
- h) Promote the incorporation of the environmental dimension in the politics, programs and projects of development.

In its operative and functional structure the Advisory Technician Council is integrated by a titular delegate and a substitute, all members officially designed by respective institutions y/o sectors, and with knowledge of the environmental sciences and/or ecological:

a. Of the Public or Governmental Sector:

- Secretariat of Economical Planning
- Ministry of Agriculture, Cattle and Feeding
- Ministry of Urban and Rural Development
- Ministry of Public Education
- Ministry of Public Health and Social Attendance
- Ministry of the National Defense

b. Of the Private Sector:

- Coordinating Committee of Agricultural, Industrial and Financial Associations (CACIF)

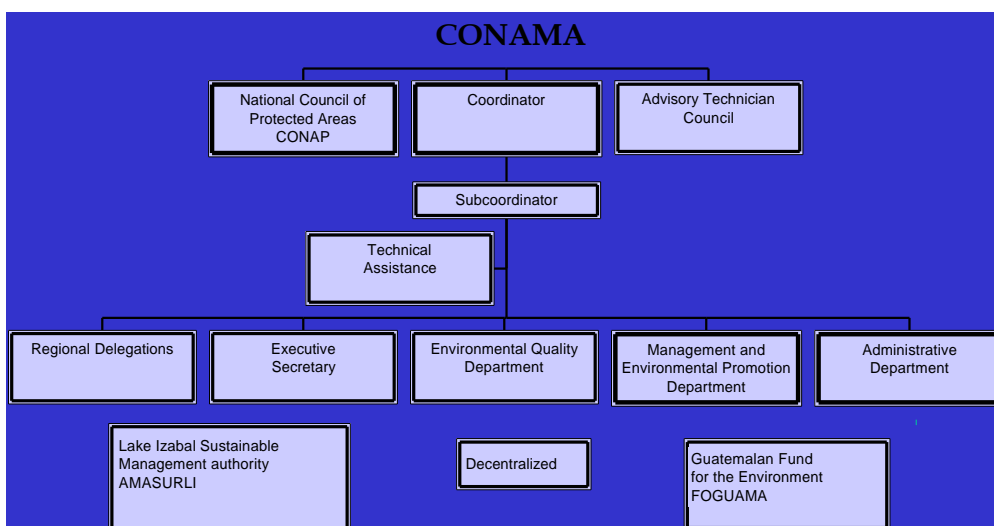
c. Of the Academic Sector:

- National University
- Private Universities
- Association of Journalists of Guatemala

d. Other Sectors (invited):

- National Association of Municipalities
- Not Governmental Organizations (of social development, environmental and indigenous)

Next the organic and functional structure of the CONAMA like Agency of National Coordination.



#### THE COORDINATOR:

It is the superior authority of the Institution and such as is the legal representative of the same. He directs and supervises the operation of the National Commission of the Environment. Attends the Meetings of Environmental Cabinet that has been invited in order to expose the plans, programs, projects and/or activities of the National Commission of the Environment, as well as submit the reports that are required.

#### THE ADVISORY TECHNICIAN COUNCIL:

It is the instance in charge of advisory to the CONAMA in its national administration. According to its regulation defines its specific functions and its integration, as well as its meetings (they previously are mentioned).

#### TECHNICAL ATTENDANCE DEPARTMENT:

It is the technical internal forum of the CONAMA, it constitutes the support to the superior authorities in the solution of problems operative interns and external, it facilitates him the taking of decisions in matters of certain importance or complexity.

#### THE GUATEMALAN FUND FOR THE ENVIRONMENT (FOGUAMA):

The Fund is an entity member of the National System of Administration Environmental sponsor of channeling and finance the environmental initiatives for the Sustainable Development, derived of the national politics for the Sustainable Environment.

It has the capacity of administration and financial supervision of the projects and identified programs at national level on environmental matters.

It is a financial entity of second floor, with a patrimony administered efficiently that supports the national sustainable development of the environment.

## **HUMAN RESOURCES**

* National Coordination:	Dr. Juan de Dios Calle
* SubCoordinator:	Licda. Irma Borrayo.
* Technical Attendance Dept.:	2 advisers
* Juridical and Claim Dept.:	3 technicians
* Administrative Dept.:	12 technicians
* Environmental Quality Dept.:	6 technicians
* Regional Delegates:	6 technicians
* Management and Environmental Promotion Dept.:	2 technicians

## **MATERIAL AND INSTITUTIONAL EQUIPMENT**

* Desks	52
* Tables for computer	14
* Bookcase	31
* Filing cabinets	40
* Chairs	118
* Tables	3
* Blackboards	10

### \* Computers:

- In net	24
- Independent	12
- Lap Top	1
- Printers	23
- Photocopiers	2
- Retroprojectors	3
- television set	2
- Videotape set	1
- Multimedia Projector	1
- Typewriting machines	8
- Telephones	41
- Transreceiving Radios	5
- Vehicles	13
- Motorcycles	1

## GENERAL SUMMARY OF THE INSTITUTIONAL BUDGET

Human resources:	Q. 3,700.000	US\$ 47,435
Material and Institutional Equipment:	<u>Q. 8,300.000</u>	<u>US\$ 1,064,102</u>
<b>TOTAL</b>	<b>Q. 12,000.000</b>	<b>US\$ 1,538,400</b>
	=====	=====

In the course of the national development, excellent stages in the efforts are framed of preventing and mitigate the effects of the degradation of the soils and the depletion of the fountains of water. Between these highlight the following: In the decade of the years 40s, the governmental initiative on agrarian reformation is impelled in Guatemala, which had the equal distribution of the earths between peasants and landowners like fundamental purpose; political reasons impeded the materialization of these purposes.

During the decades of the years 60s and 70s it was implemented the politics of agrarian transformation, through the foundation of the National Institute of Agrarian Transformation (INTA), whose principal function was the sharing of state earths for the promotion of the intensive agriculture. This politics brought to enable of earths like product without considering its agricultural vocation, to like grade that they was the periods of greater deforestation, waste and acceleration of the erotion of the soils, with which an irreversible process of degradation is begun.

During the decade of the years 90s, it intensifies the necessity of holding of earths per party of the peasants, without mattering their vocation and quality. Is in this period when are begun to size significantly the problem of the earth doesn't only in quantity; but also in quality, since technical studies demonstrate the high grade of salinity of the same, provoked for the excessive and uses without control of agrochemicals products utilized in the production, the one which converts them in degraded soils and unproductive.

The rural poverty, the unemployment in the agriculture, the on population and the scarcity of earths continues being protagonist of the Guatemalan reality. Furthermore the situation seems to worsen like mere consequence of the action combined of the strong increase of population in a context of stalemate. The movements peasants that pursue the access to the earth reproduce under the same patron of spontaneity, desperation and silence. But that reality statistical discouraging and the rural pressure seems to find an answer in the political environment.

When finished the conflict armed intern, by means of the signature of the Agreements of Peace subscribed in 1,996, it is expounded one of the most important agreements like is the agreement on "Social-economics Aspects and Agrarian Situation" which has like foundations: to make democratic and the

participative development, participation of the woman in the economical and social development, manners and training, agrarian situation and rural development, access to the land and productive resources, registration of the property of real state and official land officer, between another.

It is evident that the execution of these agreements requires of steps of structural adjustment, and of the institutional and legal frames. In this sense the government has begun this process through the following actions: strengthening of the Urban and Rural Development Councils, keeping in mind the fundamental paper of these in order to promote, guarantee and assure the participation of the population in the identification of the local priorities, the definition of the plans, programs and public projects and the integration of the national politics of urban and rural development.

On the other hand, the transformation of the structure of the holding and the use of the earth has the incorporation of the rural population to the economical social and political development like objective, so that the earth constitute for who work it, base of their economical stability, foundation of their progressive well-being and guarantee of their liberty and dignity.

Possibly, the insecurity on the holding of the earths has been fundamental cause for the quick deterioration of the soils; since nobody could look after and protect the earths without the certainty of being legitimate proprietor, at the same time the central and municipal governments neither rely on the necessary resources in order to undertake effective campaigns of conservation and/or recovery of deteriorated or degraded lands.

It is important highlight, that the problem of the holding, use and handling of the land is a problem of social and economical character, for the one which the steps of solution should go in that sense. In such sensitive become efforts for measured implementation that help to the solution of the problem, like the case of the creation of the fiduciary of lands within an institution participative bank for the credit attendance and the development of the saving, specially to micro, small and medium managers. The fund of lands will concentrate the authority of the public financement of acquisition of lands will propitiate the establishment of a transparent market of earths and will facilitate the development of plans of territorial settlement. The politics of award of the fund will prioritize the award of earths to peasants that are organized for the effect, keeping in mind criterions of economical and sustainability environmental . In order to assure the benefits to arrive to the neediest sectors, the fund will rely on a special instance of consultantship and administration in order to attend to the communities and rural organizations.

These new stages have implicated processes of training and become aware of the rural populations mainly with clear purposes as for the conservation of the areas of cultivation in the frame of the protection of the basins like productive units.

These steps undoubtedly will rebound in benefit of the implementation of programs of conservation and recovery of degraded lands, reforestation and other initiatives of protection and environmental conservation.

The Program of National Action to combat the Desertification, such like still has not been adopted officially for the government of Guatemala like a priority component of the agenda. It is important mark that the Convention of Desertification as to the same of the Climate Change and other agreements and international treaties are processes relatively new in their concept and focus for the one which the process of implementation has begun with actions of information to the diverse actors of the society. About objectives, contents and goals, however initiatives exist tune that have been undertaken so much for governmental organizations like not governmental within their plans and programs of work.

### **III. PARTICIPATIVE PROCESS TO SUPPORT THE PREPARATION AND IMPLEMENTATION OF THE NATIONAL ACTION PROGRAMS**

One of the most critical problems in the treatment of the environmental aspects, constitute the lacking in information and data that they allow to arrive to valid conclusions and objectives, like in many topics, but especially in the environmental the investigation, with very rare exceptions, technological scientist doesn't exist from wide manner and sustained in principles.

The government of Guatemala, without neglecting their responsibility in the definition of politics and their list as facilitador of the processes and activities that influence in the well-being of the society of general manner, like is mentioned previously, makes efforts by developing mechanisms that assure the transparency in the administration, which permit and promote the decentralization of functions and guarantee the delegation of responsibilities of administration to the remainder of the civil organized society.

With the purpose of consolidating the spaces of participation between the government and the civil organized society. The process of implementation of the Convention of the Nations United to Combat the Desertification, begun in 1.997 with the First National Encounter held in the Northwest and Northeast Regions of the country, with participation of representatives of diverse actors and sectors of the society. This encounter had like fundamental purpose, identify the principal causes and the effects of the degradation of the soils, concluding in that the causes of this phenomenon have their origin in the social, economical and cultural aspects, whose goods influence directly in the environmental deterioration and to the increment of the poverty. At the same time they were used as base in order to propose the criterions for the formulation of the National Strategy to Combat the Desertification and Mitigation of the effects of the Drought.

The civic participation, it is a commitment established by means of the subscription of the agreements of peace. However, the participative process between the government and the civil organized society, still don't consolidate. First for the fear of public expression that they left the 36 years of the conflict armed intern and then for the lacking in organization in the expression and proposal of the civil society, in front of the daily proposals of the government. In Guatemala the communitary participation is not new, from 1.945 the committees of development are constituted communitary with a focus of support to the administration of the central government and the municipal governments legally; however these have never had an excellent paper in front of the proposals of both governments, translating it only in managers of actions communitary and circumstances, for example in the organization of festival days, organization of religious events, communitary surveillance in front of eventual problems, etc.

The woman plays an important paper in the utilization and handling of the natural resources, as well as in the national economy; however their list is not completely recognized, inclusive for the same woman. This has a direct relationship with the cultural and social own patrons of the country; since historically in the Guatemalan society the man is who has to developed the economical activity, and their macho conduct has relegated the woman to a plane second. In the current moments the woman has claimed some spaces of participation in the national life, mainly in the political environment the one which has created a hopeful climate for a focus of equality of opportunities for women and men. This of course, will also transcend in the efforts of incorporating the focus of gender in the several initiatives and national commitments, like the implementation of the several Conventions, between them the Desertification.

The participative focuses is effective whenever the communitary rely on a transparent and truthful information on the problems that they affect them; to their time, their participation creates demand and disposition in order to support to the agents of the system in the definition of serious and viable proposals.

In spite of not being properly implemented the National System of Environmental Information (SINIA), some concrete actions have come back developing, like it is the case of the popularization of some politics, strategies, laws, regulations, etc. related with the environmental administration and the natural resources. However, it is important to stand out that for their characteristics of nation pluricultural, pluriethnic, and multilanguage, in Guatemala is not easy design a strategy of popularization and/or general communication without taking these particularities of the country in consideration.

In the proposals of the SINIA, are considered extremely important the adapt of databases, not only of environmental looks, but also of inventories and diagnoses of the natural resource for a guessed right definition of the national bills of the environmental and cultural patrimony of the country.

#### **IV. PROCESS OF CONSULTANT IN THE SUPPORT TO THE PREPARATION AND IMPLEMENTATION OF THE NATIONAL ACTION PROGRAMS AND OF THE AGREEMENTS OF ASSOCIATION WITH THE DEVELOPED COUNTRIES PARTS AND OTHER ENTITIES**

With the First National Encounter on Desertification and Drought held in 1.997 is begun the process of national consultation on the several causes and goods of the phenomenon in the country.

In spite of the fact that the problem patent is made to mere view, this should be approached in the frame of a national politics, with several strategies of implementation, and not with actions isolated of control. However, in the calendar of government, the topic has gone collecting importance of slow due manner to problems of greater importance that according to this should be solved priority.

On the other hand, the international cooperation to level of technical support, economical and financier, seem to don't consider it neither within their priorities. They in multiple opportunities have become proposals to organisms, so much bilateral like multilaterals in search of support, without that to the had been gotten date this.

It is important to mention, the support that the Secretariat of the Convention had offered to the national counterpart, so much for its ratification like for the execution of the national encounter, and the elaboration of this national report. Attitude that had not assumed the parts or countries developed members of the Convention, in spite of being established like an agreement within the same.

In the efforts of implementing of the commitments emanated of the agreements of peace subscribed in 1,998, in those that the recovery of soils and degraded earths form important part, concrete actions have been expounded to the reference, like the case of the application of support expounded the countries friends (Sweden, Norway, Spain, France, Canada and United States from America), for the protection of the basins like units of production and subsistence would feed.

On the other hand, the CONAMA, has begun negotiations with international organisms for the support of their administration in environmental material in



the one which undoubtedly will give up full importance to the protection and conservation of the natural resources, mainly the water, the soils and the forest.

With the purpose of incentivate the communitary management and the interest oof the international coopération, it is working in the founding of committees and groups communitary voluntary for the prevention, recovery and conservation of productive areas degradated by causes of the hydric and eolian erotion, the protection of the fountains of water and the reforestation. The present Initiative carries out in coordination with the municipal governments and the development urban and rural councils departmental and regional.

In synthesis, have not been had still, the support of the international cooperation of developped countries as is establishes the Convention, surely because neither contextual has been expounded the problem in the frame of a national politics of manner, with concrete actions from the concept of the desertification.

**V. ADOPTED OR PLANNED MEASURES INSIDE OF CONTEXT OF THE NATIONAL ACTIONS PROGRAMS, INCLUDING MEASURES TO PROMOTE THE ECONOMIC ENVIRONMENT, CONSERVE THE NATURAL RESOURCES, PROMOTE THE INSTITUTIONAL ORGANIZATION, INCREASE THE KNOWLEDGE ON DESERTIFICATION AND ITS CONTROL FOR THE FOLLOWING UP WORKS AND ASSESTMENT OF THE DESERTIFICACION AND DROUGHT.**

Upon analyzing the problem of the desertification, it is necessary consider that in the dynamic of the phenomenon, the social and economical factors have a significant incidence. It is probably, in the case of the problems linked with the desertification, where it is evident the incidence of statements factors.

Nowadays, it is recognizing, that a clear association between situations of poverty, stiller extreme poverty, exists and conditions of desertification; clear evidences of it exist in, practically all the areas of the country, affected for the phenomenon of the desertification in several grades and magnitudes. In the context of this association is that make dynamic the circulates vicious poverty-degradation environmental-poverty, the poverty like cause and consequence of the deterioration of the natural resources.

High population concentrations exist in rural areas relatively small, facilitating a progressive degradation of the natural resources of this areas. This situation has unchained a group of process with environmental negative impacts, migration to the cities pressuring on areas of ecological severe risk, exploitation of fragile ecosystems with demographic overload and deforestation enlarging the agricultural border.

Some aspects of direct incidence in the desertification, according to the outputs of the national encounter on the topic are the following:

## **Social pressure on the land**

### **Property and Holding**

The insecurity of holding is a crucial factor in the development of processes of deterioration of the natural resources that, in last term, drive to the desertification. Besides the problems derived of the small farm, are accustomed to give up other situations that provoke insecurity in the holding and they induce an use suboptimus of the natural resources natural soil, water, forests, biodiversity, etc., favoring their degradation.

The typical situations that are presented in the country, they generally are:

- a) Persistence of areas without title of property or with regulations of ambiguous property as for the laws of their occupants or of who they reclaim laws.
- b) Associated Problems to the communal property.
- c) Confusions as for the modes of laws of use, including the laws of usufruct and the leases of lands, between another.
- d) Existence of state lands in ambiguous situation as for their final destination, or in process of award in the context of agrarian reformation and/or colonization

Among the effects that could attribute to the insecurity of holding of the agricultural, cattles or forests lands could mark the scarce disposition of their occupants in order to adopt innovations and carry out investments with effects of medium long term, and the difficulties of the affected producers in order to guarantee financial operations. In last term, these effects gives place to descents of productivity and, eventually, to deterioration and to destruction of the resources.

### **Availability of lands**

The distribution of the lands is related directly: with the structural dualism of the agriculture and with the several forms of holding and exploitation of the forest that have existed historically in the country. In 1.979 the majority of agricultural exploitations (81%) don't have more than 5 blocks of land (3.5 hectares) of extension and they produce 39% of agricultural products for the local market and the proper consumption (corn, beans, wheat, etc.) and only 7% of products of export (sorghum, cotton, coffee, etc.), 11 of fruits and 0.4% of grasses. While the exploitations of more than 64 blocks (45 hectares), would produced 80% of the products of export, 55 of fruits and they possess 87% of the lands with grasses, guided toward the extensive cattle raising, producing 22 only% of the basic products for the local feeding.

The appraisal of annual growth of the quantity of earth cultivated with basic grains diminished from 1,950, falling the appraisal of growth of the quantity of earth dedicated to the cultivation of corn of 1.61% in 1.950 to 0.28% between 1.964 1,979, having passed the hectares cultivated with basic grains of approximately 553.200 hectares of corn in 1.950 to 499.000 hectares in 1,978.

This phenomenon, reaches to revert, due to the get off price of the principal products. This passed of 460.000 hectares in 1.980 to 383.000 hectares in 1,988, to the same time that increased the surface cultivated with corn and beans of 723.310 hectares in the first year to 1,337,000 hectares in the second, the one which represented an increase of the 85%. The phenomenon of reinvestment, however, has not diminished the problem of lacking in land of the majority of producers that generally are rural peasants or without land, being valued that their numbers was in 1.992 of around 1,211,400 against 450.000 in 1,950. On the other hand the extension of the area cultivated with basic grains showed be long term without effectiveness, then this surface began to decline in 1,988, being reduced between 1,987-1,990, the areas sowed with basic grains, of 82.700 hectares.

While the surface dedicated to forests passed according to the annuals of the production of FAO (that although they base an opinion on data proportioned by the governments, difficultly to verify it, they are the only fountain of comparison that, to a title indicative could give us a tendency on the use of the land in Guatemala), of 72.000 square kilometers in 1.950 (66% of the total surface) to 58.000 square kilometers in 1,970; 45.000 square kilometers in 1.980 38,300 square kilometers in 1,989.

## **Outstanding processes of the deterioration:**

### **a) Degradation of the agricultural soils**

Guatemala in a high percentage bases its economy in the agriculture and in the agroindustry, reason for the one which the erosion runs off with like the principal threat. The erosion is one of the processes which conduces to the desertification. The tendency exists to mark that, the erosion, but the principal, it is one of the most important processes of environmental deterioration that develop in the country. However, in the practice, the process of erosion has not being accompanied like occur.

Like product of the utilization or exploitation of the natural resources, the deterioration has been generated and/or loss of the agricultural soils, well-known process like erosion. The erosion apart from reduce the natural fertility and the productivity of the soils, also influence in the deterioration of the bodies of water, being these, rivers, lakes or the same oceans or seas, also the same erosion influence in direct manner or insinuation on natural catastrophes that have several aftermath, until the cost of human life in direct form. The values of erosion that occurs in Guatemala, go from some tons of soils for hectare per year, until several hundred of tons. The principal fountains of erodable

products, come from overused of areas of lands, that is to say of areas of lands with strong slopes that are cultivated with vegetables species of low grade of economical and ecological profitable.

Most of the basins of the country have altered their hydrological cycle, the one which provokes big avenues and floods in time of rain and decrease of volume in dry time.

The acceleration of the processes of erosion in Guatemala during the last decades has been product of multiple processes of character anthropic, but particularly, of the expansion of the agricultural border and the over use of the soils especially for practices of crop which has rebounded in accentuating the vulnerability of the soils, opposite the agents of the erosion.

Another process that carries to the degradation of the soils is the loss of fertility product of its direct utilization without replenishment of feeds. Owing its difficult perception, it is a process to that doesn't give the due importance. Nevertheless the increment in the use of fertilizers, it is estimated that the applied volumes don't succeed in balancing the loss of feeds that has continued producing it in the soils destined to the agricultural production in the country.

The use of fertilizers, in any event, has gone determined areas of cultivation, but wide areas of cultivation extensive annual and of pasture have lacked an adequate replenishment of feeds.

A third process determinant of the degradation of the soils is the salinization. A significant fraction of the lands subjected to the irrigation they suffer serious problems of salinization derived of inadequate techniques of watering and of difficulties of drainage.

## **b) Deforestation**

Also in the case of the deforestation, the expansion of the agricultural border is principal cause, the substitution of the forest for agricultural systems or related to cattle, at its time, favored, for diverse reasons, but particularly, for processes of spontaneous or induced colonization]and for the expansion of the cattle activity, many time, favored for economical diverse incentives. The wooden extraction for firewood and carbon, so much in order to be used as fuel in industrial processes like for domestic consumption, direct being one of the most important causal factors of the deforestation. However, the initiatives guided to the development of plantations of energy forests, practically, they have not been successful.

## **c) Loss of Biodiversity**

A key factor sustainables of the arid zones for the development, semi-arid and sub-humid dry it is the capacity of maintaining their Biodiversity. These zones are characterized for the genetic variability of their species that they present a wide range of morphological adaptations, physical and chemistries to the hard

conditions of their environment. At the same time, they are characterized by presenting a great endemic wealth.

Among the principal causes of loss of the Biodiversity have been marked the destruction and the decrease of the habitat, mainly for processes of deforestation, coast contamination, alteration and dry up of mangrove, as well as other minor processes. Unfortunately, the evaluations of the losses of Biodiversity are scarce, insufficient and limited to very reduced territories.

The Biodiversity in the arid and semi arid zones have been gone reducing in alarming form. Several thousand of vegetables species and animals have already disappeared and could continue disappearing every year.

Guatemala has experienced very few significant advances in material of fight against the desertification and the drought, specifically since the politics, strategies, plans, programs and projects that of global manner and/or of separate manner for the country has been formulated in the search of a model of sustainable development, they have not considered this variable like important part in itsr structuring and operatively. From same manner the academics entities and of investigation, so much governmental like not governmental, don't incorporate still in their programs and pensum of studies the topic, so that these studies serve like point of parting for the formulation of politics, strategies and actions tending to the prevention and control of the problem.

Some initiatives that have been expounded to the date, like the case of the Action Plan of Forest, the Action Plan of Environmental, etc. guide their actions to the conservation of the resources natural water, soil, forest, of individualized manner. It has been lacking a perspective of group, integrating, that considers the new conceptions of the sustainable development -economical growth, social justness and environment conservation-, that incorporates the problems of the Biodiversity in a national vision, of the climate change, of the demographic and migratory problems, etc.

On the other hand, still is not observed, to level of the governmental instances of decision, a clear understanding on the phenomenon of the desertification, which is necessary so that the initiatives expounded in this context, is better welcomed in terms of political will.

In the same context it is important stand out that many weakness in the national systems of environmental information exist, being with purposes of maintaining dynamic inventories of natural resources, of accompaniment of the processes of environmental transformation, of implementation of bills of the environmental patrimony (to be linked to the systems of national economical bills, the internalization of the environmental costs to the processes of economical modernization) or of evaluation of processes of transformation.

This situation, that is translated in the lacking in appropriate indicators or in the little solidity of the utilized indicators, united to the incorporation limited of

social-economics indicative comparative to the areas affected by processes of transformation that lead to the desertification, have carried to the formulation of not very reliable and unconcluded diagnoses, and to certain lack of solidity of argument, opposite the political and economical authorities, in order to sustain initiatives in material of combat the desertification.

Important experiences exist in Guatemala as for the formulation of plans, programs and projects, so much in initiatives that are guided directly to the conservation of the natural resources, like in initiatives that are centered in the correction of situations that they wrapped in such a manner or another, the process of deterioration that lead to the desertification. On the other hand, to level of international organizations, few guided proposals have developed not, being to the handling and utilization of the natural resources or well to their protection and conservation, by means of plans, programs and projects, without specifying properly the with respect to the control of the desertification and the drought.

On the other hand, legal texts have been proclaimed that they create normative and included instruments, economical, guided to the conservation or development from the renovable natural resources (soils, vegetation, continental waters, etc.). However, they are limited or very scarce the successful outputs that, objectively, could attribute to the majority of plans, programs and executed projects, equal thing could say concerning the outputs of the application of normative bodies and economical instruments for the administration of the natural resources.

In any event, for effects of the analysis and preparation of proposals guided to brake those processes of environmental transformation negatives that lead to the desertification, is necessary the participation of the government and the civil organized society.

It is important to emphasize, that the problem as for the definition of strategies, don't reside neither in the analysis, neither in the preparation of proposals, neither in their quality; the problem resides, on one hand, in the political genuineness of the proposals- their acceptance for the society- and in the will of the public power for implement them and on the other hand, in the institutional capacity for the execution of specific proposals.

Taking the previous proposal like premise, it has been suggested to the current authorities of government adopt a group of criterions on the which they will be based on the operative schemes for the formulation and implementation of politics and national strategies to combat the desertification and mitigation of the drought. Among these:

1. Structuring of National Programs of Action to combat the Desertification

The national programs of action and to combat the desertification, should consider of coherent and consistent manner with the global and political plans

of formulated development and implemented for the Governmental administration and/or Not Governmental, of like manner that their content to the same as their concept, they go of manner composed to the protection of the natural resources, without that it means brake their rational utilization. As well as, should be expounded in a frame of interinstitutional and sectorial coordination and cooperation in order to articulate convergent initiatives and avoid to duplicate of efforts and resources.

## 2. Compatibilization of the national strategy with the environmental and economical politics

The strategy to combat the desertification, should be inserted of explicit manner in the environmental national politics that of incipient manner has come back developing in the country, their instruments juridical principals is constituted by the own constitution and for general laws or laws mark for the environmental administration and should state explicitly in the regulation of these and/or in the formulation of special laws referred to the natural resources (soil, forest, water, biodiversity, climate change etc. )

On the other hand, consistency with the global orientations of the economical national politics is required that recovers the role of the private sector in the economy and the role of the market like principal instrument appointed of resources, that is opened to the external commerce and that reaches to consolidate outlines of international integration in a context of open regionalism, and that restrict the public expense and pressure the self-financing of all the structure of the State (central government, municipal governments, autonomous, semiautonomous instances and decentralized instances, researching instances, etc.).

Finally, in this order of things, it is important the integration of the strategy to combat the desertification with the national strategies guided to other initiatives, for example the comparative to the biodiversity and the climate change, and another of similar character.

## 3. Incorporation of economical instruments

Any national strategy should compose the utilization of normative instruments and not of direct regulation of the processes that lead to the desertification with the application of economical instruments of administration of the natural resources, as well as revise the effects, positives or negative, that diverse instruments of economical effective politics have on the processes of environmental transformation.

## 4. Evaluation of the phenomenon of the Desertification and agro-ecological and social-economic zonification .

The great diversity of the environmental, social-economic and demographic conditions of the country, make recommendable the identification of spaces

highly relatively homogeneous and the evaluation, with a grade of reasonable approach for planning effects, of the incidence of the processes of environmental transformation that leads to the desertification, particularly the presence and development from nucleus of desertification and the grades of physical and social vulnerability of certain areas. Also, they should evaluate the phenomenons of social transformation, including the strategies of the population in order to link to economical activities not tied to the agricultural production for proper consumption or in small scale.

5. Creation and/or consolidation of decentralized outlines and participative of administration

The government, without neglecting its role in the promotion of politics and their list like comptroller of the activities that incidence in the well-being of the society of global manner, should develop mechanisms that assure the transparency in the administration, permit and promote the decentralization of functions and guarantee the delegation of responsibilities of administration to the civil organized society.

Constantly the governmental administration should favor and support the creation of instances of encounter of the civil society with the idea of creating canals of active participation. In this sense, it fit to consider the official auspice to the creation of national forums like superior representative instance of the civil organized society.

Eventually, seminars, conferences, etc., could constitute in a mechanism for the opening of spaces of relating of coordination and cooperation between the diverse groups of interest, government, civil organized society and external co-participants.

Should be considered the creation of councils, committees or commissions to combat the desertification for the coordination of actions, with expressions to municipal level, rural, regional and national, in order to accompany all the pertinent phases to a strategy integral, instance in the one which should participate all the actors and sectors of the society and in the one which they should compose other efforts guided to the better administration of the natural resources. Its character, according to which correspond, should evolve, from merely advisory to determinably resolute.

In synthesis, is sustained that the combat to the desertification and mitigation of the drought, only could be visualized if, in the short and medium term, they settle down regionalism systems of administration, autonomous and participative, structured on operative programs in whose design has been composed the concepts of justness and of environmental conservation, where



the consistency of programs and activities with this conception are periodically evaluated.

6. Adoption of an institutional frame for the execution of programs of action to combat the Desertification

For the materialization of the national strategy, especially during their initial definition, it is necessary identify an operative instance of administration with global functions of coordination, control and pursuit of all the contemplated activities, without damage of that, to the same time, the strategy requires identification of separately components that gives place to programs which design, financement and execution could unwrap of manner relatively autonomous.

The presence of this entity with an explicit purpose of "environmental optimizing" is indispensable in order to assure the coherence of the diverse programs with the fundamental objective: the sustainable development.

The administration of each program, according to the case, could be responsibility of governmental organizations, not governmental and local communitary groups.

7. Formulation of programs guided to the nucleus of desertification

It seems reasonable privilege, the formulation of initiatives of control and restoration in areas affected by nucleus of desertification, so much because the emergency conditions there prevalent are necessary, like, because in that situations, can there be a clearer perception of the political authority concerning the social and environmental involved costs and therefore, of the benefits that could associate to combat the desertification and to the efforts of mitigation of the drought. These initiatives focalized, could constitute the base for national more operative proposals.

8. Space Delimitación of the proposals

In benefit of the efficiency and the efficacy of plans, programs and projects in their formulation, economical analysis, execution, administration and pursuit, searching make viable outlines of more operative participation, it would be important limit the area of geographical influence of like initiatives, considering fundamentally the context determined by the decisions of decentralization of the administration, the tendency of the population to make optimism the local benefits in any initiative of investment and the diversity of the environmental conditions.

On the other hand, it could be recommendable, expound a a pilot phase of execution, limited to a micro-region, that is constituted in the foundation of a

wider proposal that undertakes all or a great part of the area denominated by the general problem to whose solution is guided the strategy.

On the base of the previous considerations, the plans, programs and projects, should be limited to components that they necessarily should have a national character or to situations where the components are technically similar in all the regions where the strategy is going to work hard, case in which the national proposal should have the character of proposal frame and give place to local specific proposals.

9. Creation of mechanisms for the technical support and financier of the national strategy to combat the desertification

The national mechanism would have to include funds of the more varied fountains, so much national like international, so much public like private and consider the financement of initiatives of any origin whose purpose is the detain, reduce or prevent processes of environmental transformation that lead to the desertification or to exacerbate the effects of the drought.

10. Implementation of the national system of environmental information

The development of dynamic inventories of natural resources, the correct evaluation of the processes that lead to the desertification and exacerbate the effects of the drought, and the construction of bills of the environmental patrimony, demand the establishment of a national system of environmental information, system that should constitute strategy to combat desertification in central element of any.

Is necessary mention, that from 1.997 year in that was held the first meeting of the sub-region (Central America, Mexico and the Caribbean) on Santo Domingo, the Dominican Republic, and then in March, 1.998 in Guatemala city, it has being proposing the necessity of coordinate actions to level of the sub-region. However has not been succeeded in stating explicitly these ideas, on one hand, because in the majority of the countries members of the sub-region, still not implement the programs of national action, and on the other hand because apparently the governments of these countries still don't achieve get dimension the existent problem for priority in the content of their agendas of work.

In view of the before mentioned, is necessary to make social with much more aggressiveness the Convention to level of drawee of national decision, and internalize their content in the instances of coordination at subregional level like the Central American Commission of Environment and Development-CCAD-, the Central American Bank of Economical Integration- BCIE-, etc. Furthermore, it is necessary promote a third sub-regional encounter in order to coordinate the problem and interests of the same, identified by means of their respective national reports, and formulate a sub-regional plan in agreement with the realities of this, which could be adapted for the governments of the subregión.

## **VI. FINANCIAL CONTRIBUTIONS OF THE NATIONAL BUDGETS TO SUPPORT THE IMPLEMENTATION, AS WELL AS FINANCIAL ATTENDANCE AND TECHNICAL COOPERATION, INCLUDING AFFLUENCY. PROCESSES IN ORDER TO IDENTIFY REQUIREMENTS, FINANCING AREAS AND THE ESTABLISHMENT OF PRIORITIES**

As has manifested in the development of the present report, The Program of National Action to Combat Desertification, has not been adopted yet officially by the government of Guatemala as a priority component of the agenda. However, exist similar initiatives that have undertake, such the case of the national project of agricultural development elaborated from 1976 to 1984, in which is developed the national project for the conservation of soils and waters, with the results that are also mentioned in previous chapters.

Owing to mentioned reasons, for the functionality of CONAMA, has not assigned a specific departure for a national program to combat Desertification. Even though has proposed the assignment of this departure for the budget of the year 2001 in forward.

In 1.999 the environmental national impelled administration for the CONAMA, starting from a diagnosis of the national and international cooperation, identify several stages starting from the which the cooperation will institutional develop and sectorial in several environments, between these, of course the national administration focused to combat the desertification and the mitigation of the effects of the drought.

Among the most outstanding aspects of this panorama are cited:

### **How CONAMA have managed the external cooperation**

The cooperation has been managed in punctual form, the revision of the documents of agreements presents a tendency to the solution of specific problems of institutions and external sectors.

An evidenced a structural weakness and politics of the CONAMA within the context Government are observed it of, which had not permit the direct capture of the resources obtained from the international cooperation.

This situation can be see in the following:

- The absence of a National Plan of Environmental Politics.
- The lacking of a strategy of local and international cooperation.
- The absence of Information and effective communication in material of cooperation.
- The lacking of environmental parameters in the country and their effective monitoring.

- The lacking in programs of environmental training of national cover.
- The necessity of improving the financial administration, directed to get resources of support to the environmental administration, in the definite fields like priority.

### **Subscribed Agreements**

- \* Agreement of Cooperation with the Association of Organizations Not Governmental of Natural Resources and the environment.

Objectives: carrying out plans, political, strategies, programs and combined projects in comparative tasks to their ends, where the institutional invigoration is one of their principals objetivos-Convenio of Cooperation and Interinstitutional Coordination with the Ministry of Energy and Mines.

Objectives: Coordinate and cooperate with actions that reach to the protection and improvement of the environment in the areas of exploration and exploitation oil company, mining and energy, as well as the rest projects that are area of competition of that Ministry.

- \* Agreement with the General Address of Roads, Dependence of the Ministry of Communications, Transport and Public Works.

Objectives: Reallocating priorities in the concept of development of road works attributing it to the protection of the environment the due importance, in order to impede their deterioration or destruction and the specification of projects that they require Evaluations of Environmental Impact.

- \* Agreement of Cooperation and Coordination with the Association of Sugar Factories of Guatemala.

Objectives: Coordinate and cooperate actions that reach to the protection and improvement of the environment in the areas and zones of influence of the sugar mills, in direct relationship and insinuation to the development of the activities and operations that they are derived of the cultivation and process of the cane of sugar.

- \* Agreement of Cooperation and Attendance with the Fiduciary for the Conservation in Guatemala, (FCG).

Objectives: Facilitating the cooperation and support between the CONAMA and the FCG, specifically in material of financial handling of funds related with the patronage of projects for the conservation, the environment, protected areas and the sustainable development of the natural resources, through the results of financial resources and an airy, reliable and transparent handling in order to achieve the common goals.

- \* Agreement of Coordination and Cooperation with the National Association of the Coffee.

Objectives: Coordinate and cooperate in actions that reach to the protection and improvement of the environment, in the areas or zones of influence of the humid and dry benefits, that operate the Coffering of the country.

- \* Secretariat of Environment, Natural Resources and Fishing from the United States of Mexico.

Objectives: carrying out actions of cooperation in the areas: biodiversity, handling of natural protected areas, flora and wild fauna, wood and forests products, wild life, ecological settlement of the territory, evaluation of environmental impact, handling of solid urban residuals, handling of dangerous residuals, substances chemistries and transbordered movements, prevention and control of the atmospheric contamination, climate change and consultations in the frame of international forums in environmental material and natural resources.

- \* National Network of Formation and Environmental Investigation, (REDFIA).

Objectives:

- Rely on a system that allows to facilitate the communication between the several institutions that they are devoted to the formation and environmental investigation in the country.
- Form and qualify human resources in the areas of formation and environmental investigation.
- Impel the environmental investigation in material of environment.

### **Effectivity and operativity of the subscribed agreements**

Next some inferences are presented that come off of a first analysis of the agreements and subscribed agreements.

- A tendency exists to establish agreements with entities of Government.
- It is evident that due to the place that occupies the CONAMA within the governmental sector, it seen obliged to carry out agreements with the dependences of the been about to achieve actions of support.
- The majority of the agreements reflects a greater benefit for the external institutions that for the CONAMA.

- The agreements are punctual and specific. Should enlarge their field of action that covers all the aspects of the activity.
- General and specific agreements with international organisms don't exist.
- Agreements of bilateral and multilateral open cooperation don't exist.
- Agreements of financial cooperation with entities of financement don't exist that favor the environmental administration.
- The cooperation is very limited to specific sectors.
- The subscribed agreements, in their majority, operative anniversaries are not sustained by means of plans.
- Programs of financial support to the actions don't exist that coordinate the CONAMA to carry out for an external institution.

**Reason is necessary a Strategy for the Cooperation**

- In order to guide the CONAMA in the direction and search of subscription of agreements of cooperation.
- So that the CONAMA establishes strategic alliances of cooperation that permit the realization and the financement of the necessary actions for the execution of their functions.

**The cooperation should reach the following objectives:**

- Coordinate local actions, carried out by institutions or local or international instances, that allow to maintain the ecological equilibrium and the quality of the environment in the country, in order to improve the quality of life of the Guatemalans.
- Provide scientific support, technician and financier that help to an effective environmental administration in the country.

**Which they should be the lines of definite cooperation by CONAMA in execution of their functions**

**Scientific**

This line is basically the realization of:

- Investigations
- Experimentation
- Studies
- Environmental Characterizations

- New methods and procedures in order to measure contamination and their control.
- Consultantships and specific advisories

## **Technique**

This line includes:

- Establishment of norms and environmental parameters
- Monitoreo of the environmental systems
- Identification of fountains of contamination and their regulation
- Establishment and operation of stations or nets for sampling and monitoring
- The development of formative programs and of training in environmental material
- International Expertise in material of environment.
- Contamination of the hydric resource
- Contamination of the atmospheric system.
- Prevention and control of the contamination of the lithic and edaphic system.
- Conservation and protection of the biotec systems
- Sustainable Rational utilization of the natural resources.
- Conservation of Protected Areas
- Territorial Settlement
- Protection and control of the Biodiversity.
- Climate Change
- Desertification and drought
- Layer of ozone

## **Financial**

The financial cooperation will be due frames in favor of:

- Administration and achievement of local and international donations destined to the environmental administration.
- Administration and achievement of funds not reimbursable directed to the realization of projects.
- Access and Utilization of reimbursable resources, with soft interests, that guarantee the viability and the sustainability of the actions.
- The gathering of funds specific coming from the bilateral and multilateral cooperation.
- Financial Support translated in consultantships, advisories or of any type that permit to implement works that help to the execution their objectives and functions.

### **Which of the lines of cooperation have been covered for the subscribed agreements**

- Scientific (any)
- Technique (very limited)
- Financial (restricted and directed toward external interests)

### **What local institutions have been identified, like important and of priority, in order to establish agreements or agreements of cooperation**

- National Association of Municipalities
- Universities and instances of investigation
- Banks of second order (Financial Funds)
- National Council of Science and Technology
- Churches

It is not strategic establish agreements with Institutions of the State. In their place should propitiate actions directed the execution of the Decree 68-86. For it is not required subscribe agreements or letters of understanding, it has to work in orderly form.

### **With what Entities and International Organisms have been had a approach and have been achieved any type of cooperation**

- Central American Commission of Environment and Development-CCAD-
- Worldwide Fund for the Environment-GEF (for Climate Change and Biodiversity)
- Interamericano Bank of Development-BID
- International Agency for the Development-AID
- Worldwide Bank-BM
- United Nations Program for the Development-PNUD
- United Nations Program for the Environment-PNUMA
- Secretariat of the Convention of Desertification-CCD

### **International organisms suggested in order to establish cooperation**

- Central American Bank of Economical Integration- BCIE
- CARE Guatemala- CARE
- Canadian Center of Studies and of International Cooperation
- Center of International Cooperation for the Agricultural Preinversión
- Ministries of Environment of America and the World
- National Council of Prevention of Disasters
- German Cooperation for the Development/ agency of the GTZ in Guatemala
- Interamerican Institute of Cooperation for the Agriculture
- Technical Agricultural Mission of the Republic of China
- National Agency of Images and Cartography



- Organization of the United States of America
- International Regional Organism of Agricultural Sanity

In spite of the problem is patent at simple sight, this must be tackled in the frame of a national politics, with different strategies of implementation, and no with separate mitigating actions and control. In the agenda of the current government, the theme has gone collecting importance of due slow manner to problems of major importance that according to this must to be resolved by priority. Due to that case neither have done efforts by assigning a budget for implementing a plan of action to combat desertification.

On the other hand, the international cooperation to level of technical support, economic and financier, might seem no to consider neither inside of the priorities. In multiple opportunities have done proposals to bilateral and multilateral organisms, in search of support, without that to the date have obtained this. Of equal manner, no obtained clear signals of developed countries Parts, as for the technical support and financier in agreement established to it in Convention.

In the efforts of implementation of the commitments obtained from the peace agreements undersigned 1, 996 in which the recuperation of soils and degraded lands and subutilized, form important part, and have planned concrete actions to the respect, such is the case of the request of support proposed to the countries friends (Sweden, Norway, Spain, France, Canada and United States of America), for the protection of the basins as units of production and alimentary subsistence.

Separately, CONAMA, has initiated negotiations with international organisms for the support of the management in environmental matter in which undoubtedly will be given full importance to the protection and conservation of the natural resources, principally the water, the soils and the forest.

At internal level, is working in to conform of committees and community voluntary groups for the prevention, recuperation and conservation of productive degraded areas by causes of the hydric and eolic erosion, the protection of the fountains of water and the reforestation. This initiative carry out in coordination with the municipal government and the advice of urban and rural development councils departamental and regional.

## **VII. REVISION OF THE POINTS OF REFERENCE AND UTILIZED INDICATORS TO MEASURE THE PROGRESSES AND EVALUATION OF SAME**

In spite of there not been implemented formally a program of national action on Desertification, this topic like is mentioned prior is considered within a global planning to level of the national environmental plan and the national environmental politics.

From this manner, in the frame of both plannings several aspects with parameters are considered and feasible indicators of evaluation during the several stages of the process that implicate the environmental national administration. In such sensitive the indicators have been considered and following instruments:

### **1. Indicators:**

- a. Modernización of the handling of the protected areas and conservation of the biological wealth of the country
- b. Restoration and conservation of the soil and utilization of the forests resources, in order to improve their handling in benefit of the diverse regions of the national territory
- c. Handling integral of the water, promoting their efficient use and sanitation.
- d. Protection of the oceans and rational utilization of their resources, as well as the modernization] of the fishing activities related to water
- e. Improvement of the quality of the air, especially in the urban zones in order to protect the health of their inhabitants
- f. Administration ecologically rational of the solid and dangerous residuals
- g. Ecological Settlement of the territory, in order to control and rule of the use of the earth and the resources in a frame of certainty and knowledge for their possessors

### **2. Instruments:**

Given that the environmental considerations have developed in a period relatively short and of heterogeneous manner, their incorporation has been unequal in the different environments (national, site, sectorial, etc.). Generally these considerations have been used initially of punctual manner, specify, restrictive and at most, like a complement to the usual procedures of sectorial administration. However a concept more holistic should part environmental frame that defines the instruments for their operativity at the same time of a politics.

The instruments are not considered like an end in the same, but rather they should be utilized in complementary form and coordinate in order to reach the

beginnings of the environmental politics. It fits to mention that the particular characteristics of each one of the instruments should be in narrow correspondence with the beginnings underlying of the politics and with the organic and administrative institutional structure. Under this focus the following instruments are considered:

#### 1. Instruments in order to fix environmental conditions:

These include the procedures in order to dictate or establish: to) norms of environmental quality, so much primary that they are related with the health of the population, like secondary destined to protect, conserve and/or preserve the environment or the nature, b) norms of emissions to the air, water and of solid residuals, and c) norms of preservation and conservation of the environmental national patrimony. These last considers the administration of the national system of guarded areas and the development of guarded private areas, the classification of the flora and the fauna of the country in different categories of conservation, and the current maintenance of an inventory of the flora and the fauna.

#### 2. Preventive Instruments:

They are constituted mainly for the system of evaluation of environmental impact and for the plans of handling of natural resources. They at first should subject a wide range of projects of investment and/or activities in previous form to their execution, already by means of the modes of declarations of environmental impact or of studies of environmental impact. These instruments also consider the studies of environmental impact like an important tool for the definition of the territorial settlement.

#### 3. Instruments of correction:

They include the plans of prevention mainly and of decontamination that the authority could dictate when the levels of any environmental variable have overcome the courages established by an environmental norm, respectively. These plans have for purpose correct situations that are contributing to that the environmental norms are about to being, or have been overcome.

They are also included here the plans of conservation destined to assure the capacity of regeneration and the biological associate diversity to the use and utilization of the natural resources. These plans of handling include, between another, the following environmental considerations: a) maintenance of volume of water and conservation of soils, b) maintenance of the courage landscape, and c) protection of species in danger of extinction, vulnerable, rare or insufficiently well-known.

#### 4. Instruments of execution:

It includes the actions of supervision, that will exercise the several organisms of the state in function of their attributions mainly. It fit highlight that will correspond the authorities municipal jurisdictional channel the public corresponding organizations the accusations of noncompliance formulated by the citizenship.

#### 5. Economical Instruments:

These include mainly and of form not restrictive the permissions of emissions of compromise and the taxes to the emissions or rates to the users, in those that will be considered the environmental implicit costs in the production or uses of certain goods or services.

#### 6. Instruments of education and investigation:

Will be pretended that the educational process, in their several levels, incorporate the integration of security and the development of habits and conducts that they reach to prevent and resolve the environmental problems by means of the transmission of know-how and of the teaching of modern concepts of environmental protection, guided to the understanding and taking of conscience. The educational process is also characterized by being an instrument mainly preventive, having a component of correction nature at the same time.

As for the investigation, it should be settled down for law, that the bottoms assigned in the budget of the nation for ends of scientific investigation and technological development, they will finance comparative projects to the environment, without damage of their specific ends.

#### 7. Instruments of civic participation:

By means of normative clear, they should settle down the minimal mechanisms of civic participation, without that it represents restriction for the search of new complementary mechanisms that they contribute to that they are more effective the compatibility of the be careful to the environment with the necessities of the economical development of the population. This minimal mechanisms of participation should include in the system of evaluation of environmental impact, in the fixation of environmental norms, in the development of plans of prevention and decontamination, and in the conformation of the several instances of national coordination like the more authenticate of the expressions of the society.

#### 8. Instruments for the generation of information:

They should materialize, by means of the establishment of the national system of environmental information of public character and regionally breakdown, that allows to maintain an adequate knowledge of the environmental quality of

the country, that facilitates the environmental administration, and that consider the nature of transectorial manner in the environmental aspects.

#### 9. Financing Instruments:

Strengthening and consolidate the Guatemalan Fund of the Environment, with the purpose of financing projects or activities guided to the protection or restoration of the environment, the preservation of the nature or the conservation of the national environmental patrimony.

In the frame of the environmental national legislation, they settle down two fundamental commands for the implementation of the mechanisms of evaluation and control of the degradation and/or deterioration from the natural resources, being these:

- a) For all project, work, industry or any another activity that for their characteristics could produce deterioration to the renovable natural resources or not, to the environment, or introduce noxious modifications to the landscape and to the cultural resources of the national patrimony, it will be necessary previous to their development a study of evaluation of environmental impact, carried out by technicians in the material and approved by the National Commission of the Environment. The official that omit demand the study of environmental impact of conformity with the law of the environment, will be sponsor personally for noncompliance of duties, as well as the matter that omit fulfill said study of environmental impact will be sanctioned with fine of 5,000.00 to 100,000.00 (Quetzales), (national currency).
- b) Popular action is conceded in order to denounce in front of the authority, all act, act and omission that generate contamination and deterioration or loss of natural resources or that affect the levels of quality of life. If in the location don't exist representatives of the National Commission of the Environment, the accusation will be made in front of the municipal authority, the one which will remit it for their attention and step to her mentioned Agency.

It in the search of an authenticate representation and participation of the actors of the Guatemalan society in the development of the environmental national administration, they become efforts for implement a mechanism of interinstitutional and sectorial coordination by means of the creation of the National System of Environmental Administration-SINGA. This mechanism of coordination bases an opinion on the foundation of National Councils composed by representatives of the several sectors, constituting it in forums of expression and debate in several areas and levels.

The SINGA, has represented, although of incipient manner the better mechanism of coordination, and proposal of the most serious alternating of solution to the environmental national problem. This mechanism bases their

operativity in the coordination with the government through CONAMA, and the materialization of the respective actions through the municipal governments.

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**“FIRST NATIONAL REPORT ON IMPLEMENTATION OF UNITED NATIONS CONVENTION TO COMBAT DESERTIFICATION”**

**PRESIDENCY OF REPUBLIC OF GUATEMALA NATIONAL COMMISSION OF THE ENVIRONMENT  
- CONAMA -**

**COORDINATOR: Ing. Julio Curruchiche.  
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