

***National  
Action  
Plan  
for  
Environment***





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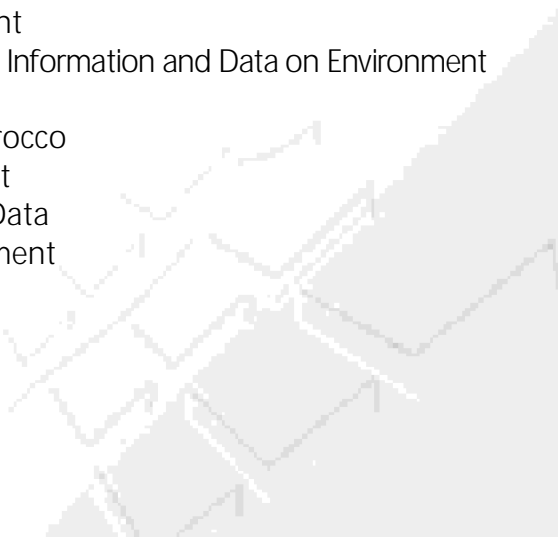
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## LIST OF ACRONYMS

CGEM	: General Confederation for Moroccan Enterprises
CMPP	: Moroccan Center of Clean Production
CNDD	: National Committee for Lasting Development
CNE	: National Council for Environment
CNESTEN	: National Center of Energy, Sciences and Nuclear Technologies
CNUED	: Rio de Janeiro Conference
CNUEH	: United Nations Conference at Stockholm
CPE	: Provincial Councils for Environment
CRE	: Regional Councils for Environment
DE	: Department of Environment
FNUAP	: United Nations Population Fund
FODEP	: Industrial Pollution Control Fund
GES	: Greenhouse Effect
GTZ	: A German Organization for Technical Cooperation
JICA	: Japanese International Cooperation Agency
LPEE	: Public Laboratory for Studies and Tests
MAP	: Mediterranean Action Plan
OCP	: Cherifian office for Phosphates
OMS	: World Health Organization
ONEP	: National Office for Drinking Water
ONG	: Non Governmental Organizations
ONUDI	: United Nations Organization for Industrial Development
ORMVA	: Regional Office for Agricultural Development
PAGER	: Program for Supplying Drinking Water to Rural Population
PAGI	: Program for Improving Large Irrigation
PAN	: National Action Plan for Struggle Against Desertification
PANE	: National Action Plan for Environment (NAPE)
ESDP	: Economic and Social Development Plan
PERG	: Program for Global Rural Electrification
PGE	: Project for Management of Environment
PIB	: Global Domestic Product
PNUD	: United Nations Development Program
PNUE	: United Nations Program for Environment
RAPIDE	: Network of Participating Parties Partners in Information and Data on Environment
SDN	: Sustainable Development Network
REEM	: Report on State of Environment in Morocco
SIBE	: Site of Biological and Ecological Interest
SIDE	: Environment Information System and Data
SNAT	: National Scheme for Territory Development
USAID	: United States Agency for Development







## Preface

While joining the international will to preserve environment and to implement Agenda 21, Morocco has decided to work in favor of a better management of environment through a multidimensional and continuous action, strategies development and actions programs. To this effect, starting from dispersed and fragmentary programs during the 1980's and 90's, Morocco moved towards more global and integrated actions in keeping with a perspective of consistency and eversustainability.

It is in this context that was launched, with the support of the United Nations Program for Development and the United Nations Fund for Population, the project of "National Action Plan for Environment" (NAPE) which comes within Program Capacity 21. This project intends to translate into concrete and tangible actions, the objectives already stated in the national strategy for environment and sustainable development, previously elaborated.

NAPE constitutes the crowning achievement of a process started just after the First Summit on Earth, held in Rio de Janeiro, in 1992. It is based on three main axes : Safeguarding environment, improving populations living standards, and reducing costs generated by environment deterioration.

This Plan of Action takes into account priorities able to guarantee a rational management of natural resources, to assure decent living conditions to all citizens and reinforce human and institutional capacities of concerned parties, to promote a better understanding and a more realistic approach of environment issues and sustainable development.

It is in fact an ambitious and global plan based on a participative and consultative approach, where all the economic and social parties are associated. Besides, NAPE has succeeded to reconcile two objectives, previously considered antagonistic, that is to encourage the economic development of the country without damaging the quality of environment .

The different NAPE protagonists, among which departments and public institutions, local communities, public sector, universities and Non Governmental Organizations, are all called upon to play an important role in the coming stage, dealing with implementation of 166 considered actions and measures. They will, on their main part, be realized with the support of friendly countries and international and regional organizations partners of Morocco.

This cooperation would be able to make up for insufficiency in financial means, presently allocated to the environment sector. We should, therefore, be more imaginative in our research for implementation means and especially more active in looking for funds whether national or international.

Therefore, let's act together for the implementation of NAPE projects in order to reverse the current deterioration tendencies of our environment and assure the development of today's Morocco, without compromising the basis for the development of tomorrow's Morocco.

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# INTRODUCTION

In the beginning of the 21st century, Morocco has been confronted with complex problems concerning development and environment. Its natural resources, particularly, ground, hydrous and marine ones, are threatened so much in quantity as quality by risks growing more and more serious. The current trends of hydrous and forestry resources exploitation exceed far away their natural renewal capacities. The non-adapted agriculture as well as urbanization extension destroy, in an irreversible manner, important surfaces of arable soils. Fragile areas as coastlines, undergo a mass tourism with little respect for environment, damaging valuable sites and landscapes. Finally, cities and industrial zones are undergoing an extension lacking control, with well-known insufficiencies in drainage and worn-out waters processing, making of these spaces real black points as far as environment deterioration and attacks to the populations health are concerned.

Facing this statement, public authorities reacted by developing, during the 1980's and 1990's, many plans and programs of intervention aiming to save and develop natural resources and improve the populations living standards. However, most of these initiatives were not completely successful. They have often been conceived and implemented in a more or less isolated way, on the basis of projects lacking consistency between them, with no real appropriation on behalf of concerned parties and populations. It is precisely this situation that the National Action Program for Environment wishes to change.

As it is conceived, NAPE is at the same time a program and a process for improving environment and achieving performances of socio-economic development in a long-term perspective and everlastingness. It provides the setting through which the community can use these resources in an efficient manner, create respectful infrastructures for environment, improve living standards and promote a healthy and sustainable economy. In this sense, NAPE is not static, it should, on the contrary, be thought of as an evolutionary tool, which can be reviewed and up-dated regularly according to the state of environment new data and tendencies.

The present document is the result of a long approach which led the Environment Department (DE), in charge of its elaboration, to prepare several studies and to organize thematic workshops in different regions of the country. A multidisciplinary team of national specialists, in collaboration with the DE and some international consultants support, has been in charge of leading these workshops, summarizing debates in an agreed upon synthesis, and evaluating recommendations by sectors in view of integrating them.

NAPE is therefore the synthesis of a considerable quantity of information and a long reflection in which participated different parties of the Moroccan society. As such, it draws an outline of the main problems facing the country's development and environment and summarizes the major concerns which have been mentioned by those who have contributed to its elaboration.

NAPE document is based on seven chapters. The first chapter presents a general introduction to the document and a preview on its content. The second chapter offers a presentation of the general national and international context in which NAPE was prepared as well as the challenges it is supposed to take up. The third chapter describes the state of Morocco environment. This state is dealt with following a method that prioritizes the dispatching of environmental problems according to space and surroundings. The themes are about water, soils, air and energies, natural surroundings, natural disasters and major technological risks and urban and urban-related areas. A last category is reserved to environmental management and communication. The fourth chapter presents Morocco knowledges achievements in managing environment, acquired from its previous experiences. Learned lessons will allow to orient the future action, particularly for NAPE setting up. The fifth chapter presents the methodology as well as basic principles which lead to its elaboration. The sixth chapter presents NAPE objectives and contents in the form of action-cards. Finally, the seventh chapter presents NAPE implementation conditions. Thus, it describes the proposed institutional setting and the major sources for financing implementation.

In a separated tome, the document presents a catalog of action-cards proposed by NAPE.

## 2 GENERAL CONTEXT

This chapter presents the national and international context in which NAPE process starts as well as the problems the latter should attack. On the national level, it draws the political and socio-economic context, the important features of the Moroccan environmental policy progress and stakes in what concerns management and protection of environment in Morocco. On the international level, the chapter describes sustainable development process and recalls the engagements taken by Morocco in this sense.

### *2.1 National context*

#### *2.1.1. Political context*

Morocco is at the heart of a political, economic, and social transition. This transition has been made necessary considering the challenges Morocco is supposed to take up, particularly in dealing with struggle against poverty and controlling unemployment and social inequalities. It is also marked by further extended political opening which is behind the emergence of new strengths of dynamism and an acting civil society. The latter does not only claim but intends to be also a concerned party, having the ambition to influence the government in order to orient its actions and impose a new rhythm.

Creating regions, that took form with the enactment of the Law 47-96, adopted March 17th, 1997, is an other dimension of this transition. Regionalization became indeed a fundamental institutional choice that goes along with the process of the country democratization and grants legitimacy to local authorities. It makes of itself the appropriate setting for innovating and promoting auspicious conditions, to take up the challenge of sustainable development on a concerted basis, and in accordance with specificities, nature of available resources and concerned populations and spaces constraints. This way, regionalization gives a modern content to decentralization, by promoting elected representatives participation and organizing their relationships with administrative authorities at the level of provinces and regions. This will, at the regional level, encourage dialogue, actions coordination, regional plans development to respond to the populations expectations, and creation of solidarity conditions between provinces and townships.

### 2.1.2 Socio-economic context

#### *a) Demographic and social data*

Morocco undergoes a strong demographic pressure with a natural growth rate of 1.73%. The present population of Morocco is of 28 million inhabitants, of which 54% are in urban areas. It is characterized by a strong mobility mainly due to rural depopulation, but also more and more by a migration from the urban areas to rural ones and mainly toward urban-related areas, because of the situation of the landed property market in cities. This process, which will grow further in coming years, is particularly dangerous for urbanism, equipment and impact on the agricultural land in urban-related areas.

The rate of activity in rural areas is estimated at 49.3%<sup>1</sup> in 1997 (busy population: 4.2 millions) with a considerable difference between men and women (respectively 76% and 24%). Unemployment in urban areas is estimated at 16.9% in 1997 against 15.8% in 1990, women are more concerned (21.8%) than men (15.3%). In rural areas, busy population was estimated in 1997 at 5 million inhabitants.<sup>2</sup>

One of the most meaningful indicators of the populations' life conditions is housing. This indicator shows that Moroccans live in difficult conditions. Indeed, in rural areas, 90% of the housing park are constituted of lodgings little adapted (shacks...), with too many people and lacking equipment in basic services. In urban areas, 25% of households live in overcrowding conditions (more than 3 people in one room). In urban-related areas, the level of equipment in water and drainage is relatively low and often results in critical healthiness conditions.

#### *b) Data on economic activities*

Moroccan economy is an economy of liberal type, where foreign trade represents 35% of the GDP. It relies on several key-sectors among which the agricultural sector which is one of the decisive activities. Whereas, other sectors such as tourism and maritime fishing begin to know an important expansion.

### Agriculture

Agriculture represents 17% of the GDP and employs almost half of the active population. However, in spite of the efforts engaged at the level of hydraulic work (92 dams), the sector still remains dependent of climatic risks.

Concerning environment, the agricultural practices as farming in strong slopes where non controlled and abusive use of fertilizers and herbicides, irrigation practices, farming in fringing soils is negatively reflected on environment. Among the effects, we can note the growth of erosion, water tables pollution and soil salinity.

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<sup>1</sup> Source : Moroccan Territory : Present conditions, Direction of, 2000 Spatial Planning

<sup>2</sup> Figures on employment in rural areas should be carefully considered

## Fishings

Morocco has two maritime facades, the Atlantic and the Mediterranean one. Their length reaches 3500 km. The Atlantic facade is situated in a zone that shelters one of the four important systems of water biologic enrichment (upwelling), which makes this zone one of the fullest of fish in the world.

Fishing sector represents 15% of exports total value and 55% of food-processing exports value. The national fishing fleet accounts around 3000 ships (out of which 446 units for deep-sea fishing) in addition to 12000 boats of artisanal type. Fishing sector offers around 200000 direct jobs and occupies an important place in export with about 6.4 billion Dhs in 1997.

However, we have to point out that the policy for developing maritime fishing based on encouraging modernization and equipment may have perverse effects. The economic attraction of the sector resulted in an important pressure on the stocks and a very advanced weariness of resources.

Moroccan piscatorial resources were also exploited by foreign fleets before the fishing agreement with the European Union (UE) came to end. The latter has not been renewed, looking for a new formula that will further serve the interests of Morocco and preserve its resources.

## Industry

Industrial sector is essentially based on manufacturing industries which represent 17.4% of the GDP (according to 1996 figures). Two domains come to mind: food-processing industry and chemistry related industry, with respectively 34.5% and 34.4% of the global added value. In the second place, we find textiles / leathers with 17.6%, metallurgic and mechanical industry (MMI) with 10.5% and electricity / electronics (EE) with 3%. The majority of industries is situated on the coastline Casablanca-Mohammedia where more than 46% of national industrial jobs were concentrated in 1997.

On the environmental level, the industrial sector constitutes an important source of nuisances and pollution<sup>3</sup>. Indeed, Moroccan industries throw about 964 million m<sup>3</sup> per year of waste water, which represents 89% of the total volume of used water. The waste quality differs according to the nature of industry and the existence or no of a processing system. Solid wastes are about 800.000 tons / year, according to 1993 figures. For their part, gaseous emissions are important and of several origins, out of which carbon dioxide considered the most important. The latter participates in Morocco at about 77% of greenhouse gas. CO<sub>2</sub> emissions are about 4 million tons for cements sector only, and to about 2.3 million tons for other industries. The other polluting gas emissions are constituted of SO<sub>2</sub> (180 000 t), carbon monoxide (700 t); nitrogen oxides (7000 t) and fluoride compounds (204.000 t). As far as dust is concerned, it represents (10.000 t) .

Industry is also an important consumer of water, about 1 billion m<sup>3</sup> per year in which sea waters represent 81% .

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<sup>3</sup> A study on ecologically sustainable industrial development in Morocco , MCIA/ONUDI, 1996, based on report on situation of industrial waste in Morocco (MCIA, 1994).



### Mines

Morocco has important mines of different ores such as phosphates, basic metals (lead, copper, zinc, tin, iron), precious metals (silver and gold), special metals (cobalt, manganese, antimony, tungsten, molybdenum), rocks and industrial minerals (fluorspar, barytine, salt, bentonite, gypsum, perlites, feldspar...) and solid fuels.

Mining sector occupies an important place in the Moroccan economic tissue. The main indicators recorded in 2002 for this sector are as follows:

> Participation to GDP:	2.83% ( <i>processing not included</i> )
> Direct jobs:	38 155
> Mining production:	22.6 million tons
> Mining product export:	5.177 billion dirhams
> Export of processed products:	9.939 billion dirhams : <i>19.3% of the national exports value</i>
> Investments achieved:	1.864 billion dirhams

Concerning environment, the mining sector continuously improves operating and valorizing systems in order to preserve natural surroundings. The administration in charge of mines work together with mining operators in order to create a synergy concerning environment protection by organizing meetings to increase public awareness (seminars, round tables, conferences...) and by realizing environmental studies while looking for the most efficient ways to prevent and struggle against nuisances.

### Energy

Moroccan energizing sector is characterized by its dependence on importing fuels (90%), with a national consumption evaluated at 8.4 million TOE among which oil products represent 68.4%. This consumption is characterized by conventional the use of conventional energy based on fossil products and by the use of traditional energy resources in rural areas (firewood, charcoal) , thus, contributing to forest patrimony destruction..

Transport sector, representing 6% of GDP, by itself, uses one third of the national energizing consumption which results in harmful effects on population health and emission of gases with greenhouse effect (GES).

### Tourism

Tourism constitutes one of the promoting sectors in the Moroccan economy. It contributes to about 7.8% of the GDP. According to 1999 figures, 2.5 million of foreign tourists visited Morocco.

Seaside tourism occupies an important place, but to maintain it depends on the quality of coastline waters and the protection of the country rears. Cultural tourism, with imperial cities, also occupies a good position. Finally, with its geographical and landscape diversity, Morocco has an important potential for sport tourism and adventure as well as for eco-tourism .

however, in spite of this important potential, developing tourism is faced with various difficulties, namely, lack of professionalism, deficiencies as far as organization and marketing



are concerned, on the one hand, and deterioration of sites having a tourist and cultural appeal, due to insufficiency of nature protection, on the other hand.

To all these facts, we can add that tourism, in its traditional shape, requires infrastructures which are important water consumers. For instance, in Agadir, tourism consumes, by itself, one third of drinking water in the city.

### Craft industry

Craft industry in Morocco is considered an important element in the economy. This sector represents close to 10% of the national GDP and employs about one million and a half and procures incomes for about 6 million inhabitants, that is more than 1/5 of the total Moroccan population. Furthermore, activities related to handicraft occupy an important number of women, especially in rural areas. Results achieved by this sector can be seen through the average value of Moroccan exports as regard to handicraft products, which have reached in current currency about 523 million dirhams in 1996.

On the environmental level, some handicraft sectors generate important nuisances at different levels. For instance, tannings throw important quantities of metals, such as chromium in salinity network. Potters contribute sometimes to air pollution because of their using polluting sources of energy (tyres...) . Professions related to wood, as those dealing with thuya in Essaouira, use forests at a rhythm that sometimes goes further beyond their natural capacity of being renewed.

### Infrastructures

Morocco followed since 1980's a policy of dams construction in order to strengthen its hydraulic capacities for the purpose of irrigation, water supply and energy production.

Transport activity, all means considered, contributes to about 6% of the GDP, employs 10% of the urban active population, participate at the rate of 25% to energy national consumption and brings undeniable incomes to the state budget.

Road infrastructures are of about 60.000 km, only half of them are unsurfaced ones. The railway network is still not yet well developed. Efforts undertaken in this field, gave priority to improving existing network. . The network length reached in 2001, 1.907 km , 1.003 km are electrified, and 370 km in double railroad.

The aerial sector has 28 airport platforms among which 13 are international ones, all opened to public aerial circulation .

### *2.1.3 Evolution of environmental policy and concept of sustainable development in Morocco*

Moroccan economy is mainly based on ground and maritime resources which are more and more restricted. In this respect, several studies show that natural resources basis is not only limited but it is also getting deteriorated as the needs of the population increase. This imbalance is flagrant in rural areas where the crisis not only threatens the national natural patrimony but more particularly the rural populations survival which depends on it. The latter

have indeed realized that their standards of living are seriously getting deteriorated especially during the last three decades. They are becoming poorer which push them to adopt survival strategies and behaviors that are not arguable in on a long term basis and damage the environment. From then on, taking into account results of the United Nations Conference at Stockholm (UNCED, 1972), and especially that of Rio de Janeiro (CNUED, 1992), Morocco recognizes that its development depends mainly on its capacity to better manage all its resources.

In this context, public authorities have started since 1980's implementing several strategies, plans and programs which were concentrated mainly on water mobilization (dams policy), struggle against desertification (national program for struggle against desertification, 1987), strategy for forests development (1993), strategy for pasture land development (1994), management of watersheds.

(national plan for watershed management, 1995), developing the bour land (law 33/94) and protecting environment (national strategy for environment and sustainable development, 1995). All these policies and programs aim at contributing more or less directly to improving the populations living standards, reduce pressure on resources and protect environnement so that we can reach the economic and social development to which we aspire.

The sectorial approach and technical means used in the 1980's and the beginning of 1990's showed, however, how they were limited. Thus, they were abandoned in favour of a more global approach, more oriented towards the concerned parties, especially the populations. This approach resulted in elaborating transverse programs which well be leading Morocco in the coming years taking into consideration its social and economic development . In this category of initiatives, we will find again the strategy for social development, the BAJ program for struggle against poverty, the national programme for struggle against desertification and for reducing drought effects (PAN), the national plan for territory development, and the national plan for economic and social development 2000 - 2004 (PDES).

Each of these programmes recognizes environmental priorities and proposes actions that are inspired on the whole from four reference categories. The first one concerns the Late King His Majesty Hassan II High Instructions, which underline the imperative need to plan for a sustainable development, respectful of our ecological and historical patrimony. The following paragraph taken from his message addressed October 17<sup>th</sup>, 1997, on the occasion of the International day for struggle against poverty, expresses this preoccupation with strength : We are ourselves too comfortably accommodated to more social disparities, more social violences, more polluted atmosphere, to an environment more in danger. This indifference or this familiarization, would it last and therefore become worse, would lead to a mass suicide. This is the true danger, this is the real stake".

The preoccupation about environment has been confirmed again by His Majesty King Mohamed VI, who in his speech of October 12th, 1999 addressed to elected representatives and official representatives in charge of regions and provinces, declared: "our territory administration must center its interest on fields that will, from now on, have a particular importance and a priority aspect such as environment protection and social action, and mobilize all means to integrate disfavored classes in society and assure their dignity".

The three other references that lead the planning process are the governmental declaration, orientations of the National Debate on Spatial Planning and the orientation memo of PDES. All these references give a particular interest to protecting environment and promoting an environmental culture. Thus, in his speech to the Parliament in April 1998, on the occasion of his nomination, the Prime Minister declared that: " the Government intends to give a particular interest to environment protection which has an important place in any strategy for a sustainable human development. This is how he took care to come out with a program on environment so as to evaluate in a very clear way the actual situation and enhance an environmental culture. This program will also come out with laws and adapted standards and will encourage using clean technologies and renewable energies" . NAPE which constitutes the basis for an environmental policy in Morocco, will certainly integrate and take into account all these references.

The Moroccan economic context is also marked by other considerations imposed by globalization requirements and the free exchange agreement signed lately with the European Union. The new nature of things in the world imposes in fact to Morocco to operate towards an upgrading of its economic tissue, taking particularly into consideration environmental criteria, which has to play an important role, more and more restricting, in the commercial relationship between developing and developed countries .

#### *2.1.4. Challenges, stakes and opportunities*

##### **a○ Challenges**

###### **○ Required new paradigms**

If the necessity for our institutions to adapt themselves, through an evolutionary process, to the new political and socio-economic context of the country, is recognized unanimously, the wished rhythm and changes orientation are still subject to animated debates. Certainly, any change requires time but Morocco has only limited time to control the harmful effects of an unbearable growth and to promote a sustainable human development.

The challenge for Morocco is, therefore, to know to what extent it can combine between the desire of a sustained consensual, endogenous change, supported by the adherence and participation of all concerned parties, and the requirements of efficiency according to which it should induce and lead the change starting from a central comprehension of the general interest, of national needs and measures to be taken to satisfy them.

###### **○ Requirements to reconcile environmental and economic interests**

The liberalization of Morocco foreign trade, result of the free exchange agreement signed with the European Union and of the World Trade Organization provisions, will certainly have positive effects on the growth, but potentially damaging environment. These effects will be felt on some important export sectors such as intensive agriculture, mines exploitation, known to be the more polluting. This foreseeable increase of pollution is a new challenge for the public authorities. It is about promoting a balanced developing policy that would reconcile between economic interests, including short-term ones, and the worry to protect environment and resources in the perspective of a sustainable development.

### b○ Main stakes

In the case of Morocco, the environmental question is summarized in three stakes categories. The first one consists in raising this question like a constant of Moroccans collective awareness. The protection of environment should be the business of every body, which requires campaigns to increase public awareness and a set of inciting and dissuading measures to save eco-systems completeness in all their components .

The second stakes category concerns everlastingness of capital - resources. The state of advanced deterioration in which are some resources whether ground or maritime ones, combined to the drying climate confirmed by a decrease tendency of rain, observed during the last three decades, result in vital space reduction. In these conditions, where the population does only have limited means to change its individual and collective survival strategies, pressure becomes necessarily excessive on residual resources not yet exploited. While recognizing capital resources everlastingness as a principal stake, the discussion is then oriented towards the actions to be implemented, in order to allow a deep change in the capital management strategies, and reconsider in concrete terms the relationship between Man and his environment.

While recognizing the everlastingness of capital resources as a main stake, the discussion moves, therefore, to the actions to be put into effect so as to allow a deep transformation of capital management strategies, in order to concretely review the relationship between man and his environment.

The third stakes category refers to environmental sanitary security. These stakes come within an environmental evolution determined by the badly mastered urbanization and the development of sectors of so-called "dirty" products and for which Morocco has a comparative advantage. The respiratory, cutaneous and neurological illness proliferation found in regions of strong concentration of road traffic and sources of polluting emissions, means that the atmospheric pollution constitutes a problem for health in the main urban zones of Morocco. Pathologies related to atmospheric pollution attack the least favored social classes of the population, which are more exposed to some environmental nuisances , and therefore, more weakened because of unhealthy housing. Reducing this inequality appears, therefore, as one of the challenges the State should take up. Sanitary security represents an important financial stake, in general not quite enough taken into account due to lack of data, methods and tools put at the disposal of decision-makers. For the society, the cost of atmospheric pollution, water pollution and lack of purification is yet considerable. Facing the preoccupying evolution of environmental sanitary security, public authorities should endow themselves with sufficient anticipatory capacity.

### c○ Opportunities

Protecting environment should not be perceived as a constraint but rather as an activity generating opportunities likely to contribute to the growth of national economy and improve the populations living standards. A better global surroundings management would, in fact, encourage national and foreign investors to invest in sectors of added-value activities , which have till now enjoyed little attention. Moreover, a sustainable exploitation of natural resources whether ground or maritime ones would guarantee a long-term durability of activities associated to them and would save future generations interests. A developing policy respectful of environment represents, therefore, a lever likely to encourage job creation and improve enterprises competitiveness.

### Job creation

Programs dealing with environment protection can contribute in a significant way to solving the problem of unemployment which constitutes a major challenge facing the country in the beginning of this millennium. For instance, starting work on reforestation, preserving water and soil, promoting the sector of renewable energies and eco-tourism in sites of ecological interest, as well as increasing the number of stations for purification and processing solid and liquid waste, all constitute an important jobs potential not yet used.

### Improving enterprises competitiveness

Economic growth challenges resulting from the application of free exchange agreement with the European Union, also represent opportunities for Moroccan environment, mainly when environmental preoccupations were added to the process of development and industrial planning. A strategy aiming to encourage investing in clean technologies and encourage enterprises to take the environmental dimension in their management systems, will contribute to increase competitiveness. This will require a suitable legal setting, which will specify not only royalties for pollutants and users, but also incitements to improve environmental performance for instance through tax benefits.

## 2.2 International context

### 2.2.1 Developing sustainable development process

Since 1970's people started becoming aware of environmental problems. At this stage, objectives were outlined within a short-term protectionist vision, and were limited to reduce risks for health and protect species and eco-systems which were threatened. The first policies defined in this context, have an approach according to sectors and a tendency to deal with the different components separately.

A more global vision started to be defined in the beginning 1980's. Issues like climate change, ozone problem, transporting polluting materials at a long distance and finally accumulation of long-term effects that threaten coming generations showed that, on the one hand, environmental problems are not of a local nature and that, on the other hand, they require a multi-sectorial and disciplinary approach.

Thus, environment deterioration became an international preoccupation, especially because of globalization. Being worried about earth environment deterioration, the nations community has elaborated a set of protocols and conventions in order to protect environment which deterioration does not stop. This has started with launching the sustainable development concept by Brundtland Committee in 1987. Indeed, the United Nations Committee for Environment and Development has declared that environment degradation is directly linked to economic development. Preserving natural resources is vital for the continuity of social and economic development, but on the other side, protecting environment can not be achieved without economic development.



This same sustainable development concept has been reaffirmed by the (UNCED) held in Rio in 1992. Agenda 21 adopted during this Conference put the outline for international, regional and national strategies for environment. A set of conventions were also a subject for discussion. It is mainly about the Convention on Climate Change (UNFCCC), Convention on Biodiversity and declaration on forests. A Global Environment Fund (FEM) was created to help developing countries in their environmental policy.

In June 1997, the 160 signatories at Rio Conference, met in a second summit in New York (Rio + 5). This meeting was the opportunity to evaluate the progress made as regard to environment, at the light of conventions and commitments taken at Rio conference. The report was negative. Environment is still in deterioration and it is becoming urgent to take action. The European Union has proposed that all industrialized countries reduce their level of CO<sub>2</sub> emission in 1990 to 85% in 2010.

### *2.2.2. Morocco engagements*

Following the example of the international community, Moroccan public authorities have become aware of the environmental issues. This preoccupation resulted in its commitment in the sustainable development process and willingness to work for a better environmental management. Thus, Morocco has signed and ratified the main conventions and international protocols and adopted declarations resulting from Rio Conference (1992). It is mainly about Agenda 21 from which comes program "ACTION 30". The latter's objective is to elaborate national Action Programs for Environment (NAPE), the United Nations Convention on climate Change (UNFCCC) and Kyoto Protocol, Convention for Species Protection, Conserving Biological Diversity, Convention for Struggle against Desertification and Drought and the statement on forests protection, as well as the Rio declaration constituted of 27 principles.

Morocco has, furthermore, signed other international conventions dealing with different environmental sectors.

- Convention related to humid areas of international importance, particularly, like wildfowl houses
- Barcelona Convention for the protection of Mediterranean sea against pollution and 1976 protocols
- Paris Convention in January, 1993 about prohibiting production, storage and use of chemical weapons and about their destruction (1993)
- Vienna Convention for the protection of the ozone layer (1985)
- Montreal Protocol related to substances which weaken the ozone layer (1987)
- Geneva Convention for reducing nitrogen and sulphur oxide waste (1979)
- Basel Convention on cross-border moving of dangerous waste and their elimination
- Decision of the Organization for Economic Cooperation and Development Council (OCDE) on cross-border moving of waste intended for operations of valorization (1972), ...