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PORTUGAL



COUNTRY PROFILE





#### **INTRODUCTION - 2002 COUNTRY PROFILES SERIES**

Agenda 21, adopted at the United Nations Conference on Environment and Development (UNCED) in Rio de Janeiro in 1992, underscored the important role that States play in the implementation of the Agenda at the national level. It recommended that States consider preparing national reports and communicating the information therein to the Commission on Sustainable Development (CSD) including, activities they undertake to implement Agenda 21, the obstacles and challenges they confront, and other environment and development issues they find relevant.

As a result, in 1993 governments began preparing national reports for submission to the CSD. After two years of following this practice, the CSD decided that a summarized version of national reports submitted thus far would be useful. Subsequently, the CSD Secretariat published the first Country Profiles series in 1997 on the occasion of the five-year review of the Earth Summit (Rio + 5). The series summarized, on a country-by-country basis, all the national reports submitted between 1994 and 1996. Each Profile covered the status of all Agenda 21 chapters.

The purpose of Country Profiles is to:

- Help countries monitor their own progress;
- Share experiences and information with others; and,
- Serve as institutional memory to track and record national actions undertaken to implement Agenda 21.

A second series of Country Profiles is being published on the occasion of the World Summit on Sustainable Development being held in Johannesburg from August 26 to September 4, 2002. Each profile covers all 40 chapters of Agenda 21, as well as those issues that have been separately addressed by the CSD since 1997, including trade, energy, transport, sustainable tourism and industry.

The 2002 Country Profiles series provides the most comprehensive overview to date of the status of implementation of Agenda 21 at the national level. Each Country Profile is based on information updated from that contained in the national reports submitted annually by governments.

Preparing national reports is often a challenging exercise. It can also be a productive and rewarding one in terms of taking stock of what has been achieved and by increasing communication, coordination and cooperation among a range of national agencies, institutions and groups. Hopefully, the information contained in this series of Country Profiles will serve as a useful tool for learning from the experience and knowledge gained by each country in its pursuit of sustainable development.

#### NOTE TO READERS

The 2002 Country Profiles Series provides information on the implementation of Agenda 21 on a country-by-country and chapter-by-chapter basis (with the exception of. chapters 1 and 23, which are preambles). Since Rio 1992, the Commission on Sustainable Development has specifically addressed other topics not included as separate chapters in Agenda 21. These issues of trade, industry, energy, transport and sustainable tourism are, therefore, treated as distinct sections in the Country Profiles. In instances where several Agenda 21 chapters are closely related, for example, chapters 20 to 22 which cover environmentally sound management of hazardous, solid and radioactive wastes, and chapters 24 to 32 which refer to strengthening of major groups, the information appears under a single heading in the Country Profile Series. Lastly, chapters 16 and 34, which deal with environmentally sound management of biotechnology, and transfer of environmentally sound technology, cooperation, capacity-building respectively, are presented together under one heading in those Country Profiles where information is relatively scarce.

At the release of this publication, Portugal had not submitted its Country Profile in the standard format requested by the Secretariat.

Due to the fact that the format differs from that utilized by most countries, inconsistencies could arise when including the information in the database currently under development. For this reason, we appeal to countries to present their Country Profiles in the standard format provided by the Secretariat which has been made available in this CD-Rom for ease of reference.

Once the Country Profile has been properly formatted and submitted to the Secretariat, it will appear on our web page: <u>http://www.un.org/esa/agenda21/natlinfo</u>

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#### 1. International Framework and Context

#### 1.1. Background

The United Nations Conference on the Environment and Development (UNCED) was held in Rio de Janeiro in June 1992. The representation of the 176 attending countries was made at the highest level and culminated in a Summit attended by 102 Heads of State. This Earth Summit followed a long process of reflection and involvement at world level and its aim was to find a common platform of action for the Environment and Sustainable Development. The resulting work led to the signing of two Conventions, two Declarations and one Action Agenda, Agenda 21.

Portugal held in this date the Presidency of the European Union (then the European Economic Community). As a result of the approximately 400 actions and measures foreseen, Portugal needed the involvement of 17 Ministries and 74 Public institutions at the time<sup>2</sup>.

<sup>&</sup>lt;sup>2</sup> 'Strategic Synthesis' – Most relevant aspects for the pusuance of the Conclusions of the UNCED, MARN/ Project Team, Dec.1992

The following themes and action proposals as the results of the Rio Conference stand out:

- i) Climatic Changes (Framework Convention)
- ii) Biodiversity (Convention)
- iii) Forests (Declaration of Principles)
- iv) Desertification (Convention Preparation subsequently signed in 1994)
- v) Agenda 21 (Plan of Action)
- vi) Rio Declaration (27 Principles to guide Action )
- vii) Setting up of the Commission for Sustainable Development (CSD)

The Commission for Sustainable Development (CSD), established at the 1992 Summit, was the catalyst in the implementation process of Agenda 21. Portugal was an active participant in all the CSD meetings from the outset.

The General Assembly of the United Nations in 1999 resulted in Resolution 53/242; this established that the 2nd World Summit would take place in 2002 coinciding with the assessment of the ten years since 1992.

#### **1.2. Sustainable Development – Conceptual and Operational Contents**

Ten years after the Rio Summit, we can say that the current problems are those of a world in an accelerated urbanisation process, under a growing threat of climatic changes (and the consequent worsening of the processes of natural catastrophes – sudden changes in climatic conditions, flooding and droughts), lack of fresh water and the inherent consequences for health and food safety, generalised loss of biodiversity, uncontrolled deforestation, intensification of the processes of desertification and erosion of arable land, increase of situations of risk and accidents, growing presence of dangerous substances in the environment and the food chain and difficulty in controlling the sources of pollution (on land – periodic and widespread, and at sea – spills, deposits of dangerous waste, etc).

Given the changes which the world has since undergone, notably with regard the globalisation process, the implementation of the principles of Sustainable Development currently involves the updating of the

concerns which existed in 1992 at the Rio Summit and present in the programme contents of Agenda 21. In Portugal this aim has been kept in mind when defining environment and development policies.

#### The three dimensions of Sustainable Development<sup>3</sup>

<u>Firstly the environmental dimension</u>. The natural restriction to the development of human activities is the crux of the question of *sustainability*. The merely economic use of 'natural resources' by production activities and subsequent consumption has been substituted by the more suitable formulation of '**use of environmental resources**' which includes well being for human life.

<u>The economic dimension</u>. Economic activities are part of life and are included in the development process, enabling the satisfaction of human needs; the consideration of the **qualitative aspects of development**, in addition to the economic aspects, is indispensable in the scope of *sustainable development* for the simple reason that "neither aggregate growth nor the growth of incomes is enough to ensure the progress of society as a whole"<sup>4</sup>.

<u>The social dimension</u>. From a broader perspective, development includes not only strengthening the material basis of sustenance, but also opening up to new opportunities and strengthening capacities ('capacity building'). The inclusion of the social dimension in *sustainable development* also results from the essential consideration of the **equity** criterion in the implementation of sustainable development.

It is also important to remember the <u>institutional dimension</u> in addition to these three dimensions. The institutional dimension highlights questions related to the forms of governance (flexibility, transparency, democracy) and legislative systems, together with the framework of the social partners' participation (trade unions and enterprises) and civil society (NGO) as essential aspects for the promotion of the objectives of sustainable development.

#### **Operational Progress of the Concept**

<sup>&</sup>lt;sup>3</sup> UNIDO, 2001 - The Three Dimensions: Defining Sustainable Development, Doc/50367 <sup>4</sup> Ibid

It is well known that there is a time lag between world pledges and the true fulfilment of those pledges; this is the result of the difficulties involved in operationalising such an ambitious concept as *Sustainable Development*.

The methodological search for operational means and instruments has been orientated towards various approaches, of which the following stand out:

- i) Information Systems (particularly Indicators<sup>5</sup>) and Benchmarking
- ii) Observatories<sup>6</sup>
- iii) Scenarios<sup>7</sup>
- iv) Extended Accounting Systems (Social Statistics<sup>8</sup> and Environmental Statistics, 'Green' Accounting, etc)<sup>9</sup>

The structure of indicators adopted by Portugal is currently based on the OECD proposal, of the 'Pressure-State-Response' (PSR) type. This type of indicator has been increasingly used to evaluate national policies and sectorial strategies as well as for the evaluation of projects.

#### 2. Portugal's Participation in the Bodies of International Reflection and Agreement

The United Nations Conference on the Environment and Development (Rio 92) allowed the theme of Social Development to become an unequivocal part of the working agendas of international Organisations.

Following the positions which Portugal has assumed meanwhile in the international context, the national priorities defended in the international concertation plans currently underway are presented below.

<sup>&</sup>lt;sup>5</sup> United Nations Indicator Systems, OECD and European Union (EUROSTAT); in Portugal the system proposed by DGA has been used: Pressure-State-Response, based on OECD

<sup>&</sup>lt;sup>6</sup> Of the kind proposed in the ambit of the TERRA / EDEC Programme

<sup>&</sup>lt;sup>7</sup> As an example, the method used by the Tellius Institute of Boston, Stockholm Environment Institute, by the 'Global Scenario Group'

<sup>&</sup>lt;sup>8</sup> Following the Nice Summit, the construction of Social Indicators was proposed

<sup>&</sup>lt;sup>9</sup> UNIDO\_Doc/50361; Various examples: France, Norway; in Portugal the INE (National Statistics Institute) made a study at the end of the 80s; in the ambit of GEPAT, guideline documents were published and the "Experimental Matrix of the Consumption of Natural Resources" trial took place (1989)

#### 2.1. Participation in the scope of the United Nations

Portugal has been an active participant in the Meetings of the Commission for Sustainable Development (CSD), contributing both in the meetings and in the drawing up of the annual Report Evaluating the Implementation of Agenda 21 in Portugal.<sup>10</sup>

#### 2.2. Participation in the scope of the European Union

The background to the discussion on Sustainable Development in Europe goes back to the 80s.

As a Member of the Union, Portugal participated in the Cardiff Summit where the need to integrate environmental policies in other policies was consolidated (European Council of Cardiff, 1998); this resulted in the so called *Cardiff Process*. This process gave rise to proposals for policy action (Agriculture, Transport, Energy, Industry, Internal Market, Co-operation for Development, Fishing, ECOFIN and General Affairs), for the respective integration of the environmental dimension in the respective sectorial policies.

The Special Lisbon Council (March 2000), during Portugal's presidency of the European Union, consolidated the integration of social and economic policies and the 'European Social Agenda' was subsequently approved in Nice in December that year. The process which began, known as the *Lisbon Process*, thus became particularly important due to the growing need to face the problems of poverty and social exclusion in Europe; it has been developing on a number of fronts and these came together in the latest and most recent European Council (Goteburg, 15th and 16th June).

Hence, the Gothenburg Council became the pivotal moment for environmental policies throughout the European Union (and with short term reflexes for countries in the enlargement zone; the coordination of the three dimensions and the joint analysis of the effects of all the policies on sustainability, create a completely new framework of current challenges for policy action in this field.

<sup>&</sup>lt;sup>10</sup> 'Annual Report to the Commission on Sustainable Development' – UNCED *follow-up*, drawn up annually in Portugal since 1993

In the first quarter of this year the European Commission presented Member States with a consulting document on the Strategy for Sustainable Development for the European Union; this had the dual aim of preparing a platform for agreement at the European level at the same time as contributing to the European Union's position as international leader in the context of the preparation of the Johannesburg Summit of 2002 (Rio+10).

Portugal presented a final contribution for the Portuguese State's official position; this includes some considerations regarding the internal aspect of the referred strategy such as it is *«fundamental to pursue the work to integrate environmental questions in the sectorial policies through the strengthening of dialogue at community and national level between those who have different policies and at various phases of the decision process ».* 

Regarding the external aspect, it was equally considered *«fundamental to include the SD concept in the EU's external policy, especially in the co-operation for development and in the negotiations of international agreements, particularly with regard rules for international trade*<sup>11</sup>»

The European Commission recognises the enormous scope which the 'Sustainable Development' concept has acquired since the Rio Summit in 1992, embracing more and more dimensions - not only environmental but also social and economic<sup>12</sup> and presents this *Strategy* proposing an *operationalisation* of this concept around six concerns/ problematic areas (attentive to the seriousness they present, the long term aspect of the effects and their European dimension):

- 1. Climatic changes / Clean energy
- 2. Public health / Potential health risks
- 3. Management of natural resources / Growing pressure on vital resources
- 4. Poverty and social exclusion
- 5. Ageing population

<sup>&</sup>lt;sup>11</sup> *Ibid*, p.3.

<sup>&</sup>lt;sup>12</sup> Art.2 of the Treaty of Amsterdam adopts the concept of Sustainable Development with the following form: social and economic progress and of a high level of employment, as well as the obtaining of balanced and sustainable development in particular through... the strengthening of economic and social cohesion".

6. Mobility, uses and organisation of land / Congestion and pollution

#### 2.3. Participation in the scope of the OECD

In the scope of the OECD, the initiative and involvement in Sustainable Development questions began in 1998 (with a project which was to be developed in the three following years and presented to the Ministerial Meeting of its Council in 2001). An Interim Report was presented in 1999<sup>13</sup>. Portugal has participated in this process as a Member of the OECD.

The most extensive aim of this project is expressed in the attempt to attract attention at all political levels (Heads of Government, Ministers of Finance and the Economy, Ministers of the Environment, Social Affairs, Transport, Energy, etc) on some crucial and priority problems from the environmental viewpoint<sup>14</sup>.

The Policy Report resulting from this identifies what it considers to be the key thematic areas<sup>15</sup>, which form the reference framework for the Sustainable Development policies:

- 1. Operationalisation of the markets for Sustainable Development;
- 2. Improved guidelines for the innovation and diffusion of scientific knowledge;
- 3. Development and strengthening of Institutions and decision processes;
- 4. Improved 'gauging' processes of sustainability;
- 5. More effective integration of the Sustainable Development objectives in economic, sectorial and territorial policies;
- 6. Strengthening of international co-operation for development;
- <sup>13</sup> OECD, 1999 The Interim Report on the OECD Three-Year Project on Sustainable Development, Paris: June 1999 <sup>14</sup> Ibid
- <sup>15</sup> "Policies to Enhance Sustainable Development", SG/SD (2001) 5/REV1, OECD 09-Mar-2001

Likewise, Portugal has been participating in the negotiations underway in the ambit of the OECD aiming at strengthening the credit discipline on exports which intend to make projects or transactions comply with specific requirements in the fields of the environment and sustainable development by the countries which receive these actions.

2.4. Participation in the ambit of the World Trade Organisation (WTO)

Portugal's position, in agreement with the European Commission, defends the strengthening of the multilateral trade system as a means of ensuring greater global economic growth as well as greater legal predictability and security of international economic relations.

Portugal is therefore in favour of starting the new Multilateral Cycle of negotiations, based on a balanced agenda in which targets for the environment and development are also incorporated.

The priorities defended by Portugal regarding the environment are based on the clarification of the relationship between environmental rules and international trade with a view to promoting reciprocal support between trade and environmental policies and guaranteeing greater legal certainty. The aim is also the effective integration of Developing Countries in the world economic system<sup>16</sup>.

With regard the social dimension of development, Portugal defends that this theme merits careful reflection within the various relevant international Organisations (WTO, ILO, UNCTAD, World Bank and IMF).

<sup>&</sup>lt;sup>16</sup> Particularly in this field, the EC has taken a proactive stance making trade and co-operation themes evolve (of interest to Developing countries) such as access to the market, technical assistance and capacity building.

#### **II. Implementation of the Sustainable Development Objectives in Portugal**

#### 3. Summary of the General Objectives and Fields of Intervention in the Priority Areas<sup>17</sup>

- 1.1. Sustainable Development Objectives Institutional Dimension
- 1.2. Sustainable Development Objectives Environmental Dimension
- 1.3. Sustainable Development Objectives Social Dimension
- 1.4. Sustainable Development Objectives Economic Dimension

#### 4. Presentation of the Specific Approaches and the Actions Developed for the Sustainable

#### **Development Objectives**

- 2.1. Governance and Institutions
- 2.2. International and Bilateral Co-operation
- 2.3. Atmosphere and Climatic Changes
- 2.4. Biodiversity
- 2.5. Desertification and Drought
- 2.6. Oceans, Marine Resources and Coastal Zones
- 2.7. Urban Areas and Land Use Planning
- 2.8. Natural Resources
- 2.9. Inland Waters and Related Ecosystems
- 2.10. Forests
- 2.11. Waste
- 2.12. Health and Well Being
- 2.13. Demography (Migration and Ageing of the Population)
- 2.14. Poverty and Social Exclusion
- 2.15. Employment
- 2.16. Vocational Training
- 2.17. Participation, Access to Environmental Information and Education
- 2.18. Macroeconomic Policies
- 2.19. International Trade
- 2.20. Energy
- 2.21. Tourism
- 2.22. Transport
- 2.23. Agriculture and Forestry
- 2.24. Fishing
- 2.25. Industry

#### 1. Summary of General Objectives and Fields of Intervention in the Priority Areas

The Priority Intervention Areas can be identified on the basis of the priorities defined by the different bodies and organisations (UN, OECD, EC), and considering the evolution of the contents of Sustainable Development.

Therefore, the actions which take place in Portugal related to Sustainable Development are presented in an extensive list, identifying the main objectives to be reached and organised around the four dimensions of Sustainable Development: institutional, environmental, social and economic.

#### 1.1. Sustainable Development Objectives – Institutional Dimension

#### a) Governance and Institutions

- Reinforcement of the institutional capacity for the implementation of Sustainable Development
- Establishment of new policy mechanisms
- Promotion of transparency and participation
- Opening and reinforcement of participation in the processes of decision making
- Combat to corruption
- Protection of the human rights

#### b) International and Bilateral Cooperation

- Compromise accomplishment regarding financial aid in the scope of the GEF
- International fulfillment of the Conventions and Agreements
- Reinforcement of the Cooperation with the PLP
- Reinforcement of the Cooperation with Spain

#### **1.2.** Sustainable Development Objectives – Environmental Dimension

#### Transversal Domains:

#### c) Atmosphere and Climatic Changes

- Recognition of global nature of the problems and the effects, independently of where the causes take place
- Management of the uncertainty on the occurrences, duration and intensity of the phenomena of climatic changes, through the reinforcement of the scientific research
- Mutual maximization and benefits between policies of development and policies of containment of the emissions of gases with effect of greenhouse, foreseeing the stabilization of the pollutant concentrations
- Reinforcement of the international cooperation, in the direction of the implementation of the Chap.9 of Agenda 21 (Framework Convention), in particular technological transference and capacity building of the developing countries
- Maintenance, to the international scale, of criteria of equity
- Limitation of the process of depletion of the ozone layer (reinforcement of the goals of the protocol of Montreal)
- Promotion of Sustainable Development in the sectors of energy, efficiency and consumption, transports, industry, as well as land uses and marine resources development
- Implementation and reinforcement of the measures of reduction of road traffic in urban areas and incentives to the development of the alternative transportation means (railroad and maritime/fluvial)
- Control of transboundary atmospheric pollution
- Control of acidification of air, troposphere ozone and other pollutants
- Reduction of 15% on the emissions of Co2, gas methane and nitric oxide, in 2010 (European Objective)

#### d) Biodiversity

- Promotion of biodiversity in the long run
- Total accomplishment of the Network Natura 2000 in 2004, representing 15% of the territory (European objective)
- Protection of the forest areas
- Incentives to the fixing of populations in rural and agricultural areas
- Consideration of the effect of climatic changes
- Promotion of biodiversity in territorial waters (European objective)

- Protection of habitats for rare or threatened species

#### e) Desertification and Drought

#### - Water and soil conservation

- Maintenance and rehabilitation of adjusted practices to the physical and ecological characteristics of the regions that present some degree of susceptibility
- Improvement of water availability and water conservation in the soil
- Respect for the natural capacities of the soils
- Maintenance of the vegetation cover and rehabilitation of the degraded vegetation
- Reforestation of natural and adapted species
- Incentives to the fixation of population in threatened areas

Cross-Sectoral Concertation Domains:

#### f) Oceans, Marine Resources and Coastal Zones

- Implement the disposal and recommendations from the Conventions and International Agreements
- Implement the agreement on the fishing 'quota' (European Objectives and Regional Agreements)
- Prevent and control the effect of the accident of pollution in the maritime courses
- Implementation of the FAO Code on Fishing
- Integrate the recommendations of EC in the Strategy of Integrated Management of Coastal Zones (European objective)
- Elaborate National Strategies for the Sustainable Development of Coastal Zones
- Maintenance of capture rates below the level of biological security
- Protection facing the telluric pollution
- Protection of the coastal zones from the maritime accidental pollution
- Development of a Monitoring and Observatory System on oceanic and coastal issues

#### g) Urban Areas and Land Use Planning

- Reinforcement of the capacities of the communities and local authorities
- Diminishing congestion and promoting systems of less pollutant transports

- Implementation of Local Agendas 21, regarding the objectives of Sustainable Development (ex. reduction of the emission of gases with greenhouse effects)
- Concerted action between local authorities, for the implementation of the objectives of the ICLEI (ex. "Cities for Climate Protection")

#### h) Natural Resources

- Maintenance of levels and extraction rates bellow natural regenerating rates
- Integrated management of natural resources, according with the national goals of Sustainable Development

#### i) Inland Waters and Related Ecosystems

- Attaining 'Good Status' quality for all waters till the end of 2015 (European Objective / Water Framework Directive)
- Renaturalization of the surface water courses;
- Diminishing aquifer contamination by nitrates;
- Progressing with water quality improvement by means of prevention actions and treatment systems use;

#### j) Forests

- Integrated Management of the forest areas (European objective)
- Recover of burned areas
- Reforestation of the areas facing erosion and desertification risk
- Sustainable Maintenance of forestry culture rhythms
- Maintenance of good condition of the bushes and forested areas

#### k) Waste

- Less waste production

- Higher reuse and recycling rates
- Higher waste elimination rates
- Reduction of toxic and dangerous wastes

#### 1.3. Sustainable Development Objectives – Social Dimension

#### Transversal Domains:

#### l) Health and Well Being

- Reduction of the minus impacts of the environment malfunctions on the health human being, in the long run
- To control and to diminish the display of dangerous and persistent substances in the human organism
- To stimulate more healthful patterns of consumption
- To stimulate the consumption of echo-products (ecologically approved and/or proceeding from biological agriculture)
- To promote the access of all the citizens to a good environmental quality
- To promote healthful work conditions

#### m) Demography (Migration and Ageing of the Population)

- To counterbalance the effects of the world-wide population growth
- Management of the resultant social consequences of immigration
- Management of the effect of the aging of the population (European objective)
- Reevaluation of the systems and times of work and reform

#### n) Poverty and Social Exclusion

- To fight the poverty in its causes
- To integrate measures of inclusion in all the sectors of activity (European objective)

Cross-Sectoral Concertation Domains:

#### o) Employment and Vocational Training

- Promotion of the access to employment
- Incentives to the creation of jobs
- Incentives to the auto-job

#### p) Participation, Access to Environmental Information and Education

- Promotion of the access to the information and sensitization of the citizens
- Incentives to the participation in the of decision making processes
- Incentives to the participation of the civil society for the protection of the environment
- Reinforcement of the environment education actions

#### 1.4. Sustainable Development Objectives – Economic Dimension

#### Transversal Domains:

#### q) Macroeconomic Policies

- Implementation of new mechanisms of politics

- Adoption of indicator models compatible with the SIDS
- Reflection in the frame of the new challenges raised by Sustainable Development to the paradigms of Economy Sciences<sup>18</sup>

#### r) International Trade

- Leadership of the process of integration of the environment in commerce, within the scope of the WTO
- the Reform of the system of guarantees of credit in use
- Implementation of prohibitions and restrictions list

Cross-Sectoral Concertation Domains

#### s) Energy

<sup>&</sup>lt;sup>18</sup>ROBERTSON, James, 1997 - **The New Economics of Sustainable Development:** *A Briefing for Policy Makers*, A Report for the European Commission

- Reductions in the long run of the Co2 emissions
- Incentives to the use of renewable energies
- Incentives to the use of renewable energies

#### t) Tourism

- Promotion of a sustainable approach of tourism
- Improvement of the instruments of territorial planning (in urban and coastal zones)
- Minimization of the uneven distribution of the added value and the effect of congestion between the country of origin and destination of the tourists
- integral accomplishment of the Alpine Convention
- Promotion of the tourism in protecting areas (Eco-tourism.)

#### u) Transport

- Substantial reductions of the emissions of Co2 and NOx
- Reduction of the congestion and traffic levels
- Review of the politics of taxes on fuels
- Promotion of transport less harmful for the environment
- Improvement of transport public systems

Sectoral Domains:

#### v) Agriculture and Forestry

- Incentives for implementation of practices less harmful for the environment
- Awards for the options that favour the environmental protection, beyond the legal requirements
- Application of Agenda 2000 in the direction of the conservation of the local communities, protection of biodiversity, protection of soils and related ecosystems
- Reduction of the presence, in ground and surrounding waters, of heavy metals and persistent organic compounds
- Reduction of the areas with exotic species cultures (forestry)
- Review of the CAP criteria and effective integration of environment criteria (European objective)
- Implementation and extension of the Environmental Agro Measures (Europe) -
- Limitation of the emissions of gases with greenhouse effect
- Prevention of the eutrophication of waters

- Reinforcement of the mechanisms of coordination with the energy politics

#### w) Fishing

- Maintenance of the general conditions of productivity of marine ecosystems (controlled captures, below biological security rates)

- Maintenance and protection of biodiversity

- Reduction of the fishing activity, for threatened species (European objective)

#### x) Industry

- Incentives to the most efficient use of materials and energy
- Prevention and handling of the pollution from effluents, gaseous emissions and waste
- Conception and trading of products without toxic and dangerous substance incorporation
- Adoption of measures for reduction of the risks due to chemical substances

### 2. Presentation of the Specific Approaches and Actions Developed for the Implementation of the Sustainable Development Objectives

The main fields of intervention are presented in the priority areas for the implementation of Sustainable Development in Portugal in the light of the strategies agreed at the world and European Union level.

The actions developed are characterised as *Transversal, Cross Sector* or *Sectorial*. These are intended to identify the kind of co-ordination necessary at governance level.

#### INSTITUTIONAL DIMENSION

#### 2.1. Governance and Institutions

The globalisation process is translated in new demands for governance at all levels. The political and institutional capacity must be improved and not only at the technical level; the clarification of the 'rules of the game', the identification of the priorities and the co-resposibilisation of the other actors call for a

co-ordination capacity which is both 'vertical' and 'horizontal', together with the capacity to adapt and recognise mistakes, learn and ensure transparency and trust from citizens<sup>19</sup>.

The institutional changes in recent years in Europe, and specifically in Portugal, have been characterised by four features: privatisation, decentralisation partnership, and co-ordination. The real challenge of today is the **reform** (and not the omission) of the State's role in a highly complex institutional environment<sup>20</sup>.

In Portugal, the involvement of the civil society and the social partners occurs at a high level, in the participation in the Consultative Councils of the National Environment and Sustainable Development Council. Representatives of economic, social and environmental interests can express themselves there and contribute to the reflection and debate on the principles and objectives of Sustainable Development.

#### 2.2. International and Bilateral Co-operation

Portugal is an active member of almost all the international bodies dedicated to environmental and development problems. Internationally, the boost to the official development assistance (ODA) and the increase of the partnership spirit with developing countries has also been on the government's political agenda.

Portugal assumes special responsibilities in supporting the development of countries with whom it has strong historic ties, the Portuguese Speaking African Countries (PALOP), and makes a decisive contribution to the implementation of Sustainable Development objectives in those countries.

In concrete terms, Portugal contributed US\$276 million in 1999. The aim was to reach .36% of GDP in 2000 in order to gradually approach the target amount established by the United Nations of 0.70% in 2007. Between 1990 and 1999, there were some falls in the amounts attributed to the PALOP, partly due to the need to reorientate financial aid given the political situation in some African countries. On the other hand, it was necessary to partially direct financial aid towards the reconstruction of East Timor, which received emergency aid from Portugal.

<sup>&</sup>lt;sup>19</sup> IIED, 2001, **The Future is Now**, International Institute for Environment and Development (IIED), 2001, for the UN World Summit on Sustainable Development <sup>20</sup> Ibid

Portugal adhered to the "Global Environment Facility " (GEF) in 1992, during the experimental phase, having contributed with 4.5 million DSE ("Direitos de Saque Especial"), equivalent the 6.15 million dollars, and was committed to 4 million DSE, equivalent the 5.6 million dollars, for the Reorganized GEF (GEF 1). For 2d Reconstitution of features of the GEF (GEF 2) Portugal assumed the commitment of 4 million DSE, equivalent the 5.5 million dollars of which 75% already had been paid. Following the request of the GEF Council, began the 3d financial reconstitution of the GEF, whose conclusion is foresen for 2002. The Portuguese contribution for the GEF3 is expectable to be of the same order of magnitude of the contributions for GEF1 and GEF2.

The co-operation objectives of Portuguese policy aimed to strengthen multilateral actions as a whole. In relation to Spain particularly, Portugal maintains bilateral co-operation focussed on the sharing of superficial water resources of international rivers crossing the national territory (Lima, Minho, Douro, Tagus and Guadiana), and in the joint management of the common Protected Areas e (e.g. International Douro and Tagus Areas).

An Interministerial Conference on Environment of PALOP was held in Lisbon, in 1997. There, measures for future action to implement Agenda 21 were reviewed and an observatory to exchange related information, proposed to be established between Portugal, PALOP's and Brazil.

Due to its geographical position, Portugal has played an active role in the International Co-operation of Oceans and Coastal Zones, which has contributed to the boosting of communication between United Nations organisations (ECOSOC, IMF and FAO). Portugal signed the various Conventions for the protection of the oceans and the seas such as the Convention for the Prevention of Marine Pollution by Spills (1972), MARPOL Protocol (1973 and the OSPAR Convention (1998).

#### ENVIRONMENTAL DIMENSION

#### 2.3. Atmosphere and Climatic Changes

The Ministry of the Environment and Land Use Planning and the Ministry of Science and Technology are responsible for making decisions for protecting the atmosphere.

## The air pollution control policy in Portugal is mainly regulated by the Decree Law 352/90 of November 9, Ministerial Order 286/93 of March 12, and Decree-Law 276/99 of July 23, which define a new framework for the air quality management.

The Decree Law 352/90 defines the authorities whose task is to manage and supervise air pollution control and the objectives of the Portuguese air pollution abatement. The main national objectives according this Decree-Law are:

- a) The protection of public health, the well being of the population and the conservation of nature;
- b) The preservation of harmony between nature, industrial activities, transport and human life, through the establishment of conditions for integrated, harmonious and sustainable development;
- c) The establishment of obligatory preventive and corrective measures for ensuring that the levels of atmospheric pollutants do not exceed the maximum limits imposed on air quality standards;
- d) The fostering of public or private initiatives for promoting improvements to the quality of the air through the use of clean technologies and fuels;
- e) The development of an integrated policy for the preservation of environmental components with the objective of avoiding the transfer of pollution from one medium to another.

It also:

- f) Lists the most important industrial sources of air pollution and states that those sources shall comply with specific rules. Included in the list are the following industrial sectors: pulp and paper; chemical industry; glass production; cement production; production and transformation of asbestos; metallurgical industry; refineries; power plants and incineration of wastes;
- g) Regulates the height of stacks;
- h) Regulates the requirements and periodicity for emissions monitoring;
- i) Sets the framework for the "national emissions inventory".

The Decree Law 276/99 defines the competent authorities responsible for the assessment of ambient air quality and the policy measures to take in account in the air quality management.

The Ministerial Order 286/93 sets the air quality standards and measuring methods for SO2 and particles, lead, NO2, according to the EU air quality directives and also for CO. It also sets general

emission limits for all stationary sources and specific, more stringent, emissions limits for the following sources categories:

- Sugar refining;
- Cork industry;
- Pulp industry;
- Chemical industry;
- Glass production;
- o Ceramics;
- o Steel industry;
- o Non-ferrous metals industry;
- Large combustion plants (amendment by" Portaria" 399/97);
- Grain storage

The Ministry of Economy and Finance (MEF) issue licensing system for industrial installations, and emission of permits is made by Regional Bodies of the Ministry of Environment and Land Use Planning (MAOT), the DRAOT's. These are based on the standards set in the EU Directives. Particularly in line with Directive on Integrated Pollution Prevention and Control (IPPC), MEF and MAOT began issuing new integrated environmental licences for industrial installations in 2000.

The standards for incineration of hazardous wastes are set in Decree Law 273/98 and for domestic wastes in Ministerial Order 125/97.

The ground level ozone is regulated by Ministerial Order 623/96 of October 31.

Decree Law 104//2000 defines the specifications for petrol and diesel fuels to comply in 2000 and 2005 according to Directive 98/70/EC.

The phased out of leaded gasoline in June 1999 was another measure taken by the government in order to reduce air emissions (Pb).

Environmental impact assessment is being systematically carried out early in the decision-making process and most of the industrial activities are subject to a licensing procedure prior to the installation of a plant.

In Portugal an integrated and systematic fiscal environmental policy has not been implemented. Although there are some incentives and dispositions in the tax system that are positives in the context of the environment protection, such as:

- ✓ Fiscal incentives designed to the promotion of renewable by consumers, as fiscal incentives to new equipment acquisition;
- ✓ Favourable buy-back tariffs for every renewable producers;
- ✓ Energy renewable production promoted through grants and zero-interest loans
- ✓ Incentives to LPG vehicles

Voluntary agreements on the issue of the Environment and Development was settled between the government and several Confederations of Portuguese Agriculture and Industry in order to comply with national legislative measures and/or measures arising from the application of Community and international legislation including legislation on air emissions.

A national programme was established, to reduce the emissions of SO2 and NOx from existing Large Combustion Plants - "Programa Nacional de Redução de Emissões". This programme sets global annual ceilings for large combustion plants in order to comply with the EU directive. For the other plants that are not included in that category the Government opted for contracts with the manufacturing industry where clear obligations for each sector are defined and associated with a schedule for fulfilment of such obligations. Contracts for Environmental adaptation were signed with the vast majority of industrial sub-sectors.

It is also in course an air quality program in order to have an assessment of ambient air quality for the all country, including Madeira and Azores to identify the zones where it is necessary to implement plans for the improvement of air quality

With regard to reduce the air pollution emissions (SO2, NOx, VOC and NH3), and mitigating transboundary air pollution, Portugal commits itself to comply in 2010 with:

Total SO2 emission – 160 Kt
Total NOx emission - 250 Kt
Total VOC emissions - 180 Kt
Total NH3 emissions – 90 Kt

An Annual Air Quality Report is published, and air quality is part of the Annual State of the Environment Report; the media use these to inform the public when the alert thresholds are exceeded. There is a daily Internet update of an air quality index as well.

Concerning reduction emissions of GHG and resource development for GHG sinks, the goals must be defined at the future National Programme, and should be taken in count the "EU burden sharing" for the commitments to the first commitment period for the Kyoto Protocol, i.e., not increase more than 27% of the GHG emissions until 2012.

Portugal has ratified Montreal Protocol as Amendments and fulfils the commitments within the framework of the EU. Portugal has also ratified the Convention for long Range Transboundary, Air Pollution and has signed the Protocols on POP, VOC's and heavy metals.

The overall objective of the Portuguese policy strategy in relation to the preservation of the ozone layer is to further develop and implement measures aiming to reach the total phase-out of emissions of ozone-depleting substances (ODS's) world wide. In the shorter term, the objective is to limit the expected peak in the destruction of the ozone layer.

Short-term (2-3 years) goals for mitigating ozone depletion are:

To secure full implementation of the new Regulation on ozone depleting substances (Council Regulation 2037/2000). This includes a series of measures, which are particularly important to help reducing ozone depletion in the near future, such as:

- a phase out of Methyl Bromide by 2005;

- a lowered limit ('cap') for placing HCFC's on the European market;
- a ban on uses of HCFC's;
- HCFC production phase out;
- a ban on the use and sales of CFC's and other fully halogenous substances;
- an export licensing system for the remaining trade in ODS's.

Long-term (5-10 years) goals:

Portugal aims to ensure that emissions from CFC's and other fully halogenous substances, which should already have been phased out, cease as quickly as possible through:

- A new ban of the placing on the market and use of such substances, except for essential uses and some time-limited exceptions to ease transition. This will make illegal trade more difficult as the market for these substances will be abolished.
- Strengthening of the licensing system for ODS's (including export licensing) in line with recently adopted Montreal Protocol requirements. This will facilitate crosschecking of imports and exports and obstruct illegal trade.
- Improving the implementation of the existing regulatory framework, including improved cooperation between environmental and customs authorities on import/export controls, and costeffective sanctions for non-compliance.
  - Ensuring that 'essential uses' of CFC's are minimised.

In this context, Portugal has been also:

- providing information concerning the new ODS Regulation;
- undertaking measures to improve co-operation with customs with regard to the control of trade in ozone-depleting substances;
- providing effective administration of the ODS Regulation, including decisions on import quotas, essential uses, industrial rationalisation, import and export;
- developing a strategy for reduction our 'essential uses';

- participation in the Open Ended Working Group under the Montreal Protocol to strengthen the compliance mechanism;

- participation in the meetings of the Parties to the Montreal Protocol.

A research programme SIAM - Climate Change in Portugal: Scenarios, Impacts and Adaptation Measures (1999 - 2000) was the 1st study in Portugal in the context of the vulnerability to climate changes. This study adopts an interdisciplinary approach to better understanding future scenarios on

climate and climate change impacts in different social and economic sectors in Portugal. The major groups involved as adviser are: scientific and technological community. Local authorities are involved in the process of decision-making. NGO's and industry are involved in the consultative process. Farmers will be the group most affected

In the scope of environmental training plan Portugal developed some actions concerning data collection, systematic observation and meteorological observations.

New technologies are being developed or introduced to reduce greenhouse gases emissions, as Renewable Energy, gas natural and wind based technologies. The successful introduction of natural gas since 1997 has been a key factor in the diversification of Portugal's energy sources and mitigation of environmental problems.

This information is disseminated and shared at the national and international level through the State of Environment Report available at the Internet and submissions to the Convention Secretariats

Climatic Changes are of particular importance in Portugal. The vulnerability to the possible rise in water levels of the sea and the intensification of phenomena of desertification and drought form two of the most serious potential threats.

The Interministerial Commission for Climatic Changes determined a **Strategy for Climatic Changes**<sup>21</sup> in May 2001. Its main fundamental objectives are:

- a) To reaffirm the international commitments, notably the ratification of the Kyoto Protocol;
- b) To limit the aggregate emissions of the EU by the application of sectorial measures (transport, energy, industry, residential and services, agriculture and forests);
- c) To characterise the climate and the vulnerability of the national territory;
- d) To implement economic and financial instruments, to promote the use of renewable energy supplies, to review technical regulations and improve energy efficiency;
- e) To stimulate market mechanisms;
- f) To extend the role of the Commission for Climatic Changes;

<sup>&</sup>lt;sup>21</sup> Resolution of the Council of Ministers no. 59/2001

g) To create an operational structure for the implementation of the Strategy;

h) To develop an information and communication system, including public access.

#### 2.4. Biodiversity

Portugal has contributed to the attempts made all over the planet to preserve the ecosystems and the genetic diversity of the organisms found there.

The Convention on Biological Diversity was approved for ratification in 1993 and came into force in Portugal in 1994, who signed the Cartagena Protocol on Biosafety in this context in 2000.

The National Strategy for the Conservation of Nature and Biodiversity (May 2001), includes the principles of the conservation of nature and biodiversity in the sectorial policies and this is a crucial aspect of Sustainable Development.

As a Member of the European Union, the work done towards the compliance with the community Directives is to be stressed, in particular of *wild birds* (79/409/CEE) and the *preservation of natural habitat*, *wild fauna and flora* (92/43/CEE), as well as the regulations applied in the community by CITES.

Portugal participated in the preparation of the Washington, Ramsar, Berne and Bonn Conventions, which were landmarks for the joining of forces in this field at world level.

Reference should also be made to the participation in the Pan-European Strategy of Biological Diversity and Countryside (Council of Europe) as a member of the enlarged *bureau*.

The *in situ* conservation of species and habitat is achieved with the following instruments:

#### c) National Ecological Reserve

Portugal is a member of other international networks, such as the European Network of Biogenetic Reserves, formed by the Council of Europe in 1976.

#### e) Red Books

The Red Books of Vertebrate Animals (1990 and 1991) and of Bryophytes (1994) have been published and the Red Book of Vascular Flora is being finalised.

f) Conservation Studies and Actions

*Ex-situ conservation* has taken place using actions complementing *in situ conservation*, particularly with regard to genetic vegetable and animal resources for agriculture and the forests.

Also of importance is the role played by the Zoological Gardens, Recovery Centres and Botanical Gardens in Portugal, notably for their participation in plans for the recovery of species and the development of specific conservation programmes and the support for compliance with CITES.

The SIPNAT database system (Information System of Natural Heritage) was set up with the aim of systematising, divulging and promoting information on the natural heritage.

In the ambit of genetically modified organisms (GMO), measures have been adopted as a result of the transposition of European Directives for the protection of the environment and human health against possible risks arising from the use of genetically modified micro-organisms (GMM) or the release of genetically modified organisms (GMO) into the environment.

#### 2.5. Desertification and Drought

The National Action Programme (NAP) was elaborated by the National Committee and was approved by the Government at July 1997 (Decision 69/99, 17/07<sup>22</sup>). and is the result of a widespread participation by agents involved and interested in the issue of desertification, mainly from the most affected regions, in a total of about 2.200 people, in strict compliance with the spirit of the Convention to Combat Desertification. The NAP envisages five strategic objectives:

<sup>&</sup>lt;sup>22</sup> A decisão foi através de uma Resolução do Conselho de Ministros

- Soil and water conservation;
- To fix working-age population in rural area;
- Recovery of affected areas;
- Campaigns to raise public awareness of the issue of desertification;
- Making the fight against desertification an integral part of general and sectorial policy.

A National Committee to Co-ordinate the implementation of the Convention was created at October 1999 (Decision 979/99,  $20/10^{23}$ ) This Body include experts from 5 Ministries. In the same decision a National Observatory was created to work closely with the National Committee for ensure monitoring and assessment of the programme's implementation.

On the occasion of the elaboration of the NAP in a first attempt to identify the areas which display the conditions most likely to encourage desertification, and then to territorialise the question of the susceptibility of Portuguese soils, three indices were defined, each one of them reflecting different forms of acting of different factors in the process of desertification.

a) Climate index- defined by the relationship between the average yearly precipitation and the average potential evapo-transpiration calculated using the Penman method, as proposed by United Nations Environmental Program;

b) Soil loss index- this basically combines four factors, which determine the erosive process: the erosivity of precipitation, soil type, plant cover and the slope;

c) Drought index- this introduces the drought component whenever necessary, based on the number of the years (expressed as a percentage) in which the amount of year precipitation is lower than the threshold represented by the quintile 0.01 of log-normal distribution;

By combining the three indices an index of susceptibility to desertification, which shows the spatial distribution of the phenomenon throughout the Portuguese mainland, was constructed.

<sup>&</sup>lt;sup>23</sup> Esta foi Despacho conjunto.

Desertification processes and development have been assessed in several projects, partially those developed under Annex IV (Regional Action Programme) and supported by the European Union:

MEDRAP- Concerted Action to support Annex IV' RAP.

**Dismed** – Desertification information system to support NAP's in the Mediterranean.

**Desertlinks** – Combating desertification in Mediterranean Europe: Linking science with stakeholders.

Medaction – Policies for land use to combat desertification.

The areas most susceptible to desertification correspond to some parts of the interior of Alentejo and some parts of the North of the country (11%). This is a moderate risk of desertification in 60% of Portuguese territory. This situation is being difficult to contest because the irregular water supplies and the depopulation in some interior regions of Portugal.

The flight of populations in Portugal cannot be compared with the type of movement seen in regions of the world most seriously affected by drought. However, the constant flow of population to the cities, especially the cities along the coastal strip, causes serious problems both at the source of the moving population and their destination: abandoned land in the country, with its attendant effects on natural resources and landscape, and overpopulation in the cities, which has direct consequences on ecological balance, biodiversity and environment.

A National Committee to Co-ordinate the implementation of the Convention was created at October 1999 (Decision 979/99, 20/10<sup>24</sup>). This Committee is presided by the Focal Point of CCD- Forestry General Directorate/Ministry of Agriculture Rural Development and Fishier (MADRP).

Portugal has 213 hydrometrical, 153 climatic, and 482 udometric monitoring stations. This coverage is considered adequate. The capacity for the assessment of the soil and land degradation continued be poor, 2 data collection stations. Many efforts are made to improve the information at al levels and for the public in general, particularly through **Dismed**.

<sup>&</sup>lt;sup>24</sup> Esta foi Despacho conjunto.

The traineeship was supported by MADRP and Portuguese Institute of Cooperation amounted around US\$ 30,000,000. MADRP made a traineeship on soil degradation (28<sup>th</sup> August to 15<sup>th</sup> September 2000) for the Portuguese-speaking African countries and is being collaborated with Mozambique in the NAP' elaboration.

#### 2.6. Oceans, Marine Resources and Coastal Zones

There is no central institution for activities for this issue. The Ministry of the Environment and Land Use Planning, and the Ministry of Agriculture, Rural Development and Fisheries address certain issues and, in some cases, the port authorities are in charge.

The preparation of a national policy on oceans is planned and foreseen in the National Environmental Plan. Portugal has coastal area management programs that encompass fishery activities in the EEZ. In 1993, the Clean Sea Plan (Plano Mar Limpo) was adopted to react to discharges of harmful substances. It also includes the preparation of emergency plans. Legislation has been enhanced to address some of the relevant issues, and a law being prepared to implement the FAO Code of Conduct on Responsible Fishing. Portugal considers that ocean issues touch upon almost all sustainable development concerns, and require particularly effective coordinated action at the national, regional, and international levels. There is an urgent need for an integrated approach to the implementation and monitoring of existing legal instruments and other international agreements, and to promote integrated coastal zone management following the International Year of the Oceans in 1998.

Due to the over-exploitation of marine resources, fish catches decreased in the past years. Measures are foreseen for the protection and conservation of marine species. Portugal participates in the development of socio economic indicators related to the management of marine resources, in systematic observation systems, *ia* the mussel watch program, and in the Global Ocean Observing System.

Portugal develops monitoring programs in coastal zones, mainly related lo: harmful algal blooms, marine biotoxins (DSP, PSP), microbiologic contamination of shellfish, and mercury contamination of fish resources of the Portuguese EEZ. Research projects in coastal and marine areas are primarily related to: fish stocks assessment and distribution; phytoplankton dynamic and coastal eutrophication; sediments contamination and deposition of dredged sediments; environmental impact of estuaries in

adjacent coastal zones; and macro algae stocks evaluation and distribution. As regards environmental preservation of harbour areas, there are already Emergency Plans at the Principle Ports, which also have reception of board wastes. In addition, more ports have stations of treatment for waste waters. The Emergency Plans of Secondary Ports are now being elaborated, and they also have reception of waste products.

There are two databases available for integrated coastal management: the National Information System on Water Resources and the National Database on Fishery. Both are considered adequate, but improvements are necessary to meet future needs. Portugal provides capacity building and training measures to address this chapter.

Portugal participates in programs promoted by ICES, IOC, OSIPAR and the EU. Portugal signed the UN Convention on the Law of the Sea in 1982, and is in the process of ratifying it.

#### 2.7. Urban Areas and Land Use Management

Urban areas are a mass of environmental, social and economic problems where congestion (of traffic, people and constructions), pollution, high consumption of resources and energy, the production of waste and gas emissions with greenhouse effect, are already the usual pattern of environmental conditions in which urban populations survive.

Portugal has a Law on Spatial Planning and Urban Policy, since 1998. This Law is a framework defining and integrating actions from Public Administration. in order to ensure an adequate structure and use of the space, ordained to achieve an integrated sustainable development, in an economic, social, cultural and environmental way, through different regions and urban centres.

The planning legislation in Portugal is made of a very large number of acts, but this situation is changing. After 1998, the country has a unifying legislative framework for the spatial planning system - National Program for Spatial Planning Policy-, intending to make it more responsive to rapidly changing economic and social conditions.

In Portugal, the responsibilities for spatial planning resides with the national government, although certain responsibilities are delegated to decentralised government departments at regional level (RCC's regional co-ordination commissions - non-elected bodies with important spatial planning functions) and local government (municipalities-elected bodies) with decision making powers and responsibilities in determining local development.

The spatial planning concerns three different levels: national, regional and local.

- <u>At national level:</u>
  - National Program for Spatial Planning Policy
  - Sectoral Plans regarding the spatial impacts of economic development
  - Special Land Use Plans such as: protected areas, public dams and coastal zones plans.

#### • <u>At regional level</u>

- Strategic Regional Plans

#### • <u>At local level</u>

#### - Inter municipal Spatial Plans

- Land Use Plans such as: Master Plans (general regulatory zoning instrument covering the territory of the municipality), Development Plans (general frame work for guiding land use changes with development goals in human settlements) and Detailed Plans (more specific than the general zoning and land use Plans).

The Special Land Use Plans defines especial rules for especial values namely environmental ones, and those rules overcome those defined by the Land Use Plans, in order to achieve the sustainable use of space, particularly on areas with specific characteristics like protected areas.

The plan that controls the expansion of the human settlements is the Land Use Plan, nowadays in a reviewing process, trying to manage the urban sprawl. Simultaneously the Spatial Land Use Plans preserved especial areas and natural resources with a zoning of different levels of human uses from the impacts of the human settlements invasion. Main pressures occur in coastal areas for tourism and urban expansion.

Land Use Plans must also take into account the land-use restrictions related with biological diversity, in protected areas and sites designated on the directive "habitats", and also in the natural resources protection law (National Ecological Reserve).

According with the Portuguese planning system, the plans at local level must be consistent with the strategies defined in plans prepared at central levels of the Administration. The Master Plan, when confirmed by the central government, gives the municipality the right to approve Development and Detailed Land Use Plans. Furthermore it is a condition to access to specific central government funding.

Namely at local level, the tools for full integration of the planning system are much more developed concerning the discussion of local decisions according the other levels of planning.

The articulation of investments in relation to the urban environment is currently made in the framework of the *Polis* Programme – the Programme for Urban Requalification and the Enhancement of the Environment's Value in Cities. The main objective of this programme is to improve the quality of life in the cities through urban and environmental interventions, which increase the attractiveness and competitivity of urban centers, which have a relevant role in the structuring of the national urban system.

The Polis Programme embraces a number of intervention areas relevant to Sustainable Development:

- a) Measures for Urban Requalification and the Enhancement of the Environment's Value
- b) Measures supporting the Improvement of the Urban and Environmental Conditions of Cities:
  - New forms of urban mobility
  - Installation of environmental monitoring and management systems
  - Enhancing the urban and environmental value around educational establishments
  - Awareness campaigns and environmental education
  - Other actions that have a positive impact on the quality of urban life

Since 1992, 300 ha of public forestland have been transformed into other uses such as industry, social infrastructures, roads, urban expansion, natural gas pipeline and waste treatment equipment. Nevertheless there has been an expansion in forest area, at an annual rate of 0.5%, over the past 20 years, due to natural regeneration and the restructuring process of grazing and burned lands, (sowing and planting) uncultivated land, and marginal agriculture.

Integrated planning and management of land resources on protected areas has a specific approach, specially concerning the maintaining of rural population and activities that are the principal managers of these areas. National program on nature tourism in protected areas is one of the initiatives to sustain young people and promote social and economic development in these areas. With the revision of the Framework-Law of the Protected Areas in 1993, local authorities began to participate on the protected area management commission.

Portugal uses regularly different types and methods of land inventories, such as satellite image, aerial photograph surveys, for monitoring land uses changes, soil, and also other natural research methods compiling climatic information Different data concerning human settlements and its dynamics is also available.

The National Geographical Information System (SNIG), created in 1990, consists of a distributed network based on Internet, which connects geo-referenced data produced by competent agencies at Local, Regional and Central level. It's main objectives to promote and guarantee the permanent availability of data that is needed for planning and management activities, particularly for Land Use Planning. The development and implementation of SNIG is co-ordinated by the National Centre for Geographical Information (CNIG).

SNIG provides the access to both graphical (topographic and the matic digital maps, satellite imagery or digital aerial photographs) and alphanumerical information. The data producers determine the access conditions of the information available in the network and are responsible for its quality and updating.

Concerning the local level, the information can be disseminated through practically all the national territory, for the needs of the sustainable management of land resources. Our country profits from

especial funding support to establish and improve Geographical Information System (GIS) at the local level.

The General Directorate of Environment is developing a program on sustainable development indicators that include indicators on integrated land management and sustainable use of land resources. Information on these issues and on protected areas and nature conservation area available through the web sites of the Ministry.

#### 2.8. Natural Resources

The Portuguese Government has implemented a set of actions to take sustainable advantage of geological resources, notably:

• Training operators and workers and the spread of information on the efficiency of production processes with cleaner technologies;

• Characterisation of places of production and the corresponding impacts on the environment and the countryside;

- Organisation of the territory and implementation of integrated projects;
- Requalification of abandoned mining areas;
- Legal and fiscal instruments for the adoption of best practices in the sustainable use of resources.

#### 2.9. Inland Waters and Associated Ecosystems

The framework of national and community legislation - Decree-Law no.45/94 and Framework Directive of the European Community Water – fixes the rules established in the Base Law on the Environment and establishes the planning process for water resources based on the river basin as a territorial unit.

The National Water Plan (PNA), which covers the whole national territory, and the Plans of the Hydrographic Basin (PBH), which covers the different hydrographic basins, are in the final phase.

The Plans for the Land Use Planning of Classified Reservoirs (POAC) and the Plans for the Land Use Planning of Protected Areas (POAP), are also essential for the good management of water resources.

In addition, the management of the national water resources also depends on bilateral relations with Spain. The two countries signed a Convention (1999), which provides the framework for the joint management of the International Rivers– Lima, Minho, Douro, Tagus and Guadiana.

The National Water Plan aims to make the policies, projects and programmes of water resources compatible with each other and ensure the availability of enough water – in terms of both quantity and quality – to sectors of activity for a relatively long term. The PNA envisages 7 Axes of Action:

- a) Environmental sustainability
- b) Integrated management of the water domain
- c) Sustainable management of demand
- d) Economic and financial sustainability
- e) Rationalisation, optimisation and effectiveness of the legal and institutional framework
- f) Information and participation of citizens
- g) Applied knowledge, study and research of water resources

The policy measures undertaken in the sector of the provision of water, notably through the *Origins of Water Programme*, have led to the following evolution of service levels to the population<sup>25</sup>:

NUTS II	<b>Overall levels of service (%)</b>			
	<b>1990</b> (a)	1995 (b)	1997 (c)	1999* (c)
North	65	70	71	78
Centre	68	84	89	95
Lisboa and Vale do	92	97	98	99
Tejo				
Alentejo	83	89	92	94
Algarve	82	82	88	91
CONTINENT	77	84	86	90

## **Evolution of the Provision of Water**

Sources: a) DGA

b) INE (National Institute of Statistics)

c) Questionnaire to Town Halls

\*Expected values based on works underway and to be concluded in 1999

<sup>&</sup>lt;sup>25</sup> Quoted in MAOT, 2001 – **POA 2000-2006** 

NUTS II		Overall level	els of service (%)		
	1990 (a)	1995 (b)	1997 (c)	1999* (c)	
North	36	44	51	59	
Centre	39	52	54	71	
Lisbon and Tagu Valley	79	86	86	89	
Alentejo	69	83	84	85	
Algarve	76	68	81	84	
CONTINENT	55	63	68	75	

#### **Evolution of the Drainage of Residual Waters**<sup>26</sup>

Sources:

a) DGA

b) INE (National Institute of Statistics)

c) Questionnaire to Town Halls

\*Expected values based on works underway and to be concluded in 1999

The national targets for water management are:

#### <u>By 2006</u>

- index of water supply of 95 %;
- index of waste water treatment of 90 %;
- 80 % reduction of pollutants in drinking and bathing waters;
- Reduction of leakage in supply networks to 20 %;
- Availability of water in accordance with priorities;
- Recovery and maintenance of the good quality of surface waters;
- Recovery of the natural conditions and protection of the aquatic ecosystems;
- Prevention and the reduction of the effects of floods, droughts and polluting accidents;
- Implementation of the Portugal-Spain Convention on Protection and Sustainable Use of Transfrontier Waters;
- Implementation of the Framework Directive on the policies of European Water Management (full implementation by 2015).

## 2.10. Forests

Forests are of utmost importance to Portugal, as one-third of the country is covered by forests. The Portuguese Forest is composed of 44% of conifers and 58% of broad leaves. The principal objective of wood production occurs in 58% of the forest, composed essentially of conifers, Pinus pinaster and other

pines cultivated for high forest. The forest reserved for the production of other non-wood products (42%) is essentially composed of oaks, chestnut trees, and stone pines.

Eighty-three percent of all forests are private property, a significant part of which is integrated into farmland. Given their importance, a strategic shift was made in public administration of forests in recent years, in order to provide more and better services for privately owned forests. Public forests cover an area of 7,3% and are basically composed of coniferous plantations. Three percent are state-owned and consist mainly of pinus pinaster. These predominate in the coastal region and are subjected to management plans, to ensure the sustainable production of quality timber. One quarter of these state forests cover coastal dunes. Their harvesting is governed by preservation guidelines, and regeneration is assured by clear felling. Six percent of the forest is managed by industrial enterprises (pulping industries).

Forest harvesting is dominated by small-scale enterprises. Present practices satisfy the wood industry's needs, but are not adequate for the valuation of forest products. An investment support system is now in progress in order to rationalise and modernise forest-harvesting practices.

Despite the strong occurrence of forest fires (average 50,000 ha burn per year, but strong annual variation due to meteorological factors), there has been an expansion in forest area, at an annual rate of 0.5%, over the past 20 years, due to natural regeneration and the restructuring process of grazing and burned lands, (sowing and planting) uncultivated land, and marginal agriculture. Forest fires are the main cause of forest loss. The urbanisation process and acidification have only a small impact on forest loss, and air pollution has a light impact near some industrial zones. The fragmentation of forest property, absenteeism of forest owners, and the high level of forest fires are the main obstacles to effective afforestation and reforestation.

In order to prevent and combat forest fires, Portugal has established a national network of lookout towers and ground patrols. Additionally, there are special projects to improve forest infrastructure, to provide training, to develop safe silvicultural techniques, and to improve the data bank on forest fires.

There are 5 technical-professional schools, 5 polytechnic institutes, and 2 universities, which provide education in the forestry sector. Sixty foresters graduate each year. The forest staff situation is below at

the central level, and poor at the district and field levels. In the public sector, there is a general lack of technical and research staff, and of management, planning and implementation skills. There is also a great need for trained staff in the private sector.

Major developments following UNCED include a new Forestry Policy Act (1996).In Europe the UNCED commitments to SFM were translated by the Resolutions of the Helsinki Conference, which Portugal is a signatory State. The Forestry Policy Act includes sustainable forestry management as the most important goal, noting the commitments of the Ministerial Conferences. Portugal has adopted the sustainable forest management criteria and indicators approved in Lisbon Ministerial Conference on the Protection of Forests in Europe, Resolution L2.

Forest policy is linked to agricultural, industrial, environmental, land management, and regional development policies.

The Ministry of Agriculture, Rural Development and Fisheries is responsible for forest policy. It has one central service, the Directorate General on Forests, and seven regional units integrated in the Regional Agriculture Departments. Other ministries are also involved in forestry matters: The Ministry of Environment and Land Use, the Ministry of Planning, the Ministry of Home Affairs, the Ministry of Education, the Ministry of Economy and the Ministry of Employment and Solidarity. The inter-sectorial co-ordination of forest policy is therefore assured by an Inter Ministerial Commission for Forest Affairs.

The interdependence between agriculture, industry, environment, land planning and regional development implies an increasing number of agents whose opinions are being taken into account in forest policy. Major groups are advisory participants in decision-making at the national and district levels, and they are ad-hoc participants at the field level. The major groups which contribute to the forest sector are farmers, the forest industry, their representative associations, local communities, and environmental NGO. The dialogue with the major groups is done formally in the framework of a Forestry Advisory Council.

Reforestation, afforestation, and improvements of existing forest resources and forest productivity are being promoted, and support is available for some specific activities. The existing programs for support

of the sector are under revision. Forest conservation and protection are being promoted, and efforts have been made to raise public awareness of forest issues, including restoration and rehabilitation of degraded land. Improvements have been made in the existing system for the protection against forest fires, including prevention, monitoring and fire risk systems.

In accordance with EU regulations for forest protection against air pollution, annual forest assessments are being carried out and permanent observation plots have been established. The impact on forests of pests and diseases is being assessed and monitored, and biological and chemical methods of control have been tested.

In the IPF process context, Portugal participated actively on the IPF/IFF process, co-organising with Cap Verde and Senegal the Expert Meeting on Rehabilitation of Forest Degraded Ecosystems (Lisbon, 1996) and with Chile, Denmark, India and New Zealand the "International Experts Meeting on the Role of Planted Forests in Sustainable Forest Management" (Chile, April 1999).

Although an exhaustive assessment of IPF proposals was not carried out, a "check list" was conducted and its results strongly influenced the most recent developments in national forest policy. The establishment of a Plan for the Sustainable Development of the Portuguese Forests (PSDPF) was considered as the lacking tool for the national forest program. Participation of major groups has improved according to IPF orientation and the cross-sectoral nature of forests was emphasising in this new plan. (See the Vision Major strategic guidelines and Operational objectives in annex).

The Forestry Policy Act (1996) is the major policy instrument in place and, as mentioned above, the PSDPF was developed later in accordance with the IPF agreed principles for national forest programs. Together and with other existing policy instruments, they constitute an integrated part of the national forest program.

The Land Use Act and the correspondent specific legislation define the policy of land management and urbanisation as well as the land management instruments, their relationship and political state. Therefore land use management plans allocate available land to forest use.

Forestry planning is done by Regional Plans of Forest Management "to be applied on a sub-national scale", and by Forest Management Plans "to be applied on a State scale" and they integrate all aspects of the multiple use of forests.

Until now, demand in external markets for certified products has raised some difficulties is setting on forest products in these markets. There are no clear indications that certification is promoting SFM: national forest policy development has been more effective. The private sector is involved in the Pan European Forest Certification Process in order to respond to external pressures.

Remote sensing is available for the assessment of forest fires and a GIS for the forest sector is being implemented. Forest inventories are periodic - on a ten-year basis - and the last was carried out in 1995. These inventories cover the whole country and indicate the areas occupied by the main species. They assess the growing stock, increments and age classes for the main timber producing species.

Portugal is participating in the Pan European Process of the Ministerial Conferences on the Protection of Forests in Europe and is a signatory State of the Resolution L2"Pan –European criteria, indicators and operational level guidelines for sustainable forest management" of Lisbon Conference, therefore it is deeply engaged in the use of these C&I.

The national report to Lisbon Conference provided information according to the agreed C&I which are being used for policy, development and monitoring, namely on the Plan for the Sustainable Development of the Portuguese Forests. The adaptation and test of operational level guidelines is under development

Forestry activities also provide additional income in rural areas and are an important component of rural development although no strong relationship exists between forestry and poverty eradication .

A National Biomass Centre was established which develops technologies for the utilisation of forest biomass, especially for the use of wastes from forests harvesting and industrial processing. In order to promote the sound use of forest products and avoid substitution by non-renewable materials, a "Wood Seminar" (1997) and a "Cork Seminar" (1998) took place in partnership with the private sector and the

Forest authority. The private sector is launching several initiatives in this regard like the 1<sup>st</sup> World Congress on Cork Oak and Cork in June 2000 to be held at Lisbon.

The Sustainable Development Plan of Portuguese Forestry (1998-2001) has the following main objectives:

- a) annual plantation of 60,000ha of pine, oak and eucalyptus trees;
- b) annual reforestation of 19,000ha of inadequate plantations;
- c) support for the natural regeneration of 5,000ha a year of cork oak;
- d) 20% reduction of forest fires in 2003 and 50 % in 2008 (reference to 92/97);
- e) establishment of a pilot forest network;
- f) establishment of a network of protected areas for migratory birds in 2003;
- g) establishment of 300 forest management plans (covering 250,000ha) over private land, in 2003;
- h) establishment of management plans for all hunting areas in 2007.

## 2.11. Waste

Portugal rigorously applies the community legislation on waste, in particular the framework law of 1997.

The sectorial strategic plans carry out a detailed characterisation of the management of waste in Portugal, characterising the reference situation quantitatively and qualitatively together with the measures to be taken and/or being taken. These are drawn up by the Institute of Waste with the competent bodies on this matter:

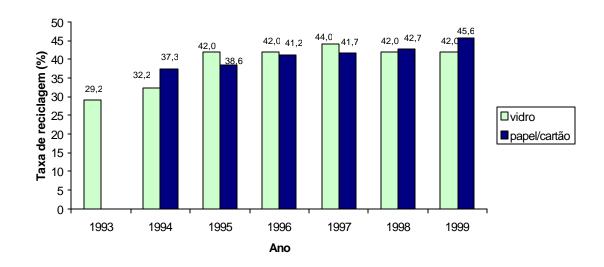
- Strategic Plan of Urban Solid Waste (PERSU);
- Strategic Plan of Hospital Waste (PERH);
- Strategic Plan of Industrial Waste (PESGRI);
- Strategic Plan of Agricultural Waste (PERAGRI).
- a) The main PERSU directives are:

- Construction of landfill;
- Construction of infrastructures for the treatment of USW;
- Improved selective collection and multimaterial recycling;
- Reaching the targets for 2000 and 2005 (Following table).

Years Reduc	ction Recycling	Sanitary dumping and technical confinment	Dumps	Incineration	Compost
Situation in 19950%	4%	14%	73%	0%	9%
Situation in 20000%	6%	55%	12%	22%	6%
Targets for 2000 3%	15%	42%	0%	26%	15%
Targets for 2005 5%	25%	23%	0%	22%	25%
Targets for 2000 and 2005					

b) The National Plan envisages an evolution in the quantity and the hazardousness of Industrial Waste, moving towards a relative reduction of about 20%, varying by sector.

The recycling rates have been increasing in recent years, particularly of glass and packages.



Evolution of the recycling rates of glass and paper/cardboard (%)

The population served by ecopoints increased from less than 1 % in 1995 to 47% in 1999.

The Green Point System (SPV) was formed in 1997 in order to increase the recycling rates; this is oriented towards the management of urban waste and, subsequently, towards industrial waste. In 1998 this system covered 16% of the territory, serving 19% of the population; at the end of July 2000 the coverage had increased to 55%, reaching 81 % of the population. The evolution is presented in the following table:

Year	<u>1998</u>	<u>1999</u>	<u>2000</u>
No. of contracts with economic operators	<u>2 660</u>	<u>3 513</u>	<u>4 017</u>
Quantity of packages placed on the market and covered by the system	<u>500 000</u>	<u>628 147</u>	<u>660 603</u>
Packages placed on the market covered by the system (%)	<u>63</u>	<u>84</u>	<u>93</u>
Area covered by the system (%)	<u>16</u>	<u>44</u>	<u>55</u>
Population covered by the system (%)	<u>19</u>	<u>52</u>	<u>81</u>

Evolution of some parameters related to ERE

In 2000, 100,000 tons of package waste was sent for recycling and the target of 200,000 tons was set for 2001.

The transposition of Directives 75/439/CEE and 87/101/CEE was made to the national law on the elimination of used oils.

The figures in the following Table refer to the total amounts of used oil collected, as against the quantity of new oil sold, with reference to 1990 to 1998.

Year	New oil sold (t)	Jsed oil collected (t)
1990	106 712	2 824
1991	101 890	4 553
1992	99 803	13 839
1993	89 187	23 136
1994	93 718	22 434
1995	98 053	35 222

1996	96 448	41 863
1997	93 131	47 870
1998	109 000	53 713

e: D.G.E.

Evolution of the amount of new oil sold and used oil collected from 1990 to 1998

In 1999, Portugal transposed Directive 96/59/CE to national law; this establishes the rules for the elimination of used PCB, with a view to their total destruction.

Equipment	<u>In use</u>	Out of use
Transformers	235	254
Condensers	212	151
Resistance	3	
Total	450	405

Amount of equipment containing PCB according to the inventory in 1999

National legislation (2001) established the rules on the management of used batteries and on licensing. It also approves the action programmes related to the accumulators of industrial and similar vehicles and batteries and other accumulators.

Within the scope of the Basel Convention ratified in 1994, Portugal is now prepared to ratify a Protocol, "Basel Protocol on Liability and Compensation" adopted in December 1999. This protocol establishes the legal system for action in the case of the illicit transfers of dangerous or other waste, creating responsibilisation and compensation mechanisms for the resulting damage. There is no registration of illicit movements originating in Portugal.

The short-term strategy for the elimination of waste in Portugal envisages the closure of incinerators which do not comply with community norms (19 already closed), the construction of two new incinerators and the consolidation of the actual network for alternative decontamination treatment. Dangerous waste will be eliminated by co-incineration in cementation furns units, in accordance with the plan of the Ministry of the Environment and Land Use Planning.

At the same time as the construction of the infrastructures necessary for the adequate treatment of urban solid wastes, garbage deposits have been closed and their number reduced from 328 to 56 between 1995 and 2000, with the aim of a further reduction to 26% until the end of 2001.

#### SOCIAL DIMENSION

#### 2.12. Health and Well Being

The Ministry of Health is responsible for activities under this chapter. The Basic Health Act was adopted in 1990. The National Health Service Statute and the Regional Health Authorities Regulations have been established, and existing legislation bias been reviewed. The new legislation provides for more flexibility in the administration of health services and for their decentralization. The Government plans to provide for an Environmental Health Master Plan. The National Environmental Plan expresses concern for the coverage of the population with health care infrastructure. Health targets are being integrated into sectorial policies (social security, education, employment, housing, among others.

A program is being implemented to raise awareness on health issues. The main concerns at the health sector are: to ensure the quality of food, and particularly to protect food from contamination through pesticides and other agricultural chemicals; to protect the quality of drinking water, particularly to protect water sources from pollution caused by waste water; to improve the treatment of hospital wastes.

Although the total coverage with health and medical facilities has improved in recent years, there are still regional disparities. A considerable part of the population is not covered with appropriate water supply and wastewater treatment facilities. Existing systems are not always in satisfactory conditions. Waste collection covers most of the population, but waste treatment and disposal need further improvements.

Research is being carried out on public health monitoring, and studies have been undertaken au parasitic worms and animal parasitology. A number of new hospitals, health care centers, and centers for drug prevention and rehabilitation were established in recent years.

#### **2.13. Demography (Migration and Ageing of the Population)**

Unlike the world rates of population growth (actually 6.1 billion people, according to the UN, with an annual rate of 80 million *per* year), in Europe the population growth rates are declining.

This tendency, of diminishing birth rates is allied with an ageing of the population. In Portugal, the *middle* family has 2.8 persons.

In what refers to the population spread over the territory, it is stressed the previous pattern: growing and concentrated population along the coast (in which are the two Metropolitan Areas, Lisboa and Porto), and desertification of the interior rural land.

#### 2.14. Fight against Poverty and Social Exclusion

Portugal has played a relevant role in Europe in recent years:

a) Following the interruption of the Community Programmes for the Fight against Poverty and Social Exclusion in 1994 (Poverty I, Poverty II and Poverty III), Portugal engaged in perfecting the specific action in this field: the Programme for the Fight against Poverty created in 1990 was strengthened, the Guaranteed Minimum Income was created in 1996, the Social Employment Market was created in 1997 and the Social Network in 2000.

b) During the Presidency of the European Union, Portugal played a key role in the importance given to the fight against poverty and social exclusion, which was the subject of formal deliberation at the Lisbon Summit.

c) Portugal can continue to play a relevant role at the European level as a result of the pains taken to innovate in the production of knowledge and in the development of specific action to fight poverty, making preventative action a top priority and bearing in mind the relevance that is now being given to the contribution of the civil society.

The **Guaranteed Minimum Income** (*"Rendimento Mínimo Garantido"*) is of particular importance as a basic instrument in the fight against poverty which was set up as a right to citizenship giving everyone

the opportunity to have access to the minimum resources to satisfy minimum needs as well as access to progressive social and professional insertion.

The GMI is part of a territorial based intervention model as it is managed by Local Commissions in the actual communities of the beneficiaries.

Within the ambit of the fight against poverty, **the National Programme for the Fight against Poverty** was launched in 1990 and updated in 1996; the objective of this programme was to eradicate the mechanisms of poverty and social exclusion through co-operation with public and private entities from an integrated perspective, and through strengthening social, civil and political dialogue and local development.

The projects for the fight against poverty have included a number of measures and initiatives supporting local development, notably the Guaranteed Minimum Income and other national and community operational programmes. Of particular note are: *Ser Criança*" ("Being a child"), "Project VIDA", "Operational Environment and Urban Revitalisation Intervention", "Special Rehousing Programme" and "INTEGRAR Sub-Programme".

The Co-operation Pact for Solidarity should also be stressed in this field; it was signed in 1996 and is fundamental to the forming of partnerships extended to agents of social solidarity.

Of the Pact's two strategic intervention areas, pre-school and special education should be stressed together with support for the most vulnerable groups (children and young people, the disabled, the elderly, drug addicts, people in infected with HIV, families in need and the promotion of employment and local development initiatives.

The strategic objective of the European Union defined at the Lisbon Summit is to become the most competitive space in the world with more and better jobs and more social cohesion using the knowledge economy. In this spirit, the National Inclusion Plan is based on the following principles:

• <u>Dedication of the concept of national citizenship</u>, which may be extended to all residents (...)

- <u>Responsabilisation and mobilisation</u> of society as a whole (...) in the attempt to eradicate situations of poverty and exclusion (...)
- <u>Convergence of economic, social and environmental measures</u> (...)
- <u>Territorial basis</u> of interventions and the <u>focussing</u> of the responses to local problems and people (...)
- Recognition of the importance of <u>equal gender opportunities</u> (...)
- <u>Consideration of the gender perspective</u> in analysing situations (...)

The main targets of the National Action Plan for Social Inclusion (PNAIS), presented in 2001, are:

- To eradicate *infant poverty* by 2010;
- To reduce the *poverty rate* from 23 % (in 1995) to 17 % (in 2005);
- To reduce *absolute poverty* by 50% by 2005;
- To launch 50 Urban Social Development Contracts by 2003;
- To launch the *Rural Space and Social Development Programme*;
- To ensure the signing of a *Social Insertion Contract* by all those in a situation of exclusion;
- To ensure the signing of the same contract by *children and young people* leaving the school system early;
- To launch a *national social emergency line* in articulation with *district centres*.

#### 2.15. Employment

Following the Luxembourg process, the National Strategy for Employment defined by the Government in co-operation with the social partners was structured around the improvement of employability, the development of the entrepreneurial spirit, encouraging the adaptability of workers and enterprises and strengthening equal opportunity policies.

Employment is both a strategic and mainstream objective for the Portuguese Government and assumes the concerted action of economic, social, regional development and education policies. The **Social Employment Market** was formed in 1996 in the scope of the integrated programme to fight long-term unemployment; it aims to provide different kinds of solutions for the socio-professional integration or re-integration of the unemployed in activities directed towards social needs, which were not satisfied by the normal workings of the market.

In this ambit, the **Occupational Programme** for the Unemployed in Economic Need provides a monthly subsidy to the unemployed and a useful social occupation in activities that satisfy collective needs. The local authorities, the public services and social solidarity entities are responsible for carrying out this programme in activities connected to environmental preservation: cleaning public spaces and forest parks and maintaining public buildings.

The Support System for Local Development Initiatives, which includes the Local Employment Initiatives, was set up due to the asymmetry found in employment and development between urban and rural centres; in addition, the Territorial Pacts and Regional Employment Networks were launched for preventative reasons.

The financial contribution for the training and setting up of **micro-enterprises** should also be highlighted as this provides a social and economic boost to less developed regions. The forming of **Insertion Enterprises** which aim to fight poverty and social exclusion through the acquisition and development of personal, social and professional skills suitable to carry out an activity is equally of note.

Finally, a programme for the **Conservation of the Cultural Heritage** has also been set up which provides financial and technical support for the creation of new jobs associated to the conservation and restoration of the cultural heritage.

The National Employment Plans, adopted since 1997 have defined an integrated employment strategy characterized by the adoption of active employment measures aimed not only at creating jobs but also at increasing Portuguese workers' professional qualifications and encouraging socio-economic development at local level.

In order to improve local and regional development, the Regional Employment Plans were created to add a number of specific objectives and measures, adapted to the regional contexts of the different regions, to the four pillars of the National Employment Plan and complete the cover provided by regional Employment Networks. In addition, the State's performance in this field implied joint actions with the community, in partnership with the social partners and regional and local bodies and organizations of civil society involved in social and economic development at the regional level.

Equal opportunities for men and women are a fundamental principle that is horizontally applied in the world of employment, vocational training and support for the creation of companies as expressed in the National Employment Plan. Therefore it was adopted a Global Plan for Equal Opportunities (Resolution n°49/97 of 6 march), thus fulfilling one of the commitments of the Beijing Action Platform, which covers many of the areas then listed as deserving special attention.

In this area, specific measures aimed at promoting equal opportunities have been adopted, namely financial and technical programs supporting women's entrepreneurial initiatives by articulation between central administration, local authorities and non-governmental organizations.

#### 2.16. Vocational Training

Education and training have been priority areas of the Government's action and basic instruments for the professional and social insertion of the young, the unemployed and citizens at risk of unemployment, poverty and exclusion.

There has been a steady rise in public expenditure due to occupational training since 1995 as this is a component of the employment policy and an instrument in the fight against unemployment at the local and regional level; the financing of training in the fields of tourism, agriculture and fishing are of particular importance as these are sectors which are fundamental to the local development of certain regions traditionally linked to these activities.

The Institute for Environmental Promotion plays a pivotal role in the co-operation for the development of training activities with the Ministry of Labour and Solidarity or with other organisms, university institutions, municipal, social and professional associations NGO (Environment) and enterprises. In 1996, a Plan for Occupational Training in the Environmental Area was established in collaboration with the Institute for Employment and Occupational training (IEFP) and with which 270 courses were given by 2000.

#### 2.17. Participation, Access to Environmental Information and Education

Recognizing the importance of integrating environmental considerations in governmental decisionmaking and considering that improved access to information contribute to public awareness of environmental issues, public authorities, at national and local levels, are responsible to make information available to the public.

The National Statistics Institute, although is depending on the Planning Ministry, is responsible for dissemination of information about all economic and social sectors, including data related to sustainable development. Ministry of Environment has also made information available related to sustainable development.

The rights to information and participation are set in the Constitution, which also safeguards the rights of petition and popular action. The development of the right to information was codified by Law No. 65/93 of 26 August, particularly in what concerns the access to Administration documents by the citizens. That law also governs the access to environmental administrative documents. The Decree-Law No.83/95 of 31 August establishes the situations where the right to popular participation in administrative proceedings may be exercised. The Code of Judicial Proceedings approved by Decree-Law No. 442/91 of 15 November has already proposed clear goals for information and public participation.

The Basic Environment Act approved by Law No. 11/87 of 7 April set a framework of an environmental policy, including the participation principle on the formulation and implementation of this policy. The public participation implies a continuous flow of information between the Administration agencies and citizens.

Recently the Law No. 10/87 of 4 April, known as Law of Environmental Protection Organizations (ADA) that established the ADAs' rights of participation and interference, was reviewed. So, the Law No. 35/98 of 18 July provides a legal framework to a more efficient action of Environmental Non Governmental Organizations.

According the Law No. 11/97 of 7 April, every year the Government has the obligation to present to the Parliament a Report on State of Environment. The publication of these Reports is a contribution to promote the public awareness and information concerning environmental issues. In the Report on State of Environment are available relevant indicators on sustainable development, using the OECD methodology (press ion, state and answer indicators). The indicators are linked to principal goals of environment policy, but a programme on indicators has not been established.

Indicators of sustainable development are available to the public, but there are not yet a strategy and a plan concerning the development and use of them.

Although all economic sectors are relevant to the environment policy, Portugal as a member of European Union decided to focus on the areas which correspond to the target sectors provided in the Fifth Environmental Action Programme – industry, energy, transports, agriculture and tourism. The indicators concerning these sectors show and measure the integration between environmental issues and sectoral policies and are available on the Report of Environmental State.

Portugal has been an active participant in international organizations responsible for collection, analysis and dissemination of environmental information and data related to sustainable development as OECD, ECE – UN.

Ministry of Environment tries to optimise, expand and improve environmental information systems, which should include the access of all social groups to that information and the dissemination of traditional knowledge.

There are governmental projects aimed at strengthening electronic networking capacities, allowing a better and larger usage of Internet.

Although major groups (local authorities, universities, environmental organisations) contribute to the collection, assessment, management and dissemination of information, the Governmental authorities are the most responsible for these activities.

The private sector doesn't have a relevant role in providing information at local and national levels. When activities have a significant impact on the environment operators inform public of the environmental impact of their activities and products.

The Ministry of Environment has promoted the elaboration of studies by researching Bodies in order to provide indicators concerning the sustainable development in the proprietary sectors of economic activity.

Ministry of Environment has considered that is necessary to promote a better performance of human resource, as a way to improve a better environmentally sound policy. In this context environmental education and training of experts are important measures to fulfil that goal. Furthermore, it is important to improve an environmental information system, which should include the access of the community and the major social groups to that information. Without good information systems there is not a good environmental management within the principle of the shared responsibility of the environmental policy.

## **ECONÓMIC DIMENSION**

#### 2.18. Macroeconomic Policies

The Portuguese Government defined a set of policy measures to develop the competitivity and productivity of Portuguese enterprises and their aim was to include environmental and social considerations in the decisions of economic agents. Of these measures, the systems for *Ecological Labelling and Environmental Auditing* are to be stressed.

The main political and financial instrument to implement these measures is the **Operational Programme of the Economy (POE)**, 2000.2006, directed to all productive sectors (except agriculture) and which promotes the adoption of integrated forms of investment for energy efficiency and environmental management.

The government policy envisages investment in the qualification of human resources through the development of the information and knowledge society as a means of ensuring the sustained growth of productivity<sup>27</sup>. Of the government measures currently underway, we stress *Internet Initiative*<sup>28</sup> and the National Initiative for Electronic Trade.

#### **2.19. International Trade**

Since Portugal became a member of European Union trade barriers were dismantled and adopted the European Union External Common.

Tariff Foreign direct investment had an important role in changing the patterns of exports. Traditional export sectors like textile, clothing and footwear have reduced their relative value and new exporting areas are growing. Motor vehicles and electrical industry represents one third of total sales to other countries (world market). This phenomenon is associated to foreign direct investment in those sectors as well as with indirect investment preconised by foreign sophisticated buyers who induced an increase and modernization of Portuguese suppliers in those sectors.

In order to integrate the trade and environment issues, Portugal has implement several measures, such as eco-labeling, eco-management auditing system.

In the last years the Portuguese economy has improved. Following the greater dynamism of economic activity, the employment market grew positively both in terms of rate of activity, employment growth and the drop in the rate of unemployment was considerable. In this area it should be mentioned that the unemployment rate has dropped and is one of the lowest in the European Union.

 <sup>&</sup>lt;sup>27</sup> The implementation of these objectives is based on the policy guidelines defined in the Lisbon European Council (2000).
<sup>28</sup> The generalised use of the Internet by the civil service, enterprises and the population as a whole is one of the main intended objectives.

Between 1995 and May 1999, within the scope of the Contractual Regime for Foreign Investment (RCIE), Portugal received total investments in the amount of PTE 307.400.000, corresponding to 14 projects responsible for creating and maintaining between 7.475 and 6.639 jobs.

These projects involved expansion and modernization of manufacturing plants (seven or 50% of the total), Greenfield projects (six or 43% of the total) and reconversion of an industrial unit (one project or 7% of the total).

Foreign direct investment also contributed to create new jobs with consequent increase of employment. It also increased the technological renewing in sectors like motor vehicles and electrical industry, with the consequent increase of the technological intensity and competitiveness of Portuguese economy.

In recent years in Portugal, the consumption patterns have suffered dramatic changes, mainly due to a strong modernization and sustained economic growth. In terms of the European Union between 86 and 99, Portuguese GDP has grown from 54% to 77% of the European average. This had consequences in consumption patterns. To illustrate the case, it should be underlined that the percentage of chocolate consumers in the general population has grown from a mere 5%-8% in the eighties to a full 61% in 1999. Another interesting figure is the percentage of women regularly going to the hairdresser (86%9 and the percentage attending beauty salons (25%). To sum up, the recent economic growth has had resulted in higher levels of more sophisticated and demanding consumption of the general public.

Portugal is member of the World Trade Organization (WTO) and in this framework it is essential that WTO, as an essentially economic organization, is adapted to the constant evolution of international economic relations.

The participation of Portugal, within the EU framework, in the WTO negotiations will be essential to improve its access to foreign markets and to the improvement of its economic growth and development. The reinforcement of multilateral trade rules in sectors, such as competition, investment and social development, in order to increase legal security and predictability of international economic relations among countries, represents a vital contribution to foster economic growth, to promote sustainable development and to increase the inter-relation between the WTO and the global economic evolution.

Within this context, Portugal particularly supports the integration of a multilateral framework of disciplines and rules for international investment in the WTO negotiations with the objectives of increasing legal security for investors and favouring international flows of investment, with, under appropriate conditions, can have a positive impact on development.

The UNCTAD, as well as WTO, is also an important forum to discuss all the aspects connected with sustainable development and in strict collaboration with WTO must give a strong contribution to a better integration of developing countries in the international trade system. The situation of the Least Developed Countries, especially the Africans, is a particular concern to Portugal.

## 2.20. Energy

Portugal is heavily energy dependent. More than 80% of its total energy consumption is imported and the largest proportion comprises oil products. This signifies that the greatest domestic energy policy concern is associated with the security and diversification of its supply at the lowest cost, reducing dependence on oil and diversifying energy products.

There have been recent increases in the demand for energy in the transport and services sectors, fundamentally in the form of oil products in the former and electricity in the case of the latter sector, Industry, as in the rest of the EU, has succeeded in increasing its energy efficiency by containing its respective specific consumption.

There are four domestic policy priorities vis-à-vis issues related with the interconnection between energy and the environment:

- Diversification of primary energy sources;
- Increase in energy efficiency in the various sectors of economic activity;
- Use of clean technologies;
- Greater exploitation of renewable resources.

Measures adopted in the implementation of the referred policies include:

#### > Introduction of Natural Gas in Portugal

(in 2000, natural gas represented 10% of primary energy consumption)

#### > Intensification of the advantage taken from endogenous renewable resources

In the EU context, in percentage terms Portugal is one of the biggest contributors of renewable energy in the energy supply, although this contribution is focussed on the exploration of water resources.

An Action Plan (implemented by the municipalities) is also being formed which includes making full use of endogenous resources.

#### Rational Use of Energy

(through incentive systems to sectors of industry and transport)

#### Technological Development

With the support of the Public Administration, Universities and the private sector, the equipment and installations in the refining, electricity production and energy conservation sectors have been modernised.

#### Limitation of Emissions

(using reglementary and fiscal changes with regard the specifications of the fuel characteristic so as to progressively reduce the sulphur content and bring about the disappearance of leaded petrol)

Improving energy efficiency has been an important policy objective in order to reduce the sharp growth of energy demand, lower the increase in greenhouse gas emissions.

The Government has promoted the development of independent power production of energy based on renewable sources. In 1998, Portugal's energy production from renewable energy was 2.3 Mtoe, compared with 2.1 Mtoe in 1990. Hydro is the most important renewable source, between 1990 and

1998 average annual hydro electricity production was 10.1 TWh Small hydro capacity was 223 Mwe in 1998, more than twice the level of 1990. Wind capacity increased rapidly, from 1MW in 1990 to 47 MW in 1998.

The diversification of primary energy sources fundamentally involves an increase in the use of coal and the introduction of natural gas. It is, however, particularly this latter fuel, which has been responsible for a certain degree of reduction of global pollution emission levels. Greater energy efficiency may be achieved through the use of cleaner, more efficient technologies, energy management and minimum cost planning.

#### Importance of Renewable Energies In Portugal

With the exception of Austria, Finland and Sweden, Portugal is the country with the largest use of RE ("Renewable Energies") as a percentage of its total energy consumption. It is also, with the exception of Luxembourg, the country with the smallest reserves of fossil and nuclear energy resources, with renewable energies contributing around 98% of domestic production in the consumption of primary energy. It is therefore an extremely valuable endogenous resource.

Traditionally, the renewable sources which have made the greatest contribution to the total consumption of primary energy in Portugal are biomass, particularly forest products and hydropower although there has been a large increase in the use of solar heating over the last few years and, more recently, in the use of wind power (an increase of 16 GWh to 91 GWh over the four year period between 1995 and 1998– see table on Electricity Production in Portugal). Mature conversion technologies currently exist for all of these resources, in the form of reliable equipment, which, in many cases, is commercially competitive with conversion equipment for traditional fuels.

According to the most recent statistics, combustion of biomass adds almost 2,000 ktep per annum to the national energy production statistics of which most is generated from forest wastes, industrial by-products and waste and hydropower with around 1,125 ktep, whereas geothermal energy (low and high enthalpy) represents around 50 ktep (see Conversion Technologies Table). 1,036 GWh of electricity was produced from biomass in 1997 i.e. around a 3% of the total production of electricity in Portugal whereas hydropower accounted for 13,175 GWh, around 39% of total electricity production.

Geothermal power from the two power stations on the Azorean Island of S. Miguel (Ribeira Grande and Pico Vermelho) already produces 57 GWh (1998 figures). Such a contribution is far from insignificant in light of the scarcity of fossil fuel resources in Portugal.

The environmental benefits resulting from the use of renewable energies for electricity production were internalised by the creation of the "*tarifa verde*" ("green tariff"), recently contained in the enactment of Decree-Law no. 168/99 of 18<sup>th</sup> May. The item of legislation in question took environmental protection considerations into account in addition to the commitments in respect of the limiting of gaseous emissions, particularly CO<sub>2</sub>, assumed in the Kyoto Protocol.

Technologies for the conversion of renewable resources into useful energy forms are reasonably well known. The greater or lesser contribution of these technologies to the energy system of the future, does not, however, essentially depend upon the possibility of their physical conversion, but rather on a number of factors which may favour or prejudice their general use, several of which are referred to below.

The temporal irregularity of the materialisation of several of the resources (particularly sun and wind), which does not always coincide with energy consumption requirements, requires storage problems to be solved and this will be reflected in the cost of the facilities for conversion into useful energy.

In addition, the irregular geographical distribution of the resources may limit the zones of possible exploitation (as in the case of geothermal energy, wave or tidal power) or be easier to exploit in locations of lesser need (use of solar heating which is more available in hot areas).

Portugal has sufficient renewable resources in terms of quantity to justify an endeavour to exploit them with a view to minimising its energy dependence.

#### 2.21. Tourism

The tourism contributes, in Portugal, with about 8% to the GDP, which is higher than many other sectors. It gives directly emplyment to 6% of the active population and has already a multiplicative effect in economic activities, at national and local level.

The tourist entrances in Portugal increased about 8,1% between 1980 and 1997.

The legislation related with planning in the protected areas and nature reserves, coastal zones, generally include specific rules for touristic uses, towards the protection of the natural and cultural heritage and conservation of landscape.

There are several plans and programs related with Sustainable Tourism running in Portugal, covering the issues of Tourism, Integrated Land Use Planning and National Resources, Biological Diversity and Coastal Areas:

- National Plan for Tourism
- National Programs for Tourism
- Regional Plans for Land Use Management
- Municipal Plans for Land Use Management

at a more sectoral level:

- Plans for Coastal Zone Management
- Biological diversity Strategy
- Nature 2000
- Plans for Lagoons Management

The covered relevant issues to sustainable tourism, in these plans, are: coastal zones, wetlands, protected areas, nets of NATURE 2000 zones, biodiversity, rural zones, cultural heritage, traditional products.

The principles of *eco-tourism* and *nature-based tourism* are an integral part of the National Policy. The promotion is being made through:

- A guide for Nature Tourism
- Plan for Promotion of Nature Program

• Projects in the context of 'EU Tourism and Environment Award'

In the scope of the management of the protected areas, is in preparation a *Code of Conduct*, as well as sensibilization actions, in order to avoid damaging environmental practices.

Professional courses in technical schools and colleges are available for employees in the tourism industry to assist them in understanding, applying and promoting sustainable tourism and there are also training actions to nature guides.

The touristic resources are all inventoried, and this inventory will be available in the InterNet in 1999. The sustainable development indicators related to sustainable tourism, eco-tourism and nature-based tourism are being integrated in the current implementation of the national SIDS.

## 2.22. Transport

The Transport sector in Portugal is responsible for a large part of the polluting emissions into the atmosphere: 20% of the Carbon Dioxide, 20% of the Volatile Organic Compounds and 60% of the Nitrogen Oxides; it is also a large consumer of energy  $(33\%)^{29}$ .

Portugal has applied the European legislation on the reduction of some dangerous substances in gasoline, giving rise to a reduction in the emissions per transport unit and this is expected to become more evident following the adoption of catalytic converters There has been a high growth in the number of vehicles (85% of light vehicles between 1990 and 1997, and 78% goods vehicles) and use intensity has risen 72%, with regard the average number of kilometres per person in this period <sup>30</sup>.

The car use rate in Portugal is 28 vehicles per 100 persons, which is an average occupation rate of 3.6 persons/vehicle (higher than the European average of 2.3 persons/vehicle).

People responsible in this field locally have tried to promote the better articulation of transport policies with other territorial planning instruments in order to maximise the supply of public transport and

 $<sup>^{29}</sup>$  Report on the Stage of the Environment 1999, DGA, pg.260-265  $^{30}$  Ibid

reduce the levels of traffic and congestion. A number of Portuguese cities adhered to the world initiative of the *Day without Cars* contributing to the awareness of residents and users of the cities to the problems of congestion.

#### 2.23. Agriculture and Forestry

The Portuguese agriculture is characterised by the preponderance of extensive production systems, with a low use of inputs. The most of these systems are sustainable concerning the environment. Nevertheless their economic viability is reduced. The extensive production systems are mainly located in less unprotected regions with adverse climatic conditions, low capacity of land use and disadvantageous topography.

The modernisation and the viability of these production systems are not easy to implement. Thus is the reason of a significant abandon of land uses in the inland country. The support to the extensive production systems is previewed on the Community Policy for Agriculture and also in the scope of agro-environmental measures trough Compensatory Reimbursements.

In Portugal, food security is guaranteed since the earlier fifties. Nevertheless, since 1994, mainly due to the CAP policy, agro-environmental measures have promoted the support of traditional extensive systems and they have positively contributed to reduce the pollution provoked by the land use practices. There are also measures to enable the nature conservation and the protection of genetic resources. These agro-environmental measures are grouped into the following main topics:

- Environment, soil and water protection and improvement (ten measures)
- Landscape and traditional characteristics of arable land conservation (six measures)
- Preservation of cultivated area with natural and historical great value (eleven measures)
- Protection of residual areas in natural ecosystems, particularly in concerning agricultural landscape (five measures)
- Protection of biodiversity (two measures)

Portugal through the LEADER, EU initiative, aims at the preservation of the multifunctional character of the agriculture and the land use. In this scope the rural development is promoted through activities

diversification, such as rural tourism, handicraft, supporting small rural industries and promoting the traditional, regional and local products.

In Portugal are in force legislation that widely reduces the use of productive land for others purposes that are not the agriculture, likely the urbanisation and industry. The use of lands for these purposes requires a specific authorisation of the Environment and Land Planning Ministry based on the advise of the Ministry of Agriculture, Rural Development and Fisheries.

All major groups and NGOs are represented in the National and Regional Council for Agriculture. The farmers associations are called upon to pronounce on the major measures for agriculture policy. These measures require the farmer's awareness in order to promote sustainable practices for agriculture that should be environmentally friendly.

Professional training actions for farmers, technicians and farmers association were implemented in the scope of the adequate use of land, sustainable agriculture, practices and measures and environmental protection. A **Code of Good Practices** for the Agriculture was published in order to help the farmers in their practices.

A document on "Minimum Preventing Environmental Demands for Land and Water Protection", was elaborated, in co-operation with other institutions of the "Ministry of Agriculture, Rural Development and Fisheries of Portugal", concerning:

- a) Soil protection against erosion
- b) Water resources protection
- c) Air protection

There is a specific legislation for the use of pesticides that sets the rules and best procedures in this scope. Within the application of agro-environmental measures, several measures obliged the farmers to use pests adequately and in a limited way, namely the integrated production and the biological agriculture. In the period of 1994/99, around 5.000 farmers applied to them covering approximately an area of 54.000 hectares.

The Ministry of Agriculture, Rural Development and Fisheries of Portugal has a public laboratory for advises on plant nutrition and several university centres are doing research in this scope (see the annex3)

In 1989/90 there were 625.829 hectares of Irrigated Used Agricultural Are, amongst which 115 003 hectares corresponded to collective irrigation projects, 352 957 hectares corresponded to individual irrigation projects and 157 869 hectares were assorted. After 1995 there were 88 264 hectares of irrigation projects created by public initiative which corresponds to an increase of 14 621 hectares between 1995 and 1999.

On period 2000-2006, there will be an increase of the equipped irrigation area on 46 299, promoted by the Institute of Hydraulic, Rural Engineering and Environment (IHERA) – Ministry of Agriculture, Rural development and Fisheries and Regional Directorates of Agriculture, and 26 200 hectares promoted by EDIA (Empresa de Desenvolvimento e Infra-estruturas do Alqueva) at Alentejo Region.

Regarding the aim of increasing water use efficiency, IHERA is the institution responsible for the putting forward and/or manage of the "Measure 2 – Reinforcement and optimisation of water use in agriculture", integrated on EU Programme "INTERREG IIC – Operational Programme on Land Management and Drought Control in Portugal".

Until the end of 1999, there were several working projects, namely:

- a) Rehabilitation and modernisation of the irrigation network of "Alqueva Irrigation Scheme".
- *b)* Study on canal water delivery system automation, in a situation of water deficit, and definition of management models.
- c) Network for demonstration of techniques and devices on modern surface irrigation systems.
- d) Pilot station for demonstration of surface irrigation techniques on "Divor Irrigation Scheme".
- e) Development of a decision support system for the management of GIS on an irrigation scheme.
- f) Integrated management techniques on irrigation water use. Application to "Odivelas Irrigation Scheme".
- g) National Conference of Irrigation District Associations.
- h) Irrigation Water Management on Maize. Development of a Real-Time Irrigation Scheduling System on Mira Irrigation Scheme.

- i) Pilot Station for demonstration of infiltration and erosion control techniques on "Divor Irrigation Schemes".
- j) Assessment of groundwater wells.
- k) Small dams for water delivery to livestock, on dry areas.
- 1) Crop water requirements of the "Algarve" main crops, aiming its better use.
- m) Study of oil water flow on a drip irrigation system.
- n) Plant breeding improvement, for water stress situations.
- o) Drought: the speech of social forces, or realities incorporated in their decisions.

In relation to the drainage projects, 1996 saw the conclusion of 67 902 hectares of drainage works, in order to prevent and remedy water logging and salinization of agricultural land. However some works are expected to finish during 1999 and these will benefit 6 200 hectares in the Central region (river "Tagus") and 12 000 hectares in the Northern region (river "Vouga").

Policies concerning the protection of water from pollution of agricultural sources are running, namely:

- 1- Application of the EU Nitrate Directive (91/976/CEE);
- 2 Document on "Minimum Preventing Environmental Demands for Land and Water Protection";
- 3 Participation in the research project entitled "Methodologies for Preservation of Groundwater Quality";
- Participation on the licensing process for the use of reclaimed water for irrigation, according the established on the National Law n°236/98.
- 5 Participation on the "CT90 Standardisation Technical Commission", for the elaboration of "reuse of reclaimed wastewater for irrigation standards".

Within the scope of the National Program to Eradicate Poverty approximately 200 pluri-annual local management projects are in progress. 455 increased the financial endowment of these programs and their operating rules were revised to adjust this instrument to the aims of effective combat against the phenomena of concentration of the risk factors of poverty and social exclusion.

The projects in progress, which are also local development processes, are intended to invest in the population and its potential to achieve projects to improve quality of life in urban and rural areas, to

perform territorial intervention for a realistic approach to local development; and involve various partners in their individual expert specificity.

Portugal through INIA (National Institute for Agricultural Research) is a subscriber of the International Undertaking for Plant Genetic Resources. In the scope of FAO, the INIA is responsible for the "in citu" and "ex citu" conservation of "germoplasm".

#### 2.24. Fishing

Portugal is in a privileged position in relation to their European partners with EEZ of about 1.7 million km<sup>2</sup> and a coastline of around 900 km (almost 1500 km, including the Autonomous Regions).

Sustainability objectives in fishing are focussed on maintaining the general productivity conditions of the marine ecosystems (controlled catches, below the thresholds of biological safety) and the maintenance and protection of biodiversity.

The Fishing/Environment Accord is aimed at sectorial articulation and the promotion of a sustained fishing activity, rationalising fishing in particularly sensitive zones.

Portugal has subscribed to a number of International Agreements in this sector in the ambit of the European Union, bilaterally with Morocco and multilaterally with the Portuguese Speaking African Countries. Internally, the reconversion of the traditional fishing activity has raised difficulties and opens up the need for integrated intervention (reconversion and occupational training, social action for unemployed fishermen, furthering of new activities).

The PROPESCA and IC PESCA Programmes have been developed in line with these objectives and the changes necessary for the sustainability of this activity in accordance with the environmental restrictions. At the same time, other Programmes, such as SIPESCA (Incentive System) and others, support innovation in the sector and capacity building. Some Sub-Programmes in the ambit of the Fight against Poverty and Social Exclusion have also been implemented in zones affected by the compulsory reduction of fishing.

## 2.25. Industry

The Portuguese Industrial Policy strategy – directed essentially towards enterprises - also includes an environmental and social component, like the processes underway in other economic sectors, with a view to a sustainable industrial model.

The Portuguese Government's intervention determines the application of the industrial policy instruments so as to put the objectives of SD into practice, notably <sup>31</sup>:

- Support for R&D investment projects, for cleaner technologies and rational management of raw materials;
- Development of infrastructures for environmental protection;
- Implementation of environmental audits;
- Promotion of legislation for an environmentally less aggressive industry;
- Incentives for innovation and environmental technology tranfers;
- Change of consumption patterns and creating an awareness in industries of the adhesion to ecological labelling;
- Incentives for better (voluntary) environmental behaviour in industrial enterprises, adhering to the Community Ecomanagement and Auditing System (CEAS);<sup>32</sup>
- Promotion of business Eco-efficiency

The efforts of the national industry to comply with the first generation of environmental norms are starting to have a positive result on the environment. The next decade will be more demanding, however, regarding the prevention of pollution and technological risks in the substitution of techniques and products, which are harmful to health and the environment. In this context, enterprises will need to have true environmental strategies with two lines of action: the adaptation to cleaner technologies and the introduction of Ecomanagement and Auditing Systems

<sup>&</sup>lt;sup>31</sup> With the exception of RETEX (Programme for the Regions strongly dependent on Textile and Clothing Industries), the following instruments were applied until the end of the 2nd Community Support Framework in mid: PEDIP (Strategic Programme to Dynamise and Modernise the Portuguese Industry), PRODITEBA (Programme to Dynamise the Assets of Environmental Equipment and Technologies) and SIMIT (Incentive Systems for the Modernisation of the Textile Industry).

 $<sup>^{32}</sup>$  The Ministries of the Economy and the Environment are developing these actions; particularly in the cement sector, the joint action will end in 2004.

Portuguese industries have a number of instruments at their disposal supporting their modernisation and adaptation to environmental criteria for Sustainable Development. Of particular note is the support given in the scope of PEDIP (where sums from FEDER, ESF and the State Budget are channelled in the area of the environment) and the system of tax incentives (in function of declared Collective Income Tax for entities whose main activity is in the field of the integrated prevention and control of pollution).

Other instruments include the Environmental Adaptation Contracts and the Continuous Improvement of Environmental Performance Contracts. The former aimed at the phased compliance with legislation until 2000 while the latter fix specific targets to be reached by enterprises for the reduction of the environmental impact of their activities. On subscribing to these contracts, enterprises adhere to the compromises inherent in the Community Ecomanagement and Auditing System.

# **IV.** Perspectives for the Future

- 1. Priorities for Environment Policy in Portugal
- 2. Objectives in the Scope of Sustainable Development
  - **2.1. International Pledges**
  - 2.2. Short, medium and long term targets
- 4. Evaluation of Progress and Monitoring
  - **3.1. Objectives and Result Indicators**
- 4. Sustainable Development Strategy for Portugal

# 1. Priorities of the Environment Policy in Portugal<sup>33</sup>

The priority targets and actions, which guide the policy action towards building long-term conditions for sustainable development, take three essential aspects into consideration:

i) The country's socio-economic situation: Portugal is still in need of modernisation and improved infrastructures throughout the country;

<sup>&</sup>lt;sup>33</sup> Operational Programme of the Environment 2000-2006

ii) The recognition of the value of environmental advantages intrinsic to the national territory as development factors;

iii) The need to apply the national, community and international normative framework in the period 2000-2015.

The environmental strategy for the next decade is based on the following courses of action:

<u>First course of action</u>: sustainable management of natural resources and improved environmental quality as the essential rights of all Portuguese.

This course of action is based on the consideration of the principles *equity*, *solidarity* and *shared responsibility*.

# <u>Second course of action</u>: integration of the environment in the territorial development policy and in sectorial policies.

Making territorial planning and sectorial policies compatible with the environment is one of the conditions of sustainability: *ex-ante* evaluation of impacts, preventing damage, adapting to intervention instruments, constructing indicators of environmental pressure of the different activities and monitoring the effects are some of the conditions to be met so as to integrate the objectives of environmental protection in other policies

# <u>Third course of action</u>: conservation and recognition of the natural heritage in the framework of the strategy for the conservation of nature and biodiversity.

The biological diversity and the variety of the ecosystems and countryside are the ecological, cultural and economic heritage of Portugal and Europe. The protection and recognition of this heritage are essential elements of the "National Strategy for the Conservation of Nature and Biodiversity".

<u>Fourth course of action</u>: establishing a strategic partnership with the different actors for the environmental modernisation of economic activities and organisations.

The Central Administration will promote the deliberation necessary among its different departments and ministries for an integrated approach of environmental problems and will foster institutional means of cooperation and contracting with the remaining agents.

Fifth course of action: development of environmental education and information.

Environmental education and information should involve all citizens going from the school to the community and from the community back to the school. Consumers and public opinion play a key role in environmentally directed demand both in the area of goods and services as well as in the support for measures protecting the environment, such as climate, the oceans and the defence of biodiversity in general.

#### 2. Objectives in the Scope of Sustainable Development

#### 2.1. International Commitments

There are three essential 'axes' in the framework of Portugal's policy action for the implementation of the Sustainable Development objectives at the international level so as to carry out this process:

#### i) Compliance with the commitments assumed following the Rio Conference

a) Rio Declaration – the 27 Principles were accepted and are now taken into consideration in all policies;

b) Biodiversity Convention – Portugal drew up its National Strategy in 2001;

c)**Framework Convention of Climatic Changes** - Portugal participated in the respective meetings and performed national inventories of emissions; it signed the Kyoto Protocol and subscribed to the resulting pledges; it set up an Interministerial Commission for Climatic Changes (1998); it assumed targets for emissions by 2010 and 2020 and established a resulting Action Plan;

d) **Convention on Desertification** – Portugal formed a Work Group which proposed a National Action Plan in 1997, now underway;

 f) Agreement on Forests- Portugal subscribed to the Principles of Integrated Management at world and European Union level and it is developing a National Plan for the Sustainable Development for Portuguese Forests; g) National and Local Agenda 21– in 1992 Portugal transcribed the action principles of Agenda 21 with the drawing up of a Thematic Agenda and a Programmatic Agenda; this involved all bodies of the Administration and the main social partners as well as the holding of Public Debates; a number of Local Authorities have drawn up Local Agendas 21 in deliberation with other local authorities from various countries

h) Indicator System - Portugal has developed and adopted an Indicator System for Sustainable Development.

ii) Implementation of the principles of Sustainable Development established in the European Union Treaty

a) Integration of the Action Principles of the 6th Community Environment Programme in national policies – Portugal has respected and implemented the *Prevention, Co- Responsibility, Subsidiarity and Polluter-Pays/User-Pays Principles*;

**b) Integration of the measures proclaimed in the 'Cardiff Process'** – The definition of *Integration Indicators* is underway for the sectors involved in the referred Process (already drawn up for the Energy, Transport, Industry, Agriculture and Tourism sectors);

c) Participation in the definition of the 'European Strategy' for Sustainable Development – Portugal has contributed to the drawing up of the final text of the European *Strategy* and is in the process of preparing the National Strategy.

iii) Compliance with the commitments assumed internationally

- a) Participation in the CSD / UN meetings and of the Contracting Parties of the Convention;
- b) Participation in the OECD meetings;
- c) Participation in other bodies (FAO, ILO, UNEP, UNDP, etc);
- d) Participation in the World Trade Organisation meetings (WTO);
- e) Participation at the Local Administration level in the ambit of ICLEI (International Council for Local Environmental Initiatives);

- f) In the context of bilateral relations: technical, scientific and financial support to the Portuguese Speaking African Countries (PALOP);
- g) In the context of bilateral relations: participation in annual government meetings with Morocco and Brazil;
- h) In the context of bilateral relations: development of technical and scientific co-operation with Spain in the ambit of the Luso-Spanish Convention and the joint management of the Tran border Protected Areas;
- i) Participation at enterprise level in CSER (Corporate Social and Environmental Responsibility) meetings.

## 2.2. Short, Medium and Long-Term Targets

The following objectives summarise the target's Portugal must meet in the short, medium and long term.

## Short Term (2004-2006)

- Compliance with the Community Directives
- Gradual sectorial integration of environmental policies
- Intensification of pollution prevention and control measures
- Strengthening of the State's regulating responsibility
- Strengthening of the control and monitoring capacity
- Realisation of studies, measures and actions envisaged in the Special and Sectorial Plans
- Promotion of environmental requalification and protection actions particularly those of a preventive nature
- Promotion of publicity and awareness campaigns.
- Motivate the participation of social and economic partners in the implementation of objectives
- Establish platforms of international co-operation (Portuguese speaking countries, within Europe and the rest of the world)

## Medium Term (2010-2012)

- Compliance with the pledges in the ambit of the Kyoto protocol
- Development of economic indicators for the complete recovery of costs related to environmental services
- Fulfilment of the targets fixed for mainstream policies (integration of environmental and social objectives)

in the various sectors of the Administration

• Effective development of forms of international co-operation and aid to development

# Long Term (2020-2025)

• Total achievement of 'good' levels of environmental quality (superficial and underground interior waters, coasts, soil, atmosphere, vegetation, and habitat)

• Achievement of satisfactory levels of quality of life for all the population (health, employment, eradication of poverty and social exclusion, housing, education, leisure)

• Achievement of indicators of high quality of Governance

# **3. Evaluation of Progress and Monitoring**

One means of operationalising Sustainable Development is to monitor it through a coherent System of Indicators (Environmental, Social, Institutional and Economic).

In Portugal, this System can be placed in the framework of a continuous evaluation and monitoring process (possibly through setting up an 'Observatory for Sustainable Development'), in accordance with the strategy adopted and going from already existing entities and bodies (CNADS, Focal Points of the Ministries).

# 3.1. Objectives and Result Indicators

In Portugal, a set of Indicators was adopted for the thematic areas of the Environment and their interpretation is compatible with the concepts used by INE (National Institute of Statistics) and/or EUROSTAT<sup>34</sup>.

<sup>&</sup>lt;sup>34</sup> "Proposal for a System of Indicators for Portugal", DGA, 2000

Social Indicators were proposed following the Nice Summit; the recent conjugation between the *Lisbon Process and the Cardiff Process* makes it necessary to construct Systems of Indicators which are more farreaching in evaluating the results of the integration of the three dimensions of Sustainable Development.

#### Integration Indicators

The objective of the *Integration Indicators* is the overall evaluation of sustainability, supplying a table of indicators, which enable the *ex-ante* and *ex-post* evaluation of the degree of the environment's integration in each sector.

Sectorial analyses have been made in the ambit of the *Environment Programme* in order to define a set of **Integration Indicators** in the Tourism, Transport, Energy, Industry and Agriculture sectors, which can be summarised as follows:

# i) Transport and the Environment<sup>35</sup>

In the construction of the System of Integration Indicators for the Transport sector, the **environmental factors** considered relevant were: *air, water resources, solid waste, energy resources, soil;* the **social factors** considered were: mobility, *visual intrusion, noise, accident, congestion.* The incidence of the effects was classified as 'great', 'moderate' and 'some'.

The proposed Indicators are applied to the evaluation of the integration at **policy** level and to the scale of the **project**.

# ii) Agriculture and the Environment<sup>36</sup>

Environmental indicators were constructed which reflect the intensity of the respective pressures due to agriculture (*conservation of soil, water and production factors*), made up of Indicators for the Evaluation of Policies and Indicators for the Evaluation of Projects.

# iii) Energy and the Environment<sup>37</sup>

<sup>&</sup>lt;sup>35</sup> 'Transport and the Environment' – *Integration Indicators*, Urban and Regional Systems Center for the Ministry of the Environment, 1999

<sup>&</sup>lt;sup>36</sup> 'Agriculture and the Environment' – Integration Indicators, University of Évora, for the Ministry of the Environment, 1999

In order to translate the strategic objectives proposed for the energy sector in a framework of sustainability, a list of new indicators of sustainable development was drawn up in relation to *emission rates, energy efficiency and use of renewable sources*.

#### iv) Tourism and the Environment<sup>38</sup>

Four dimensions of evaluation were defined for these indicators: *water, energy, aesthetics resources and urban solid waste.* 

# v) Industry and the Environment<sup>39</sup>

An indicator composing of the '*environmental merit*' of projects has been proposed, which would be calculated on the basis of the quantification of its importance in satisfying the defined targets.

#### 4. Sustainable Development Strategy for Portugal

Portugal has a dual compromise in relation to the drawing up of the National Strategy for Sustainable Development: as Member of the United Nations in compliance with the decision of the 19th Special Session of the United Nations, and as a Member of the European Union following the Gothenburg Summit.

The structure of a National Strategy must include:

- a) Principles and Objectives
- b) Integrated Policies
- c) Means of Implementation
- d) Role of the Social Partners
- e) Establishment of Platforms of International and Bilateral Deliberation
- f) Policy Guidelines for Sustainable Development

<sup>&</sup>lt;sup>37</sup> 'Energy and the Environment' – *Integration Indicators*, Center for the Conservation of Energy, for the Ministry of the Environment, 1999

 <sup>&</sup>lt;sup>38</sup> 'Tourism and the Environment' – *Integration Indictors*, University of Algarve, for the Ministry of the Environment, 1999
<sup>39</sup> 'Industry and the Environment' – *Integration Indicators*, Catholic University, for the Ministry of the Environment, 1999

The building of a comprehensive Information System (also including aspects of qualitative evaluation) is one of the supports of any action strategy. Besides the implementation of a System of Indicators - already adopted for the environmental aspects and extending to the other dimensions of Sustainable Development - the effective implementation of the *Territorial Planning System* is necessary with its resulting articulation between measures of territorial nature or incidence.

In the light of the new problematic frame of globalisation and the commitments assumed internationally, with regard the environmental dimension of the policies to be developed, it would be useful to update the principles on which the previous National Plan of Environment Policies were founded. The drawing up of a new document would enable Portugal to place these policies in the framework of the Sustainable Development Strategy, to be presented by 2002.

Finally, the drawing up of this Strategy would provide the Public Administration with an opportunity for internal co-operation as well as the external participation of social partners and NGO.