1. Background

- Natural environment: river network
- Economy 2005-2006
- Population
- Social welfare
- Public participation

BACKGROUND

Located at the south-west tip of Europe, very close to the African continent, Spain consists of 17 Autonomous Communities and 2 Autonomous Cities. Mainland Spain occupies the majority of the Iberian Peninsula. Its national territory includes two enclaves in North Africa (Ceuta and Melilla), and two archipelagos (the Balearic Islands in the Mediterranean Sea and the Canary Islands in the Atlantic Ocean). It is characterised by the wide diversity of its geography, climate and flora and fauna, which, alongside other social, cultural, political and economic factors, make it a varied and unique country.

TERRITORY

Total surface area	505,988 km^2
Area above an altitude of 600 m	57.7%
Highest point (Teide)	3,721 m
m Length of coastline	7,905 km
km Continental shelf (0-200 m)	100,138 km^2

CLIMATE

Continental on the central plateau and in the Ebro Valley
Temperate around the Mediterranean Arc and in the Balearic Islands
Atlantic in Galicia and on the Bay of Biscay
Sub-tropical in the Canary Islands
Maximum annual precipitation above 1,000 mm (>2,000 mm in the NW)
Minimum annual precipitation below 300 mm (<200 mm in the SE)
Average annual temperature between 14º and 20ºC

RIVER NETWORK

No. of water bodies (rivers)	3,792
Estimated total river length	75,000 km
No. of reservoirs (2007)	1,179
No. of natural wetlands	2,559

LAND COVER (%) CLC 2000

Arable land and permanent crops	32%
Natural grasslands and mosaic vegetation	18%
Forest area (wooded)	27%
Semi-natural vegetation	17%
Open spaces and exposed soil	2%
Rivers, reservoirs and wetlands	2%
Artificial surfaces	2%

Population (Municipal Register as at 01/01/2007)

Inhabitants	45,200,737
Average density	89.3 inhab/km^2
Maximum density in an Autonomous Community	Madrid: 758 inhab/km^2
Minimum density in an Autonomous Community	Castile-La Mancha: 25 inhab/km^2
Maximum density in a provincial capital	Barcelona: 16,242 inhab/km^2
Minimum density in a provincial capital	Caceres: 52 inhab/km^2

Other population figures

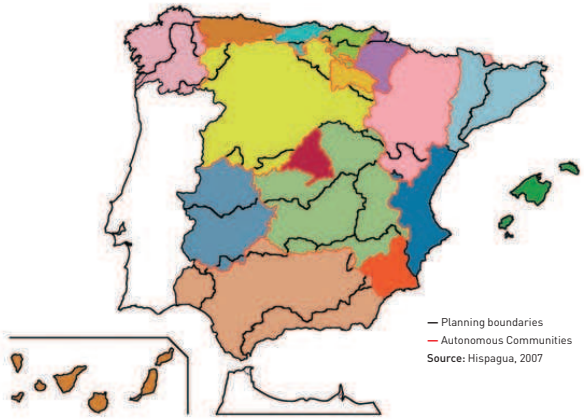
Increase in population between 2001 and 2007	4,353,366 inhab
Total no. of municipalities	8,111
No. of municipalities with over 100,000 inhabitants	59
No. of municipalities with over 500,000 inhabitants	6
No. of municipalities with 10,000-100,000 inhabitants	662
No. of municipalities with under 10,000 inhabitants	7,390
Life expectancy (2005)	
Male	76.96 years
Female	83.48 years

DEMOGRAPHIC DISTRIBUTION

% of population in municipalities of <10,000 inhab. (7,390 municipalities)	8.3%
% of population in municipalities of >10,000 inhab. (721 municipalities)	91.7%

Natural environment: river network

Spain's river network is closely related to two of its other physical features: its orography and its climate. Spain is one of Europe's most mountainous countries. This relief has divided the country into three watersheds (Cantabrian, Atlantic and Mediterranean) and created the eight large basins of its major rivers. The boundary between the Atlantic and Mediterranean watersheds is marked by the broad ranges of the Iberian and Betic Mountains, which are where the major drainage divides are found: Picos de Urbión, Sierra Cebollera, Sierra de Albarracín and Sierra de Segura.



Apart from the north and north-west, Spain's climate is characterised by low rainfall and high rates of evapotranspiration, typical of the Mediterranean climate, leading to small amounts of surface water. Absolute flows of Spanish rivers are generally low. The two exceptions are the Douro and Ebro, in which flows are substantial. In both cases, these river courses are fed by large basins and receive considerable input from tributaries running down from the Cantabrian mountain range and the Pyrenees, respectively.

The remaining rivers have much smaller flows. The Tagus has the advantage that some of its tributaries collect large amounts of water from the Central mountain range and that it runs through a low valley that receives relatively substantial rainfall. The River Guadalquivir, the basin of which coincides approximately with the Guadalquivir Depression, is fed by a number of tributaries with sources in the Subbetic and

Penibetic Mountains. Out of the Iberian Peninsula's five major rivers, the Guadiana's course registers the lowest rates of precipitation.

Generally speaking, river flows reflect the distribution of rainfall throughout the year. This makes it possible to classify them into two categories: rivers in which the summer minimum has an insignificant impact on flow (river courses that receive considerable rainfall), and rivers in which the summer minimum is long and has a significant impact on flow (river courses in dry and semi-arid areas). This is the Peninsula's most common type and the country's main rivers, with the exception of the Ebro, belong to this category. Rivers in wet parts of Spain are usually short, but with a high flow volume, as seen in the cases of the River Miño in Galicia and the River Nalón in Asturias. The country's Mediterranean rivers have irregular regimes which, in many cases, could be considered to represent a transitional classification between river and dry watercourse.

Overall, there is a clear differentiation in the Peninsula's river network between the Atlantic watershed and the Mediterranean watershed. These watersheds are also characterised by their high and low rainfall levels, respectively, which result in a clear imbalance.

River basins(1) consist of a drainage area which, via a network of watercourses, carries its water to a main river. As a whole, the main river basins in the Atlantic watershed cover an extensive surface area exceeding 300,000 km^2. The water in a basin does not just consist of surface water, but also includes natural groundwater deposits (aquifers), which play a major role in the water cycle.

DATA ON THE PENINSULA'S MAIN RIVERS

River	Altitude at source (masl)	Length in Spain (km)	Total length	Spanish basin area (km^2)	Total basin area (km^2)	Average flow (m^3/s)
Ebro *	1,980	910	910	84,415	85,362	426.0
Tagus	1,593	731	1,006	55,810	80,600	500.0
Douro*	2,160	572	897	77,334	97,290	675.0
Guadiana	1,040	438	744	55,513	67,133	70.0
Guadalquivir	1,400	657	657	58,003	58,003	164.3
Júcar	1,700	498	498	42,989	42,989	49.2
Segura	1,413	325	325	18,870	18,870	26.3
Miño	600	310	310	17,757	17,757	340.0
Turia	1,680	280	280	6,394	6,394	14.0
Ter	2,480	209	209	3,011	3,011	17.15

Source: Basin Authority websites

Notes: The international section of the Douro (shared with Portugal) is 112 km long. The French part of the Ebro basin covers 502 km^2 and the part in Andorra covers 445 km^2.

(1)A river network is an area where water converges through a network of tributaries into one single main river, which then carries it to the sea. It is therefore a natural network that does not coincide with political administrative boundaries (Source: Hispagua).

Another feature of the river network is the existence of broad basins that do not feed into river valleys, creating endorheic drainage systems that flow inland. This forms shallow lakes of varying sizes, which mostly disappear during the summer months. Two of the most important are the La Nava and Gallocanto basins, the latter of which has an endorheic basin covering an area of 543 km^2.

Owing to Spain's geography, the river network is made up of a large number of tributaries (some very large) and sub-tributaries running over very mountainous relief. This gives rise to another feature of many of the country's rivers: torrential flow. The table above shows the considerable height at which the Peninsula's main rivers have their source, with the Douro and the Ter surpassing an altitude of two thousand metres.

TRIBUTARIES OF SPAIN'S MAIN RIVERS OVER 200 KM LONG

River (tributary)	Genil	Esla	Pisuerga	Gabriel	Segre	Tormes	Sil	Jalón	Alagón
Length (km)	237	275	275	263	261	247	225	224	201

Source: Basin Authority websites

These rivers have to cross a considerable difference in elevation from their source, with average incline in excess of two metres per kilometre (the limit above which a river is considered to be torrential). This is the case of rivers flowing into the Bay of Biscay, for the Ebro's Pyrenean tributaries, and for rivers in the south of the Peninsula.

Finally, it should be noted that a large number of works have been carried out on rivers (dams and reservoirs) to regulate their flow, prevent floods, store water for times of scarcity and generate hydroelectric power. The table below shows the number of dams built in Spain over the years.

Construction period of dams	No. of dams	% of total
Before 1900	51	5.05
1900-1929	85	8.42
1930-1959	220	21.80
1960-1989	484	47.98
1990 onwards	169	16.75

Source: MMA, 2007

River basin management

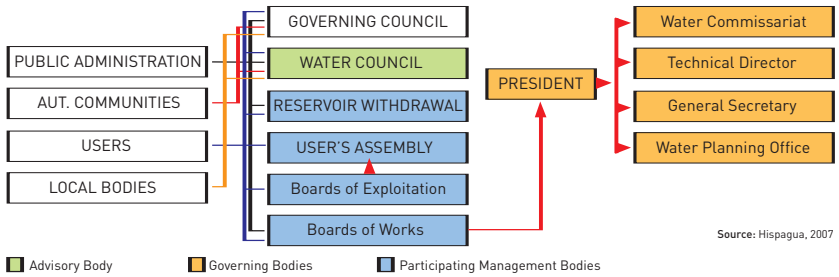
Spain has been a pioneer in hydrological and hydraulic study and management, adopting a territorial approach that focuses on river basins and is based on policies developed between the second half of the 19th century and the first third of the 20th. The aim throughout has been to make rational use of the scarce and irregular water resources available.

These initiatives began in earnest in 1861, when studies were carried out with a view to creating a series of authorities that, based on natural river basins, would manage existing resources. As a result of these studies, the "Hydraulic Divisions" *(Divisiones Hidráulicas)* were set up in 1865 and entrusted with the following tasks, among others:

- Conduct studies on river regimes.
- Inspect canal and reservoir works carried out by corporations.
- Direct construction of canals and reservoirs using budgetary resources.
- Build channels and flood defence systems.
- Inspect work on canals, reservoirs and dams built under concession wherever water is consumed or flow regime is altered.

In 1926, the Hydrographical Authorities *(Confederaciones Hidrográficas)*(2) were set up, adopting basins as the natural geographic demarcation. Although the first two hydrographical authorities (Ebro and Segura) were set up that same year, the Hydraulic Divisions were kept on to carry out the task of managing the basins' legal, concessionary and administrative affairs. The hydrographical authorities took on the work of building state infrastructure and supporting municipalities, provincial councils and individuals. In the 1940s, hydrographical authorities were structured into two very similar bodies: Hydraulic Services Confederations and Authorities *(Confederaciones y Delegaciones de Servicios Hidráulicos)*. This latter group became the Southern Spain (previously Guadalhorce), Tagus and Guadiana Hydrographical Authorities.

DIAGRAM OF A HYDROGRAPHICAL AUTHORITY'S ORGANISATIONAL STRUCTURE



Source: Hispagua, 2007

(2) Royal Decree of 5 March 1926 (Madrid Gazette, No. 65).

Drawing up plans to address water problems (especially deficits and floods) and take advantage of water resources have been ongoing tasks in Spain for many years and at very different political, economic and social times. Since the first attempts to analyse alternatives and draw up proposals in the late 19th century, through to the present day, there have been many examples of river basin management planning, such as the Plan Gasset in 1902 (greatly influenced by the ideas of Joaquín Costa); the National Hydraulic Works Plan *(Plan Nacional de Obras Hidráulicas)* for irrigation in 1933; the General Public Works Plan *(Plan General de Obras Públicas)* of 1939-1941; the Economic and Social Development Plans *(Planes de Desarrollo Económico y Social)* in the 1950s and 1960s; and the National Hydrological Plan *(Plan Hidrológico Nacional)*, currently in effect, approved by the Spanish Parliament in 2001.

Comprehensive regulations govern the Hydrographical Authorities' operations. Their legal basis is laid down by the Spanish Constitution of 1978 and reflected, among other legislative acts, in the Water Act, Legislative Royal Decree 1/2001 *(Ley de Aguas, RD Legislativo 1/2001)* of 20 July(3); the Regulation of Public Water Resources, Royal Decree 849/86 *(Reglamento del Dominio Público Hidráulico, RD 849/86)* of 11 April(4); the Regulation of the Public Administration of Water and Water Planning, Royal Decree 927/1988 *(Reglamento de la Administración Pública del Agua y de la Planificación Hidrológica, RD 927/1988)*, of 29 July(5)); and Royal Decree 650/1987 *(Real Decreto 650/1987)* of 8 May 1987, defining basin authorities' territorial jurisdiction; in addition to regulations laid down by the EU and the Regional Governments(6).

More recently, Royal Decree 125/2007 *(Real Decreto 125/2007)* of 2 February, which lays down the territorial scope of river basin districts(7), incorporates this new administrative concept to adapt Spain's legislation to the Water Framework Directive. According to this Royal Decree, river basin district shall mean "an area of land and sea made up of one or more neighbouring river basins and the transitional waters, groundwater and coastal waters associated with such river basins."

Each river basin district is considered to include all the groundwater located beneath the limits defined by the boundaries between river basins in the corresponding river basin district. In the case of aquifers shared between more than one river basin district, each is assigned the part of the aquifer corresponding to its respective territorial area, with the obligation to ensure that its management is co- ordinated among the basin districts affected.

(3) Legislative Royal Decree 1/2001 of 20 July, approving the consolidated text of the Water Act (Official State Gazette No. 176, of 24 July 2001).

(4) Royal Decree 849/86 of 11 April, approving the Regulation of Public Water Resources, which implements preliminary titles I, IV, V, VI and VII of Act 29/85 of 2 August, on water.

(5) Royal Decree 927/1988 of 29 July, approving the Regulation of the Public Administration of Water and Water Planning, implementing titles ii and Iii of the Water Act (Official State Gazette No. 0209, of 31 August 1988).

(6) Royal Decree 650/1987 of 8 May (Official State Gazette No. 122, of 22 May 1987).

(7) Royal Decree 125/2007 of 2 February, establishing the territorial scope of river basin districts (Official State Gazette No. 30 of 3 February 2007).

The new concept of river basin district is structured around Spain's long tradition of river basin management and is adapted in general terms to the organisational structure and division of power between the State and the Regional Governments. Consequently, in defining the new management concept, the current structure of river basins has incorporated groundwater, transitional waters and coastal waters.

New approach to water resource management

The Water Framework Directive (WFD)[8] came into effect in December 2000, establishing a new context offering protection to all waters in EU Member States. This Directive incorporates the basic principles of modern water resource management and, for the first time, includes all waters: inland surface waters, groundwater, transitional waters and coastal waters.

Its essential objective is to achieve good status and sustainable use of waters by 2015, for which purpose basic tools such as water planning, management by river basin, economic analyses and public participation have been established. The Directive establishes the concept of "water bodies", understood to mean "the units of analysis for monitoring compliance with environmental objectives. Necessary measures will be applied to reach such objectives". The environmental goals pursued are summarised in the following table:

WATER FRAMEWORK DIRECTIVE: ENVIRONMENTAL GOALS

Inland surface waters	Groundwater
Prevent the deterioration of the status of all water bodies Protect, enhance and restore all water bodies by 2015 at the latest	
Reduce pollution from priority substances, and cease or phase out emissions, discharges and leakages of priority hazardous substances	Prevent or limit the input of pollutants
Comply with regulations and objectives for protected areas	
	Reverse the significant and sustained upward trends in concentrations of pollutants produced by human activity

(8) Directive 2000/60/EC of the European Parliament and of the Council of 23 October 2000, establishing a framework for Community action in the field of water policy [DOCE 327 L, of 22-10-00]

The WFD does not only propose specific actions to protect waters, but also incorporates the whole process of water planning. In this respect, it proposes a strategy aimed at achieving proper water resource management, culminating in preparation and implementation of a Water Plan *(Plan Hidrológico)* for each river basin district.

The Directive defines a series of tasks to be carried out, which are inter-related and must be implemented in a co-ordinated manner. Within this framework, the most important tasks carried out so far are those laid down by articles 5, 6 and 8 of the Directive, establishing identification, demarcation and classification of water bodies; study of the repercussions of human activity on these water bodies; economic analysis of water use; creation of a register of protected areas in each river basin district; and drafting of water status monitoring programmes.

Classification of surface waters

SPAIN: CLASSIFICATION OF SURFACE WATERS

Water body category	No. of water bodies identified
Rivers	3,792
Lakes	319
Transitional waters	168
Coastal waters	351
TOTAL	**4,360**

Source: Spanish Ministry of the Environment (MMA), 2007: Water Planning. "Summary of General Studies of River Basin Districts in Spain".

In the case of rivers, the first task carried out to classify them was to define the "significant river network". This work was carried out by the Centre for Water Studies *(Centro de Estudios Hidrográficos)* under the Spanish Centre for Public Works Studies and Experimentation (CEDEX – *Centro de Estudios y Experimentación de Obras Públicas*) in collaboration with river basin authorities. A river is considered significant when the surface area of the drainage basin exceeds 10 km^2 and average annual input is over 100 l/s (3.15 hm^3/year).

WATER BODIES AFFECTED BY PRESSURE AND FREE OF IMPACT

River basin district	No of water bodies (rivers)	No. of water bodies affected by pressure	No impact
Basque Country Inland Basins	**48**	30	17
North	**291**	259	106
Galicia-Coast	**466**	261	69
Miño-Limia	**249**	229	103
Douro	**342**	315	216
Tagus	**285**	264	91
Guadiana	**229**	54	40
Andalusian Atlantic Basin	**113**	75	14
Guadalquivir	**325**	250	83
Andalusian Mediterranean Basin	**120**	107	32
Segura	**69**	48	9
Júcar	**296**	181	76
Ebro	**699**	560	177
Catalonian Inland Basins	**260**	181	45
Balearic Islands	no data		
Canary Islands	no data		
Ceuta and Melilla	no data		

Source: Spanish Ministry of the Environment (MMA), 2007: Water Planning. "Summary of General Studies of River Basin Districts in Spain".

In order to define river types, an overall classification has been made for the country as a whole, identifying types that are common to all river basin districts and taking into account a series of variables(9). This has lead to the definition of 33 types on the Peninsula and Balearic Islands (e.g. main watercourses, large and small Mediterranean watercourses, mountain rivers, high mountain rivers, Mediterranean rivers, coastal rivers, rivers in La Mancha, Basque Country-Pyrenean rivers, etc.). For each of these types, a series of baseline conditions are defined equivalent to the status of water bodies not subject to significant alteration by human activity (classification of "very good status"). This task is still at implementation stage, although studies have been carried out in specific areas and those defined by the Basin Authorities in the reports relative to article 5 of the Directive (WFD).

In each River Basin District, analyses have been performed on the pressures affecting water bodies in the "river" category. Except for the areas around the headwaters of rivers, most of the network is affected by one pressure or another caused by human activity, with very few water bodies in this category being free of pressure(10). The corresponding table shows the waters bodies (rivers) considered to be suffering pressure in each River Basin District.

(9) Altitude, annual temperature variation, basin area, average annual flow, specific average annual flow, estimated conductivity, latitude, longitude, Strahler order of the river, average gradient of the basin, percentage of months with zero flow and average annual temperature.

(10) The types of pressure taken into account are: diffuse-source pollution; point-source pollution; abstraction; morphological alterations; water regulation, transfer and diversion; land use; other types not included in the list.

RIVER BASIN DISTRICTS

Type	Name	Territory
RIVER BASIN DISTRICTS WITH INTER-COMMUNITY BASINS (shared by more than one Autonomous Community)	**Guadalquivir River Basin District**	Guadalquivir river basin, and the river basins that feed into the Atlantic Ocean, from Palos de la Frontera to the mouth of the Guadalquivir.
	Segura River Basin District	River basins that feed into the Mediterranean Sea between the mouth of the Almanzora and the left bank of the Gola del Segura. This also includes the Rambla de Canales sub-basin and the endorheic basins of Yecla and Corral Rubio.
	Júcar River Basin District	River basins that run out in the Mediterranean Sea between the left bank of the Gola del Segura and the mouth of the River Cenia. This excludes the intra- community basins in Valencia, the transitional waters associated with them and the coastal waters associated with the coastline of intra-community river basins.
RIVERBASIN DISTRICTS SHARED WITH OTHER COUNTRIES (demarcation of the Spanish part)	**Melilla River Basin District**	The territory of this autonomous city and its transitional and coastal waters.
	North River Basin District	River basins that feed into the Bay of Biscay from the mouth of the River Eo to the French border, including transitional waters, except the basins on the left bank of the River Eo and excluding transitional waters associated with the Basque Country Inland Basins. This includes the Spanish territory of the Rivers Nive and Nivelle.
	Douro River Basin District	The Spanish part of the Douro river basin.
	Miño-Limia River Basin District	The Spanish territory of both river basins, plus the corresponding transitional and coastal waters.
	Tagus River Basin District	The Spanish part of the Tagus river basin.
	Guadiana River Basin District	The Spanish part of the Guadiana river basin, plus the Spanish part of its transitional and coastal waters.
	Ebro River Basin District	The Spanish part of the Ebro river basin and its transitional waters, of the Garona river basin and other river basins that feed into the Atlantic Ocean across the French border (except those of the Rivers Nive and Nivelle). Also the Laguna de Gallocanto endorheic basin.
	Ceuta River Basin District	The territory of this autonomous city and its transitional and coastal waters.

Economy 2005-2006[11]

In 2006, Spain's economy operated in a more favourable international economic environment than the previous year as the world economy registered the highest growth of the last decade. The EU economy, however, showed more balanced growth than in foregoing years. The European export market benefited from the worldwide context, despite the euro appreciating throughout the year. All Member States registered positive growth ranging between 6% in Ireland and 2% in France, Italy and Portugal. As regards recent Member States, these countries continued their growth of previous years at rates above the Community average.

In contrast to the economic situation, on an institutional level 2006 saw no major agreements reached on matters affecting the future of the Union. On 1 November 2006, the Treaty establishing a European constitution was due to come into force, but rejection by France and Holland led to the project's halt. A period of reflection began, culminating in a less ambitious agreement favouring consensus, which was signed at the end of last year in Lisbon[12] and is now in the process of being ratified by Member States.

Production

Spain's economy grew by 3.9%, the highest rate since 2000, although it continued to be based on domestic demand, as in previous years, leading to greater household borrowing. This favourable contribution from the domestic market was complemented by positive results from the foreign market. Nevertheless, the Spanish economy's need for financing stood at around 8%, although the rate of increase slowed.

As regards economic sectors, 2006 could be considered the start of a trend towards certain rebalancing, with greater participation from industry as a whole. The GVA for industrial sectors grew at an average annual rate of 3.3%, three points above the growth for 2005. This recovery in industry is also reflected in the Industrial Production Index (IPI), which rose by 3.8% in 2006, compared to 0.7% in 2005. In this regard, it is worth highlighting the recovery in the automobile industry driven by foreign demand, and the relative stability in the textile sector following substantial adjustment in 2005. Furthermore, the energy sectors reduced their activity as a consequence of the year's mild weather.

(11) Spanish Economic and Social Council (Consejo Económico y Social): "Report on Spain's Socio-Economic and Labour Situation in 2006" ("Memoria sobre la situación socioeconómica y laboral de España en 2006"). Madrid, CES Publications Department, 2007.

(12) The Treaty of Lisbon was signed on 13 December 2007.

BACKGROUND

Although the construction sector's growth rate was moderated somewhat, it was once again the economy's most dynamic sector in 2006 and recorded a 5.3% increase in GVA. There was a noticeable trend towards deceleration throughout 2006, except in the third quarter, which saw a considerable increase in approval for housing due to the expected entry into effect of the Spanish Building Code *(Código Técnico de Edificación)*.

Public Administration investment accounted for 34.5% of total tenders by Public Authorities in the construction sector. The largest increases were recorded in investment by the Ministry of the Environment, which raised spending by 121%, allocating the majority to the State Water Companies *(Sociedades Estatales del Agua)*.

In 2006, despite being affected by drought, the primary sector finished the year with an increase in productivity, which had a positive effect on agricultural income. That year, the measures set out by the Common Agricultural Policy (CAP) of 2003 began to be applied. These specifically involved decoupling subsidies from production, which led to a reduction in the surface area planted with some crops (durum wheat, legumes, cotton, tobacco and beet). It is worth highlighting the increase in area planted with bio-fuel crops, which amounted to 223,000 ha.

The regulations governing the fishing sector were completely reviewed: in 2006, the European Fisheries Fund was approved (in force since 2007), representing a modification of fisheries policy aimed at achieving sustainable fisheries. Specifically, it was agreed to maintain the ban on anchovy fishing and reduce the Total Allowable Catches (TAC) for hake and Norway lobster in Iberian waters, whilst increasing the TAC for northern hake by 20%. Furthermore, the Fisheries Agreement with Morocco was approved in December 2006 and came into effect in February 2007, allowing Spanish fishing vessels to operate in that country's fishing banks for four years. A 6-year agreement was also reached with Mauritania.

After the construction sector, the next most buoyant was the services sector. Retail recorded bigger growth than the previous year, especially in the sale of foodstuffs. Meanwhile, the telecommunications sector also registered a considerable increase, although with widely varying performance in its main services. In this respect, mobile telephony was the most dynamic segment, while land-line telephony seems to have reached a ceiling.

This economic activity was governed by moderately restrictive policies, which meant that the government accounts showed a fiscal surplus at the end of the year. Furthermore, the European Central Bank's monetary policy in the eurozone kept interest rates low, stimulating Spain's domestic demand.

MACRO-ECONOMIC INDICATORS: SPAIN, EUROZONE, EU-15 AND EU-25

	GPD growth		Employment growth		Inflation rate		Public deficit	
	2005	2006 (e)	2005	2006 (e)	2005	2006 (e)	2005	2006 (e)
España	3.5	3.9	3.1	3.1	3.4	3.6	1.1	1.8
Zona euro	1.4	2.7	0.8	1.4	2.2	2.2	-2.5	-1.6
UE-15	1.5	2.8	0.8	1.3	2.1	2.2	-2.3	1.6
UE-25	1.7	2.9	0.9	1.5	2.2	2.2	-2.4	-1.7

Source: Eurostat and European Commission. Economic forecasts for spring 2007-2008, May 2007.
(e): estimate

Instrument for change: the National Reform Programme

Throughout 2006, structural changes were implemented within the framework of the National Reform Programme (PNR – *Programa Nacional de Reformas*), focusing on aspects like the need to increase competition in the electricity sector and retail trade. This programme also included Community priorities relating to the European Energy Strategy, encouraging business activity, increasing employment opportunities in certain job categories, and promoting investment in knowledge and innovation.

The PNR develops the guidelines of the renewed Lisbon Strategy, giving greater priority to sustainable growth and to employment. The Spanish Government, which submitted the PNR 2005-2008 to the EU for review, defined the following priority targets for 2010: achieve full convergence with the EU-25 in income per capita and increase the employment rate, approaching the Strategy's initial target of 70%.

The Spanish programme was structured into seven areas[13], and was favourably reviewed by the Commission. Its strong points were considered to be the effort to achieve budgetary stability, creation of an R&D and Innovation programme, and implementation of a Strategic Infrastructure and Transport Plan (PEIT – *Plan Estratégico de Infraestructuras y Transporte*). Its weak points were considered to include the need to reduce labour market segmentation, the imbalance in the male-female employment rate and the need for greater competition in the retail distribution and energy sectors.

(13) 1) Macro-economic and budgetary stability, 2) PEIT and AGUA Programme, 3) Increase and enhancement of human capital 4) Research, development and innovation strategy (INGENIO 2010), 5) Greater competition, better regulation, greater efficiency in public authorities and competitiveness 6) Labour market and social dialogue.

In October 2006, the Spanish Government presented the annual progress report on the PNR, stating that, during its first year in effect, over half (52.4%) the measures set out had been approved. Income per capita reached 98.8% of income in the EU-25 and the employment rate stood at 63.3%. The European Commission considered that Spain was progressing adequately, although it also mentioned that measures should be applied to improve competitiveness, the main challenge facing the Spanish economy.

Autonomous Communities: movement towards convergence

Spain's progress since it joined the European Union has allowed it to achieve economic convergence with the rest of Europe's economies, a process enhanced by EU Structural Funds. Accordingly, in the 2000-2006 period, Spain's regions grew on average by between 2.8% and 3.9%. Furthermore, the difference in per capita income among Autonomous Communities shrank by ten points.

In 2006, the most dynamic Autonomous Communities were Murcia, Cantabria, the Basque Country and Galicia, all recording growth of 4.1%. By comparison with the previous year, Valencia, Galicia, Cantabria and the Balearic Islands were the most buoyant, partly due to the construction and industry sectors in the first three and the recovery of tourism in the latter.

In the 2000-2006 period, the Spanish economy's real GDP grew at an annual average of 3.3%, with Murcia leading this growth (3.9%). As mentioned above, the difference in GDP per capita (purchasing power) has dropped by 10 points in the last 6 years. In terms of euros per inhabitant, in 2006 Madrid recorded per capita income of 28,850, compared to Extremadura with 15,504. The Basque Country, Navarre and Catalonia also have a nominal GDP per capita above the EU-25 average (24,500 per inhabitant), although the remaining regions have not yet reached this figure.

The need to accelerate convergence between Spain's Autonomous Communities will be met by designing long-term policies based on human resource training, technology development and energy efficiency and sustainability. Actions co-financed by the EU for the next six years have been designed with this in mind.

Population

Men and women in Spain[14]

In 2006, Spain's resident population amounted to 45,200,737 people, of which 50.57% were women and 49.43% were men. The 1998-2006 period registered growth of 12.2%, unequally distributed between the two genders, with a 2.4% difference in favour of men, even though natural population growth favours women. The higher growth of the male population is mainly due to immigration.

In 1998, the number of foreign residents stood at 637,085. However, by 2006, this figure had risen to 4,144,166 (53.46% males and 46.54% females). 68.1% of this foreign population comes from eleven countries[15], the main countries of origin being Morocco (563,012), Ecuador (461,310) and Rumania (397,270). Distribution by gender differs greatly according to country of origin; in this respect, the number of Moroccan males doubles the number of women, while among emigrants from Andean countries, the proportion of women is greater than that of men.

SPAIN: POPULATION BREAK-DOWN BY GENDER, 2006-2007

	Population as at 1 January 2007			Population as at 1 January 2006		
	spanish	*foreign*	*total*	*spanish*	*foreign*	*total*
Men	19,944,277	2,395,685	22,339,962	19,884,997	2,215,469	22,100,466
Women	20,736,906	2,123,869	22,860,775	20,679,801	1,928,697	22,608,498
Both genders	**40,681,183**	**4,519,554**	**45,200,737**	**40,564,798**	**4,144,166**	**44,708,964**

Source: INE 2007. Municipal Register as at 1 January 2007 and 1 January 2006 (definitive figures)

According to analysis carried out by the Spanish National Institute of Statistics (INE – *Instituto Nacional de Estadística*) on 2004 figures, average annual net income of women receiving some form of income was lower than that of men. In this analysis, women's average income amounted to 9,215.8 compared to the 13,897.9 received by men. If we analyse the different income components[16], only in the case of widow's benefits is women's income greater than that of men.

By age group, women's average income is always lower than men's: accordingly, in the age band between 16 and 29 years old, women's salary is just 78% of men's, although from retirement age onwards, the percentage is more equal. Generally speaking, the highest average earnings for both genders are to be found in the central age bands (between 30 and 64 years old), while the lowest are at either end of the scale (young people and over-65s).

Analysis of men and women's income in terms of educational attainment reveals that although there are still differences according to gender, they are smaller among people who have received higher education. In terms of area of activity, industry is where the fewest differences exist. Income has dropped for both men and women in the last 10 years.

Women's position as regards income depends considerably on family structure. Single- parent families whose head is a woman receive lower average incomes per person than other types. Their standard of living is only higher than that of elderly women living alone. People in such situations are most vulnerable to relative poverty.

Regarding family structure, it is worth highlighting the significant change in recent years. The most common form of cohabitation in Spain is the two-person unit, with or without children. The transformation of Spanish society has given rise to new forms of cohabitation and, in recent decades, the number of people living alone has increased (mainly among women in urban environments), as have the number of single-parent families (1 adult with children or grandchildren) and common-law couples of the same or different gender.

The number of marriages has fallen from 8 per 1,000 inhabitants (1975) to 5 per 1,000 in 2006. Also, in recent years the percentage of children born outside marriage has grown. In Spain, this stood at around 2% in 1975 and currently represents approximately 27%. Countrywide distribution of the percentage of children born to unmarried mothers shows that the highest percentages are found in the Canary Islands (46.6%), followed by the Balearic Islands and Madrid, all of which are above the national average[17].

Social welfare

Life expectancy and infant mortality: two indicators of social progress

Life expectancy at birth is an indicator of social welfare and is associated with economic development, food quality and the population's access to the social benefits of health care, retirement provision and modern medicine. This indicator makes an

(14) INE, 2007. "Men and Women in Spain" ("Mujeres y hombres en España").

(15) Ecuador, Morocco, Romania, Colombia, the United Kingdom, Argentina, Germany, Bolivia, Bulgaria, Peru and China.

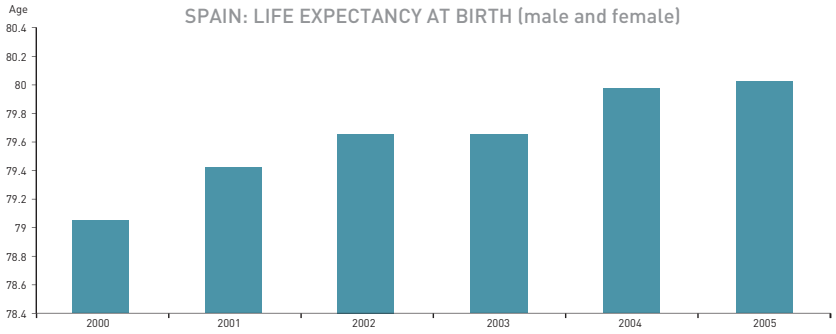
(16) Income from: widowhood benefits, old age benefits, unemployment benefits, savings, self-employment, salary and other benefits.

(17) Organic Law 3/2007 (Ley Orgánica 3/2007), of 22 March 2007, on the effective equality of men and women, constitutes a major step toward evening out the socio-economic imbalance between the genders.
[Official State Gazette No. 71 of 23 March 2007].

estimate of the average number of years that people born in a certain year would live if the mortality rate were to remain constant. The highest life expectancy rates (2000-2005) are found in developed countries, with North America in the lead (77.6), while Africa registers the lowest rate (49.1).

According to the INE, life expectancy in Spain (2005) for men and women stood at an average of 80.23 years, while ten years previously (1995) it was 77.25 years. Life expectancy for women was 83.48[18] years and for men 76.96 years. It should be noted that since 2000 this indicator has remained relatively stable, only increasing by 1.18 points.

SPAIN: LIFE EXPECTANCY AT BIRTH (male and female)



Source: INE[19]

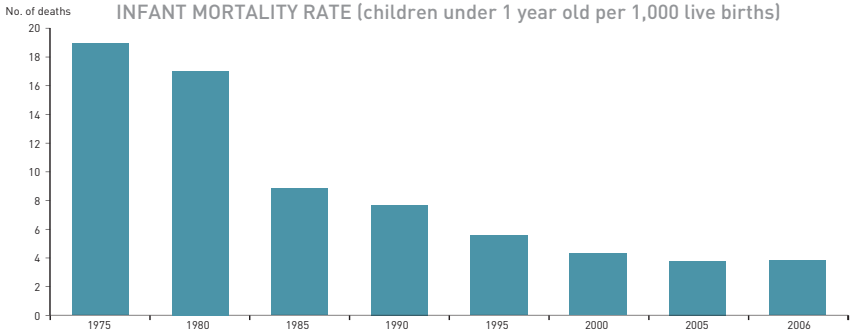
According to Eurostat (2005), the life expectancy of Spanish women is one of the highest among developed countries, only surpassed in Europe by Liechtenstein (84.09) and Switzerland (83.96). This same source has published a report stating that life expectancy in Spain will increase by approximately four years by the mid-21st century, reaching an average age of 87.9 in the case of women and 81.4 in the case of men.

When this indicator is analysed by Autonomous Community, some differences come to light. Ten regions (Aragon, Cantabria, Castile-Leon, Castile-La Mancha, Catalonia, Galicia, Madrid, Navarre, the Basque Country and Rioja) maintained a life expectancy above the national average throughout the period analysed (2000-2005). In 2005, however, eight regions continued to fall below the national average: Andalusia, Asturias, the Canary Islands, Valencia, Extremadura, Ceuta and Melilla.

(18) The index provided by Eurostat for Spanish women in 2005 is slightly higher: 83.66 years.
(19) Notes:
1) From 2002 onwards, the population figures used by the INE are Current Population Estimates calculated on the basis of the 2001 Census, which may be subject to review.
2) Life expectancy has been deduced from complete mortality tables calculated by taking deaths over two years (the baseline year and the previous year) and the population at 1 January in the baseline year.

As regards infant mortality, this demographic indicator shows the number of deaths for every thousand live births. It measures the infant population under one year of age, although it is now also common to include children younger than five years old. Obviously, this indicator is related to a country's level of development and to the level of health care received by the population. However, it is also linked to environmental conditions, which include housing hygiene and safety, water quality and air quality.

INFANT MORTALITY RATE (children under 1 year old per 1,000 live births)



Source: INE.2007. Basic Demographic Indicators (Indicadores demográficos básicos). Mortality (Mortalidad). Infant Mortality Rate per 1,000 births (Tasa de mortalidad infantil, por 1000 nacidos). Total for country and Autonomous Communities

Although innovations in medicine and basic health care have increased life expectancy in recent decades, international inequalities are so stark that the United Nations has included reducing infant mortality among the Millennium Development Goals[20]. According to Eurostat (2005), the highest infant mortality rates in the EU-27 are registered in Romania (15 per thousand) and Bulgaria (14 per thousand), while in Luxembourg they stand at the opposite extreme at 2.6 per thousand.

In Spain, the infant mortality rate has been falling annually since 1975. In 2006, it stood at 3.77 per thousand births, one of the lowest in Europe and world-wide. There was a spectacular drop between 1975 and 1985 and, from that year on, the rate has fallen more slowly. In this respect, a significant change has been seen in the Autonomous City of Ceuta, where the rate has plummeted from 44.8 per thousand (1975) to 7.81 (2006), although it still surpasses the national average. Eight regions have lower-than-average rates, with Navarre at the forefront (1.88 per thousand).

(20) The United Nations Millennium Development Goals include reducing the mortality of children under the age of 5 years old, setting the target of "reducing by two thirds, between 1990 and 2015, the under-five mortality rate". In 2004, there was a review of the results achieved, which found that 91 countries were progressing too slowly. In 2007, Unicef considered it was an achievement to have reduced infant mortality figures from 13 million per year (1990) to 9.7 million (2006). The preventable causes of mortality include "lack of drinking water, poor health conditions and measles".

It is interesting to note the relationship between the drop in the infant mortality rate, the fertility rate (number of children per woman of reproductive age) and the increase in the average age at which women become mothers (30.9 years old in 2005), all aspects that have played a part in stabilising population growth in Spain for a number of decades.

The implementation of universal social security coverage, development of the National Health System from 1986 onwards, vaccination campaigns, development of specialist gynaecology and paediatrics units in hospitals and health centres, together with a general improvement in the standard of living, have all contributed to the situation in Spain revealed by the indicators.

Access to Information and Communication Technologies (ICT)

In the last half of 2005, 56.4% of Spanish households owned a computer of some kind. One year later (2006), this figure had grown to 58.4%. Desk-top PCs continue to be the most common type (52.3%), with lap-tops representing 18.5% and other types of computer 6.4%. The following Autonomous Communities had most household ICT equipment: Madrid (69.6%), Catalonia (62.1%), the Basque Country (60.6%) and Rioja (58.6%).

In the last half of 2006, about 20 million people used a computer at some time, representing 61% of the population aged between 16 and 74 years old. There are no significant differences between Spaniards and foreign residents in terms of computer use, though there is a clear imbalance between men (57.6%) and women (50.8%).

HOUSEHOLDS WITH BROADBAND INTERNET CONNECTION (%), 2004-2006

	2004	2005	2006
UE-27	14	23	30
UE-25	14	23	32
UE-15	17	25	34
Eurozona	s.d.	23	31
España	15	21	29

Source: Eurostat (data gathered from the INE website).
Note: For the purposes of these statistics, "household" is considered to mean those with at least one member between 16 and 74 years.

In 2005, 45.4% of the population aged between 16 and 74 used the Internet. In 2006, this percentage had grown by more than two points (48.6%), which means that about 18 million people used the Internet, the vast majority (82.9%) connecting regularly (daily or weekly). The proportion of foreign residents in Spain who habitually use the Internet is greater (50.5%) than the percentage of Spaniards (48.5%).

Spanish Internet users mainly connect from their own homes (70.7%) or their place of work (45%). Use of cybercafés by foreign residents is very widespread. The main Internet services used by private individuals are information searches relative to goods and services, e-mail, access to media and entertainment, and information searches on websites provided by the Public Administration.

According to figures from Eurostat, in 2002, 39% of EU-15 households had an Internet connection, and this grew to 54% in 2006. In Spain, this figure has risen from 28% in 2003 to 39% in 2006. The number of broadband connections has grown by 14 points in Spain since 2004 and is now just one point below the EU-27 average, and only five behind the EU-15 average, as may be seen in the accompanying table.

DIGITAL DIVIDE (%) BETWEEN MEN AND WOMEN (2004-2006)

Source: INE. 2007. Survey on Information and Communication Technologies Equipment and Use (Encuesta sobre equipamiento y uso de tecnologías de información y comunicación).

As regards the population who use electronic commerce, in 2005 the percentage was 8%, while in 2006 it had grown to 11.7%, which means that it is used by approximately 4 million people. Madrid is the leader in the purchase of goods and services via this channel (16%), although the Balearic Islands are also above the national average, along with Catalonia, the Basque Country, Rioja and Navarre.

The following main products are purchased using this system: travel and accommodation, tickets to shows, books, magazines and e-learning material. The following main problems are mentioned by users as regards this kind of commerce: misleading advertising, delays in delivery and lack of information on guarantees.

The digital divide[21] between men and women has been narrowing since 2004. The graph shows the percentage difference in use of the two most important technologies, computers and internet, which, as may be seen, is more frequent among men. As regards computer use, this difference has dropped by 3.4 percentage points since 2004, while in Internet use (which shows a less marked difference), it has decreased by 2.2 percentage points in the same period.

Public participation

Campaigns to raise public awareness and introduce permanent measures to facilitate mobility and reduce traffic

The problems caused by road traffic are well-known: air pollution, noise, congestion and traffic accidents. To find the keys to achieving sustainable mobility and to respond to existing problems, the European Union has been promoting the initiative "In town without my car!" since 1999. The objectives are to make citizens aware of the need to use automobiles rationally and to promote public transport, journeys on foot and bicycle use. From 2002 onwards, this initiative was combined with “European Mobility Week”.

SPAIN: IMPLEMENTATION OF PERMANENT MEASURES TO IMPROVE MOBILITY IN TOWNS AND CITIES (NO.)

Permanent measures	2002	2003	2004	2005	2006	2007
Total	666	897	777	1,204	1,126	2,491
Average per town/city	3.22	3.68	3.63	4.00	4.28	10.17

Source: MMA. European Mobility Week, "In town without my car!", 2007. Final Report.

The number of European towns and cities participating in the initiative's first edition in 1999, reached 164, a figure that rose to 2,011 in 2007, highlighting its success and the extent to which its message is reaching citizens across Europe. A recent report on the EU-27 by the European Commission[22] found that 50% of Europeans use their car as a habitual means of transport; at the same time, however, a similar percentage say they are willing to pay more for less polluting vehicles, walk more or use a bicycle as a means of transport, and adopt environmentally friendly driving habits to reduce pressure on the environment.

(21) “Digital divide” means the percentage point difference between genders regarding the main indicators on use of information and communication technologies.

(22) European Commission, 2007: “Eurobarometer. Attitudes on Issues Related to EU Transport Policy. Analytical Report” (Flash EB series #206 b)

Spain has been involved in these initiatives since 2000 and a growing number of municipalities and citizens have taken part. In 2006, 284 municipalities participated in “In town without my car!” and 245 took part in European Mobility Week.

European Mobility Week 2007 focused on the theme "Streets for People", with the aim of raising awareness about the problems created by majority use of cars as a means of transport. The distinction that had been made between participation in one initiative or the other ceased to be applied in 2007, giving rise to two new categories : "outstanding towns and cities", which are those that meet all the requirements of European Mobility Week, and "participating towns and cities", which partially met the required criteria.

One of this initiative's goals is for towns and cities to implement a wide variety of permanent measures of differing scope, among which are pedestrianisation, setting up mobility programmes in schools and companies, improving infrastructure for bicycles, extending public transport networks, implementing plans for goods distribution and organising mobility forums.

In 2007, the permanent measures most applied involved improving infrastructure, eliminating architectural barriers, launching aware-raising campaigns, lowering pavements, creating or extending pedestrian areas, improving cycle lane networks, and improving bicycle facilities.

The total number of participating municipalities in Spain was 305, of which 82 were considered to have met all the requirements of “outstanding towns and cities”. The total number of citizens involved amounted to 18,802,793 and, out of these, 8,812,877 lived in “outstanding towns and cities”.

By Autonomous Community, the leading performers were, as in previous years, Catalonia (101) and the Basque Country (101), followed at some distance by the Canary Islands (15), Castile-Leon (15), Andalusia (13), Valencia (12), Extremadura (12) and Madrid (9). The largest number of “outstanding towns and cities” was in the Basque Country (25), followed by Extremadura (12), the Canary Islands (8), Castile-Leon (8) and Andalusia (7).

CENEAM: Lead Centre for Environmental Education in Spain

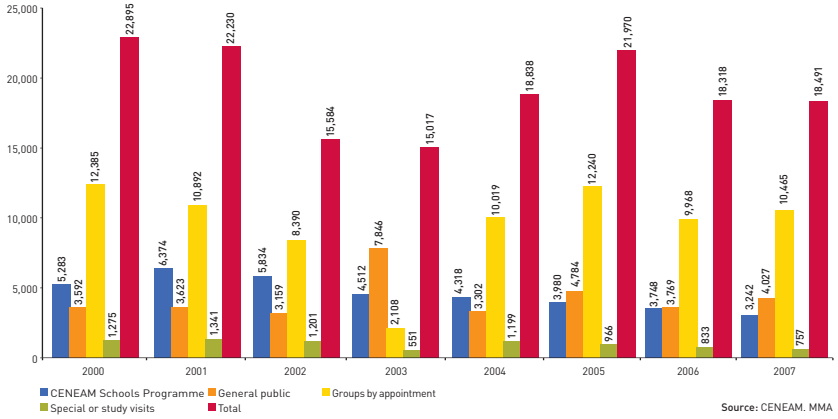
The Spanish National Centre for Environmental Education (CENEAM – *Centro Nacional de Educación Ambiental*) reports to the Spanish Ministry of the Environment

through the National Parks Agency *(Organismo Autónomo Parques Nacionales)*. Its objective is to increase citizens' sense of environmental responsibility through a series of educational strategies. The Centre's work focuses on developing a wide range of environmental education services, as well as on implementing programmes and designing and producing materials and other resources for people working in the field, students and the public in general.

The CENEAM manages a specialist Documentation Centre holding over 20,000 papers, 391 titles (periodicals) and an archive of almost 80,000 images. This agency widely distributes its content via Internet[23] and one of its leading publications is the Environmental Education Resource Guide *(Guía de Recursos para la Educación Ambiental)*, a directory of equipment, materials and documents. It also runs an extensive training programme through its Summer School *(Aula de Verano)*, Open Class-room *(Aula Abierta)* and by providing courses to various organisations. In 2006, it held 54 courses attended by a total of 1,296 students.

Apart from carrying out the activities mentioned above, the CENEAM collaborates with other Ministry of the Environment departments in matters relating to access to information, awareness-raising, education and public participation in issues of climate change; implementation of the Natura 2000 network, by co-publishing a manual aimed at promoting communication and public participation; monitoring compliance with the recommendations set out in the White Paper on Environmental Education in Spain; and holding seminars.

NO. OF VISITORS TO THE SPANISH NATIONAL CENTRE FOR ENVIRONMENTAL EDUCATION - CENEAM



Source: CENEAM. MMA

(23) www.mma.es/ceneam

The graph shows the most significant figures for the period 2000-2007. Over this time, the CENEAM received 153,313 visitors including teachers, students and general public, recording an average of nearly 20,000 visitors per year. 50% of visitors came in organised groups, 24% through the CENEAM Schools Programme, 22% of visitors were members of the general public and 5% were on study visits. As regards the first programme, meetings were also held with teachers working on the 4 levels into which it is structured.

It is worth noting that in the last two years (2006-2007), a monthly average of around 1,500 people visited the Centre. Visitor numbers peaked between April and July and dropped to their lowest levels in December, January and February.

CENEAM'S MAIN ACTIVITIES (2006)

- **CENEAM Schools Programme:** four different levels according to student age. On level 4, it promotes active student involvement in environmental care and improvement.
- **Green Households:** aimed at families and oriented towards saving water and energy in homes.
- **"El Robledo" Nature Class:** equipment loaned to schools, associations and non-profit organisations. In 2006, it was used by 69 groups and 2,193 people.
- **"From My School for My Town *(De mi escuela para mi ciudad)*":** project running since 1998, aimed at encouraging school-children to participate in improving the city of Segovia. In 2006, 7 schools and 1,300 children took part.
- **Educational visits and walks (around the Valsaín area):** intended for the general public to discover the nature, history and traditions of this area of great environmental value.
- **Touring exhibitions:** theme-based exhibitions, including exhibitions on climate change and the Sierra de Guadarrama, which have been loaned to institutions and non-profit organisations.