

8 July 2009

Statistics on Biotechnology Use
Provisional results. Year 2007

**Business expenditure on Biotechnology-related activities grows
17.8% in 2007 as compared with the previous year**

**The number of companies that carry out biotechnological activities
increases 15.9%**

Expenditure on Biotechnology-related activities in the business sector reached 540 million euros in 2007, with a 17.8% increase as compared with the previous year.

In total, 764 companies carried out Biotechnology-related activities during the year 2007, indicating an increase of 15.9% as compared with the previous year. 12.8% of these companies had income of international origin related to biotechnological activities.

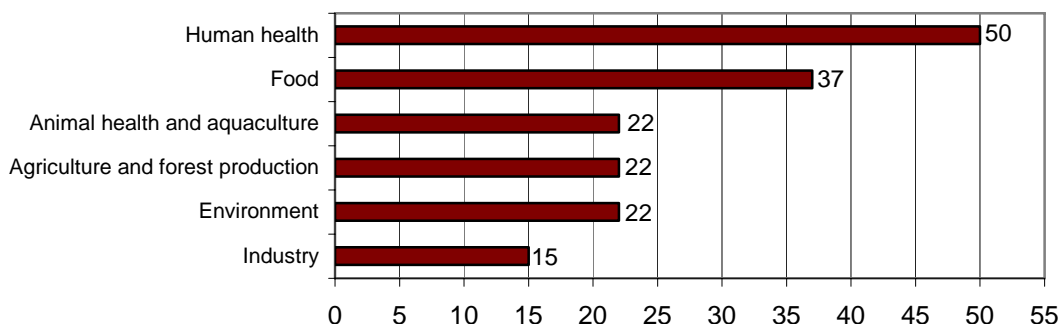
In the business sector, 7,218 persons were dedicated to Biotechnology-related activities, on a full-time equivalent, 9.4% more than in 2006.

For the 33.7% of companies with Biotechnology-related activities, said activities were their main or sole activities. 23.4% considered them to be a secondary line of business, and 42.9% claimed that they were a necessary tool for one or several stages of the production process.

Areas of Biotechnology application

Among the areas of final application of the products obtained from the use of the different types of biotechnology, worth noting were human health and food, with 50% and 37%, respectively, of the total units with biotechnological activities.

**Percentage of units with biotechnological activities, by area of
final application of Biotechnology. Year 2007**



Internal expenditure on Biotechnology-related R&D activities increases 20.6% in 2007

Internal expenditure on Biotechnology-related R&D activities reached 1,123 million euros in 2007, accounting for 8.4% of total expenditure on internal R&D activities, and a 20.6% increase as compared with 2006.

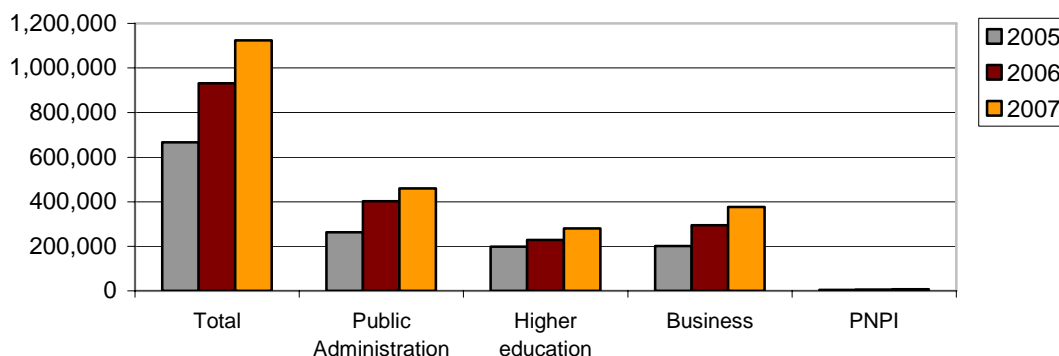
By field of operation, the Public Administration presented the highest percentage of total expenditure on Biotechnology R&D activities (40.9%), followed by the Business sector (33.5%) and Higher education (25.0%).

The business sector increased its internal expenditure on Biotechnology-related R&D activities 27.6% in 2007. In addition, the number of companies with Biotechnology R&D activities registered an increase of 20.1%.

In Higher education, internal expenditure on Biotechnology R&D registered growth of 22.9%, whilst in the Public Administration, the annual rate was 14.2%.

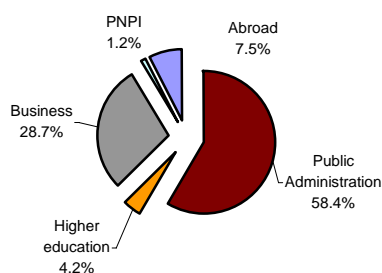
Evolution of expenditure on Biotechnology-related R&D activities

(thousands of euros)



Biotechnology-related R&D activities were mainly financed by the Public Administration (58.4%) and the private sector (28.7%). Funds originating abroad (7.5%), from Higher education (4.2%) and Private Non-Profit Institutions (1.2%) financed the rest.

Internal expenditure on Biotechnology-related R&D activities, by origin of funds. 2007



Comunidad de Madrid and Cataluña record the greatest expenditure

The Autonomous Communities which incurred the greatest expenditure on Biotechnology R&D activities were Comunidad de Madrid and Cataluña, followed by Comunitat Valenciana, Andalucía and País Vasco.

Expenditure on Biotechnology R&D, by field of operation and by Autonomous Community

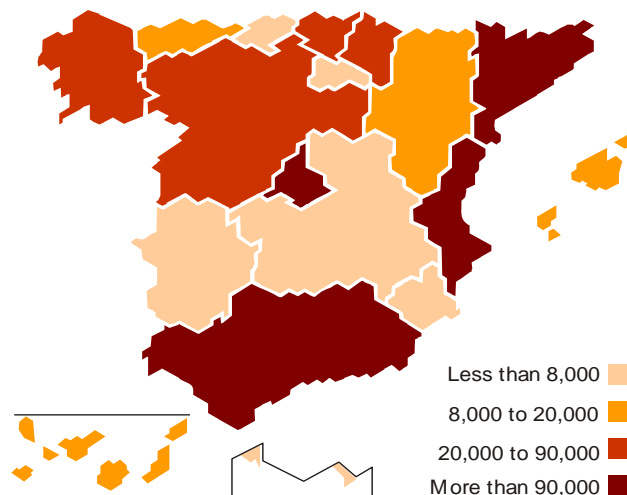
Thousands of euros

	TOTAL	Rest of sectors *	Companies
TOTAL	1,123,168	747,022	376,146
Andalucía	103,836	77,631	26,205
Aragón	8,596	x	x
Asturias (Principado de)	12,127	10,652	1,475
Balears (Illes)	9,779	9,409	370
Canarias	9,270	7,586	1,684
Cantabria	637	-	637
Castilla y León	39,975	29,830	10,145
Castilla-La Mancha	6,068	5,363	705
Cataluña	300,259	185,106	115,153
Comunitat Valenciana	103,940	88,575	15,365
Extremadura	4,239	2,308	1,931
Galicia	26,811	21,292	5,519
Madrid (Comunidad de)	369,510	248,944	120,566
Murcia (Región de)	6,035	4,347	1,688
Navarra (Comunidad Foral de)	39,903	28,209	11,694
País Vasco	78,202	21,971	56,231
Rioja (La)	3,981	x	x
Ceuta and Melilla	-	-	-

(*) Rest of sectors: Public Administration, PNPI and Higher education

x: Data protected by statistical secrecy

Biotechnology R&D Expenditure in 2007 (thousands of euros)

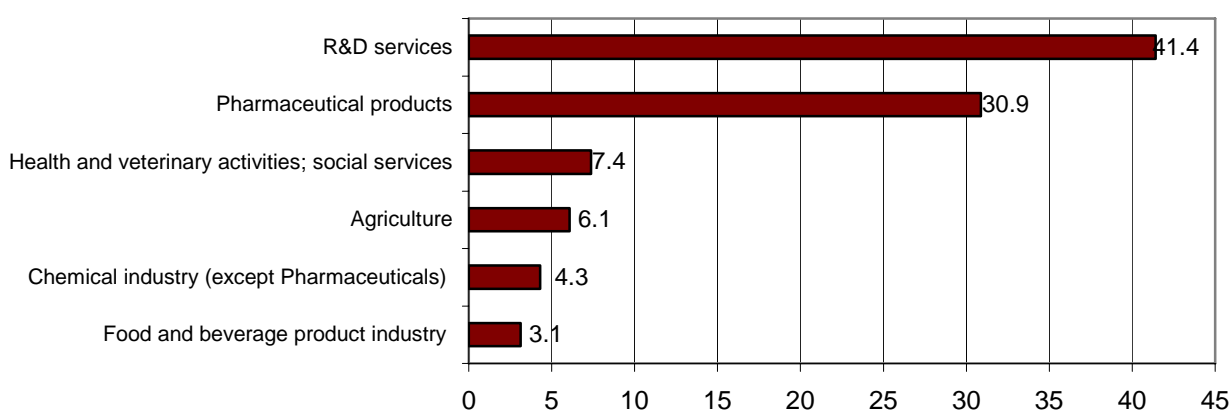


Expenditure on Biotechnology-related R&D activities in the business sector

The Services sector accounted for 53.9% of expenditure on Biotechnology R&D in 2007, while the companies in the Industry sector accounted for 39.5%.

By branch of activity, of note were *R&D services* (with 41.4% of total expenditure) and *Pharmaceutical products* (30.9%).

Distribution of expenditure on Biotechnology-related R&D activities, by branch of activity. Year 2007 (%)



Personnel employed in Biotechnology-related R&D activities increases 14.3% as compared with 2006

The number of persons employed in Biotechnology-related R&D activities on a full-time equivalent increased 14.3% in 2007. The number of women employed in these activities grew 17.0%, while the number of men grew 10.6%.

In the year 2007, a total 17,979 persons were dedicated to Biotechnology R&D activities, on a full-time equivalent, representing 8.9% of the total personnel employed in R&D activities.

The set of researchers in Biotechnology R&D activities reached 11,161 persons, accounting for 9.1% of the total R&D researchers, and an increase of 11.7% as compared with the year 2006.

In turn, the companies employed 4,063 persons on a full-time equivalent, with an interannual increase of 12.2%. This figure represented 4.6% of the total personnel employed in R&D.

Companies employed 2,288 researchers on a full-time equivalent, 13.2% more than in 2006. This figure represented 5.4% of the total R&D researchers.

58.2% of Biotechnology-related R&D activities personnel were women. The highest percentages of female participation were recorded in Private Non-Profit Institutions (80.3%) and in the Public Administration (61.3%). In business, this percentage stood at 59.6%.

Personnel employed in Biotechnology-related R&D activities, by field of operation, according to occupation and sex. Year 2007

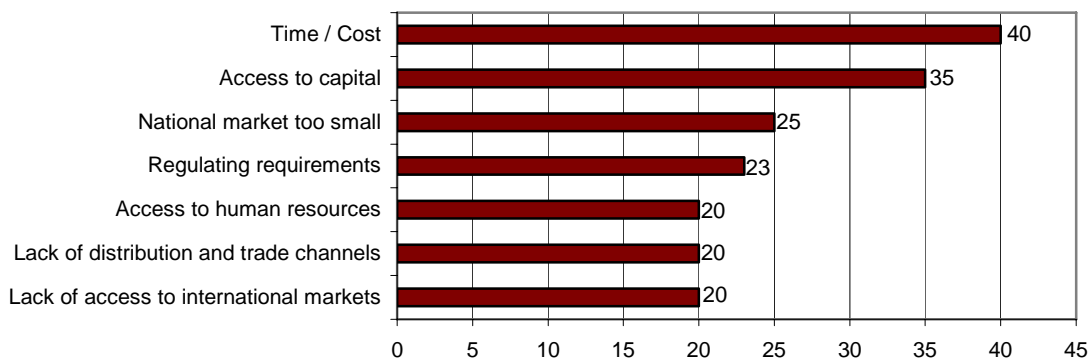
On a full-time equivalent

Field of operation	Total		Researchers	
	Total	Women	Total	Women
TOTAL	17,979	10,471	11,161	6,108
Public Administration	8,254	5,056	4,708	2,685
Higher education	5,530	2,887	4,094	2,075
Business	4,063	2,422	2,288	1,295
PNPI	132	106	71	53

Obstacles to the development of Biotechnology

The obstacles that, with a high* valuation, prevented or hindered the progress of development and marketing activities of biotechnological products and processes, were time/cost and access to capital, with 40% and 35%, respectively, of the total units that carried out Biotechnology-related activities during the year 2007.

Obstacles to the development of Biotechnology. Year 2007 (%)



* The scale was: High, Medium, Low and Does not know

Methodological note

The Statistics on Biotechnology Use were prepared following the methodological guidelines of the OECD.

The information was collected, in the case of companies, through an additional module annexed to the Technological Innovation in Companies Survey, and aimed at all those units that were potentially linked to Biotechnology. In the case of the Public Sector, the information is collected through a module annexed to the Statistics on R&D Activities, and is aimed at all those units that carried out the R&D statistics, be they Higher education centres, Public Administration or PNPI.

As of the year 2006, the scope of the Biotechnology statistics was broadened, considering as the object of study those units with Biotechnology-related activities (not only Biotechnology R&D), analysing the type of biotechnological activities that they develop and the areas of final application of the products obtained from the same, as well as the obstacles that prevent or hinder the progress of the development and marketing of biotechnological products and processes.

As of 2007, the internationalisation of Biotechnology-related activities is taken into account.

Biotechnology comprises the application of science and technology to living organisms, as well as to their parts, products and models, in order to alter living or inert material, for the purpose of producing knowledge, goods or services.

The main aggregates for quantifying the national effort in Biotechnology-related activities, performed within the State throughout the year, comprise: expenditure on Biotechnology-related activities, personnel dedicated to these activities, including persons who have worked on a full-time equivalent (FTE), internal expenditure on Biotechnology R&D, which includes current and capital expenses, and the personnel dedicated to Biotechnology R&D tasks, which includes the set of persons who have worked on a full-time equivalent (FTE).

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