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Survey on the use of water in the agricultural sector. Year 2006

The amount of irrigation water used in the agricultural sector decreases 3.9% as compared with the year 2005

According to the Survey on the use of water in the agricultural sector, water use in farms reached 15,865 cubic hectometres in the year 2006, indicating a decrease of 3.9% as compared with the year 2005.

By type of crop, herbaceous crops reached 44.7% of total use. Considering irrigation techniques, the sprinkler and trickle techniques accounted for 54.7% of the total water.

Use of irrigation water by type of crop and irrigation technique

Unit: thousands of m³

	Year 2006	Percentage of the total	Percentage variation compared with 2005
By type of crop			
Herbaceous	7,088,133	44.7	- 7.3
Fruit trees	3,034,800	19.1	- 3.7
Olive grove and vineyard	2,681,770	16.9	16.4
Potatoes and vegetables	1,264,370	8.0	- 14.4
Other types of crops	1,795,882	11.3	- 7.0
Total	15,864,955	100.0	- 3.9
By irrigation technique			
Sprinkler	3,409,289	21.5	- 11.9
Trickle	5,263,360	33.2	8.3
Gravity and others	7,192,306	45.3	- 7.5
Total	15,864,955	100.0	- 3.9

By type of crop, potato and vegetable operations reduced their water use by 14.4% as compared with the year 2005. In contrast, olive groves and vineyards increased their use of water by 16.4%.

By irrigation technique, the amount of water applied to crops by sprinkler and gravity techniques decreased 11.9% and 7.5%, respectively; in turn, the amount of water applied to crops via localised or trickle techniques increased 8.3% interannually.

Origin of irrigation water

79.7% of the water available to irrigators came from surface sources, 19.0% from underground sources and 1.3% from other water sources, such as desalinated water (marine or salubrious) or reused water (from waste water treatment plants).

Origin of irrigation water

Unit: thousands of m³

	2006	%
Surface water	13,929,893	79.7
Groundwater	3,319,011	19.0
Other water resources	224,674	1.3
TOTAL	17,473,578	100.0

Use of irrigation water by Autonomous Community

The Autonomous Communities which used the most water in 2006 were Andalucía, representing 23.8% of the total, and Aragón, with 14.2%.

At the other end of the scale, always considering Communities with an irrigation area greater than 1.0% of the national total, were La Rioja (1.2%) and Navarra (2.8%).

Use of irrigation water by Autonomous Community

Unit: thousands of m³

	Year 2006	Percentage of total	Percentage variation compared with 2005
Andalucía	3,776,716	23.8	- 7.3
Aragón	2,252,975	14.2	0.9
Castilla y León	2,149,175	13.5	- 6.3
Castilla-La Mancha	1,722,266	10.9	- 4.7
Cataluña	1,420,633	9.0	- 0.2
Comunitat Valenciana	1,547,102	9.8	- 3.4
Extremadura	1,412,555	8.9	- 1.0
Murcia (Región de)	527,511	3.3	- 6.3
Navarra (Comunidad Foral de)	438,226	2.8	- 4.4
Rioja (La)	189,837	1.2	- 1.2
Rest of Autonomous Communities	427,959	2.6	- 1.0
Spain	15,864,955	100.0	- 3.9

Use of water for irrigation decreased 7.3% in Andalucía and 6.3% in the Autonomous Communities of Castilla y León and Región de Murcia as compared with the year 2005. Aragón experienced an increase of 0.9%.

Methodological note

The INE has been carrying out this survey annually, in order to estimate the volume of irrigation water used by farms. The survey is aimed at 576 irrigation communities.

The 1994 General Irrigation Communities Catalogue is used. It is published by the Ministry of Public Works, Transport and Environment, updated with information from the INE Central Companies Directory (CCD) as well as other, supplementary information from administrative registers of the Ministry of the Environment, and Rural and Marine Environment and the Autonomous Communities.

The selection is exhaustive for those irrigation communities that include farms with a total area greater than 2,000 hectares. The irrigation communities with an area less than this magnitude are studied by sample, selecting a quota of entities that are previously stratified by size, using a commitment allocation that is either uniform or proportional, so that for each Autonomous Community, the irrigation area studied is approximately 60% of the total.

To refer the final results to the total irrigation land in each Autonomous Community (granted that the irrigation communities account for the distribution of water in approximately two thirds of the irrigation area of Spain), we first carry out a correction of the volume of underground water captured by the farms affiliated to irrigation communities, used to complement the water supplied by them. Second, we perform the expansion of the estimated consumption per hectare for the sample, using the information on the irrigation area by technique and type of crop, provided by the Survey on Crop Areas and Yields carried out by the aforementioned Ministry.

For further information see [INEbase-www.ine.es/en/welcome_en.htm](http://www.ine.es/en/welcome_en.htm) All press releases at: www.ine.es/en/prensa/prensa_en.htm

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