

30 January 2012

Survey on Production Methods in Agricultural Operations Year 2009

Main results

- 27.3% of head of herbivores (cattle, sheep, goats and horses) graze on communal land.
- Housing for pigs has a capacity for 27.4 million pigs. Cataluña and Aragón are the Autonomous Communities with the most spaces.
- 61.5% of irrigation operations use localised irrigation.
- 73.1% of the hectares of herbaceous crops are cultivated in a conventional manner, ploughed with outlets or discs.

Production methods in operations with livestock

•Use of communal pastures

In Spain, there were 25.1 million head of herbivores (cattle, sheep, goats and horses). 27.3% of them grazed on communal land.

By Autonomous Community, the highest percentages of herbivores sharing pastures were recorded in la Rioja (68.0%), Comunidad Foral de Navarra (53.5%) and Aragón (51.6%).

Conversely, Illes Balears (1.0%), Extremadura (4.1%) and Galicia (10.6%) presented the lowest percentages.

Regarding the operations with herbivorous livestock, there were a total of 192,938 such operations in Spain. 21.0% of them had herbivores that grazed on communal land.

The Autonomous Communities with the highest percentages of operations with herbivores that grazed on communal land were Comunidad Foral de Navarra (63.7%), La Rioja (63.3%) and Aragón (42.7%). In turn, those presenting the lowest percentages were Illes Balears (0.3%), Extremadura (7.0%) and Galicia (9.9%).

Use of communal pastures by operations with herbivores

| | Herbivores ⁽¹⁾ | | Grazing on communal land ⁽²⁾ | | | |
|-------------------------------------|---------------------------|-------------------|---|------------------|-------------------------------|--|
| | Operations | Head | Operations | Herbivores | Herbivores on communal land % | Operations with herbivores that graze on communal land % |
| National Total⁽³⁾ | 192,938 | 25,096,417 | 40,414 | 6,840,134 | 27.26 | 20.95 |
| Andalucía | 23,223 | 3,642,007 | 2,705 | 460,332 | 12.64 | 11.65 |
| Aragón | 6,907 | 2,322,232 | 2,948 | 1,199,262 | 51.64 | 42.68 |
| Asturias (Principado de) | 17,820 | 472,855 | 5,345 | 129,790 | 27.45 | 29.99 |
| Balears (Illes) | 4,144 | 337,023 | 13 | 3,468 | 1.03 | 0.31 |
| Canarias | 3,103 | 300,869 | 531 | 79,856 | 26.54 | 17.11 |
| Cantabria | 8,215 | 374,263 | 2,884 | 112,228 | 29.99 | 35.10 |
| Castilla y León | 24,778 | 4,803,194 | 9,058 | 2,021,821 | 42.09 | 36.56 |
| Castilla-La Mancha | 9,191 | 3,323,160 | 3,283 | 1,303,136 | 39.21 | 35.72 |
| Cataluña | 7,544 | 1,235,317 | 1,634 | 225,461 | 18.25 | 21.66 |
| Comunitat Valenciana | 2,296 | 460,060 | 523 | 143,183 | 31.12 | 22.77 |
| Extremadura | 17,903 | 4,354,258 | 1,257 | 179,312 | 4.12 | 7.02 |
| Galicia | 49,422 | 1,212,777 | 4,891 | 128,280 | 10.58 | 9.90 |
| Madrid (Comunidad de) | 1,771 | 201,751 | 585 | 58,945 | 29.22 | 33.01 |
| Murcia (Región de) | 2,168 | 693,434 | 360 | 151,312 | 21.82 | 16.59 |
| Navarra (Comunidad Foral de) | 3,369 | 730,273 | 2,144 | 390,552 | 53.48 | 63.65 |
| País Vasco | 10,314 | 449,215 | 1,768 | 128,333 | 28.57 | 17.14 |
| Rioja (La) | 768 | 183,699 | 486 | 124,861 | 67.97 | 63.26 |

(1) Source: Agrarian Census 2009

(2) Only communal land not given by "luck" or leased to livestock breeders

(3) Includes Ceuta and Melilla

•Stabling of pigs

Housing for pigs provided spaces for 27.4 million pigs in Spain.

The Autonomous Communities with the highest number of spaces were Cataluña (with 7.1 million), Aragón (6.0 million) and Castilla y León (3.6 million). On the contrary, Cantabria (9,218 spaces), País Vasco (14,257) and Principado de Asturias (20,966) were the regions with the least spaces.

By type of stable, in Spain, there were 24.0 million spaces in stables with floors made partially or totally of grating, 1.6 million in free stabling on a bed of straw and 1.8 million in another type of housing.

In stables with floors made partially or totally of grating, the highest figures of spaces were recorded in Cataluña, Aragón and Castilla y León. The lowest figures corresponded to Principado de Asturias, País Vasco and Cantabria.

The Communities with the most spaces in free stabling on a bed of straw were Castilla y León, Extremadura and Andalucía. The Autonomous Community with the least spaces was Comunidad de Madrid.

For the other types of stabling, Andalucía, Extremadura and Castilla y León presented the highest number of spaces. Cantabria and Comunidad de Madrid recorded the lowest.

Pig farming stables

| | Total stabling | | With floor totally or partially made of grating | | Free stabling on beds made of straw | | Other types of stabling/housing | |
|-------------------------------------|----------------|-------------------|---|-------------------|-------------------------------------|------------------|---------------------------------|------------------|
| | Operations | Spaces | Operations | Spaces | Operations | Spaces | Operations | Spaces |
| National Total⁽¹⁾ | 75,066 | 27,438,351 | 26,167 | 24,032,628 | 12,537 | 1,595,560 | 39,113 | 1,810,163 |
| Andalucía | 7,519 | 2,689,278 | 1,843 | 1,802,237 | 1,187 | 306,439 | 4,728 | 580,602 |
| Aragón | 3,163 | 6,018,060 | 3,088 | 5,796,061 | 133 | 160,166 | 126 | 61,832 |
| Asturias (Principado de) | 4,296 | 20,966 | 141 | 5,227 | 932 | 3,248 | 3,231 | 12,491 |
| Balears (Illes) | 2,026 | 69,884 | 154 | 29,410 | 601 | 17,563 | 1,364 | 22,911 |
| Canarias | 692 | 77,006 | 131 | 48,875 | 127 | 7,521 | 455 | 20,611 |
| Cantabria | 325 | 9,218 | 21 | 6,954 | 82 | 1,233 | 224 | 1,030 |
| Castilla y León | 6,058 | 3,580,223 | 2,285 | 2,876,060 | 1,452 | 448,215 | 2,825 | 255,948 |
| Castilla-La Mancha | 1,498 | 1,511,277 | 1,028 | 1,389,840 | 166 | 64,601 | 435 | 56,836 |
| Cataluña | 6,008 | 7,143,496 | 4,859 | 6,774,762 | 734 | 168,408 | 1,066 | 200,326 |
| Comunitat Valenciana | 1,338 | 1,407,970 | 1,257 | 1,345,252 | 46 | 24,569 | 74 | 38,150 |
| Extremadura | 6,675 | 938,172 | 1,252 | 280,730 | 2,195 | 310,901 | 3,656 | 346,541 |
| Galicia | 32,216 | 1,360,885 | 8,534 | 1,234,456 | 4,330 | 35,055 | 19,650 | 91,375 |
| Madrid (Comunidad de) | 50 | 33,763 | 16 | 31,741 | 10 | 127 | 27 | 1,896 |
| Murcia (Región de) | 1,096 | 1,783,823 | 971 | 1,662,304 | 76 | 40,903 | 121 | 80,617 |
| Navarra (Comunidad Foral de) | 1,021 | 664,254 | 407 | 633,728 | 305 | 3,729 | 370 | 26,797 |
| País Vasco | 909 | 14,257 | 100 | 6,902 | 101 | 1,165 | 712 | 6,190 |
| Rioja (La) | 174 | 115,820 | 80 | 108,090 | 58 | 1,718 | 49 | 6,012 |

(1) Includes Ceuta and Melilla

Production methods in agricultural operations with land

• Irrigation methods

Localised irrigation (trickle, micro-spraying, etc.) was the method used the most in agricultural operations. Specifically, it was used by 61.5% of the farms, representing 43.9% of the hectares irrigated.

Gravity was the second most commonly used method, with 35.5% of the operations and 29.7% of the irrigated area.

Lastly, irrigation by spraying was used by 13.9% of the operations, and 26.4% of the hectares irrigated.

Irrigation methods

| | Operations | % | Hectares | % |
|--------------|----------------|---------------|------------------|---------------|
| Total | 488,046 | 100.00 | 3,093,433 | 100.00 |
| Spraying | 67,609 | 13.85 | 816,595 | 26.40 |
| Localised | 299,913 | 61.45 | 1,358,390 | 43.91 |
| Gravity | 173,334 | 35.52 | 918,447 | 29.69 |

By Autonomous Community, Andalucía registered the highest number of operations with localised irrigation (26.3% of the total). It was followed by Comunitat Valenciana (19.2%) and Galicia (12.4%).

The Communities recording the least operations with localised irrigation were Comunidad de Madrid (0.3% of the total), La Rioja (0.8%) and Cantabria (1.0%).

Considering the localised irrigation areas, the greatest areas were found in Andalucía, Castilla-La Mancha and Comunitat Valenciana. In turn, the smallest areas were registered in Principado de Asturias, Cantabria and País Vasco.

Area irrigated by localised irrigation

| | Operations | % of operations | Hectares | % of hectares |
|-------------------------------------|----------------|-----------------|------------------|---------------|
| National Total⁽¹⁾ | 299,913 | 100.00 | 1,358,390 | 100.00 |
| Andalucía | 78,720 | 26.25 | 570,021 | 41.96 |
| Aragón | 9,046 | 3.02 | 58,360 | 4.30 |
| Asturias (Principado de) | 9,668 | 3.22 | 497 | 0.04 |
| Balears (Illes) | 4,562 | 1.52 | 5,808 | 0.43 |
| Canarias | 5,947 | 1.98 | 12,510 | 0.92 |
| Cantabria | 2,882 | 0.96 | 812 | 0.06 |
| Castilla y León | 11,543 | 3.85 | 33,741 | 2.48 |
| Castilla-La Mancha | 22,309 | 7.44 | 185,893 | 13.68 |
| Cataluña | 19,743 | 6.58 | 78,263 | 5.76 |
| Comunitat Valenciana | 57,513 | 19.18 | 181,286 | 13.35 |
| Extremadura | 9,849 | 3.28 | 76,987 | 5.67 |
| Galicia | 37,031 | 12.35 | 8,666 | 0.64 |
| Madrid (Comunidad de) | 930 | 0.31 | 4,125 | 0.30 |
| Murcia (Región de) | 14,843 | 4.95 | 115,835 | 8.53 |
| Navarra (Comunidad Foral de) | 4,441 | 1.48 | 15,017 | 1.11 |
| País Vasco | 8,634 | 2.88 | 1,458 | 0.11 |
| Rioja (La) | 2,253 | 0.75 | 9,112 | 0.67 |

(1) Includes Ceuta and Melilla

• Cultivation techniques

Conventional cultivation of ploughing with outlets or discs was the method used the most by Spanish agricultural operations. More than 373,000 operations used this method on almost eight million hectares of herbaceous crops (73.1% of the total).

The minimum cultivation method was used by 77,796 operations, and direct sowing was used by 22,892.

Land cultivation techniques for herbaceous crops

| | Operations | Hectares |
|---------------------|----------------|-------------------|
| Total | 442,453 | 10,885,471 |
| Conventional | 373,116 | 7,960,623 |
| Minimum cultivation | 77,796 | 2,223,575 |
| Direct sowing | 22,892 | 701,273 |

Methodological note

The Survey On Production Methods in Agricultural Operations is part of Agrarian Census 2009. It has been carried out for the first time, in partnership with the rest of the European Union countries, and in compliance with Regulation no. 1666/2008 of the European Parliament and of the Council.

The survey has been conducted by the National Statistics Institute (INE), in partnership with the Euskal Estatistika-Erakundea/Basque Statistics Institute and the Institut d' Estadística de Catalunya/Statistics Institute of Cataluña, according to the agreements signed between the INE and the respective Statistics Institutes.

The research was carried out throughout the country during the first quarter of the year 2010, by direct interview with the owners of 72,520 agricultural operations.

In País Vasco, all of the characteristics were researched comprehensively. In the rest of the territory, a sample of 55,966 agricultural operations was selected from Agrarian Census 2009. The survey uses a stratified random sample design. The strata are formed by crossing Autonomous Community, Economic Technical Orientation (ETO) and operation size. In each Autonomous Community, the estimators are calibrated to the most relevant variables from Agrarian Census 2009.

As in the Census, the data refers to agricultural year 2009, that is, the season from 1 October 2008 to 30 September 2009.

The main characteristics researched are the following:

- For those operations with land: variables complementary to the irrigation areas of the Census (average UAA irrigated in the last three years, irrigation area according to the method, origin of the water and management regime of the irrigation water), maintenance of landscaping elements, cultivation of the land, actions for preserving the soil, use and fertilisation techniques.

- For those operations with livestock: stabling of bovine livestock (cattle), porcine livestock (pigs) and laying hens; use of pastures and installations for storing natural fertilisers of animal origin.

On analysing the information, it must be considered that an operation may have different types of livestock and stables, and/or use different irrigation methods and cultivation techniques.