



ANNUAL AGRICULTURAL STATISTICAL SURVEY: 2020 and 2021

The Hellenic Statistical Authority (ELSTAT) announces the results of the Annual Agricultural Statistical Survey for the years 2020 and 2021.

A. CULTIVATED AREAS

The **total agricultural land** (arable land, horticulture land, permanent crops, and fallow land) amounts to 28,112.0 thousand stremmas in 2020 and 28,420.0 in 2021, recording an increase of 1.1%.

Cultivated areas by main crop type and by year are distributed as follows (Table 1, Graphs 1 and 2):

- in 2020, 57.4% of the agricultural land (16,143.0 thousand stremmas) is covered by arable crops (net area), 1.6% (442.8 thousand stremmas) by vegetable crops (net area), 35.8% (10,075.4 thousand stremmas) by permanent crops, whereas 5.2% (1,450.9 thousand stremmas) is fallow land.
- in 2021, 56.9% of the agricultural land (16,178.9 thousand stremmas) is covered by arable crops (net area), 1.7% (493.5 thousand stremmas) by vegetable crops (net area), 36.2% (10,295.7 thousand stremmas) by permanent crops, whereas 5.1% (1,451.9 thousand stremmas) is fallow land.

Table 1. Agricultural land by crop category (Greece total), 2020 – 2021

In thousand stremmas (1 stremma=0.1 ha)

Crop category	2020	2021	Change (%) 2021/2020
Total agricultural land	28,112.0	28,420.0	1.1
Irrigated	12,119.2	12,190.8	0.6
1. Arable land	16,143.0	16,178.9	0.8
Irrigated	7,343.8	7,341.1	0.0
2. Horticulture land	442.8	493.5	11.5
Irrigated	447.2	479.2	7.2
3. Permanent crops	10,075.4	10,295.7	2.2
Irrigated	4,328.2	4,370.6	1.0
4. Fallow land	1,450.9	1,451.9	0.1

Notes:

1. For the purposes of the Annual Agricultural Survey, agricultural land is defined as the coverage of the country's lands with vegetation that originated from human intervention, either on the reference year of the survey or historically.
2. Arable and horticulture land of the table above, refer to net areas, i.e., do not include successive/secondary crops.
3. Irrigated areas include the secondary / successive crops and do not refer to the net area.
4. Any discrepancies between sums, totals and percentages are due to rounding.

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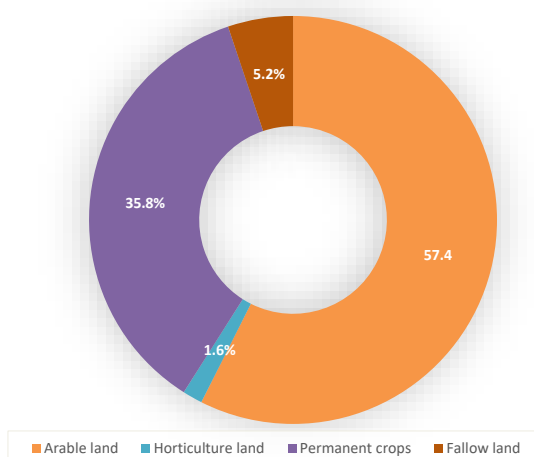
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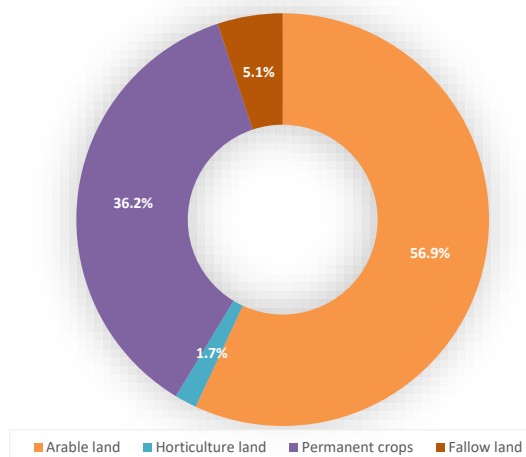
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Graph 1. Percentage (%) distribution of agricultural land by categories (Greece, total), 2020



Graph 2. Percentage (%) distribution of agricultural land by categories (Greece, total), 2021



The change of the most important cultivated crops, between 2020 and 2021, in terms of land area coverage, are the following (Table2):

- **durum wheat** increased by 15.3% in 2021 compared with 2020. More specifically, areas under durum wheat amounted to 2,712.0 and 3,127.8 thousand stremmas in 2020 and 2021 respectively,
- **grain maize** increased by 3.2% in 2021 compared with 2020. More specifically, areas under grain maize amounted to 878.9 and 906.9 thousand stremmas in 2020 and 2021 respectively,
- **cotton** decreased by 5.5% in 2021 compared with 2020. More specifically, areas under cotton amounted to 2,782.2 and 2,628.2 thousand stremmas in 2020 and 2021 respectively,
- **alfalfa (multiannual clover)** increased by 2.4% in 2021 compared with 2020. More specifically, areas under alfalfa amounted to 1,650.8 and 1,691.0 thousand stremmas in 2020 and 2021 respectively,
- **vineyards (total)** decreased by 0.7% in 2021 compared with 2020. More specifically, areas under vineyards amounted to 701.8 and 697.0 thousand stremmas in 2020 and 2021 respectively,
- **orange trees** increased by 2.2% in 2021 compared with 2020. More specifically, areas under orange trees amounted to 271.8 and 277.8 thousand stremmas in 2020 and 2021 respectively,
- **peach – nectarine trees** decreased by 2.4% in 2021 compared with 2020. More specifically, areas under peach – nectarine trees amounted to 380.6 and 371.3 thousand stremmas in 2020 and 2021 respectively,
- **olive trees (total)** increased by 2.3% in 2021 compared with 2020. More specifically, areas under olive trees amounted to 7,362.0 and 7,531.6 thousand stremmas in 2020 and 2021 respectively.

Table 2. Crop land, by category and cultivated species (Greece total), 2020 – 2021.

In thousand stremmas (1 stremma=0.1 ha)

Cultivated species by category	2020	2021	Change (%) 2021/2020
1. Arable land	16,199.1	16,228.8	0.2
1.1 Cereals for grain	6,597.4	6,861.1	4.0
Common wheat	836.1	934.7	11.8
Durum wheat	2,712.0	3,127.8	15.3
Barley	1,247.4	988.4	-20.8
Grain maize	878.9	906.9	3.2
Other cereals	923.0	903.2	-2.1
1.2 Edible pulses	296.6	301.8	1.7
1.3 Industrial Plants	4,044.3	3,788.5	-6.3
Tobacco	123.5	101.8	-17.5
Cotton	2,782.2	2,628.2	-5.5
Sunflower	852.2	810.3	-4.9
Rapeseed	209.7	190.4	-9.2
Other industrial plants	76.8	57.7	-24.9
1.4 Aromatic plants	83.0	91.3	10.0
1.5 Fodder plants	4,893.7	4,902.5	0.2
1.5.1 for grain	777.7	701.7	-9.8
Vetch	401.2	325.8	-18.8

Cultivated species by category	2020	2021	Change (%) 2021/2020
Lupin	133.5	116.1	-13.0
Fodder peas	124.0	119.0	-4.0
Other fodder plants for grain	119.1	140.8	18.2
1.5.2 for hay	4,116.0	4,200.8	2.1
Barley for hay	133.8	129.1	-3.5
Oats for hay	203.3	212.0	4.3
Vetch for hay	216.2	239.9	11.0
Alfalfa (multiannual clover)	1,650.8	1,691.0	2.4
Clover (annual and other multiannual)	392.6	385.0	-1.9
Lowland hay meadows	891.7	898.0	0.7
Maize green or for silage	296.8	307.5	3.6
Other fodder plants for hay	330.8	338.3	2.3
1.6 Clover grain	50.5	48.6	-3.8
1.7 Melons and watermelons	113.2	110.8	-2.1
1.8 Potatoes	119.2	124.2	4.2
2. Horticulture land	471.5	517.8	9.8
3. Permanent crops	10,075.4	10,295.7	2.2
3.1 Vineyards (total)	701.8	697.0	-0.7
Vines for wine	389.7	390.9	0.3
Vines for table grapes	122.9	125.3	1.9
Vines for currants	189.2	180.9	-4.4
3.2 Trees in compact plantations	9,373.6	9,598.6	2.4
3.2.1 Citrus trees	390.8	401.5	2.7
Lemon trees	27.6	28.8	4.2
Orange trees	271.8	277.8	2.2
Tangerine trees	89.3	92.8	4.0
Other citrus trees	2.1	2.1	0.8
3.2.2 Fruit trees	319.5	334.0	4.5
Pear trees	44.0	42.0	-4.5
Apple trees	92.8	94.2	1.5
Kiwi trees	112.9	125.8	11.5
Other fruit trees	69.8	71.9	3.1
3.2.3. Stone fruit trees	650.0	653.3	0.5
Peach - Nectarine trees	380.6	371.3	-2.4
Cherry trees	161.6	167.2	3.4
Apricot trees	83.4	89.9	7.9
Other stone fruit trees	24.5	24.8	1.5
3.2.4. Nut trees	452.5	480.6	6.2
Almond trees	162.7	173.2	6.5
Walnut trees	148.9	157.4	5.7
Chestnut trees	84.0	88.1	4.9
Other nut trees	56.9	61.9	8.8
3.2.5. Olive trees	7,362.0	7,531.6	2.3
3.2.6. Other trees	198.9	197.6	-0.6

Notes:

1. Arable and horticulture land include secondary/successive crops.
2. Any discrepancies between sums, totals and percentages are due to rounding.

B. PRODUCTION OF AGRICULTURAL PRODUCTS

The changes in the production of the most important agricultural products, in terms of production volume, are the following (Table 3):

- **durum wheat** increased by 14,8% in 2021 compared with 2020. More specifically, durum wheat production amounted to 813.8 and 934.6 thousand tonnes in 2020 and 2021 respectively,
- the production of **grain maize** increased by 4.5% in 2021 compared with 2020. More specifically, grain maize production amounted to 1,043.2 and 1,090.5 thousand tonnes in 2020 and 2021 respectively,

- **cotton** decreased by 2.4% in 2021 compared with 2020. More specifically, cotton production amounted to 868.6 and 847.4 thousand tonnes in 2020 and 2021 respectively,
- **tomatoes** increased by 1.0% in 2021 compared with 2020. More specifically, tomatoes production amounted to 653.4 and 659.8 thousand tonnes in 2020 and 2021 respectively,
- **grapes (total)** decreased by 0.1% in 2021 compared with 2020. More specifically, grapes production amounted to 696.2 and 695.6 thousand tonnes in 2020 and 2021 respectively,
- **must** decreased by 0.3% in 2021 compared with 2020. More specifically, must production amounted to 264.6 and 263.7 thousand tonnes in 2020 and 2021 respectively,
- **oranges** decreased by 9.6% in 2021 compared with 2020. More specifically, oranges production amounted to 698.3 and 631.1 thousand tonnes in 2020 and 2021 respectively,
- **apples** increased by 0.7% in 2021 compared with 2020. More specifically, apples production amounted to 299.4 and 301.5 thousand tonnes in 2020 and 2021 respectively,
- **olives** decreased by 0.2% in 2021 compared with 2020. More specifically, olives production amounted to 3,051.4 and 3,045.1 thousand tonnes in 2020 and 2021 respectively,
- **olive oil** decreased by 7.6% in 2021 compared with 2020. More specifically, olive oil production amounted to 276.7 and 255.7 thousand tonnes in 2020 and 2021 respectively,

Table 3. Production of basic agricultural products (Greece total), 2020 – 2021

In thousand tonnes

Agricultural products	2020	2021	Change (%) 2021/2020
Common wheat	258.5	287.4	11.2
Durum wheat	813.8	934.6	14.8
Barley	384.0	291.3	-24.1
Oats	99.1	99.0	-0.1
Grain maize	1,043.2	1,090.5	4.5
Rice	240.6	254.7	5.9
Cotton	868.6	847.4	-2.4
Sunflower	247.1	206.3	-16.5
Rapeseed	43.0	38.5	-10.3
Fodder vetch for grain	73.3	61.3	-16.3
Fodder lupins for grain	24.2	21.3	-12.2
Fodder peas for grain	26.6	24.9	-6.5
Barley for hay	47.2	42.3	-10.3
Oats for hay	79.4	81.5	2.7
Fodder vetch for hay	90.8	102.0	12.3
Alfalfa (multiannual clover)	1,895.8	1,901.7	0.3
Clover (annual and other multiannual)	441.7	408.9	-7.4
Lowland hay meadows	342.7	341.1	-0.5
Maize green or for silage	1,252.5	1,301.1	3.9
Watermelons	353.2	346.8	-1.8
Melons	74.0	71.9	-2.8
Potatoes	355.3	355.2	-0.1
Onions, dry	92.2	90.8	-1.5
Tomatoes	653.4	659.8	1.0
Cucumbers	138.9	130.1	-6.3
Peppers	129.8	128.4	-1.1
Strawberries	78.7	80.3	2.0
Olives	3,051.4	3,045.1	-0.2
Olive oil	276.7	255.7	-7.6
Grapes	696.2	695.6	-0.1
Must	264.6	263.7	-0.3

Agricultural products	2020	2021	Change (%) 2021/2020
Lemons	57.7	53.3	-7.7
Oranges	698.3	631.1	-9.6
Tangerines	176.6	166.6	-5.7
Pears	101.5	85.0	-16.3
Apples	299.4	301.5	0.7
Kiwi	276.4	298.6	8.0
Peaches – Nectarines	623.8	352.0	-43.6
Cherries	108.2	91.6	-15.3
Apricots	98.5	67.0	-32.0
Almonds	56.6	60.4	6.6
Walnuts	47.6	50.1	5.3
Chestnuts	37.3	37.6	0.8
Pomegranates	45.4	45.7	0.8

Notes:

1. The production of agricultural products refers to cultivated agricultural land in 2020 and 2021.
2. The production of arable and horticulture crops includes the production of the main and secondary/successive crops.
3. Any discrepancies between sums, totals and percentages are due to rounding.

C. LIVESTOCK: NUMBER OF ANIMALS AND PRODUCTION OF LIVESTOCK PRODUCTS

1. Number of animals

The changes in the number of the most important animal and poultry species, are the following (Table 4):

- **bovine animals** increased by 3.2% in 2021 compared with 2020. More specifically, bovine animals amounted to 742,794 and 766,755 heads in 2020 and 2021 respectively,
- **pigs** decreased by 3.5% in 2021 compared with 2020. More specifically, pigs amounted to 688,559 and 664,636 heads in 2020 and 2021 respectively,
- **sheep** increased by 2.2% in 2021 compared with 2020. More specifically, sheep amounted to 8,860,473 and 9,052,105 heads in 2020 and 2021 respectively,
- **goats** decreased by 3.6% in 2021 compared with 2020. More specifically, goats amounted to 3,890,214 and 3,751,549 heads in 2020 and 2021 respectively,
- **hens** increased by 7.5% in 2021 compared with 2020. More specifically, hens amounted to 34,032,905 and 36,596,568 heads in 2020 and 2021 respectively,
- **turkeys** increased by 6.3% in 2021 compared with 2020. More specifically, hens amounted to 521,545 and 554,573 heads in 2020 and 2021 respectively.

Table 4. Livestock (Greece total), 2020 – 2021

Number of animals or beehives

Livestock	2020	2021	Change (%) 2021/2020
Bovine animals	742,794	766,755	3.2
Pigs	688,559	664,636	-3.5
Sheep	8,860,473	9,052,105	2.2
Goats	3,890,214	3,751,549	-3.6
Hens	34,032,905	36,596,568	7.5
Geese	23,110	23,390	1.2
Ducks	18,121	18,284	0.9
Turkeys	521,545	554,573	6.3
Rabbits	550,313	550,336	0.0
Beehives	1,766,403	1,850,697	4.8

2. Meat Production

The changes in meat production by animal and poultry species, are the following (Table 5):

- **beef meat** increased by 2.8% in 2021 compared with 2020. More specifically, beef meat production amounted to 39.0 and 40.1 thousand tonnes in 2020 and 2021 respectively,
- **pork meat** decreased by 1.6% in 2021 compared with 2020. More specifically, pork meat production amounted to 79.1 and 77.8 thousand tonnes in 2020 and 2021 respectively,
- **sheep meat** decreased by 4.9% in 2021 compared with 2020. More specifically, sheep meat production amounted to 61.4 and 58.4 thousand tonnes in 2020 and 2021 respectively,
- **goat meat** increased by 1.3% in 2021 compared with 2020. More specifically, goat meat production amounted to 17.9 and 18.1 thousand tonnes in 2020 and 2021 respectively,
- **rabbit meat** decreased by 4.7% in 2021 compared with 2020. More specifically, rabbit meat production amounted to 2.0 and 1.9 thousand tonnes in 2020 and 2021 respectively,
- **poultry meat** (except ostriches) increased by 0.3% in 2021 compared with 2020. More specifically, poultry meat production amounted to 240.3 and 241.0 thousand tonnes in 2020 and 2021 respectively.

Table 5. Meat production by animal and poultry species (Greece total), 2020 – 2021

In thousand tonnes

Animal species	2020	2021	Change (%) 2021/2020
Bovine animals	39.0	40.1	2.8
Calves younger than 1 year	10.2	8.8	-13.8
Calves 1-2 years	20.5	22.8	11.2
Heifers, cattle more than 2 years and buffaloes	8.4	8.5	2.3
Pork	79.1	77.8	-1.6
Piglets	6.8	6.8	0.2
Pigs	72.3	71.0	-1.8
Sheep	61.4	58.4	-4.9
Lambs	46.4	43.3	-6.8
Sheep older than 1 year	15.0	15.1	1.1
Goats	17.9	18.1	1.3
Goat less than 1 year	13.3	13.4	0.7
Goats older than 1 year	4.6	4.8	2.9
Rabbits	2.0	1.9	-4.7
Poultry (except ostriches)	240.3	241.0	0.3

Note: Any discrepancies between sums, totals and percentages are due to rounding.

3. Production of livestock products

The changes in the production of milk and other livestock products, are the following (Table 6):

- **milk** decreased by 1.2% in 2021 compared with 2020. More specifically, total milk production amounted to 1,897.4 and 1,874.8 thousand tonnes in 2020 and 2021 respectively,
- **soft cheese** increased by 3.7% in 2021 compared with 2020. More specifically, soft cheese production amounted to 110.0 and 114.1 thousand tonnes in 2020 and 2021 respectively,
- **eggs** decreased by 2.2% in 2021 compared with 2020. More specifically, total eggs amounted to 1,530.0 and 1,495.9 million pieces in 2020 and 2021 respectively.

Table 6. Milk production and other livestock products (Greece total), 2020 – 2021

In thousand tonnes

Livestock products	2020	2021	Change (%) 2021/2020
Milk, total	1,897.4	1,874.8	-1.2
Cow milk	607.2	604.0	-0.5
Sheep milk	888.1	883.2	-0.6
Goat milk	402.1	387.5	-3.6
Livestock products			

Cheese, soft	110.0	114.1	3.7
Cheese, hard	30.7	27.2	-11.3
Myzithra cheese	11.3	11.3	0.2
Creme	6.8	6.6	-2.6
Eggs (million pieces)	1,530.0	1,495.9	-2.2
Honey	22.8	23.5	2.9

Note: Any discrepancies between sums, totals and percentages are due to rounding.

D. AGRICULTURAL MACHINERY

The changes in the number of agricultural machineries, are as follows (Table 7):

- **Agricultural tractors** decreased by 2.4% in 2021 compared with 2020. More specifically, the number of agricultural tractors amounted to 370,466 and 361,481 in 2020 and 2021 respectively,
- **Sprayers** decreased by 1.2% in 2021 compared with 2020. More specifically, the number of sprayers amounted to 251,446 and 248,527 in 2020 and 2021 respectively,
- **Irrigation systems** increased by 5.2% in 2021 compared with 2020. More specifically, the number of irrigation systems amounted to 380,477 and 400,084 in 2020 and 2021 respectively.

Table 7. Agricultural machinery (Greece total), 2020 – 2021

Number of agricultural machineries

Type of machinery	2020	2021	Change (%) 2021/2020
Agricultural tractors	370,466	361,481	-2.4
Seeders	60,908	57,940	-4.9
Sprayers	251,446	248,527	-1.2
Threshers and harvesters	36,511	39,719	8.8
Irrigation pumps	237,175	236,955	-0.1
Irrigation systems	380,477	400,084	5.2
Other agricultural machines	397,390	40,131	0.9

EXPLANATORY NOTES

Annual Agricultural Statistical Survey The Hellenic Statistical Authority (ELSTAT) is conducting the Annual Agricultural Statistical Survey (AGR) since 1961 with the aim of collecting the basic characteristics of agriculture and livestock. The survey is conducted at Community level on a census basis.

Purpose of the survey The purpose of the survey is to collect statistical data on the cultivated areas under several crops, the number of animals and poultry, the production of agricultural and livestock products, as well as the agricultural machinery. The data are used for drawing the agricultural policy of the country and they also cover other national and international needs and obligations for statistical information.

Legal Framework The legal framework for the conduct of the annual statistical agricultural survey is the Royal Decree No 111/15-2-1962 and the Joint Ministerial Decisions No 8710/C2-1246/5-8-2010 and 2198/C2-248/24-2-2012 signed by the Minister of National Economy and the Deputy Minister of Interior, Public Administrations and Decentralization, as well as the relevant decision of the President of ELSTAT issued annually, on the approval, procurement, assignment and cost allocation for conducting the Annual Agricultural Statistical Survey and approval for using private bodies for the conduct of the survey and their remuneration.

Reference Period

- The reference period for crops is the calendar year, 1/1/2020-31/12/2020 and 1/1/2021-31/12/2021.
- The reference date, as far as livestock is concerned, is December 31, of 2020, and 2021 respectively.

Methodology and Coverage ELSTAT is conducting the survey with the cooperation of the Central and Regional Services of the Ministry of Rural Development and Food (YP.A.A.T.), the OPEKEPE, the Directorates of Rural Economy and Veterinary Medicine of the second level of Local Government (Regions), the Departments of Agriculture of the first degree of Local Government (Municipalities), as well as owners of large agricultural holdings.

The collection of data and the data entry are carried out using a questionnaire in the form of an electronic workbook (excel).

The statistical unit of the survey is the territorial area included within the administrative boundaries of each Municipal Unit of the Country, according to the "Kleisthenis Plan". The survey covers the total of the above administrative subdivisions, except for the region of Mount Athos, for which no relevant data is collected.

The persons responsible for the collection and cross-checking of the data are private enumerators having geotechnical Universities background

Definitions 1 stemma = 0.1 ha

Agricultural land: is defined as the coverage of the land of a Community with vegetation that originated from anthropogenic intervention either on the reference year of the survey or historically.

Other cereals for grain: oats, rye, rice, sorghum, semolina, millet, triticale and other cereals for grain.

Edible pulses: beans, broad beans, lentils, chickpeas, peas and other edible pulses.

Cotton: cotton cultivated on irrigated and dry land.

Tobacco: Bernley and Virginia tobacco.

Other industrial plants: sesame, sorghum, peanut, soy, sugar beet, pumpkins, flax, hemp, saffron, stevia, aloe, and other.

Other fodder plants for grain: bitter vetch, vetchling, broad bean, fodder lentil and other fodder plants for grain.

Other fodder plants for hay: green sorghum and other hays (bitter vetch, vetchling, peas, lentils, etc.).

Horticulture land: areas under vegetables including secondary/successive crops as well as the net areas of greenhouses, seedbeds, nurseries, and ornamental plants.

Tomatoes production: industrial, greenhouse, and field tomatoes.

Potatoes production: winter, spring, summer, and sweet potatoes.

Peppers production: greenhouse, and field peppers.

Strawberries production: greenhouse, and field strawberries.

Greenhouses: net areas of greenhouse flowers and vegetables.

Seedbeds: tobacco seedbeds and seedbeds for producing plantlets for transplantation.

Nurseries: areas for producing fruit and forest trees, ornamental plants, and American vines.

Olive trees: edible and oil producing olives.

Olive production: table and oil producing olives.

Other citrus trees: cherry, quince, sloe, plum, kiwi and pomegranate trees.

Other fruit trees: quince, pomegranates, figs for fresh and dried use.

Other stone fruit trees: sour-cherry, cherry-plum and plum trees.

Other nut trees: hazelnut trees and chestnut trees.

Other trees: carob, avocado, mastic, loquat, banana, and other trees (palm, willow trees etc.).

Grape production: wine, table, and raisin grapes.

Agricultural machinery, except state agricultural machinery:

- Agricultural tractors: Single-axle (dredgers, mowers, mini-mowers, etc.) and Biaxial tractors
- Seeders: Wheat, cotton, maize, bean seeders, high technology seeders for linear sowing (e.g. carrots, onions) and potato mowers.
- Sprayers: High-pressure sprinklers, Motorized sprayers, Motorized sprayers of linear crops, Motorized mufflers.
- Threshers and harvesters: Combine harvesters, Simple mowers of all types, thresher machines of all types, Simple windrowers, Cotton collectors, Beet extractors, Potato extractors, Other harvesting machines (for industrial tomatoes, onions, carrots).
- Irrigation pumps: Diesel-fueled, Gas powered, electrically driven and other pumps (steam-driven, wind-powered, animal-powered, etc.) and fuel pumps.
- Irrigation systems: Sprinkling units - fast coupling pipes with injectors, Self-propelled gun sprinkling units with injectors, Horizontal irrigation ramp self-propelled sprinkling units, Drop irrigation systems.
- Other agricultural machinery: incubators, milking machines – portable, milking machines with milk transfer lines, cream separators, wheat sorting machines, maize ginners, cotton ginners, tobacco threading machines, pruning saws, honey extractors.

Publication of data The survey results are available on a yearly basis, since 1961.

References More information on the results of the survey is available on ELSTAT website www.statistics.gr, at the link <http://www.statistics.gr/en/statistics/-/publication/SPG06/>