

AGRICULTURE AND TRANSFORMATION OF RURAL SPACE IN SPAIN, 1986-2007

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I. INTRODUCTION: AGRICULTURE IN POST-PRODUCTIVE RURAL SPACE

Rural space, and with it agricultural space, predominates in any country in the world. It is the agricultural activity of societies throughout history and today which has shaped the creation, transformation and organisation of this space. In Spain, due to its recent past, agriculture continues to play a more important role than in other European countries, where the long period after the Industrial Revolution meant a fading of agriculture as a whole although it has left an indelible mark, however much those who accept post-productivism as a fundamental principle would wish to convince us otherwise.

In the case of Europe, the Commission stated in *The Future of the Rural World* (1988): *in Europe* that "the rural world shall cover those areas and regions where diverse activities are carried out and will include natural and cultivated spaces, villages, towns, small cities and regional centres, and the "industrialised" rural areas of those areas. This represents half the population and a little more than 80% of the community's territory". They continue "but the notion of the rural world does not only imply geographical delimitation. It evokes a whole economic and social fabric with the most diverse activities: agriculture, craftsmanship, small and medium sized industries, commerce and services. It serves as a shock absorber and space for regeneration and has therefore become indispensable for ecological balance as well as an exceptional area for relaxation and leisure" (EC Commission on *The future of the rural world*, 1988, M.A.P.A, (Ministry of Agriculture Fisheries and Food, 1992).

According to the Commission, half the population and 80% of European territory are rural. This is somewhat doubtful, as it would be calling small cities and peri-urban areas rural which clearly depend on city dynamics and not on those of the rural space. In the case of Spain, the General Secretary for Agriculture of M.A.P.A. recently wrote that “Spain’s rural environment is of instrumental importance. It takes up 90% of the land and 35% of the population inhabit it. Also, it comprises almost all the country’s natural resources and a great amount of our cultural heritage. But more significant is the function of its population which is to manage this immense rural area.” (Puxeu Rocamora, J., 2007: 5)

On this basis, it would be wise to remember that land use in Spain, or in Europe, is largely agricultural and therefore, rural. According to Corine Land Cover 2000, we would have agricultural land in the order of half that of the whole of Spain, while “artificial land” (cities, infrastructures...) does not represent more than 2% of the total, as the data on table 1 show.

Table 1. Distribution of large land uses in Spain according to C.L.C. 2000 (%)					
Artificial surfaces area (cities, infrastructures, ports, industries...)	Agricultural surface area	Forest surface area with natural vegetation and open spaces (scrub- land, rocky areas, beaches...)	Humid areas	Water sur- faces	TOTAL
2.01	49.28	45.93	0.22	2.57	100.00

Source: Corine Land Cover 2000 Spain.

Table 2. Distribution of land use in Spain in 2005, according to M. A. P. A. (Ha and %)				
Arable land	Meadows and grazing land	Forest land	Other surfaces	Total surface area
17,844,192	7,168,567	16,789,738	8,734,351	50,536,848
35.30%	14.20%	33.20%	17.30%	100.00%

Source: M.A.P.A. (2007): Agricultural and Food Statistical Yearbook 2006

According to M.A.P.A. Yearbook 2006, half of Spanish land is arable, meadow and grazing land, a third is forest and therefore only 17% is artificial land, unproductive land, water.... (M.A.P.A., 2007). Rural space, then, clearly dominates despite the dizzy rate at which rural land is being transformed to urban. According to the 2006 Report on the Environment, in the last fourteen years in Spain has been transformed an artificial surface equivalent to 30% of all that has been transformed throughout history, around 240,000 hectares over a previous total of 814,000 hectares (Ministry for the Environment, 2006: 102). This means we can state categorically that rural space in Spain is overwhelmingly predominant and essentially comprises

agricultural (50%) and forest (33%) and a significant amount of natural land (lakes, rivers, un-productive rocky places...) and artificial land (infrastructures and non urban constructions) (Cf. table 2) .

Nevertheless, this predominant agricultural and rural space has a declining population. It has failed to take on the new functions which, in theory, would help to dynamize the space and arrest the obvious process of de-agriculturization and rural change.

II. THE DE-AGRICULTURIZATION PROCESS AND RURAL CHANGE

The de-agriculturization process in Spain is unquestionable, profound, maintained and incomplete, despite the fact that deeply rural areas appear to be a refuge for retired people as well as farmers. This change has affected the entire European Union, although to differing extents; it is a change based on the technification of agriculture and competition towards gaining control of international markets and has required an enormous effort on the part of European farmers to adapt to the “global market” over the two last decades.

II.1. The basic facts on rural changes in Europe and Spain

The last two decades have witnessed profound rural changes in Europe. *Some* derive from the internal dynamics themselves of European rural societies such as ageing and the abandonment of agricultural activity. *Others* have been brought about from outside, from new urban demands (rural sport and leisure, nature and landscape), which have made rural tourism a source of income and employment, and from pressure from outside agents, principally those involved in economic globalisation, with its consequences on agricultural markets. These consequences demand greater competitiveness and an opening of frontiers.

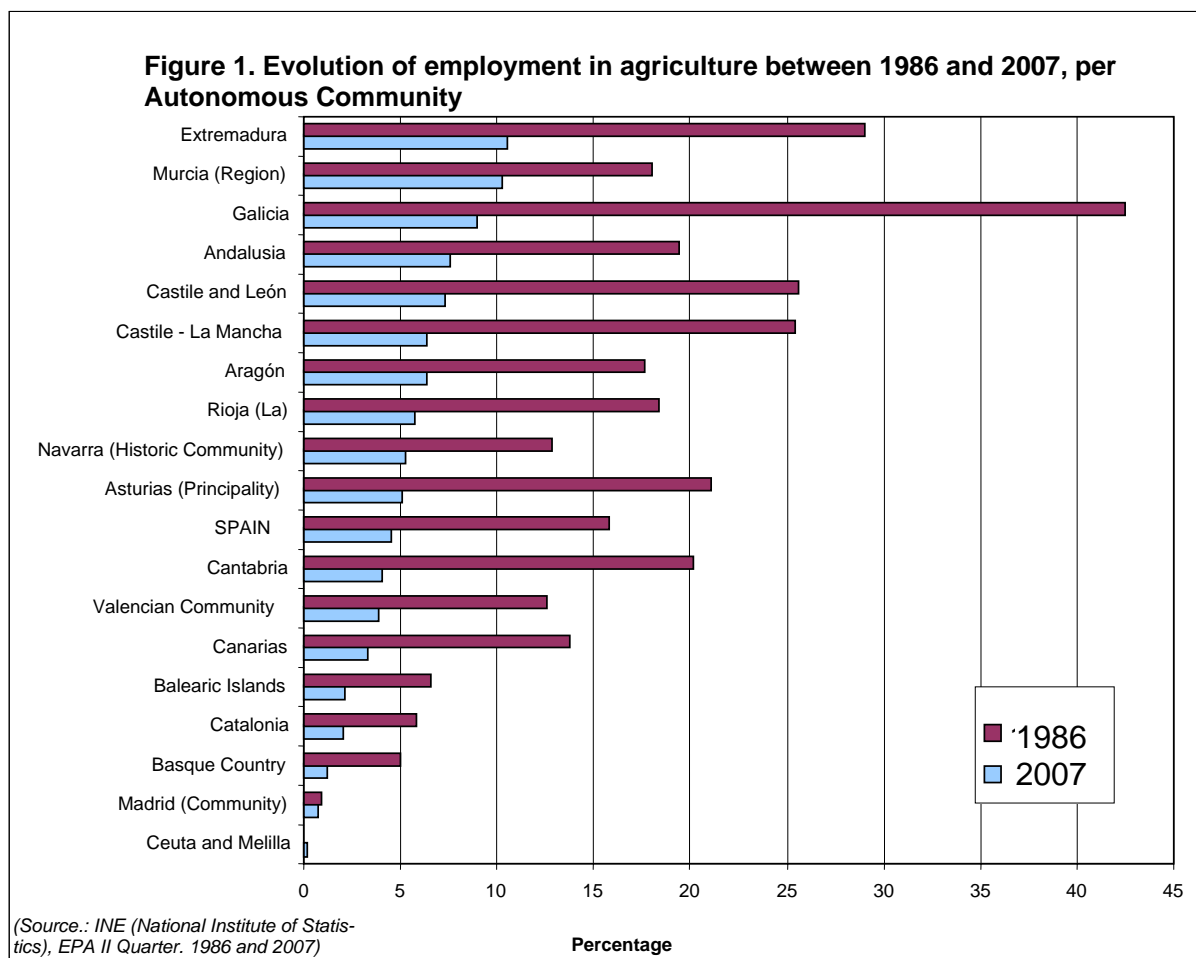
These facts have resulted in strong de-agriculturation and a spectacular fall in the agricultural population, while at the same time, technical modernization has taken place and functional diversification of the European rural world, which is now no longer essentially agricultural. Thus, from an eminently agricultural and productivist rural society it has now become a rural society which is, in theory, diversified and multi-functional.

These phenomena, which are clear and widely accepted, are not as simple as they might seem at first sight, as de-agriculturation has not affected the entire rural world in the same way, nor has functional diversification reached every corner, although there is no doubt that over these

last two decades real rural changes have taken place. Outstanding amongst these changes are, firstly, the *drastic decline in the agricultural population* and the *correlative technical modernisation* of agricultural holdings; secondly, *the move from a productivist agricultural society to a post-productivist rural society* -a change encouraged by the EU's agricultural and rural policy, clearly geared in this direction- and, thirdly, *a reorganisation of agricultural holdings and new dynamics, based on rural development*. European rural space and with it, Spain's rural space, has only partly adapted to the new situation.

II.2. The drastic decline in agricultural population

It is obvious that nowadays rural does not necessarily mean agricultural in either Europe or Spain, despite the fact that a large part of the population remains agricultural. There are ever fewer agricultural workers. Their numbers continue to decrease whereas workers employed in other sectors remain in a stand-still and only in some cases are increasing. However, the depth of agricultural change is striking and the reduction in the number of farmers, which, in regions such as Galicia has put agricultural workers back to 11% of the total when in 1986 they exceeded 42% (Cf. figure 1).



Thus, the population employed in agriculture in 1986 in Spain was 15% of the total; ten years later it was 8.6%; in 2000 it fell to 6.9% and it fell to 4.5% in 2007, employing 921,000 workers, which represents a loss of 837,000 between the former and the latter dates, equivalent to almost half those in employment in 1986. This data, for the second quarter of the EPA (Survey of the Active Population) in respective years, does not exactly match that of the National Social Security Institute in their census of contributors, which rose to 1,178,455 agricultural workers over a registered total population of 19.3 million in June 2007, which would give us 6.1% of working agricultural population over the total, although “contributors” include both the employed and unemployed. Although the Social Security data appears more reliable as these are contributors, both sources demonstrate a sign that the population employed in agriculture in Spain is diminishing. On the other hand, agriculture’s share of total GDP also fell from 5.1% to around 3.5%. There are strong variations depending on the year and agriculture is becoming less important economically.

As a whole, the population which is actually employed in agriculture in Spain is around 5.5%. If we stick to rural municipalities exclusively (<10,000 inhabitants) it rises to 18%, although the smaller the centre of population the more it increases. Therefore a third of the Social Security contributors in municipalities with fewer than 500 inhabitants work in agriculture, whereas in those with between 500 and 1,000 inhabitants they are reduced to a quarter. Those with fewer than 2,000 inhabitants remain within the average threshold of 25% as well.

However, there are 2,185 Spanish municipalities where over half the population is employed in agriculture and there are even 2,929 where agricultural workers exceed 40%, which indicates a rural permanency especially in the interior areas of Spain, particularly concentrated in the Iberian Mountain Range and the entire Duero basin, which, despite this do not contain a significant part of the total number of agricultural workers, who are mainly to be found in warm Mediterranean Spain’s intensive farming as can be seen on the maps (figures 2 and 3) and on tables 3 and 4. The data on these tables also show that more agricultural rural municipalities, those which exceed 40% agricultural population over the total, continue to lose inhabitants, whereas those under this critical threshold have started to gain inhabitants, at least since 2001. (See table 3).

Table 3. Rural municipalities (<10,000 inhab.): weight of agricultural workers over total workers in 2007

% of those employed in agriculture	Nº of Municipalities	Km²	% of Spain's land	UAA ha in 1999	Resident population in 1991	Resident population in 2001	Resident population in 2006	Agricultural workers in 2007	Total workers in 2007
<5	1,36	37,651	7.5	1,393,308	2,111,627	2,535,610	2,986,304	30,025	1,395,101
5 to <10	579	30,454	6.0	1,471,707	965,951	1,027,756	1,141,191	29,017	395,440
10 to <20	1,075	67,513	13.4	3,310,105	1,610,729	1,599,256	1,706,233	72,830	525,914
20 to <30	928	60,037	11.9	2,982,206	1,154,064	1,089,755	1,107,204	75,229	311,440
30 to <40	874	59,799	11.8	3,112,854	909,590	834,779	834,794	76,661	224,852
40 to <50	730	45,515	9.0	2,571,101	752,301	698,987	697,397	92,898	207,995
50 to <66	1,045	62,543	12.4	3,580,588	943,223	868,269	856,488	147,989	261,951
66 to <80	690	32,543	6.4	1,985,288	442,727	398,068	387,460	85,185	120,844
80 to 100	440	12,466	2.5	838,146	77,414	65,448	61,887	13,988	16,562
Total	7,397	408,522	80.9	21,245,303	8,967,626	9,117,928	9,778,958	623,822	3,460,099

Source: INE. Censuses and respective Registers of Inhabitants and (National Institute of Social Security: Accounts of SS contributors per branch of activity and regime in June 2007

Table 4. Spain's Municipalities: weight of agricultural workers over total workers in 2007

% of those employed in agriculture	Nº of Municipalities	Km²	% of the land of Spain	UAA Ha in 1999	Resident population in 1991	Resident population in 2001	Resident population in 2006	Agricultural workers in 2007	Total workers in 2007
<5	1,307	71,133	14.1	2,788,173	26,278,128	28,144,307	31,084,129	189,590	14,766,795
5 a <10	841	53,265	10.5	2,711,764	3,551,792	3,921,293	4,417,861	104,896	1,574,963
10 a <20	1,156	82,818	16.4	4,119,869	2,885,426	2,963,104	3,192,621	146,183	1,036,296
20 a <30	972	71,325	14.1	3,601,458	1,971,303	1,999,597	2,133,721	157,664	664,773
30 a <40	903	67,492	13.4	3,653,561	1,451,180	1,440,130	1,500,163	165,630	485,943
40 a <50	744	49,739	9.8	2,836,015	962,526	915,890	932,270	134,077	302,397
50 a <66	1,052	63,769	12.6	3,663,403	1,040,261	969,500	964,710	172,246	305,894
66 a <80	693	33,113	6.6	2,008,128	471,888	429,372	420,346	94,181	134,220
80 a 100	440	12,466	2.5	838,146	77414	65448	61887	13988	16562
Total	8,108	505,119	100.0	26,220,517	38,689,918	40,848,641	44,707,708	1,178,455	19,287,843

Source: INE. Censuses and respective Registers of Inhabitants and National Institute of Social Security: Accounts of SS contributors per branch of activity and regime in June 2007

And the idea that rural development in the Spanish countryside has affected the entire country, which would now be in a progressive phase, has no basis, especially, as the deep rural areas of the interior still base their development and economic dynamics on agriculture, as demonstrated by the values on the map (figure 2), corroborated by the data on table 5, where the importance of the agricultural areas in the north of Spain can be appreciated.

Figure 2. Population registered with Agricultural Social Security over total registered population in municipalities of Spain, in June 2007

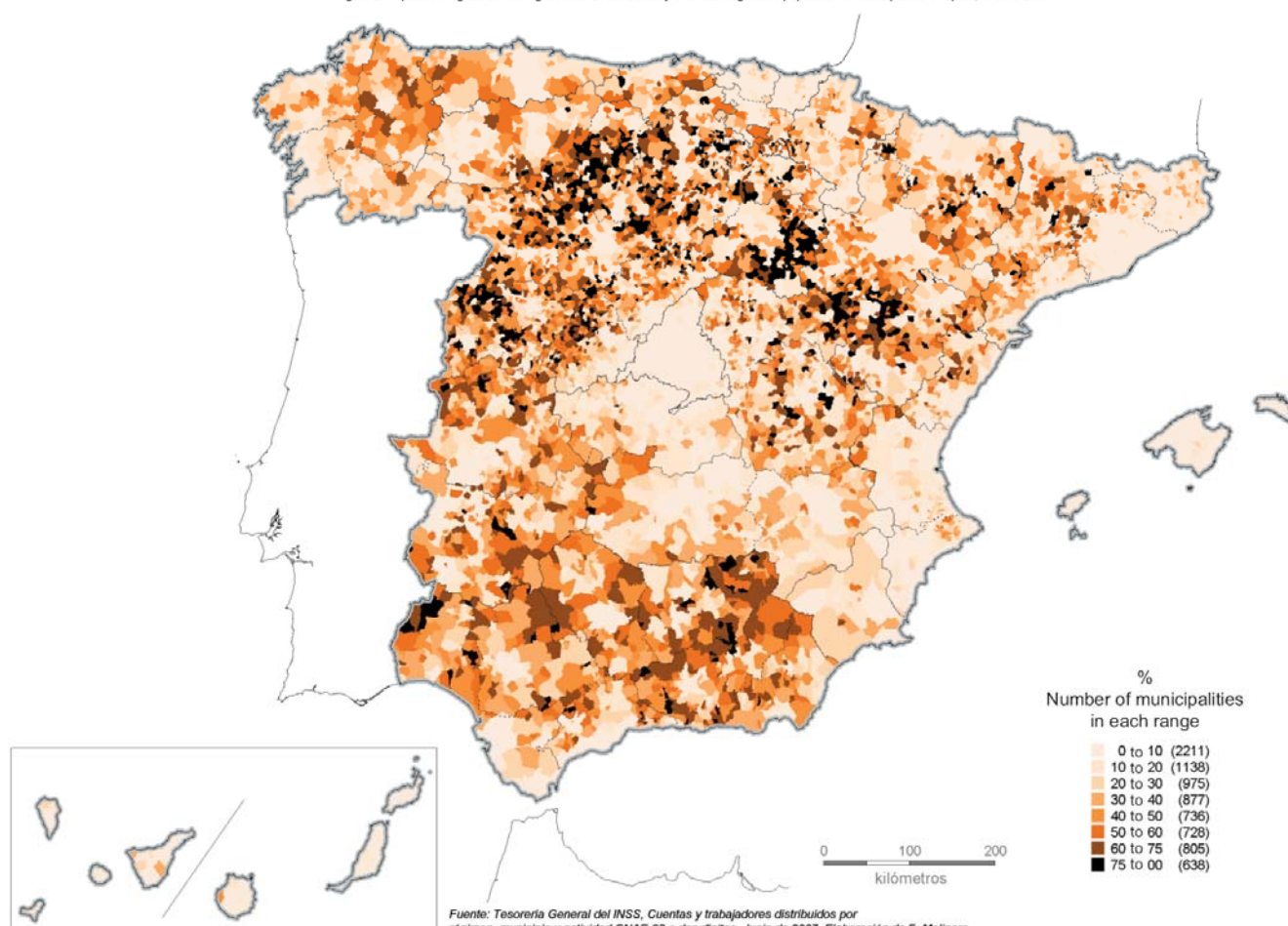


Table 5. Economic structure per municipality size. Spain 2007

	% of the number of municipalities	% of the population in 2006	Nº of total workers	% of workers in Agriculture	% of workers in Construction	% of workers in Industry	% of workers in Services
Fewer than 101 inhab.	12.0	0.1	11.632	50.3	11.2	7.0	31.4
From 101 to 500 inhab.	35.2	1.6	191.160	32.1	16.3	16.3	35.3
From 501 to 1,000 inhab.	13.1	1.7	223.599	25.8	16.9	19.9	37.4
From 1.001 to 2,000 inhab.	11.6	3.0	460.528	20.5	16.0	25.6	37.9
From 2.001 to 5,000 inhab.	12.5	7.0	1.166.422	18.0	17.0	23.9	41.0
From 5.001 to 10,000 inhab.	6.7	8.4	1.406.758	13.8	17.4	22.8	46.0
From 10.001 to 20,000 inhab.	4.3	11.0	1.846.546	9.6	16.7	20.5	53.2
From 20.001 to 50,000 inhab.	2.8	15.2	2.625.442	6.9	15.7	17.8	59.5
From 50.001 to 100,000 inhab.	0.9	11.9	2.182.843	3.6	13.3	11.0	72.1
From 100.001 to 500,000 inhab.	0.7	23.4	4.829.277	1.8	11.2	10.6	76.4
More than 500,000 inhab.	0.1	16.7	4.343.636	0.7	8.2	7.8	83.4
Spain's average	100.0	100.0	19.287.843	6.1	12.9	14.2	66.8

Source: General Treasury of INSS, Accounts and workers distributed per regime, municipality and activity SIC – 93 to two digits. June 2007 drawn up by F Molinero

N.B.: There is a slight deviation in the number of workers per municipality with regard to the total workers on the census, hence those in the “without description” category being included in the total, which we have not taken into account.

II.3. The poor functional diversification of the deep rural areas

In effect the rural world in Spain's interior, especially that of the north, is in a situation of lethargy and is losing total and active population, which, in all but a few cases is impeding its progress. It is still losing agricultural population at a sustained and even, high, rate. The data on tables 3 to 5 and figure 2 perfectly reflect this situation. It suffices to remember in this regard that almost half Spain's municipalities have fewer than 500 inhabitants and that more than a third of her population works in agriculture (see table 5) whereas around 25% work in construction and industry and the remaining third in services.

But this apparent economic diversification in many cases, especially in the deep rural areas, does not proceed from the creation of new jobs, but from the disappearance and relative diminishing significance of agricultural jobs and from the correlative increase in non agricultural jobs. The number of agricultural jobs has clearly fallen, as we have highlighted, although jobs in the services sector appear to be progressing at a positive rate despite the fact that these are personal services.

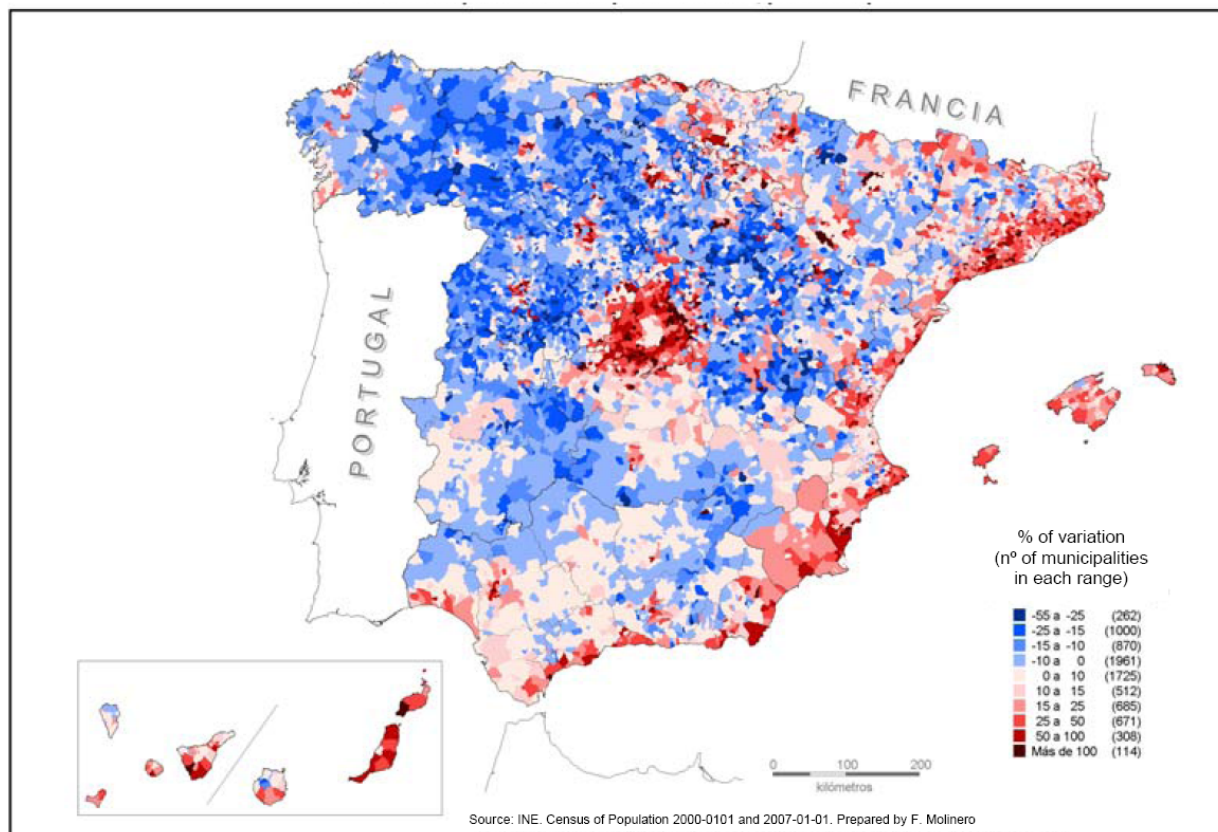
The positive aspects and the undoubted growth in some rural areas have meant that some authors are already referring to the new signs of progress of the rural areas in Spain. This is not in line with the data we show here, but it is the thesis which Benjamín García Sanz, author of, amongst other works, a study of the Spanish countryside (1996), defends from the area of Sociology. From a geographical perspective it was also defended, for Spain, by Francisco García Pascual (1998), who attributes to the entire country a phenomenon which is more visible in Catalonia, axis of the River Ebro and the Basque Country than in other regions of Spain.

The hypothetical upgrading of the countryside is due more to a selective process than a real and generalised upgrading of rural spaces. Thus, on the one hand, the peri-urban spaces are really growing as are, on the other hand, the coastal tourist spaces. Finally, growth can also be seen in some tourist areas in the interior due to their qualities in terms of nature, scenery or heritage.

And these facts can be applied in general to all European rural spaces, as peri-urban areas are capturing the greater part of the growth of the countryside, the peculiarity being that the peri-urban areas are becoming coalescent in the large population hubs. And so the valleys of the Rhine or the Po, or the SE of England, are seeing a positive dynamic, deriving from a similar

situation. But the SE coast of France is also undergoing a phenomenon similar to that of the Spanish coast. This is a phenomenon which can also be seen in the tourist areas of the Italian, French, Swiss, Austrian or German Alps.

Figure 3. Balance of Spain's population 2000-2007, per municipality



Furthermore, the rural municipalities which have grown most are in the more important centres, the regional towns and centres, and so, in short, two types of rural spaces can be referred to which are clearly differentiated in terms of content and dynamics. These are the typical rural areas, with centres of under 2,000 inhabitants, which have undergone a clear regressive evolution and trend, and the intermediate rural areas which are more balanced and diversified, often situated in the peri-urban areas, on the coast or in ecologically privileged areas, added to which are some regional centres with progressive services, as shown on Spain's population balance map 2000-2006. Therefore we can conclude that Spain's interior rural hinterland continues on this negative and unfinished spiral of loss of population and jobs, only the aforementioned areas saving it from this, as agriculture is not capable of dynamising the most backward areas despite its growing capacity for production. And the fact is that, in effect, farmers are increasingly producing more with fewer employees, due above all to the spectacular process of modernisation and technification, which has resulted in the loss of a significant number of ag-

gricultural holdings, many of which are still maintained part time, but are of an insubstantial nature.

II.4. The decline and modernisation of agricultural holdings

The rate of decline of farmers and inhabitants of rural areas is yet another symptom of the decline in agricultural holdings. If, at the beginning of the 1970s, a full-time farmer could achieve an average income working between 60 and 80 hectares of dryland, this now would need to be between 140 and 200 hectares, i.e., between two to three times more. It is evident that not all farmers are achieving this and if they were there would only be enough land for around one hundred thousand in Spain, but the process of modernisation has been accompanied by another parallel process of intensification in some cases and extensification in others, so that, whereas in eastern horticultural areas 2.5 to 3 Annual Work Units per hectare are needed, in the interior dryland cereal areas a work force would be needed equivalent to a thousandth of this figure. This gives us an idea of the disparities between intensive horticultural irrigation and extensive dryland cereal farming. These are extreme cases which show the capacity for generating work.

Statistical data reflect the same type of evolution, although they do not attest to the unparalleled transformations which have taken place in this period. Thus, table 6a shows the census evolution of the holdings, which between 1962 and 1999 shows a fall of 39% and of almost 22% between 1989 and 1999. But, just as important as the decrease in the number of holdings and the increase in average surface area, is the process of technical modernisation which has taken place, especially in intensive irrigation, although also in interior dry farming and in livestock farming on grazing and pasture land. Nevertheless, reminders of the past do remain, especially in small sheep and cattle holdings whose owners only want to hold out until they retire. However, the technical change has been spectacular and unparalleled in medium and large holdings.

Table 6a. Evolution of the number and land of agricultural holdings. Spain 1962-1999

	1962	1972	1982	1989	Variation 1962/1989	1999	Variation 1989/1999
Total n° of holdings (thousands)	2,935.3	2,571.1	2,375.3	2,284.9	-22.2%	1,790.2	-21.7%
UAA* (thousands of ha)	21,210.0	21,885.8	19,626.4	18,380.9	-13.3%	26,316.8	6.4%
Total land (thousands of ha)	44,647.9	45,702.7	44,311.8	42,939.2	-3.8%	42,181.0	-1.8%
Total land / holding (ha)	15.2	17.8	18.7	18.8	23.5%	23.6	25.4%
UAA*/holding (ha)	7.2	8.5	8.3	8.0	11.3%	14.7	35.8%
UAA*/Total land (ha)	47.5%	47.9%	44.3%	42.8%		62.4%	

Source: M.A.P.A., 2006: *Facts and figures of agriculture...*, p. 46

Table 6b. Economic Structure of Agricultural Holdings. Spain 2005				
Size in ESUs	N° Holdings.	% of n°	ESUs	% of ESUs
Total	1,073,405	100.0	20,002,753	100.0
< 1	114,425	10.7	64,682	0.3
1 to < 2	131,235	12.2	194,844	1.0
2 to < 4	189,637	17.7	548,902	2.7
4 to < 6	115,630	10.8	568,392	2.8
6 to < 8	84,772	7.9	589,505	2.9
8 to < 12	101,933	9.5	999,769	5.0
12 to < 16	66,084	6.2	915,967	4.6
16 to < 40	162,786	15.2	4,098,437	20.5
40 to < 60	43,602	4.1	2,128,263	10.6
60 to < 100	32,702	3.0	2,486,161	12.4
>= 100	30,599	2.9	7,407,831	37.0

Source: INE: *Survey on the Structure of Agricultural Holdings 2005*

The statistics, in fact, conceal very disparate situations, as, as we have shown, the 1.79 million holdings represent no more than a maximum figure, in which, accord-

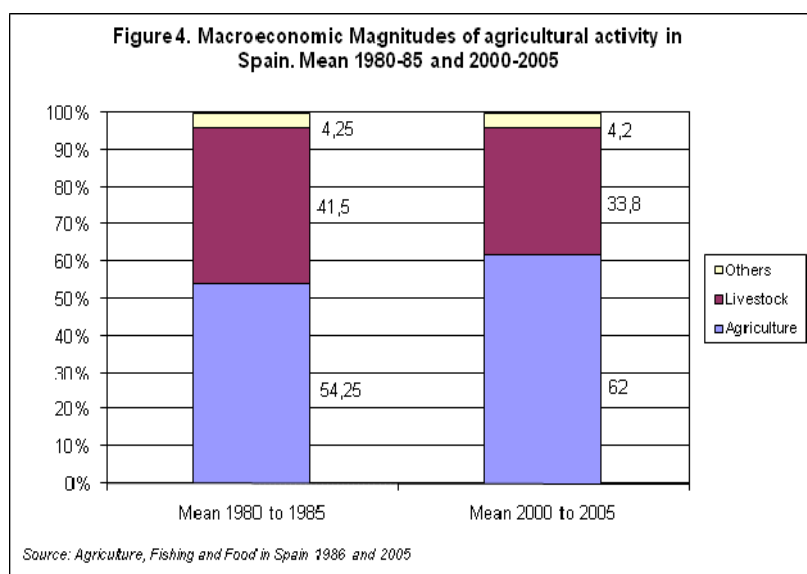
ing to the 1999 Agricultural Census itself, there were 564,536 part time farmers, and, if we subtract them, we are left with a figure close to that of Social Security contributors in June 2007 in agriculture (1,141,973 without counting aquaculture and fishing). This is much more plausible and reflects the real dimensions of the agricultural work force in Spain. Obviously, if we subtract wage-earners from this work force in 2007 (=70.546) and some of the self-employed (in total there were 84,137), who are not natural persons or working in services to agriculture, we are left with around a million agricultural holdings. This is the actual operative and functional benchmark figure.

On this basis, there is a significant contingent of complementary holdings, whose owners, responding to current needs, keep them while CAP subsidies persist (the current decoupled payments). Those whose main occupation is farming, but who have a different secondary activity as well, represented 56,402 on the 1999 census. We believe this figure remains the same at present because the circumstances have not changed. Yet small full time farmers also remain, although there are fewer of them as they are finding it difficult to compete in the market and are disappearing as they retire. Thus, the 2005 Survey on the Structure of Agricultural Holdings gave a figure of 1,079,420 (see table 6b), within which several part time small holdings are included, which are kept for the same reasons as the complementary holdings. Notwithstanding, almost half of the wealth generated by agriculture, expressed in European Size Units (1,200 €GSM), comes from holdings with more than 60 ESUs, which only represent 5.9% of the number of holdings in 2005 (Table 6b). Yet, they, together with medium-large size holdings, are responsible for the great transformations in Spanish agriculture.

III. SPANISH AGRICULTURE AT THE BEGINNING OF THE 21ST CENTURY: TWO DECADES OF AGRICULTURAL TRANSFORMATIONS

The years since Spain's entry into the then European Economic Community have seen significant agricultural changes. These have continued along the concentrated productivist lines started in the country in the second half of the fifties, although at a faster rate and more rigorously. At the same time, and of particular relevance in recent years, the new agricultural biases and practices linked to post-productive principles are evident, or at least perceivable. Two aspects must be considered to understand this dynamic: on the one hand, the strict statutory regulation – linked to the changes to the Common Agricultural Policy (CAP) – to which a substantial part of production has been subject, and on the other hand, the full use of the comparative advantages offered by the European commercial context which is more open and integrated than it was before.

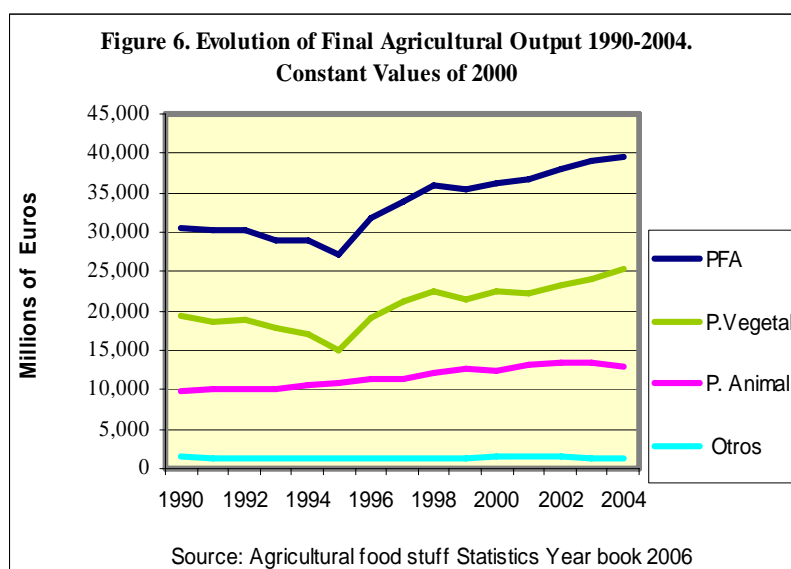
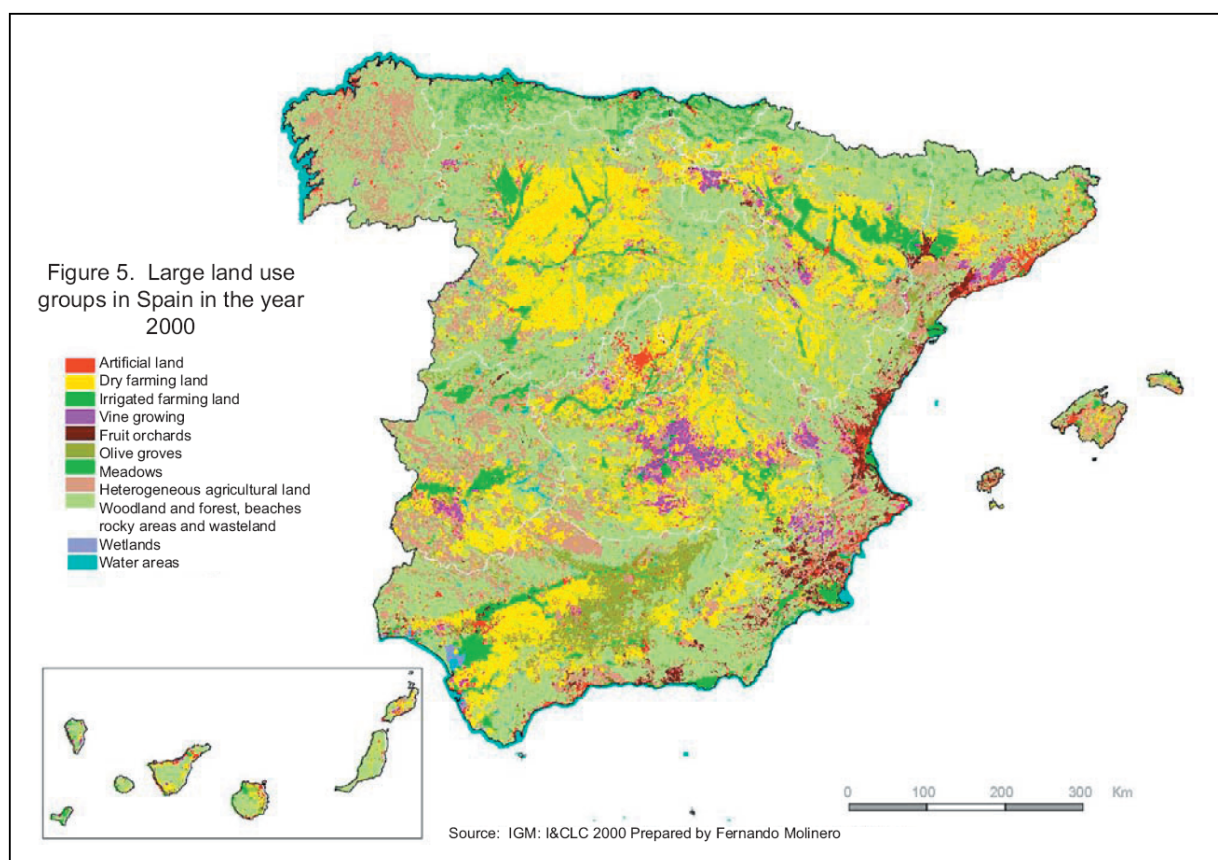
III.1. A more agricultural country, more intensive and more specialised



If we compare the agricultural economic magnitudes (Figures 4 and 5, on Final Agricultural Output, FAO) of the first half of the 1980s and those of the first five years of this century, the increase in the value of agricultural production is striking - it has gone from 54% in the former to 62% in the latter. This increase has been at the cost of the value of livestock production, which has fallen in a similar proportion. Production of services and other secondary non-agricultural activities remains stable. Therefore the country has strengthened its agriculture and has done so in a framework of an ongoing increase in work productivity, as, contrasted with the already highlighted decline in agricultural activities (reduced practically by half since 1986) and holdings, is the parallel increase in Final Agricultural Output, which in the last fifteen years has been 30%. Intensification is evident and is corroborated by the generalised increase in yield in almost all productive sectors. The application of technical - mechanical, chemical and genetic - advances di-

crease has been at the cost of the value of livestock production, which has fallen in a similar proportion. Production of services and other secondary non-agricultural activities remains stable. Therefore the country has strengthened its agriculture and has done so in a framework of an ongoing increase in work productivity, as, contrasted with the already highlighted decline in agricultural activities (reduced practically by half since 1986) and holdings, is the parallel increase in Final Agricultural Output, which in the last fifteen years has been 30%. Intensification is evident and is corroborated by the generalised increase in yield in almost all productive sectors. The application of technical - mechanical, chemical and genetic - advances di-

rectly affects this process, as demonstrated by the parallel increase in the consumption of intermediate goods. But perhaps, as a productive and spatial benchmark of the first order in the Mediterranean world, this is illustrated by irrigation. Between 1985 and 2005, considering land for crops as a whole exclusively, land which has benefited from irrigation has increased by more than 700 thousand ha; a 24% increase, based on the in most productive spaces, which contrasts with the general reduction of land devoted to arable. And the fact is that intensification, not necessarily leading to abandonment of the marginal land, does explain the reorientation of land use (Cf. figure 5: Uses of the land according to CLC 2000).

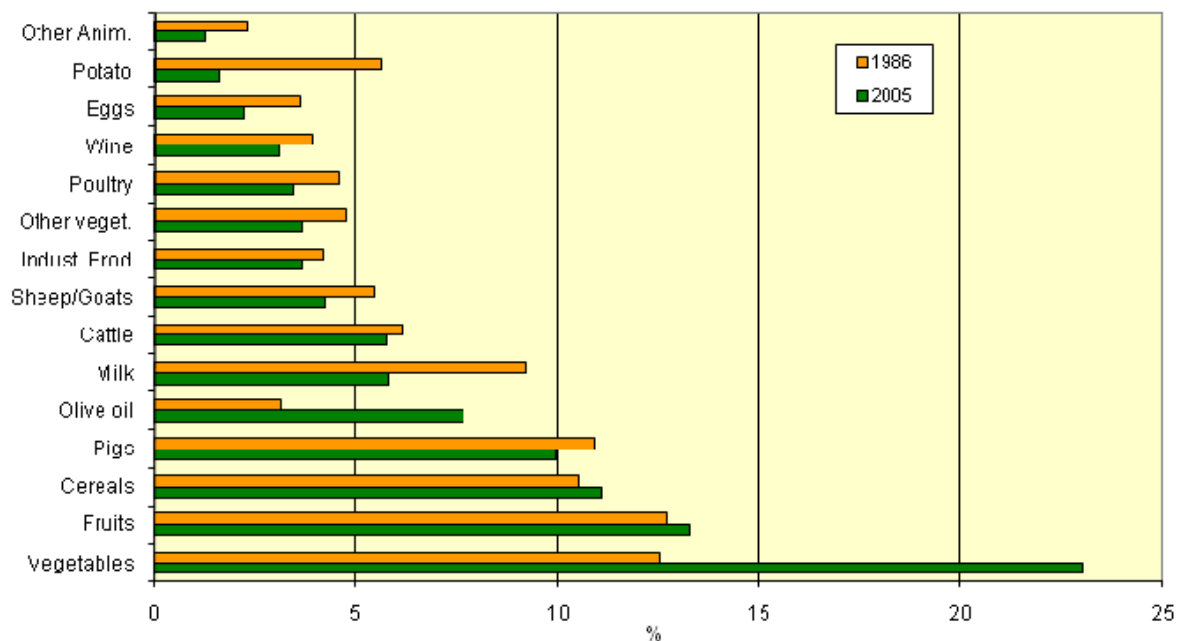


It is significant, in this regard, how, within general land use there has been an increase in forest land, grazing land and land dedicated to infrastructures, equipment and buildings; and all at the cost of the fall in farmland, meadows and fallow land, whose share has diminished by almost three million hectares. Obviously this is marginal land, only likely to be used in situations of productive pressure which is not the present case. In fact, this fall would be even greater if, within the set of measures tending towards extensification, subsidies had not been contemplated which could currently be extended to these areas, as has taken place in the interior of Spain. Here, at times, the removal of land from production or the different types of fallow land, has taken place in marginal areas reincorporated into use.

Likewise and in line with productivist principles, intensification has run parallel with specialisation and concentration. In effect, if we consider the different components which contribute most to generating agricultural wealth, the growing importance of certain productive segments can be noted, particularly that of vegetables. This branch has undergone the greatest development, if we consider it purely in its economic dimension we can state that its value has practically doubled to the point that it alone represents almost a quarter of the wealth generated in the sector, and this further reinforces its importance in all exports. Olive oil, another Mediterranean product, has also increased significantly, doubling, in relative terms, its share in the whole, and currently occupying fifth place, ahead of beef or milk. (Figure 7).

In any case, the vegetable, fruit and cereal segments alone constitute together practically half the value of agricultural production in 2005. This combination is reinforced, from another perspective, by the confirmation of the reduction in the number of holdings and their increased size, yet also the direction which the large farms are taking.

Figura 7: Contribution to the Total Final Agricultural Output. Spain 1986 and 2005



Source: Agriculture, Fishing and Food in 2005. Prepared by E. Baraja

III.2. Use of the comparative advantages: the establishment of the Mediterranean regions of intensive agriculture

The now traditional agricultural dynamism of the Mediterranean coast, - and secondarily of the Canary Islands- has become established in recent years as a consequence of the strong development of the fruit and vegetable sector, as full entry into the European Community established Spain's position as an exporter in one of the most solvent markets in the world, joining together the outside sector with European distribution and consumption trends (García Fernández, 2004: 232). In the horticultural sector the considerable investments made both by small and medium farmers and by large companies the length of the coast, with substantially fewer hectares than in 1986, account for the fact that currently 40% more production is being achieved, the major part of which is for export. The key to this intensification lies in a commitment towards innovation in the productive and marketing processes in order to take advantage of the comparative benefits in relation to the rest of Europe. In this area, as occurs in Italy, the lack of a meteorological winter and strong winds, the abundant hours of light and the relatively low humidity, make for ambient conditions which, along with the manipulation of the agricultural cycles, have meant that highly competitive horticultural products have been put onto the European market from Autumn to Spring (Morales Gil, 2004: 224). The Mediterranean coastal strip of the provinces of Alicante, Murcia, Almeria and Granada has become the country's most intensive and dynamic agricultural area. It generates the most employment and

economic development but it also presents the greatest environmental problems. These are features which it shares, although less intensely, with fruit growing, particularly citrus fruits. On a different scale, and with a different orientation, the fruit and vegetable growing area penetrates through to the interior via irrigations from the Rivers Ebro and Guadalquivir. These are not the same environmental conditions and therefore the productive and market focus is different, but, in spite of the distances, they share their features: these are innovation and market spaces. The CAP income support policy is replaced here by attention to factors which will result in increased competitiveness, organising production, handling and distribution to reach the markets in the most advantageous conditions.

III.3. The “subsidy” agricultural areas in the interior of the Peninsula

A very different dynamic has been operating in wide areas of Spain's interior. The CAP and its different applications, particularly that decided on with the reform of 1992 – reinforced by Agenda 2000 and the intermediate reform of 2003- have played the key role in the plains of the Castilian meseta or in the low plains of the Guadalquivir and the Ebro, which have traditionally been used for extensive dry farming, and where arable crops –cereals specifically– are typical. Since then a term as unfortunate as it means –“subsidy”– has guided its dynamics. While prices received by the producer have remained static or have even gone down, the different direct subsidies, replaced for the single payment per holding, represent in many cases between 30 and 40 % of agricultural income. The demands and stimuli for removing land (from production), the lack of alternatives or the progressive increase in the cost of intermediate goods, explain to a large extent the fact that, over the twenty years that we are studying, arable farming has lost more than 1.1 million hectares. Whilst marginal land was abandoned and the amount of fallow land increased, efforts were directed at decreasing production costs by means of minimum cultivation techniques or direct sowing, which became common practice. The consecutive reforms of the Common Market Organisations (CMO) which have regulated the industrial crops of the irrigated areas (sugarbeet, cotton, etc.) have led to them to a more extensive profile, opening the way for corn, although the maximum guaranteed land surfaces place a significant ceiling on its expansion. The recent interest in bio fuels appears to be encouraging hopes of diversification in landscapes which are characterised by their monotony, but this is not entirely certain.

On the other hand, the olive grove, which is also a leader, has undergone a completely different evolution. The “subsidy”, especially when aimed at financing production, has stimulated its

expansion and intensification, which explains both the total increased area planted –estimated at almost 500 thousand ha– and its irrigation –quadrupled in this same period– and the increase in yields, this dynamic is especially evident in the Andalusian olive-growing countryside.

III.4. Concentration of production and extensification in livestock spaces

The same factors described for the agricultural spaces explain the evolution of the different types of livestock and livestock spaces. Concentration and intensification are gaining strength in the segments of industrial livestock farming. Intensive production of cattle, poultry and especially pigs has been progressing with the development of integrated systems in the large agroindustrial complexes which handle the making up of feed, slaughter and meat preparation. In the case of pigs specifically, livestock has made a more spectacular leap forwards, making Spain the second largest producer in the European Union just behind Germany. Without reaching these heights, the same process of concentration can be seen in dairy production, which, if already evident for sheep, is exemplary in cattle. The reduction in number and resizing of holdings has been accompanied by unprecedented technification of the handling, feeding and selection of animals so that with substantially less livestock, yields are being achieved which raise production above the limits set by market regulation. And all of this is from a spatial perspective, accompanied by a relocation of the supplier areas, more in line with the collection, transformation and consumption circuits.

But if the horizon of competition with the other European producers explains this process, it also explains that of the parallel extensification, although in this case the stimulus of subsidies has played a more relevant role. Meadow land, as can be seen in Cantabrian and Atlantic Spain, and in the many mountain areas, is progressively diminishing, becoming limited to more accessible areas. On the other hand, there is more grazing land being used by livestock, sheep, goats, pigs and especially beef cattle which are increasing in number. These extensive farming spaces take up a substantial part of the mountain areas and western peneplains, where extensification has been accompanied by substantial improvements in livestock handling and health inspection. This has also occurred in the selection of breeds, whether with a view to quantity production, where crosses abound, or quality, in which case they are usually pure breeds and indigenous. This fact is related to the advances achieved in organic production and the extension of quality protected brands.

III.5. Food quality as a challenge for the future

In the middle of the 1980s, the number of hectares registered as organic, barely exceeded two thousand. In 2006 this amount is nearing a million (926,390). A really spectacular increase linked essentially to their statutory regulation and to administrative stimulus and the change in consumer habits, which are more concerned with quality, healthiness and environmental problems. In parallel, the number of holdings has gone from little more than two hundred to 17,214 and there are almost two thousand producers. This land is clearly intended to be used as permanent meadow and pasture, linked with extensive organic livestock farming. This adds to the role of the meadow areas of Andalusia and Extremadura, but also extends through the mountain areas and affects a considerable number of cereal hectares. Nevertheless, protected by the increase in demand, the fruit and vegetable sector stands out for its economic value. This demand is essentially international as 80% of Spanish production goes to these markets, whereas their household expenditure barely represents 1% (M.A.P.A., 2007:119).

The Food Consumption Panel highlights that ignorance of logos, the lack of information on where to find the produce and its high price are the reasons why the level of consumption is still so low (M.A.P.A., 2006: 72). However, this scant proportion is compensated for by the increase in the purchase of products which have moved away from the norms of large standardised production to define themselves in accordance with the criteria considered on the quality labels which protect them. Denominations of Protected Origin (DPOs), Protected Geographic Indications (PGIs), Guaranteed Traditional Specialities, and others which are more lax highlight the quality of the raw material, the geographical area where they are produced or the type of manufacture. In the mid eighties there were very few products protected by any quality label and these were predominantly in the area of grape growing and wine making. It was from the 1990s onwards with statutory regulation and promoted by quality policy when this really started to develop. Since then, there has been a spectacular rate of registrations, as demonstrated by the data that between 2000 and 2004 alone the number of agri-food products protected by DPOs and PGIs, not including wines, has gone from 79 to 126, and their economic value has increased by 68%. As in the above case, and despite their progress, these products only represent 2% of the value of conventional food production (M.A.P.A., 2007:118), although they play a key role with a view to the future, because they satisfy consumer demand because they are key to the multifunctional nature of the rural areas.

IV. PRODUCTIVE DIVERSIFICATION IN SPAIN'S RURAL SPACES

The processes of deagriculturalisation and agricultural specialisation, which we have already analysed, coincide with a progressive productive diversification of Spanish rural spaces. A diversification which is very much linked to the changes which have taken place in their functions and to the rural development policies conceived by the European Union and applied with European funds.

IV.1. Spain's entry into the E.U.: from agricultural productivism to rural development

Spain's entry into the E.U. (the old E.E.C.) coincides with the start of the processes of revision and modification of the productivist CAP, which dominated until the mid 1980s. The aforementioned document on The Future of the Rural World, lays the basis for what was to be a clear commitment for the rural option as opposed to the agricultural option and the promotion of multifunctional rural areas, although it continues to maintain the basic role of agriculture as an essential activity in the productive function and the territorial co-ordination of these areas.

As an effect of these new approaches, the successive revisions of the CAP, applied since the reform of the Structural Funds, especially since the nineties, shall be geared towards reducing subsidies to direct production and to further promote the modernisation of agricultural activity, and its extensification, in relation to its new environmental functionality, at the same time as furthering the development of other productive activities which promote the sought after diversification. There are two basic mechanisms for the promotion of rural development: firstly the growth of funds destined for the second pillar of the CAP (Rural Development) which increased by 50% between the programming period 1994 – 99 and 2000-06. (GARCIA FERNÁNDEZ, G., 2005), and, secondly, the setting up of the Rural Development Programmes such as the LEADER community initiatives or the PRODER national initiative programmes, since the beginning of the 1990s.

IV.2. Productive diversification in rural development programmes

Rural development programmes, community initiative and national initiative, started to be applied in the nineties and progressively extended until they covered the majority of the national rural space (table 7). Thus the promotion of development was linked to the availability of public funds, especially European funds, although always co financed with national and regional funds and significant private investment.

The LEADER and PRODER programmes introduced a new way of focussing on rural development, going from an agricultural vision to a more rural one, in all cases assigning more than half their funds to the promotion of non agricultural activities outstanding amongst which, without doubt, are rural tourism, industrial activities linked to the upgrading of local products and the development of SMEs and handicrafts.

Table 7: Basic LEADER and PRODER indicators					
	LEADER I (1991-94)	LEADER II (1995-2001)	PRODER 1 (1996-2001)	LEADER + (2003-06)	PRODER 2 (2003-06)
% National territory	16%	45%	24%	50%	48%
% National population	5%	12%	11%	19%	20%
Density (Hb./Km ²)	22	21	36	34	37
GAL number or programmes	52	132	97	145 (1)	162 (2)
Predicted investment (M€)	263	1100	620	797 (3)	828 (3)
Final investment (M€)	387	1364	791		
Growth Final Investment	47%	24%	28%		
Final Private Investment	53%	56%	50%		
Final Public National Inv.	20%	16%	18%	38% (4)	37% (4)
Final Pub Investment. E.U.	27%	28%	32%	62% (4)	63% (4)
(1): The LEADER Groups + of Andalusia and Madrid are PRODER 2 as well.. Galicia's (2) ten AGADER Groups are not included. The Canary programme has to be included carried out without GAL					
(3): Only public financing.(4): Predicted financing distribution.					
Source: In house preparation from INE(Spanish Institute of Statistics) (several years), Actualidad LEADER (several editions), MAPA (2003a, 2003b; see Source Table 2). Apud Esparcia Pérez, J. In Atlas of Rural Spain					

These changes in public intervention strategies on rural spaces are linked to a change in social vision of the new functional-

Table 8. Final financial tables of LEADER I, LEADER II and PRODER 1

		LEADER I		LEADER II		PRODER 1		
		%	Mill. €	%	Mill. €	%		Mill. €
Source of financing - investment	European Union	26.9%	104.2	27.9%	381.1	32.3%		255.0
	FEOPA			12.6%	171.2	20.1%		158.8
	FEDER			13.3%	181.8	12.2%		96.2
	FSE			2.1%	28.1			
	National Government.	20.5%	79.3	16.4%	223.9	17.5%		138.2
	Central Gov.	2.1%	8.0	3.3%	45.6	2.0%		15.8
	Autonomous Gov.	11.8%	45.8	8.4%	114.7	7.3%		57.6
	Local Gov.	6.6%	25.5	4.7%	63.6	8.2%		64.8
	Private Inv	52.6%	203.3	55.6%	758.9	50.3%		397.5
Distribution by measures(1)	A (Acq. Capac.)			0.3%	4.6			
	B (Innov. Rural Prog.)			98.7%	1,346.6			
	B1 (Technical Support)	5.9%	23.3	6.3%	86.6	M. 6. Serv. To companies	6.0%	47.3
	B2 (Professional Training)	3.9%	15.4	3.6%	49.6			
	B3 (Rural Tourism)	50.2%	198.0	32.4%	441.6	M. 3-4. Rural tourism	23.2%	183.4
	B4 (SMEs, handicrafts)	20.0%	78.8	26.9%	366.8	M. 5. Smes, crafts and serv.	24.3%	191.7
	B5 (Comerc. Agr. Prod.)	16.2%	63.8	16.9%	230.5			
	B6 (Environmnt and heritage)			12.6%	171.6			
	C (Transnat. Co-operation.)			0.8%	11.1			
	D (Assessment and follow)			0.1%	1.6			
	6. Others	3.9%	7.5					
						M. 1-2. Heritage Val	20.6%	162.6
						M. 7. Agric.- forest potential	23.9%	189.0
					M. 8. Agric.- forest extension	2.1%	16.7	
TOTAL (% and millions of €)		100%	386.7	100%	1,364.0		100%	790.7

(1): In LEADER I the nomenclatura of the measures corresponds with the numbering in LEADER II; to measure 1 (support to technical development) has been added measure 7 (Equipment and functioning of the groups). On the same line, the equivalent PRODER measures.

Source: Prepared by : Esparcia from Actualidad LEADER, 1998:1, page 17; MAPA (2003a): LEADER II final financial tables ; MAPA (2003b): Final financial report : execution1994-1999, PRODER. Apud Esparcia Pérez, J. In Atlas of Rural Spain, 2004, p. 382

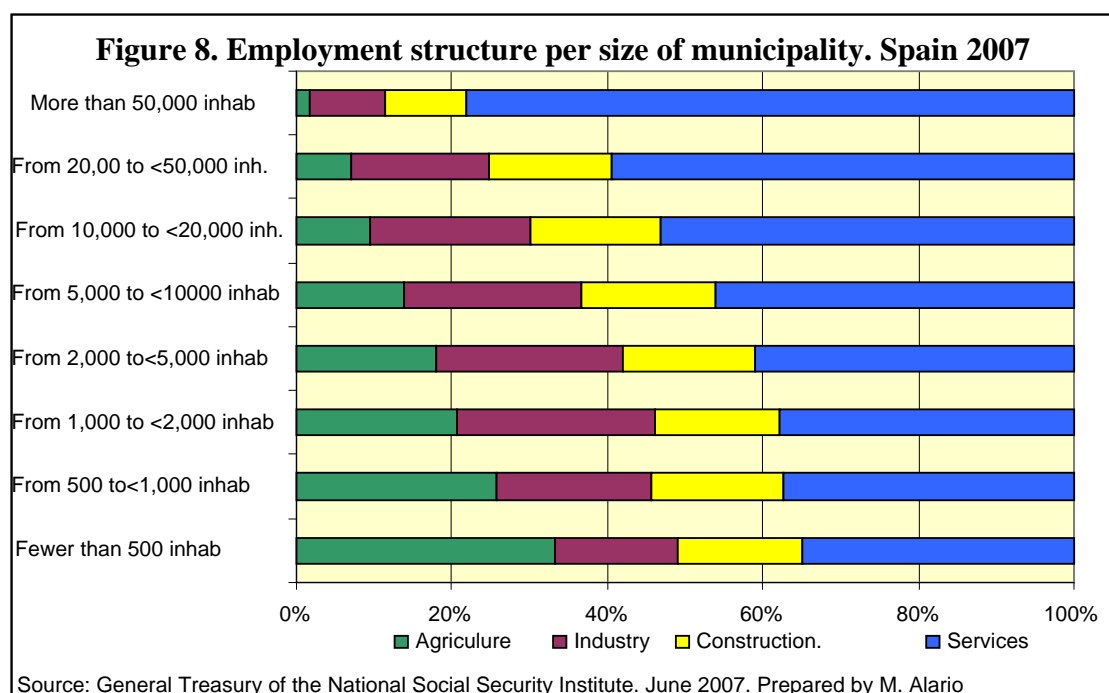
ity of rural spaces, which are supposed to have environmental values, as cultural and heritage reserves... and they are valued as quality residential spaces, especially the most accessible ar-

eas, and the more distant areas of greater environmental and scenic quality are valued as urban leisure spaces.

Thus, as a result of the interaction of complex economic and social process, new economic activities are appearing and other traditional activities are being promoted which are acquiring a new dimension in the framework of functional diversification.

IV.3. Productive diversification of rural spaces

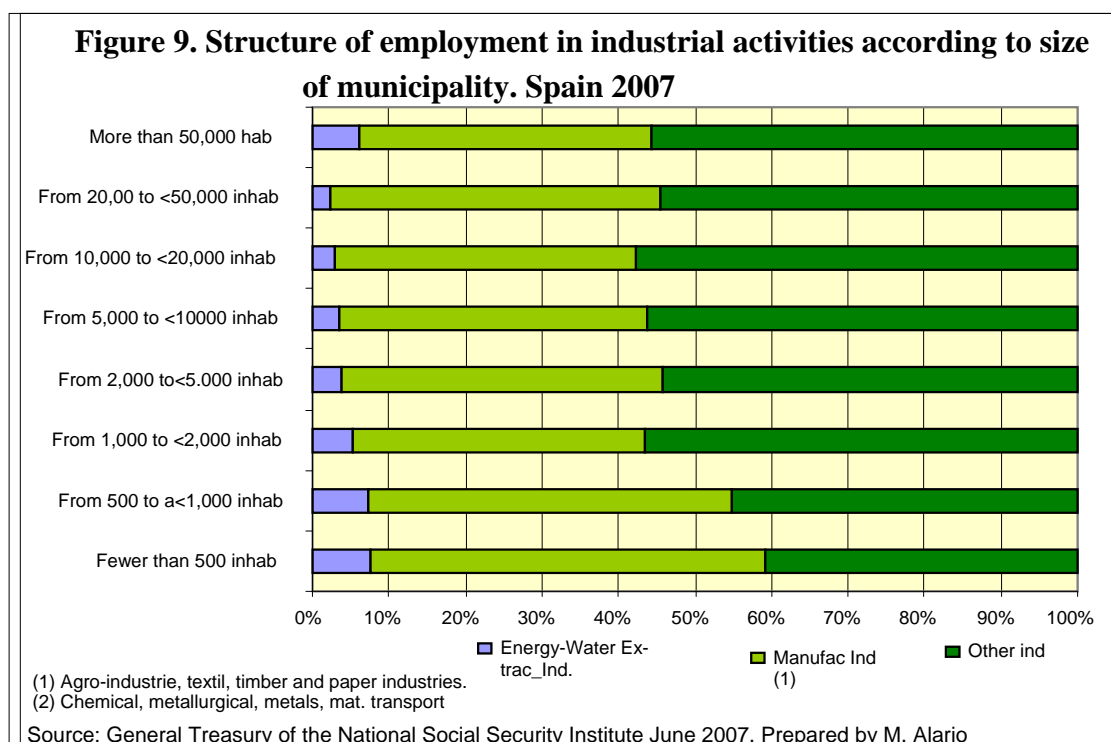
Analysis of the structure of employment in the different areas highlights that the distances between rural and urban spaces are significantly narrowing but it also demonstrates how the economic peculiarities of the rural centres are being maintained. It also highlights significant internal differences between the rural centres themselves, depending on their size and, especially, on their location in relation to the urban areas (Figure 8).



Thus, although tertiarization is visible in all types of spaces, it is obvious that this is a process lead by the urban areas and the larger rural centres, whereas the weight of agricultural activity is inversely proportional to the size. Fewer differences can be seen in the distribution of people working in industrial activities, where the smaller rural and urban municipalities share

similar values, although, obviously for different reasons. Similarly the importance of construction stands out in all municipalities, but especially in the rural and intermediate ones.

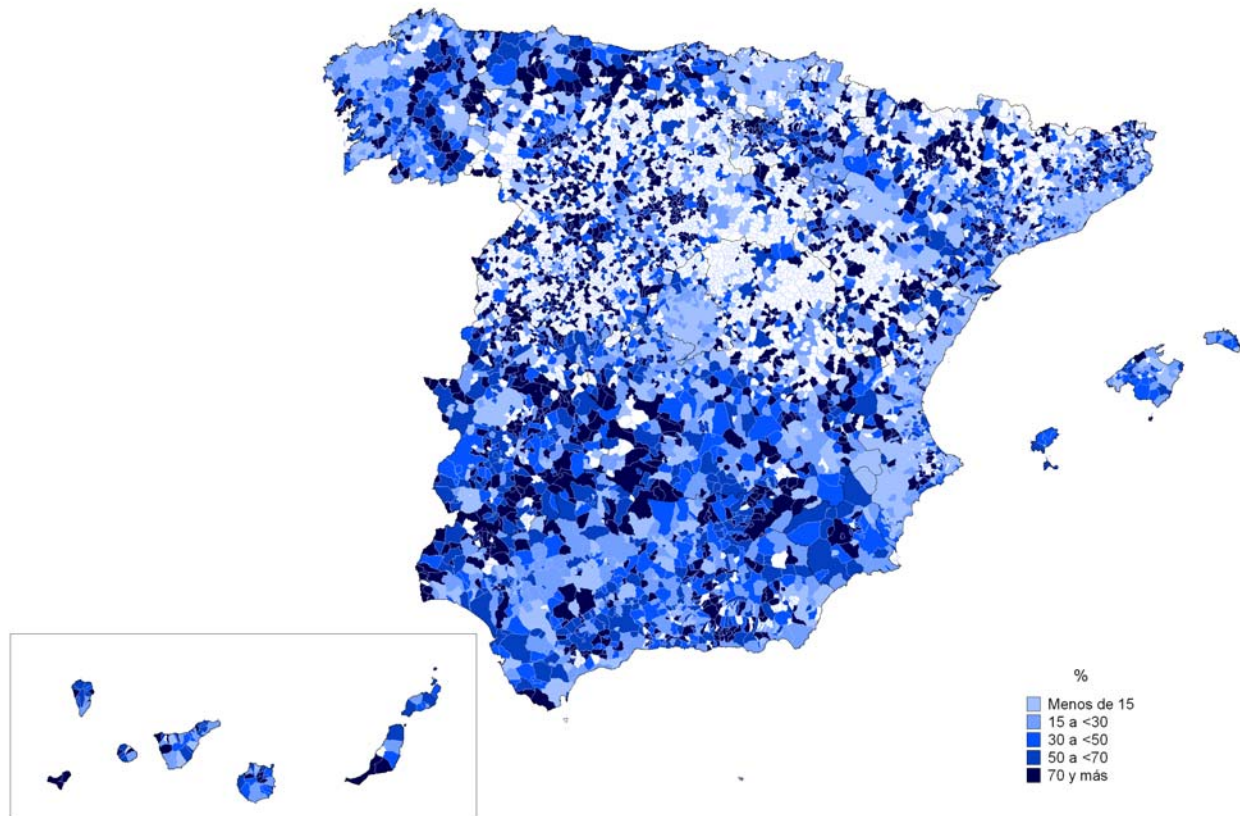
In terms of industrial activities, their importance in rural spaces lies in several factors. Thus the weight of local natural resources has lead to extraction work in municipalities with fewer than 2,000 inhabitants, although the crisis of the last twenty years has meant they have decreased significantly both in absolute and relative terms. The same thing has not occurred with manufacturing industries, which, based on local products or resources -raw materials, human or material resources, we can consider endogenous to an extent-. Especially promoted by rural development programmes, they are of very significant importance in the industrial structure of the rural areas. In the last twenty years we have witnessed a process of diffusion from the urban areas, related to the search for lower costs and less pressure from governments, which has increased the setting up of new industries, especially in peri-urban areas and areas which are more accessible than the urban spaces.



In other cases, public subsidies to rural development have played an important role in the appearance of transformation industries in rural spaces. In the context of local production upgrading which generates added value in areas of production and in a social framework which is

increasingly more concerned with food quality, very much linked to spatial references, agro industries are of special interest. These are essential in the rural industrial structure of almost all the regions, especially those of the interior and south of the Peninsula.

Figure 10 people employed in the agricultural industry compared to industry as a whole. Spain 2007

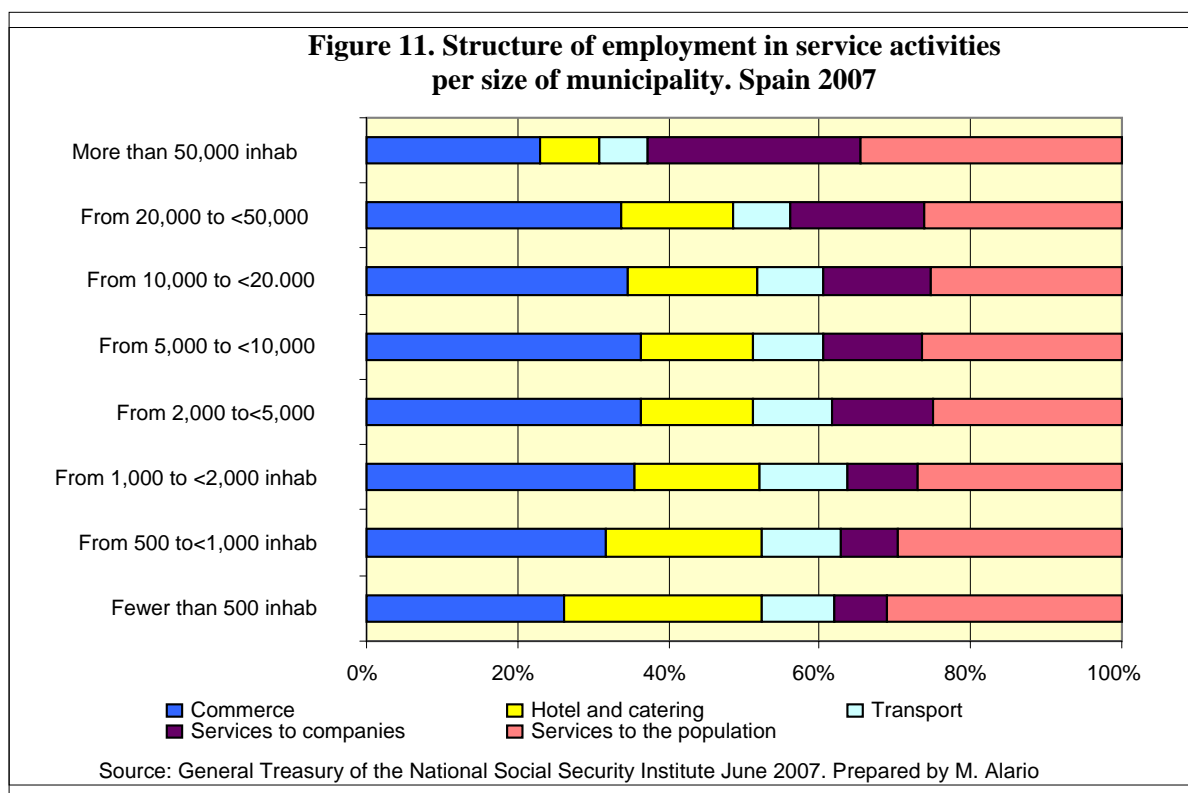


Source: General Treasury of the National Social Security Institute June 2007. Prepared by M Alano

Yet without minimising the importance of industrial activities in the economic diversification of the rural spaces, the most novel processes are those of the development of services geared towards improving the quality of life of the local inhabitants and towards developing new functions of the same quality in leisure areas for urban markets. Comparing the structure of services in rural and urban areas also highlights an internal composition with very different factors and processes in both cases.

One of the most striking aspects is that little importance is attached in the rural areas to advanced services, especially services to production, proof that the advanced tertiarization proc-

ess, the basis today of spatial imbalances, is being lead from the cities, incorporating part of peri-urban spaces exclusively.

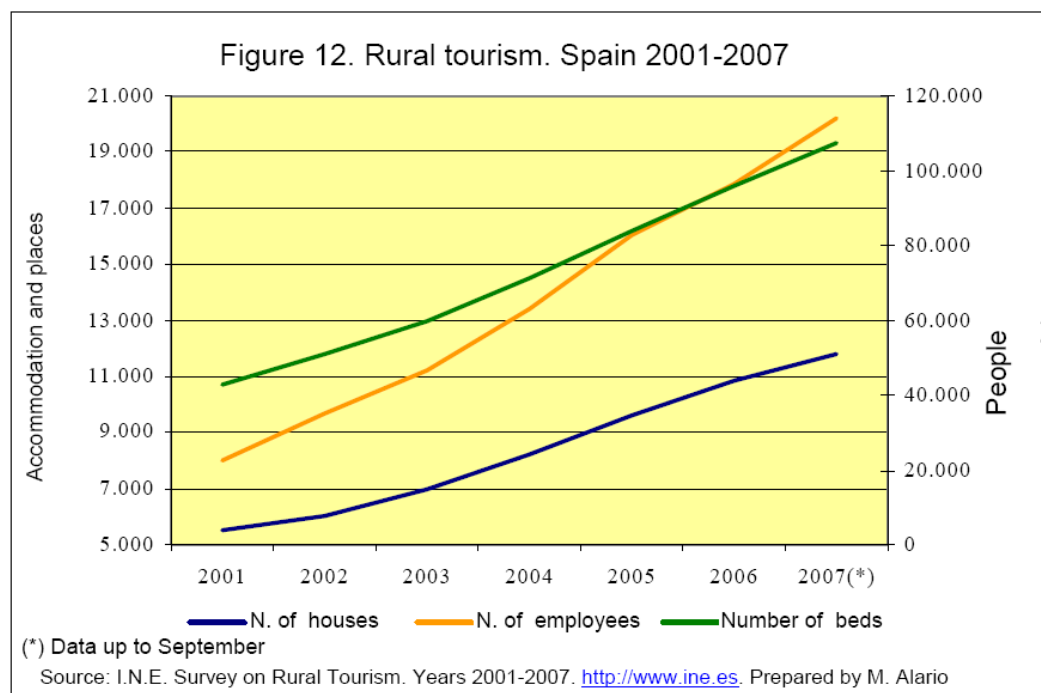


It is equally striking that at a time of great development of basic services to the population, its weight bears on the structure of employment and is very much lower in the rural spaces compared to the urban ones. This highlights the concentration of private services in the regional capitals and urban areas and, in the case of the smaller municipalities in particular, basic services to the population are usually very spatially concentrated, often held by public employees and very often offered by professionals many of whom are not resident.

In all, of most interest without doubt, is the development of tourist functions in the rural areas and the consequent boom in service activities for the urban population and, of course, which are used by the local population i.e. commercial and, especially, catering services whose relative weight in the smaller rural municipalities is triple that of the urban areas with over 50,000 inhabitants.

Although leisure activities linked to second homes have been traditional in our villages, especially since the great rural exodus in the 1960s, we can state categorically that the development

of rural tourism has constituted the basis of the finisecular transformation in Spanish rural spaces. In a decade we have gone from its practical non-existence to more than 11,800 rural



tourism
places of
accommo-
dation with
room for
over
100,000
and over
20,000
people
employed
in 2007. It
is only in

the last seven years that these indicators have more than doubled, which demonstrates the establishment of new activities and functions in part of the rural spaces and which constitute a vital complement to the subsistence of a good part of the country's interior centres.

But the importance of rural tourism is not only quantitative but qualitative. Therefore this would imply that traditionally marginalised groups could enter the labour market in rural markets, young people, for example and women especially, who represent more than two thirds of those employed in their different categories, (entrepreneurs, permanent and temporary employees).

Equally positive is the fact that this is an activity the most widespread form of which, the "casas rurales" ("farmhouse" accommodation) are easy to set up throughout the space, as the level of initial investment is low. This has lead to a development of tourist activity in thousands of small centres where there were practically no options other than agriculture. And there is a knock-on effect on other activities such as construction and handicrafts and small local industries.

This surge in non-agricultural activities which constitute the basis of the productive diversification of the rural spaces does not affect every spatial area equally. The dependence on exoge-

nous markets for the majority of activities and services and a good part of industrial services means that the distance from the large urban markets is an essential factor in their development. Thus the rural spaces which are closest to the large city areas have seen the largest growth in tourist services and second homes, along with those which offer very different atmospheres such as some mountain areas, for example. In general, peri-urban spaces and those located on fast transport routes have made the most use of this diversification, whereas those in the deep rural areas have remained on the sidelines or are in a state of incipient development, especially the smaller centres which have a strongly specialised agricultural production, as is the case for a good part of the villages on the central plains of Castile and Leon.

To **CONCLUDE**, we can note a clear process of modernisation and technification of the Spanish countryside, which, however, continues to be immersed in an obvious duality, despite the advances in the diversification of functions.

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